UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 40-F

[Check one]

☐ **REGISTRATION STATEMENT PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934**

or

☒ **ANNUAL REPORT PURSUANT TO SECTION 13(a) OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended October 31, 2020

Commission File Number 002-09048

THE BANK OF NOVA SCOTIA

(Exact name of Registrant as specified in its charter)

CANADA
(Province or other jurisdiction of incorporation or organization)

6029
(Primary Standard Industrial Classification Code Number (if applicable))

Not Applicable
(I.R.S. Employer Identification Number (if applicable))

44 King St. West, Scotia Plaza, 8 th floor,
Toronto, Ontario, Canada M5H 1H1
(416) 866-3672
(Address and telephone number of Registrant's principal executive offices)

The Bank of Nova Scotia, 250 Vesey Street,
New York, N.Y., U.S.A. 10281
Attention: Hector Becil
(212) 225-5000
(Name, address (including zip code) and telephone number (including area code) of agent for service in the United States)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common	BNS	New York Stock Exchange Toronto Stock Exchange

Securities registered or to be registered pursuant to Section 12(g) of the Act.

Not applicable
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

Not applicable
(Title of Class)

For annual reports, indicate by check mark the information filed with this Form:

☒ **Annual information form** ☒ **Audited annual financial statements**

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

Common Shares	1,211,479,297
Preferred Shares, Series 32	11,161,422
Preferred Shares, Series 33	5,184,345
Preferred Shares, Series 34 (Non-Viability Contingent Capital)	14,000,000
Preferred Shares, Series 36 (Non-Viability Contingent Capital)	20,000,000
Preferred Shares, Series 38 (Non-Viability Contingent Capital)	20,000,000
Preferred Shares, Series 40 (Non-Viability Contingent Capital)	12,000,000

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files).

Yes ☒ No ☐

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 12b-2 of the Exchange Act.

Emerging growth company ☐

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

DISCLOSURE CONTROLS AND PROCEDURES

Management's responsibility for financial information contained in the Annual Report is described on page 148 of Exhibit 99.3, 2020 Consolidated Financial Statements. In addition, the Bank's Audit and Conduct Review Committee of the Board of Directors has reviewed, and the Board of Directors has reviewed and approved, the 2020 Consolidated Financial Statements and Management's Discussion and Analysis prior to release. Scotiabank is committed to providing timely, accurate and balanced disclosure of all material information and to providing fair and equal access to such information. The Bank's disclosure policies and practices are published on its website.

Disclosure Controls and Procedures

The Bank's disclosure controls and procedures are designed to provide reasonable assurance that information is accumulated and communicated to the Bank's management, including the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), as appropriate, to allow timely decisions regarding required disclosure.

As of October 31, 2020, the Bank's management, with the participation of the CEO and CFO, evaluated the effectiveness of its disclosure controls and procedures, as defined under the rules adopted by the United States Securities and Exchange Commission ("SEC") and the Canadian securities regulatory authorities, and have concluded that the Bank's disclosure controls and procedures are effective.

Internal control over financial reporting

Management of the Bank is responsible for establishing and maintaining adequate internal control over financial reporting. These controls include policies and procedures that: (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Bank; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board, and that receipts and expenditures are being made only in accordance with authorizations of management and directors of the Bank; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Bank's assets that could have a material effect on the financial statements.

All control systems contain inherent limitations, no matter how well designed. As a result, the Bank's management acknowledges that its internal control over financial reporting will not prevent or detect all misstatements due to error or fraud. In addition, management's evaluation of controls can provide only reasonable, not absolute, assurance that all control issues that may result in material misstatements, if any, have been detected.

Management assessed the effectiveness of internal control over financial reporting, using the Committee of Sponsoring Organizations of the Treadway Commission (COSO) 2013 framework, and based on that assessment concluded that internal control over financial reporting was effective as of October 31, 2020.

Changes in internal control over financial reporting

There have been no changes in the Bank's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Bank's internal control over financial reporting during the year ended October 31, 2020.

MANAGEMENT'S INTERNAL CONTROL OVER FINANCIAL REPORTING

Management's Report on Internal Control over Financial Reporting and the Report of Independent Registered Public Accounting Firm are provided in Exhibit 99.4.

AUDIT COMMITTEE FINANCIAL EXPERTS

All of the members of the Bank's Audit and Conduct Review Committee of the Board of Directors ("audit committee") are financially literate and independent, and one or more members of the audit committee meets the definition of a financial expert. The Bank's Board of Directors has determined that Una M. Power, Aaron W. Regent and Benita M. Warmbold are audit committee financial experts and are independent, as that term is defined by the New York Stock Exchange's corporate governance standards applicable to the Bank.

The SEC has indicated that the designation of a person as an audit committee financial expert does not impose on such person any duties, obligations or liability that are greater than the duties, obligations and liability imposed on such person as a member of the audit committee and board of directors in the absence of such designation.

CODE OF ETHICS

The Bank has adopted a code of ethics, entitled "Scotiabank Code of Conduct" (the "Code "). The Code has been in place for many years and applies to all directors, officers, employees and contingent workers of the Bank. A copy of the Code was most recently filed as an exhibit to Form 6-K filed with the SEC (EDGAR Company Filings) on December 1, 2020. The Code is also available on the Bank's website at www.scotiabank.com, in the Governance section, and is available in print to any person, without charge, upon written request to the Corporate Secretary of the Bank at the Toronto executive office address shown above. A supplement to the Code, the Whistleblower Policy and Procedures, is also posted on the Bank's website. Amendments to the Code and waivers, if any, for directors and executive officers will be disclosed on the Bank's website. There were no such waivers under the Code granted in fiscal 2020.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

The disclosure provided in Table 81 "Fees paid to the shareholders' auditors" on page 138 of Exhibit 99.2, Management's Discussion and Analysis, is incorporated by reference herein. The nature of these services is as follows:

- Audit services generally relate to the statutory audits and review of financial statements, regulatory required attestation reports, as well as services associated with registration statements, prospectuses, periodic reports and other documents filed with securities regulatory bodies or other documents issued in connection with securities offerings.
- Audit-related services include special attest services not directly linked to the financial statements, review of controls and procedures related to regulatory reporting, audits of employee benefit plans and consultation and training on accounting and financial reporting.
- Tax services outside of the audit scope relate primarily to specified review procedures required by local tax authorities, attestation on tax returns of certain subsidiaries as required by local tax authorities, and review to determine compliance with an agreement with the tax authorities.
- Other non-audit services are primarily for the review and translation of English language financial statements into other languages and other services.

None of the above services were approved pursuant to an exemption under paragraph (c)(7)(i)(C) of Rule 2-01 of Regulation S-X from the requirement that the audit committee pre-approve the services. The majority of the hours expended on the audits of the 2020 and 2019 consolidated financial statements were attributable to work performed by the full-time permanent employees of the Bank's independent auditors, KPMG LLP or its affiliates. The audit committee's pre-approval policies and procedures, as revised effective March 5, 2007, were attached as Exhibit 7 to

the Form 40-F filed on December 19, 2007 for the fiscal year ended October 31, 2007. The pre-approval policies and procedures have been subsequently approved without any major changes at each annual review.

OFF-BALANCE SHEET ARRANGEMENTS

The disclosure provided under “Off-balance Sheet Arrangements” on pages 72 to 75 and “Structured entities” on pages 73 to 74 of Exhibit 99.2, Management’s Discussion and Analysis, is incorporated by reference herein. Additional information from note 3 on pages 161 to 176, note 7 on pages 177 to 182, note 10 on pages 185 to 193, note 14 on page 206, note 15 on pages 206 to 209, note 23 on page 214, note 24 on pages 214 to 217, note 35 on pages 233 to 235 and note 36 on pages 235 to 242 of Exhibit 99.3, 2020 Consolidated Financial Statements, is incorporated by reference into “Off-balance Sheet Arrangements” in Management’s Discussion and Analysis.

CONTRACTUAL OBLIGATIONS

The disclosure provided under “Contractual maturities and obligations” on pages 112 to 114 of Exhibit 99.2, Management’s Discussion and Analysis, is incorporated by reference herein. Additional information from note 7 on pages 177 to 182, note 20 on page 212, note 28 on pages 222 to 227, note 35 on pages 233 to 235 and note 36 on pages 235 to 242 of Exhibit 99.3, 2020 Consolidated Financial Statements, is incorporated by reference into “Contractual Obligations” in Management’s Discussion and Analysis.

IDENTIFICATION OF THE AUDIT COMMITTEE

The Bank’s audit committee is composed of the following directors: Una M. Power (Chair and financial expert), Scott B. Bonham, Charles H. Dallara, Lynn K. Patterson, Michael D. Penner, Aaron W. Regent (financial expert), Calin Rovinescu, Susan L. Segal and Benita M. Warmbold (financial expert).

SUMMARY OF SIGNIFICANT CORPORATE GOVERNANCE DIFFERENCES

A summary of significant ways corporate governance practices followed by the Bank differ from corporate governance practices required to be followed by U.S. domestic companies under the New York Stock Exchange’s listing standards (disclosure required by Section 303A.11 of the NYSE Listed Company Manual) is available on the Bank’s website at https://www.scotiabank.com/ca/en/about/inside-scotiabank/corporate-governance/differences.html.

NOTE ON CERTAIN ACTIVITES

During the fiscal year ending October 31, 2020, the Bank identified that in 2013 one of its Canadian subsidiaries made two separate loans to two individuals, each of whose names were subsequently published on the Specially Designated Nationals list of the U.S. Treasury Department’s Office of Foreign Assets Control (OFAC’s SDN List). The loans were made in connection with the Province of Quebec’s Immigrant Investor Program, and the individuals were referred to the Canadian subsidiary through that program. Each individual loan was for CAD 400,000, and, consistent with the terms of the Immigrant Investor Program, the entire proceeds of the loan were invested in bonds issued by the Province of Quebec. Upon maturity of each of the bonds in 2018, the corresponding loans were repaid. The respective associated client accounts remained dormant until closed in May 2020. Neither the Bank nor its affiliates have engaged in any further activities or dealings with either individual.

Pursuant to Section 13(r) of the Exchange Act, the Bank is required to disclose whether it or any of its affiliates knowingly engaged in certain activities, transactions or dealings with certain individuals or entities, including those listed on OFAC’s SDN List. Disclosure is generally required even where the activities, transactions or dealings were conducted outside the U.S. in compliance with applicable law. The Bank estimates that its gross revenue and net profit associated with each loan was less than CAD 100,000 over the life of each loan.

Undertaking

Registrant undertakes to make available, in person or by telephone, representatives to respond to inquiries made by the Commission staff, and to furnish promptly, when requested to do so by the Commission staff, information relating to: the securities registered pursuant to Form 40-F; the securities in relation to which the obligation to file an annual report on Form 40-F arises; or transactions in said securities.

Signatures

Pursuant to the requirements of the Exchange Act, the Registrant certifies that it meets all of the requirements for filing on Form 40-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereto duly authorized.

Registrant: **THE BANK OF NOVA SCOTIA**

By: /s/ Rajagopal Viswanathan
Name: Rajagopal Viswanathan
Title: Group Head and Chief Financial Officer

Date: December 1, 2020

EXHIBIT INDEX

Exhibit No.	Description
99.1	Annual Information Form dated December 1, 2020
99.2	Management's Discussion and Analysis (pages 14 through 145 of the 2020 Annual Report)
99.3	2020 Consolidated Financial Statements (pages 147 through 243 of the 2020 Annual Report)
99.4	Management's Report on Internal Control over Financial Reporting and Report of Independent Registered Public Accounting Firm (page 146 of the 2020 Annual Report)
99.5	Corporate Governance
99.6	Consent of Independent Registered Public Accounting Firm
99.7	Certifications required by Rule 13a-14(a) or Rule 15d-14(a), pursuant to Section 302 of the U.S. Sarbanes-Oxley Act of 2002
99.8	Certifications required by Rule 13a-14(b) or Rule 15d-14(b) and 18 U.S.C. Section 1350, as enacted pursuant to Section 906 of the U.S. Sarbanes-Oxley Act of 2002
101	Interactive Data File

Exhibit 99.1

The Bank of Nova Scotia

ANNUAL
INFORMATION
FORM

DECEMBER 1, 2020



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INFORMATION IS AT OCTOBER 31, 2020, UNLESS OTHERWISE NOTED.

Distribution Notice

When this Annual Information Form is provided to security holders or other interested parties, it must be accompanied by copies of all the documents (or excerpts thereof) incorporated herein by reference. Portions of this Annual Information Form of The Bank of Nova Scotia (the "Bank", "Scotiabank", "we" or "our") dated December 1, 2020 (the "AIF"), are disclosed in the Management's Discussion and Analysis for the year ended October 31, 2020 (the "MD&A"). The MD&A is also available on SEDAR at www.sedar.com.

Financial Data

Except as otherwise noted, all information is given at or for the year ended October 31, 2020. Amounts are expressed in Canadian dollars. Financial information is presented in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board, unless otherwise noted.

Forward-looking Statements

From time to time, our public communications often include oral or written forward-looking statements. Statements of this type are included in this document, and may be included in other filings with Canadian securities regulators or the U.S. Securities and Exchange Commission ("SEC"), or in other communications. In addition, representatives of the Bank may include forward-looking statements orally to analysts, investors, the media and others. All such statements are made pursuant to the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995 and any applicable Canadian securities legislation. Forward-looking statements may include, but are not limited to, statements made in this document, the Management's Discussion and Analysis in the Bank's 2020 Annual Report under the headings "Outlook" and in other statements regarding the Bank's objectives, strategies to achieve those objectives, the regulatory environment in which the Bank operates, anticipated financial results, and the outlook for the Bank's businesses and for the Canadian, U.S. and global economies. Such statements are typically identified by words or phrases such as "believe," "expect," "foresee," "forecast," "anticipate," "intend," "estimate," "plan," "goal," "project," and similar expressions of future or conditional verbs, such as "will," "may," "should," "would" and "could."

By their very nature, forward-looking statements require us to make assumptions and are subject to inherent risks and uncertainties, which give rise to the possibility that our predictions, forecasts, projections, expectations or conclusions will not prove to be accurate, that our assumptions may not be correct and that our financial performance objectives, vision and strategic goals will not be achieved.

We caution readers not to place undue reliance on these statements as a number of risk factors, many of which are beyond our control and effects of which can be difficult to predict, could cause our actual results to differ materially from the expectations, targets, estimates or intentions expressed in such forward-looking statements.

The future outcomes that relate to forward-looking statements may be influenced by many factors, including but not limited to: general economic and market conditions in the countries in which we operate; changes in currency and interest rates; increased funding costs and market volatility due to market illiquidity and competition for funding; the failure of third parties to comply with their obligations to the Bank and its affiliates; changes in monetary, fiscal, or economic policy and tax legislation and interpretation; changes in laws and regulations or in supervisory expectations or requirements, including capital, interest rate and liquidity requirements and guidance, and the effect of such changes on funding costs; changes to our credit ratings; operational and infrastructure risks; reputational risks; the accuracy and completeness of information the Bank receives on customers and counterparties; the timely development and introduction of new products and services; our ability to execute our strategic plans, including the successful completion of acquisitions and dispositions, including obtaining regulatory approvals; critical accounting estimates and the effect of changes to accounting standards, rules and interpretations on these estimates; global capital markets activity; the Bank's ability to attract, develop and retain key executives; the evolution of various types of fraud or other criminal behaviour to which the Bank is exposed; disruptions in or attacks (including cyber-attacks) on the Bank's information technology, internet, network access, or other voice or data communications systems or services; increased competition in the geographic and in business areas in which we operate, including through internet and mobile banking and non-traditional competitors; exposure related to significant litigation and regulatory matters; the occurrence of natural and unnatural catastrophic events and claims resulting from such events; the emergence of widespread health emergencies or pandemics, including the magnitude and duration of the COVID-19 pandemic and its impact on the global economy and financial market conditions and the Bank's business, results of operations, financial condition and prospects; and the Bank's anticipation of and success in managing the risks implied by

the foregoing. A substantial amount of the Bank's business involves making loans or otherwise committing resources to specific companies, industries or countries. Unforeseen events affecting such borrowers, industries or countries could have a material adverse effect on the Bank's financial results, businesses, financial condition or liquidity. These and other factors may cause the Bank's actual performance to differ materially from that contemplated by forward-looking statements. The Bank cautions that the preceding list is not exhaustive of all possible risk factors and other factors could also adversely affect the Bank's results, for more information, please see the "Risk Management" section of the Bank's 2020 Annual Report, as may be updated by quarterly reports.

Material economic assumptions underlying the forward-looking statements contained in this document are set out in the 2020 Annual Report under the headings "Outlook", as updated by quarterly reports. The "Outlook" sections are based on the Bank's views and the actual outcome is uncertain. Readers should consider the above-noted factors when reviewing these sections. When relying on forward-looking statements to make decisions with respect to the Bank and its securities, investors and others should carefully consider the preceding factors, other uncertainties and potential events.

Any forward-looking statements contained in this document represent the views of management only as of the date hereof and are presented for the purpose of assisting the Bank's shareholders and analysts in understanding the Bank's financial position, objectives and priorities, and anticipated financial performance as at and for the periods ended on the dates presented, and may not be appropriate for other purposes. Except as required by law, the Bank does not undertake to update any forward-looking statements, whether written or oral, that may be made from time to time by or on its behalf.

Additional information relating to the Bank can be located on the SEDAR website at www.sedar.com and on the EDGAR section of the SEC's website at www.sec.gov.

CORPORATE STRUCTURE

Name, Address and Place of Incorporation

The Bank was granted a charter under the laws of the Province of Nova Scotia in 1832 and commenced operations in Halifax, Nova Scotia in that year. Since 1871, the Bank has been a chartered bank under the *Bank Act* (Canada) (the "Bank Act"). The Bank is a Schedule I bank under the Bank Act and the Bank Act is its charter. The head office of the Bank is located at 1709 Hollis Street, Halifax, Nova Scotia, B3J 1W1 and its executive offices are at Scotia Plaza, 44 King Street West, Toronto, Ontario, M5H 1H1. A copy of the Bank's by-laws is available on www.sedar.com.

Intercorporate Relationships

Each international principal subsidiary of the Bank is incorporated or established and existing under the laws of the jurisdiction in which its principal office is located, with the exception of Scotia Holdings (US) Inc. which is incorporated and existing under the laws of the State of Delaware. Each Canadian principal subsidiary of the Bank is incorporated or established and existing under the laws of Canada, with the exception of: 1832 Asset Management L.P., Scotia Capital Inc. and Scotia Securities Inc. which are incorporated or established and existing under the laws of the Province of Ontario.

The Bank's principal subsidiaries are listed on Schedule A.

GENERAL DEVELOPMENT OF THE BANK'S BUSINESS

Three-Year History

As reported in accordance with IFRS, for the fiscal year ended October 31, 2020, the Bank's net income attributable to common shareholders was $6,582 million, down from $8,208 million in 2019. The Bank's net income attributable to common shareholders was $8,361 million in 2018. Earnings per share (on a diluted basis) for the fiscal year ended October 31, 2020 was $5.30 compared to $6.68 in 2019 and $6.82 in 2018.

Return on equity for the fiscal year ended October 31, 2020 was 10.4%, compared to 13.1% in 2019 and 14.5% in 2018. In fiscal 2020, the Bank's actual dividend payout ratio was 66.3% compared to 51.9% in 2019 and 47.7% in 2018.

For additional information on the Bank's businesses, see the descriptions provided below and on pages 45 to 57 of the MD&A.

Certain acquisitions and dispositions that have influenced the general development of the Bank's business over the past three years are summarized below, for additional information on acquisitions and divestitures, see note 37 to the Bank's consolidated financial statements for the year ended October 31, 2020.

On May 31, 2020, the Bank completed the sale of its banking operations in the British Virgin Islands to Republic Financial Holdings Limited.

On January 31, 2020, the Bank completed the sale of its banking and insurance operations in El Salvador, including Scotiabank El Salvador, its subsidiaries and Scotia Seguros to Imperia Intercontinental Inc.

On December 31, 2019, the Bank completed the sale of its operations in Puerto Rico and the U.S. Virgin Islands ("USVI") to Oriental Bank, a subsidiary of OFG Bancorp.

On December 3, 2019, the Bank completed the sale to reduce its 49% interest in Thanachart Bank Public Company Limited ("TBank") in Thailand, upon receiving regulatory approvals and satisfying closing conditions. As part of agreements entered into with ING Groep N.V., TBank, Thanachart Capital Public Co., Ltd. and TMB Bank Public Company Limited ("TMB") in August 2019, the Bank sold its 49% interest in TBank in exchange for cash and an approximately 6% ownership interest in the form of common shares in TMB. As per the agreements, TBank became a wholly-owned subsidiary of TMB.

On October 31, 2019, the Bank completed the sale of its banking operations in Anguilla, Dominica, Grenada, St. Kitts & Nevis, St. Lucia, St. Maarten and St. Vincent & the Grenadines to Republic Financial Holdings Limited.

On April 30, 2019, the Bank completed the sale of Scotia Crecer AFP and Scotia Seguros, its pension and related insurance businesses in the Dominican Republic, to Grupo Rizek.

On March 1, 2019, the Bank acquired 97.44% of the voting shares of Banco Dominicano del Progreso, a bank with operations in Dominican Republic in exchange for total consideration of $440 million in cash. The acquired business forms part of the International Banking business segment.

On October 3, 2018, the Bank completed the acquisition of MD Financial Management Inc. ("MD") from the Canadian Medical Association ("CMA"), for approximately $2.7 billion. MD is Canada's leading provider of financial services to physicians and their families, with more than $49 billion in assets under management and administration. The Bank and the CMA have entered into a 10-year affinity agreement under which the Bank will commit to pay $115 million over the next 10 years to support the advancement of the medical profession and health care in Canada. MD forms part of the Canadian Banking business segment.

On July 6, 2018, the Bank completed the acquisition of 68.2% of Banco Bilbao Vizcaya Argentaria, Chile, 100% of BBVA Seguros Vida S.A., 100% of Servicios Corporativos S.A., 68.1% of Inmobiliaria e Inversiones S.A. and 4.1% of Inversiones DCV S.A. (together, "BBVA Chile") for approximately US$2.2 billion. The Bank consolidated 100% of BBVA Chile's assets and liabilities and recorded a non-controlling interest of 31.8%. The acquired business forms part of the International Banking business segment.

On June 30, 2018, the Bank's Colombian subsidiary, Scotiabank Colpatria S.A., completed the acquisition of Citibank's consumer (retail and credit cards) and small and medium enterprise operations in Colombia. This acquisition forms part of the International Banking business segment.

On May 1, 2018, the Bank completed the acquisition of Jarislowsky Fraser Limited, an independent investment firm with approximately $40 billion in assets under management on behalf of institutional and high net worth clients, for approximately $978 million.

DESCRIPTION OF THE BANK'S BUSINESS

General Summary

Scotiabank is a Canadian-headquartered bank and financial services provider in the Americas. We help our customers, their families and their communities achieve success through a broad range of advice, products and services, including personal and commercial banking, wealth management and private banking, corporate and investment banking, and capital markets.

For the year ended October 31, 2020, the Bank's four business operating segments are: Canadian Banking, International Banking, Global Banking and Markets and Global Wealth Management.

Canadian Banking provides a full suite of financial advice and banking solutions, supported by an excellent customer experience, to over 11 million Retail, Small Business and Commercial Banking customers. It serves these customers through its network of 952 branches and 3,540 automated banking machines (ABMs), as well as online, mobile and telephone banking, and specialized sales teams. Canadian Banking also provides an alternative self directed banking solution to over two million Tangerine Bank customers.

International Banking has a strong and diverse franchise with more than 10 million Retail, Corporate, and Commercial customers. The Bank is served by a network of more than 1,400 branches, 5,200 ATMs and 22 contact centres.

Global Banking and Markets ("GBM") provides corporate clients with lending and transaction services, investment banking advice and access to capital markets. GBM is a full-service wholesale bank in the Americas, with operations in 21 countries, serving clients across Canada, the United States, Latin America, Europe and Asia-Pacific.

Global Wealth Management is focused on delivering comprehensive wealth management advice and solutions to clients across the Bank's footprint. Global Wealth Management serves over 1.5 million investment fund and advisory clients across 14 countries – managing over $500 billion in assets.

A more complete description of services provided by each of the Bank's major business lines is available in the MD&A, on pages 45 to 57 inclusive, and those pages are herein incorporated by reference.

Competition

The Canadian banking system consists of numerous banks and other financial institutions. Certain large Canadian banks are required by law to be widely held because their equity exceeds a threshold of $12 billion. These banks compete nationwide through extensive branch networks, ABMs, telephone, internet and mobile banking offerings. In total, the Canadian system includes 36 domestic banks, 28 foreign banks and more than 300 credit unions and caisses populaires. More broadly, the Canadian financial services industry includes thousands of institutions such as life insurance companies, property and casualty insurers, consumer finance companies, independent investment dealers and independent retail mutual fund management companies.

Competition is reflected in the range of products and services offered, innovation in features, services, technology and delivery, as well as the various pricing schemes adopted. Canada ranks 9th in the world in terms of its financial market development, according to the 2019 Global Competitiveness Report of the World Economic Forum. Additionally, a greater number of service providers in the Canadian marketplace are offering alternative channels and competition in the payments space. The increased number of new entrants into the financial services sector in recent years has also underscored an enhanced level of competition.

Scotiabank is a financial services provider in the Americas. In providing these services and products, the Bank competes with local and international banks and other financial institutions.

Supervision and Regulation in Canada

As a Canadian Schedule I Bank, the Bank's activities in Canada are governed by the Bank Act, which is one of four main federal statutes governing the financial services industry in Canada. The other three statutes cover trust and loan companies, insurance companies and co-operative credit associations.

In accordance with the Bank Act, an organization may engage in and carry on the business of banking and such business generally as pertains to the business of banking. The Bank Act grants Canadian chartered banks broad powers of investment in the securities of other corporations and entities, but imposes limits upon substantial investments. Under the Bank Act, generally a bank has a substantial investment in a body corporate when (a) voting rights attached to the voting shares beneficially owned by the bank and by entities controlled by the bank exceed 10% of the voting rights attached to the outstanding voting shares of the body corporate, or (b) the total number of shares of the body corporate that are beneficially owned by the bank and entities controlled by the bank represent more than 25% of the total shareholders' equity of the body corporate. In addition, under the Bank Act, a bank has a substantial investment in an unincorporated entity where the ownership interests in such entity beneficially owned by that bank and by entities controlled by that bank exceed 25% of all ownership interests in such entity. A Canadian chartered bank is permitted to have a substantial investment in entities whose activities are consistent with those of certain prescribed permitted substantial investments. In general, a bank will be permitted to invest in an entity that carries on any financial services activity. Further, a bank may generally invest in entities that carry on commercial activities that are related to the promotion, sale, delivery or distribution of a financial product or service. A bank may also invest in entities that provide professional investment management to closed-end funds and mutual funds, engage in the distribution of mutual funds and provide consulting and agency services for real property or service financial institutions and the bank may have downstream holding companies to hold these investments. In certain cases, the approval of the Minister of Finance (the "Minister") or the Superintendent of Financial Institutions Canada (the "Superintendent") is required prior to making the investment and/or the bank is required to control the entity. Canadian chartered banks may offer through their branch network credit or charge-card related insurance, creditors' disability insurance, creditors' life insurance, creditors' loss of employment insurance, creditors' vehicle inventory insurance, export credit insurance, mortgage insurance and travel insurance. Outside bank branches, a bank may offer insurance only in the limited circumstances prescribed by the Bank Act.

Without Minister approval, no person or group of associated persons may own more than 10% of any class of shares of the Bank. No person may be a major shareholder of a bank if the bank has equity of $12 billion or more (which includes the Bank). A person is a major shareholder of a bank if: (a) the aggregate of shares of any class of voting shares beneficially owned by that person and that are beneficially owned by any entities controlled by that person is more than 20% of that class of voting shares; or (b) the aggregate of shares of any class of non-voting shares beneficially owned by that person and that are beneficially owned by any entities controlled by that person is more than 30% of that class of non-voting shares. Ownership of the Bank's shares by Canadian or foreign governments is prohibited under the Bank Act. However, in 2009 certain amendments were made to the Bank Act that provide for limited circumstances in which the Canadian federal government may be permitted to acquire shares of a bank, including the Bank, if the Minister and Governor in Council were to conclude that to do so would promote stability in the financial system. While the government holds any shares of a bank, including the Bank, the Minister may impose certain terms and conditions, including conditions on the payment by the Bank of dividends on any of its shares.

The Superintendent is responsible to the Minister for the administration of the Bank Act. The Superintendent is required to make an annual examination of each bank to ensure compliance with the Bank Act and to ensure that each bank is in sound financial condition. The report of the Superintendent's examination is submitted to the Minister. The Bank is also required to disclose certain financial information. The Bank is subject to regulation by the Canada Deposit Insurance Corporation and the Financial Consumer Agency of Canada, and the activities of the Bank in Canada are subject to various other federal statutory provisions, including the *Proceeds of Crime (Money Laundering) and Terrorist Financing Act* which applies to all of the Bank's businesses in Canada. The activities of the Bank's trust subsidiaries and insurance subsidiaries are regulated in Canada under the *Trust and Loan Companies Act* and the *Insurance Companies Act*, respectively, and under provincial laws in respect of their activities in the provinces. Certain activities of the Bank and its subsidiaries acting as securities brokers, dealers (including investment and mutual fund dealers), underwriters and advisors (including investment counsel and portfolio managers) are regulated in Canada under provincial securities legislation and, in some cases, by self-regulatory organizations, such as the Investment Industry Regulatory Organization of Canada for broker dealers and the Mutual Fund Dealers Association for mutual fund dealers.

Bank Recapitalization (Bail-In) Regime

On September 23, 2018, the regulations under the *Canada Deposit Insurance Corporation Act* (Canada) (the "CDIC Act") and the Bank Act (collectively, the "Bail-In Regulations") which provides the details of conversion, issuance and compensation regimes for bail-in instruments issued by domestic systemically important banks, including the Bank, came into force. Pursuant to the CDIC Act, in circumstances where the Superintendent of Financial Institutions has determined that the Bank has ceased, or is about to cease, to be viable, the Governor in Council may, upon a recommendation of the Minister of Finance that he or she is of the opinion that it is in the public interest to do so, grant an order directing CDIC to convert all or a portion of certain shares and liabilities of the Bank into common shares of the Bank. For a description of the Canadian bank resolution powers and the consequent risk factors attaching to certain liabilities of the Bank reference is made to the Bank's website under Regulatory Disclosures for Fixed Income Investors[1] . The information on our website does not form part of this Annual Information Form.

International Supervision and Regulation

Capital adequacy for Canadian banks is regulated by the Office of the Superintendent of Financial Institutions, Canada ("OSFI") and subject to the revised capital adequacy requirements as published by the Basel Committee on Banking Supervision (BCBS) and commonly referred to as Basel III. Additional information on the regulatory capital of the Bank and developments facing the Bank are described under the headings "Regulatory capital" and "Regulatory capital developments during the year in response to COVID-19" on pages 61-62 of the MD&A, respectively, and those sections are incorporated herein by reference.

Automatic Exchange of Information

Under the initiative of the Organization for Economic Co-Operation and Development, many countries have committed to automatic exchange of information relating to accounts held by tax residents of signatory countries, using a Common Reporting Standard ("CRS"). Canada's automatic exchange of financial account information arrangements with jurisdictions, other than the U.S., has been implemented in accordance with the CRS and the implementation of the CRS legislation in Canada was effective July 1, 2017. The Bank meets all obligations imposed under the CRS, in accordance with local laws, in Canada and all applicable jurisdictions in which it operates.

Supervision and Regulation Outside Canada – Key Jurisdictions

United States

The activities of the Bank and its subsidiaries in the U.S. are subject to federal and state supervision, regulation and examination by bank regulatory and other governmental agencies. The Bank is subject to the Bank Holding Company Act of 1956 ("BHCA") and the International Banking Act of 1978 and associated regulations of the Board of Governors of the Federal Reserve System (the "Federal Reserve Board"). The Federal Reserve Board and other banking regulators oversee the operation of the Bank's branches, offices and subsidiaries in the U.S. The SEC, state securities regulators and self-regulatory organizations, such as the Financial Industry Regulatory Authority, regulate its broker-dealer subsidiary and the Commodity Futures Trading Commission ("CFTC") oversees the Bank's swaps and commodities trading and clearing businesses.

The Bank is a "financial holding company" under the BHCA. This status allows a broad range of financial activities to be undertaken in the U.S. Provisions of the Federal Reserve Act place certain limitations and restrictions on the transactions that the Bank's U.S. branch and agency can engage in with affiliates of the Bank.

The Bank, as a non-U.S. bank with U.S. operations, is required by the U.S. Bank Secrecy Act as amended by the USA PATRIOT Act of 2001, to take certain steps to prevent, detect and report individuals and entities involved in international money laundering and the financing of terrorism. Failure of a financial institution to comply with these requirements could have serious legal and reputational consequences for the institution.

[1] Visit webpage at https://www.scotiabank.com/ca/en/about/investors-shareholders/regulatory-disclosures/canadian-bank-resolution-powers-including-bail-in.html.

The Bank is also subject to the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"). Dodd-Frank Act reforms include heightened consumer protection, revised regulation of over-the-counter derivatives markets, restrictions on proprietary trading and the ownership and sponsorship of private investment funds by banks and their affiliates (referred to as the Volcker Rule), imposition of heightened prudential standards, and broader application of leverage and risk-based capital requirements. The Volcker Rule impacts our global activities as its reach extends to the Bank and each of its subsidiaries and affiliates (subject to certain exceptions and exclusions). The Bank has an enterprise wide compliance program to meet the requirements of the Volcker Rule, which became effective on July 21, 2015. During 2019, the five federal agencies responsible for overseeing the Volcker Rule passed certain changes to the Rule, which are not material to the Bank's operations.

The Bank is subject to the enhanced prudential standards and early remediation requirements of sections 165 (implemented by Regulation YY) and 166 of the Dodd-Frank Act (the "FBO Rule") for bank holding companies and foreign banking organizations. With respect to foreign banking organizations, the overall intent of Section 165 and Regulation YY is to strengthen the regulation of the U.S. operations of foreign banking organizations by requiring home country capital certification consistent with the Basel capital framework, home country capital stress tests comparable to U.S. standards, maintenance of a liquidity buffer for U.S. branches and agencies and establishment of a U.S. risk committee with the appointment of a U.S. Chief Risk Officer. The Bank has a Chief Risk Officer for the U.S., a U.S. Risk Committee and complies with the FBO Rule. The Bank is not currently required to form a U.S. intermediate holding company under the FBO Rule. On October 2019, the Federal Reserve finalized its rules to further tailor the regulatory framework for enhanced prudential standards and the U.S. Basel III capital and liquidity requirements applicable to domestic banking organizations and foreign banking organizations (FBOs), with which the Bank is complying.

The SEC has taken several steps toward completing its regulatory framework for security-based swap dealers and majority security-based swap participants, as required under the Dodd-Frank Act. The SEC unanimously adopted final rules providing the registration process for security-based swap dealers and majority security-based swap participants, including the detailed forms that registrants will be required to file. The Bank, which is currently registered as a swap dealer with the CFTC, anticipates registering as a security-based swap dealer with the SEC in 2021.

Mexico

Grupo Financiero Scotiabank Inverlat, S.A. de C.V. is an "affiliate holding company" pursuant to the Law for the Regulation of Financial Groups of Mexico and the Rules for the Establishment of Foreign Affiliate Financial Institutions of Mexico. The governing authority is the Ministry of Finance of Public Credit of Mexico and the supervising and regulatory authorities are the Central Bank of Mexico, the National Banking and Securities Commission and the National Commission for the Protection of the Users of Financial Services.

Peru

Scotiabank Peru S.A.A. is a "banking company" pursuant to the Law of the Banking System, Insurance and Private Pension Funds Administrators and applicable rules for financial groups enacted by the Superintendency of Banking System, Insurance and Private Pension Funds Administrators ("SBS") and the Superintendency of Securities Market ("SMV"). Beside SBS and SMV, the other governing authorities are the Central Bank of Peru, and the National Institution for the Defense of Competition and Intellectual Property, in charge, among other functions, of the protection of consumers of financial services.

Pursuant to SBS and SMV regulations on ownership and control of supervised companies, Scotiabank Peru S.A.A. also reports on its holding company shareholder Scotia Peru Holdings S.A.

Chile

Scotiabank Chile ("Scotiabank Chile") is a special stock corporation governed by the provisions of the General Banking Act and by the provisions applicable to listed corporations contained in the Corporations Act. It is supervised by the Financial Markets Commission (CMF), which is an autonomous institution related to the Chilean Government through the Ministry of Finance. Scotiabank Chile is also governed by the Central Bank of Chile and the National Consumer Service (Sernac), the latter being responsible for, among other functions, consumer protection with regards to financial services, in

accordance with the provisions of the Financial Consumer Protection Act. Scotiabank Chile's subsidiaries are supervised by the CMF, according to their respective business lines.

Colombia

Scotiabank Colpatria S.A., a subsidiary of the Bank, is a bank incorporated in compliance with the regulations of the Financial Superintendence of Colombia (Superintendencia Financiera de Colombia or "SFC"). The SFC is the supervisor of the national banking, insurance, pension funds, and securities markets under Colombian laws, with the purpose of assuring their stability, efficiency and transparency, as well as maintaining and fostering a sound and balanced development of the financial system as a whole, while protecting the interests of the public in Colombia. The SFC is responsible for inspecting, supervising and controlling Scotiabank Colpatria S.A. Additionally, the SFC promotes, organizes and develops regulations in order to ensure the protection of investors, depositors, shareholders and stakeholders. The SFC is also responsible for financial customer protection.

United Kingdom

In respect of its London Branch, the Bank is authorized in the United Kingdom by the Prudential Regulation Authority ("PRA") and subject to regulation by the Financial Conduct Authority ("FCA") and limited regulation by the PRA. Scotiabank Europe plc, a wholly owned subsidiary of the Bank in the United Kingdom, is authorized by the PRA and regulated by the FCA and the PRA. Scotiabank Europe plc's prudential supervisor is the PRA and its conduct supervisor is the FCA.

Other Jurisdictions

Outside of the U.S., Mexico, Peru, Chile, Colombia and the United Kingdom, each of the Bank's branches, agencies and subsidiaries, many of which are banks in their own right, is also subject to the regulatory requirements of the jurisdiction in which it conducts its business.

On March 11, 2020, the World Health Organization declared the COVID-19 outbreak a global pandemic. Absent any medical approaches to slow the spread of the virus, governments around the world implemented a number of measures to curtail the outbreak and slow its progression. Information on the impact of COVID-19 on the Bank is described on pages 25-27 inclusive of the MD&A and those pages are incorporated here by reference. Certain other regulatory developments facing the Bank are described on pages 126 to 128 inclusive of the MD&A and those pages are incorporated herein by reference.

Environmental, Social and Governance Strategies

Each year the Bank publishes its Environment, Social and Governance (ESG) Report, which provides details of the Bank's performance related to ESG factors and progress on social, environmental and governance policies and strategies. This document and additional information can be found in the Corporate Responsibility section of the Bank's website at www.scotiabank.com/sustainability.

Risk Factors

The risks faced by the Bank are described on pages 78 to 119 inclusive of the MD&A and those pages are incorporated herein by reference.

DIVIDENDS

Restrictions on payment of dividends and retirement of shares

Under the Bank Act, the Bank is prohibited from declaring any dividends on its common or preferred shares or redeeming, purchasing or otherwise retiring such shares when the Bank is, or would be placed by such a declaration or retirement, in contravention of the capital adequacy, liquidity or any other regulatory directives issued under the Bank Act.

In the event that applicable cash distributions on any of the Scotiabank Trust Securities are not paid on a regular distribution date, the Bank has undertaken not to declare dividends of any kind on its preferred or common shares until such distributions are made in full or the twelfth month following the non-payment of such distributions. Similarly, should the Bank fail to declare regular dividends on any of its directly issued and outstanding preferred or common shares cash distributions will also not be made on any of the Scotiabank Trust Securities.

In the event that distributions on the Bank's subordinated additional Tier 1 capital securities (NVCC) are not paid in full, the Bank has undertaken not to declare dividends on its common or preferred shares or redeem, purchase or otherwise retire such shares until the month commencing after such distributions have been made in full.

In the event that dividends to which preferred shareholders are then entitled have not been paid or sufficient funds have not been set aside to do so, the Bank has undertaken not to declare dividends on its common shares or redeem, purchase or otherwise retire its common shares.

Currently, the above limitations do not restrict the payment of dividends on or retirement of preferred shares, however, on March 13, 2020, OSFI advised federally regulated deposit taking institutions to suspend buybacks and increases to dividends in respect of its common shares as part of COVID-19 measures.

Dividend Payments

In fiscal 2020, the Bank's actual common share dividend payout ratio was 66.3%, compared to 51.9% in 2019. The Bank has declared and paid the following dividends on its common shares and preferred shares over the past three completed financial years:

	2020	2019	2018
Common Shares	$3.600000	$3.490000	$3.280000
Series 18[1]		—	$0.418750
Series 19[1]		—	$0.374547
Series 20[2]		—	$0.902500
Series 21[2]		—	$0.691967
Series 22[3]		$0.239375	$0.957500
Series 23[3]		$0.215885	$0.736967
Series 30[4]	$0.227500	$0.455000	$0.455000
Series 31[4]	$0.331828	$0.657072	$0.516968
Series 32	$0.515752	$0.515752	$0.515752
Series 33	$0.579323	$0.742073	$0.601968
Series 34	$1.375000	$1.375000	$1.375000
Series 36	$1.375000	$1.375000	$1.375000
Series 38	$1.212500	$1.212500	$1.212500
Series 40[5]	$1.212500	$1.271475	—

(1) On April 26, 2018, the Bank redeemed all of its issued and outstanding Preferred Series 18 and 19.
(2) On October 26, 2018, the Bank redeemed all of its issued and outstanding Preferred Shares, Series 20 and Series 21.
(3) On January 28, 2019, the Bank redeemed all of its issued and outstanding Preferred Shares, Series 22 and Series 23.
(4) On April 27, 2020, the Bank redeemed all of its issued and outstanding Preferred Shares, Series 30 and 31.
(5) On October 12, 2018, 12,000,000 Preferred Shares, Series 40 were issued.

DESCRIPTION OF THE BANK'S CAPITAL STRUCTURE

The following summary of the Bank's share capital is qualified in its entirety by the Bank's by-laws and the actual terms and conditions of such securities. For more details on the Bank's capital structure, see pages 61 to 67 of the MD&A and notes 21 and 24 of the consolidated financial statements for the year ended October 31, 2020. The Bank incorporates those pages and notes by reference.

Common Shares

The authorized common share capital of the Bank consists of an unlimited number of common shares, without nominal or par value, of which 1,211,479,297 common shares were issued and outstanding as at October 31, 2020.

Holders of the Bank's common shares are entitled to vote at all meetings of the shareholders of the Bank except meetings at which only the holders of preferred shares of the Bank are entitled to vote. Common shareholders are entitled to receive dividends, as and when declared on the common shares.

After the payment to the holders of the preferred shares of the amount or amounts to which they may be entitled, the holders of the Bank's common shares shall be entitled to receive the remaining property of the Bank upon liquidation, dissolution or winding-up thereof.

Preferred Shares – General

The authorized preferred share capital of the Bank consists of an unlimited number of preferred shares without nominal or par value issuable in series. The term "Preferred Shares" shall refer to all authorized preferred shares of the Bank.

As at October 31, 2020, Non-cumulative Preferred Shares, Series 32, 33, 34, 36, 38 and 40 were outstanding. In addition, Non-cumulative Preferred Shares, Series 35, 37, 39 and 41 were authorized but are not currently outstanding.

The Preferred Shares are entitled to preference over the common shares and over any other shares of the Bank ranking junior to the Preferred Shares with respect to the payment of dividends and upon any distribution of assets in the event of liquidation, dissolution or winding-up of the Bank.

The Bank may not create, without the approval of the holders of Preferred Shares, any other class of shares ranking prior to or on a parity with the Preferred Shares, increase the authorized number of Preferred Shares or amend the provisions attaching to the Preferred Shares.

Any approval to be given by the holders of the Preferred Shares may be given by a resolution carried by the affirmative vote of not less than 66 2/3% of the votes cast at a meeting of holders of Preferred Shares at which a majority of the outstanding Preferred Shares is represented or, if no quorum is present at such meeting, at any adjourned meeting at which no quorum requirements would apply.

Effective January 1, 2013, in accordance with capital adequacy requirements adopted by OSFI, non-common capital instruments issued after January 1, 2013, including Preferred Shares, must include terms providing for the full and permanent conversion of such securities into common shares upon the occurrence of certain trigger events relating to financial viability (the Non-Viability Contingent Capital or "NVCC requirements") in order to qualify as regulatory capital. Since January 1, 2013, all outstanding capital instruments that do not meet the NVCC requirements are considered non-qualifying capital instruments and are being phased out. Preferred Shares, Series 34, 35, 36, 37, 38, 39, 40 and 41 satisfy the NVCC requirements and were all issued or authorized after January 1, 2013.

Certain Provisions of the Preferred Shares

Dividends

The holders of the Preferred Shares will be entitled to receive either a fixed or floating rate quarterly non-cumulative preferential cash dividend, as and when declared by the Board of Directors of the Bank, subject to the provisions of the Bank Act, on the third last business day of each of January, April, July and October in each year at the rate specified in the terms of each series. If the Board of Directors of the Bank does not declare the dividends, or any part thereof, on a series of Preferred Shares on or before the dividend payment date for a particular quarter, then the entitlement of the holders of such series of Preferred Shares to receive such dividends, or to any part thereof, for such quarter shall be forever extinguished.

The holders of the Preferred Shares, Series 32, 34, 36, 38 and 40 are entitled to receive fixed quarterly, non-cumulative cash dividends, as and when declared by the Board of Directors of the Bank, for the specified initial period as set out in the terms

of each series, and thereafter the dividend rate for each series will reset every five years at the rate specified in the terms for such series.

The holders of the Preferred Shares, Series 33, 35, 37, 39 and 41 are entitled to receive floating rate quarterly, non-cumulative cash dividends, as and when declared by the Board of Directors of the Bank. No Preferred Shares, Series 35, 37, 39 or 41 are currently outstanding.

Redemption

The Preferred Shares currently outstanding will not be redeemable prior to the date specified in the terms for each series. On and after such dates for the Preferred Shares specified in the foregoing sentence and for all other series of Preferred Shares issued and outstanding as at October 31, 2020, subject to the provisions of the Bank Act and to the prior consent of the Superintendent and to certain conditions being met, the Bank may redeem at the time specified in the terms of each series all or any part of an outstanding series of Preferred Shares at the Bank's option without the consent of the holder, by the payment of an amount in cash for each such share so redeemed as specified in the terms of each series.

Notice of any redemption of any series of Preferred Shares will be given by the Bank at least 30 days and not more than 60 days prior to the date fixed for redemption. If less than all the outstanding Preferred Shares in any series are at any time to be redeemed, the shares to be redeemed will be redeemed *pro rata*, disregarding fractions.

Rights Upon Dissolution or Winding-Up

In the event of the liquidation, dissolution or winding-up of the Bank, the holders of each series of the Preferred Shares shall be entitled to receive $25.00 per Preferred Share, together with all dividends declared and unpaid to the date of payment before any amount shall be paid or any assets of the Bank distributed to the holders of any shares ranking junior to the Preferred Shares. The holders of each series of the Preferred Shares shall not be entitled to share in any further distribution of the assets of the Bank.

Restrictions on Dividends and Retirement of Shares

So long as any shares of a series of Preferred Shares are outstanding, the Bank will not, without the approval of the holders of the relevant series of Preferred Shares:

(a) declare, pay or set apart for payment any dividends on the common shares of the Bank or any other shares ranking junior to the series of Preferred Shares (other than stock dividends payable in shares ranking junior to the series of Preferred Shares);

(b) redeem, purchase or otherwise retire any common shares or any other shares ranking junior to the series of Preferred Shares (except out of the net cash proceeds of a substantially concurrent issue of shares ranking junior to the series of Preferred Shares);

(c) redeem, purchase or otherwise retire less than all of the series of Preferred Shares; or

(d) except pursuant to any purchase obligation, sinking fund, retraction privilege or mandatory redemption provisions attaching to any series of Preferred Shares of the Bank, redeem, purchase or otherwise retire any other shares ranking on a parity with the series of Preferred Shares;

unless, in each case, all dividends up to and including those payable on the dividend payment date for the last completed period for which dividends shall be payable shall have been declared and paid or set apart for payment in respect of each series of cumulative preferred shares of the Bank then issued and outstanding and on all other cumulative shares ranking on a parity with the preferred shares of the Bank and there shall have been paid or set apart for payment all declared dividends in respect of each series of non-cumulative preferred shares of the Bank (including the series of Preferred Shares) then issued and outstanding and on all other non-cumulative shares ranking on a parity with the Preferred Shares of the Bank.

Purchase for Cancellation

Subject to the provisions of the Bank Act, the prior consent of the Superintendent and certain conditions being met, the Bank may at any time purchase for cancellation any series of Preferred Shares outstanding, in the open market at the lowest price or prices at which in the opinion of the Board of Directors of the Bank such shares are obtainable.

Issuance of Other Series of Preferred Shares

The Bank may issue other series of preferred shares ranking on parity with the Preferred Shares without the authorization of the holders of the Preferred Shares.

Voting Rights

Subject to the provisions of the Bank Act, the holders of a series of Preferred Shares as such will not be entitled to receive notice of, attend, or vote at, any meeting of the shareholders of the Bank unless and until the first time at which the Board of Directors of the Bank has not declared the whole dividend on such series of Preferred Shares in respect of any quarter. In that event, the holders of such Preferred Shares will be entitled to receive notice of, and to attend, meetings of shareholders at which directors of the Bank are to be elected and will be entitled to one vote for each Preferred Share held. The voting rights of the holders of such series of Preferred Shares shall forthwith cease upon payment by the Bank of the first dividend on the series of Preferred Shares to which the holders are entitled subsequent to the time such voting rights first arose until such time as the Bank may again fail to declare the whole dividend on such series of Preferred Shares in any quarter, in which event such voting rights shall become effective again and so on from time to time.

Other Equity Instruments – Subordinated Capital Notes – General

The Bank currently has outstanding (a) US$1.25 billion 4.650% Fixed to Floating Rate Non-Cumulative Subordinated AT1 Capital Notes (NVCC) (“4.650% Subordinated Capital Notes”) and (b) US$1.25 billion 4.900% Fixed Rate Resetting Perpetual Subordinated AT1 Capital Notes (NVCC) (“4.900% Subordinated Capital Notes” and together with the 4.650% Subordinated Capital Notes, the “Subordinated Capital Notes”). The Subordinated Capital Notes have been determined to be compound instruments that have both equity and liability features. For more details, see note 24 of the consolidated financial statements for the year ended October 31, 2020.

The Subordinated Capital Notes are direct unsecured obligations of the Bank and, in the event of the Bank’s insolvency or winding-up, will rank *pari passu* with each other and subordinate to all of the Bank’s subordinated indebtedness and in right of payment equally with and not prior to indebtedness that ranks equally in right of payment with, or is subordinated to, the Subordinated Capital Notes (other than indebtedness which by its terms ranks subordinate to the Subordinated Capital Notes). The Subordinated Capital Notes will constitute subordinated indebtedness for the purposes of the Bank Act. In the event of the Bank’s insolvency or winding-up, the Subordinated Capital Notes will rank ahead of the Bank’s common shares and Preferred Shares.

The Subordinated Capital Notes includes terms providing for the full and permanent conversion of such securities into common shares of the Bank upon the occurrence of certain trigger events relating to NVCC requirements in order to qualify as regulatory capital.

Certain Provisions of the Subordinated Capital Notes

Distributions and Restrictions on Dividend and Retirement of Shares

Interest on the 4.650% Subordinated Capital Notes is paid semi-annually in arrears for the initial five years. Thereafter, the interest will reset quarterly and accrue at a floating rate. Interest on the 4.900% Subordinated Capital Notes is paid quarterly in arrears and will reset every five years and accrue at a fixed rate. While interest on the Subordinated Capital Notes is payable on a quarterly or semi-annual basis for the initial five year period, and quarterly thereafter, the Bank may, at its discretion, with prior notice, cancel the payments. If the Bank does not pay the interest in full to the note holders, the Bank will not declare dividends on its common shares or Preferred Shares or redeem or otherwise retire such share until the month commencing after the Bank resumes full interest payments on the Subordinated Capital Notes.

Interest will be due and payable on an interest payment date only if it is not cancelled by the Bank. Any cancelled interest payments will not be cumulative. The Bank has the sole and absolute discretion at all times and for any reason to cancel (in whole or in part), with notice to the holders of the Notes, any interest payment that would otherwise be payable on any interest payment date. As a result, the holder may not receive any interest on any interest payment date or at any other times, and the holder will have no claims whatsoever in respect of that cancelled interest.

Maturity and Redemption

The Subordinated Capital Notes have no scheduled maturity or redemption date. Accordingly, the Bank is not required to make any repayment of the principal amount of the Subordinated Capital Notes except in the event of bankruptcy or insolvency and provided that the NVCC requirements have not been triggered. The Subordinated Capital Notes are redeemable at the sole discretion of the Bank five years after their issuance and every quarter or five years, as applicable, thereafter. The Subordinated Capital Notes are also redeemable following certain regulatory or tax events, in accordance with their terms. All redemptions are subject to regulatory consent. For more details, see note 24 of the consolidated financial statements for the year ended October 31, 2020.

Purchase for Cancellation

Subject to regulatory consent, the Bank may at any time and from time to time, repurchase for cancellation any Subordinated Capital Notes in the open market, by tender or by private agreement, in any manner and at any price or at differing prices.

Events of Default

An event of default in respect of the Subordinated Capital Notes will occur only if the Bank becomes bankrupt or insolvent or becomes subject to the provisions of the *Winding-up and Restructuring Act* (Canada), consents to the institution of bankruptcy or insolvency proceedings against it, resolves to wind-up, liquidate or dissolve, is ordered wound-up or otherwise acknowledges its insolvency. Neither a failure to make a payment on the Subordinated Capital Notes when due (including any interest payment, whether as a result of cancellation or otherwise) nor an NVCC automatic conversion upon the occurrence of a trigger event will constitute an event of default.

Issuance of other Senior or *Pari Passu* Securities

The terms governing the Subordinated Capital Notes do not limit the Bank's ability to incur additional indebtedness or issue or repurchase securities, other than the restriction on retirement of shares noted above. The Bank may incur additional indebtedness without the authorization of the holders of the Subordinated Capital Notes.

Voting Rights

Holders of Subordinated Capital Notes are not entitled to any rights of holders of common shares, including any rights of shareholders to receive notice, to attend or to vote at any meeting of the shareholders of the Bank. If the Subordinated Capital Notes are converted into common shares of the Bank under NVCC requirements, holders of the Subordinated Capital Notes will become holders of the Bank's common shares and will only have rights as holders of common shares.

Constraints on Ownership of the Bank's Shares

The Bank Act contains restrictions on the issue, transfer, acquisition, beneficial ownership and voting of all shares of a chartered bank. Please refer to the section above entitled "Description of the Bank's Business – General Summary – Supervision and Regulation in Canada" for a summary of these restrictions.

Credit Ratings of Securities and Liquidity

Credit ratings affect the Bank's access to capital markets and borrowing costs, as well as the terms on which the Bank can conduct derivative and hedging transactions. The following ratings have been assigned to the Bank's securities by the rating agencies noted below, which are independent third parties. Credit ratings, including stability or provisional ratings, are not recommendations to purchase, sell or hold a security as they do not comment on market price or suitability for a particular investor. Ratings may not reflect the potential impact of all risks on the value of securities. In addition, real or anticipated

changes in the rating assigned to a security will generally affect the market value of that security. Ratings are subject to revision or withdrawal at any time by the rating agency. Each rating listed in the chart below should be evaluated independently of any other rating applicable to the Bank's debt, Subordinated Capital Notes and Preferred Shares.

	Moody's Investor Service (Moody's)		Standard & Poor's Ratings Services (S&P)		Fitch Ratings (Fitch)		DBRS Limited (DBRS)	
	Rating	Rank[1]	Rating	Rank[1]	Rating	Rank[1]	Rating	Rank[1]
Legacy Senior Debt[2]	Aa2	2 of 9	A+	3 of 10	AA	2 of 10	AA	2 of 10
Senior Debt[3]	A2	3 of 9	A-	3 of 10	AA-	2 of 10	AA (low)	2 of 10
Short-term deposits/commercial paper	P-1	1 of 4	A-1	1 of 6	F1+	1 of 6	R-1(high)	1 of 10
Subordinated debt	Baa1	4 of 9	A-	3 of 10	A	3 of 10	A(high)	3 of 10
Subordinated debt (NVCC)[4]	Baa1	4 of 9	BBB+	4 of 10	N/A	N/A	A(low)	3 of 10
Subordinated additional tier 1 capital notes (NVCC)[4]	Baa3	4 of 9	BBB-	3 of 9	N/A	N/A	BBB (high)	4 of 10
Non-cumulative Preferred Shares	Baa3	4 of 9	BBB/P-2[5]	3 of 9 / 2 of 8	N/A	N/A	Pfd-2(high)	2 of 6
Non-cumulative Preferred Shares (NVCC)[4]	Baa3	4 of 9	BBB-/P-2 (low)[5]	3 of 9 / 2 of 8	N/A	N/A	Pfd-2	2 of 6
Outlook	Stable	N/A	Stable	N/A	Negative	N/A	Stable	N/A

(1) Rank, according to each rating agency's public website, refers to the assigned ratings ranking of all major assignable ratings for each debt of share class, 1 being the highest. Each assignable major rating may be modified further (+/-, high/low, 1/2/3) to show relative standing within the major rating categories.

(2) Includes: (a) Senior debt issued prior to September 23, 2018; and (b) Senior debt issued on or after September 23, 2018 which is excluded from the bank recapitalization "bail-in" regime.

(3) Subject to conversion under the bank recapitalization "bail-in" regime.

(4) Non-Viability Contingent Capital (NVCC)

(5) Canadian Scale

On April 3, 2020, Fitch Ratings affirmed the Bank's long- and short-term issuer default ratings at 'AA-' and 'F1+'. Fitch upgraded the Bank's non-bail-in obligations including legacy senior debt, short-term (less than 400 days) senior obligations, derivative counterparty ratings (DCRs) and long-term deposit ratings by one notch to 'AA' and downgraded the rating of legacy (non-NVCC) subordinated debentures by one notch to 'A', in recognition of the build-up of total loss absorbing capital (TLAC) and other qualifying junior debt buffers to a level sufficient to recapitalize under an assumed resolution scenario. Along with other Canadian banks, Outlook was revised to Negative from Stable due to the disruption to economic activity and financial markets from the coronavirus pandemic.

On April 24, 2020, DBRS affirmed the Bank's respective long-term issuer and short-term instruments rating of AA and R-1 (high), respectively. Trend is Stable.

On April 17, 2020, Moody's affirmed the Bank's respective long-term and short-term Counterparty Risk Rating and Bank Deposits Rating of Aa2 and P-1, and also affirmed the Bank's Issuer Rating and Junior Senior Unsecured rating of A2. Outlook is Stable.

On September 14, 2020, S&P affirmed the Bank's deposits and senior debt and short term-instruments rating of A+ and A-1, respectively. Outlook is Stable.

The Bank makes payments in the ordinary course to the credit rating agencies for the rating services associated with the assignment of the credit ratings noted above. In addition, the Bank made customary payments in respect of certain other services provided to the Bank by the aforementioned credit rating agencies.

A definition of the categories of each rating as at December 1, 2020 has been obtained from the respective rating agency's website and is outlined in Schedule B, and a more detailed explanation may be obtained from the applicable rating agency.

MARKET FOR SECURITIES OF THE BANK

The Bank's common shares are listed under the stock symbol "BNS" on the Toronto Stock Exchange ("TSX") and the New York Stock Exchange ("NYSE"). The Preferred Shares are listed on the TSX under the stock symbols "BNS.PR.Y" for the Preferred Shares, Series 32, "BNS.PR.F" for the Preferred Shares, Series 33, "BNS PR.E" for the Preferred Shares, Series 34, "BNS PR.G" for the Preferred Shares, Series 36, "BNS PR.H" for the Preferred Shares, Series 38, "BNS.PR.I" for the Preferred Shares, Series 40. From time to time, the Bank also has deposit notes and other securities listed on the London Stock Exchange, Singapore Stock Exchange, Swiss Stock Exchange and Taipei Exchange.

Trading Price and Volume

The following table sets out the price range and trading volume of the Bank's securities on the TSX (as reported by Bloomberg) for the periods indicated:

		Preferred Shares							
	Common Shares	Series 30[1]	Series 31[1]	Series 32	Series 33	Series 34	Series 36	Series 38	Series 40
November 2019									
-High Price ($)	$ 76.75	$25.55	$24.95	$24.34	$24.52	$25.87	$26.04	$25.54	$19.67
-Low Price ($)	$ 74.51	$24.53	$24.65	$24.06	$24.09	$25.54	$25.76	$25.33	$18.31
-Volume ('000)	65,720	154	56	172	69	331	123	298	791
December 2019									
-High Price ($)	$ 75.59	$24.90	$25.00	$24.69	$24.62	$26.10	$26.12	$25.90	$19.98
-Low Price ($)	$ 64.98	$24.63	$24.68	$24.17	$24.39	$25.74	$25.91	$25.45	$18.51
-Volume ('000)	86,893	129	30	160	139	310	274	248	1,132
January 2020									
-High Price ($)	$ 73.80	$24.91	$24.94	$24.63	$24.61	$26.70	$26.11	$25.86	$20.76
-Low Price ($)	$ 71.64	$24.73	$24.78	$24.22	$24.37	$25.50	$25.67	$25.31	$19.64
-Volume ('000)	91,379	233	35	721	493	211	478	330	678
February 2020									
-High Price ($)	$ 74.92	$24.94	$24.99	$24.60	$24.65	$26.00	$26.16	$25.80	$20.58
-Low Price ($)	$ 68.85	$24.82	$24.85	$24.44	$24.42	$25.57	$25.42	$25.55	$18.74
-Volume ('000)	91,656	217	108	497	459	193	151	346	323
March 2020									
-High Price ($)	$ 71.17	$25.10	$25.13	$24.60	$24.53	$25.67	$25.79	$25.63	$19.00
-Low Price ($)	$ 46.37	$22.26	$22.05	$19.24	$18.01	$17.50	$19.00	$16.75	$12.49
-Volume ('000)	268,000	2,622	2,913	485	140	904	781	997	752
April 2020									
-High Price ($)	$ 58.15	$25.10	$25.11	$24.84	$24.64	$24.28	$24.88	$23.42	$18.09
-Low Price ($)	$ 51.87	$24.91	$24.95	$23.65	$22.84	$20.83	$21.41	$19.13	$15.01
-Volume ('000)	167,082	101	141	289	145	635	513	808	476
May 2020									
-High Price ($)	$ 58.54			$24.65	$24.75	$24.55	$25.30	$23.98	$18.31
-Low Price ($)	$ 49.11	—	—	$24.07	$23.96	$23.56	$24.36	$22.12	$16.71
-Volume ('000)	133,947			197	171	277	1,056	638	354
June 2020									
-High Price ($)	$ 62.07			$24.69	$24.78	$24.52	$25.23	$24.19	$17.99
-Low Price ($)	$ 54.20	—	—	$24.30	$24.20	$23.63	$24.50	$22.70	$17.02
-Volume ('000)	165,542			260	69	234	335	460	276
July 2020									
-High Price ($)	$ 57.50			$24.99	$24.84	$25.47	$25.73	$25.36	$19.98
-Low Price ($)	$ 53.72	—	—	$24.51	$24.39	$24.05	$24.65	$22.80	$17.30
-Volume ('000)	136,294			271	429	537	489	577	357
August 2020									
-High Price ($)	$ 58.99			$24.98	$24.90	$25.38	$25.69	$25.50	$20.89
-Low Price ($)	$ 55.00	—	—	$24.73	$24.71	$25.05	$25.30	$25.06	$19.45
-Volume ('000)	89,905			612	276	254	418	914	246
September 2020									
-High Price ($)	$ 56.61			$25.02	$24.91	$25.48	$25.55	$25.45	$20.99
-Low Price ($)	$ 53.54	—	—	$24.80	$24.58	$25.13	$25.13	$25.00	$19.81
-Volume ('000)	156,953			492	274	227	1,391	1,590	330
October 2020									
-High Price ($)	$ 57.93			$24.97	$24.93	$25.48	$25.57	$25.58	$20.60
-Low Price ($)	$ 53.20	—	—	$24.72	$24.66	$25.11	$25.21	$25.20	$19.55
-Volume ('000)	155,484			432	72	344	1,099	956	427

(1) Redeemed on April 27, 2020.

Prior Sales

From time to time, the Bank issues principal at risk notes, which are securities issued by the Bank for which the amount payable at maturity is determined by reference to the price, value or level of an underlying interest, including an index,

exchange traded fund or a notional basket of equities or other securities. For information about the Bank's issuance of subordinated indebtedness and other equity instruments since October 31, 2019, see notes 21 and 24 to the Bank's consolidated financial statements for the year ended October 31, 2020, which is incorporated herein by reference.

DIRECTORS AND EXECUTIVE OFFICERS OF THE BANK

Directors and Board Committees of the Bank

The following table sets out the Bank's directors as of December 1, 2020. The term of office of each director expires at the close of the Bank's next annual meeting of shareholders. Information concerning the nominees proposed by management for election as directors at the annual meeting of shareholders will be contained in the Bank's 2021 Management Proxy Circular.

Name and Place of Residence	Board Committee Memberships	Principal Occupation
Nora A. Aufreiter Toronto, Ontario, Canada (Director since August 25, 2014)	CGC – Chair HRC	Corporate Director and a former Senior Partner of McKinsey & Company, an international consulting firm
Guillermo E. Babatz Mexico City, Mexico (Director since January 28, 2014)	RC – Chair HRC	Managing Partner of Atik Capital, S.C., an advisory firm that specializes in structuring financial solutions for its clients
Scott B. Bonham Atherton, California, U.S.A. (Director since January 25, 2016)	ACRC CGC	Corporate Director and co-founder of Intentional Capital, a privately-held real estate asset management company
Charles H. Dallara, Ph.D. Oak Hill, Virginia, U.S.A. (Director since September 23, 2013)	ACRC RC	Advisory Partner of Partners Group and Chairman of Partners Group Board of Directors, USA, a private market investment and asset management group
Lynn K. Patterson Toronto, Ontario, Canada (Director since September 1, 2020)	ACRC RC	Corporate Director
Michael D. Penner Westmount, Quebec, Canada (Director since June 26, 2017)	ACRC CGC	Chairman and Lead Operating Director of both US Infrastructure Corporation and Enfragen Energy and a Corporate Director
Brian J. Porter Toronto, Ontario, Canada (Director since April 9, 2013)	None	President and Chief Executive Officer of the Bank
Una M. Power Vancouver, British Columbia, Canada (Director since April 12, 2016)	ACRC – Chair HRC	Corporate Director
Aaron W. Regent Toronto, Ontario, Canada (Director since April 9, 2013)	ACRC CGC HRC RC	Chairman of the Board and Founding Partner of Magris Resources Inc. and Chairman and Chief Executive Officer of Niobec Inc., companies involved with the acquisition, development and operation of mining and industrial mineral assets on a global basis
Calin Rovinescu Montreal, Quebec, Canada (Director since November 1, 2020)	ACRC HRC	President and Chief Executive Officer of Air Canada, Canada's largest full-service airline
Indira V. Samarasekera, O.C., Ph.D. Vancouver, British Columbia, Canada (Director since May 26, 2008)	CGC HRC	Senior Advisor at Bennett Jones LLP, a law firm, and a Corporate Director

Name and Place of Residence	Board Committee Memberships	Principal Occupation
Susan L. Segal New York, New York, U.S.A. (Director since December 2, 2011)	ACRC RC	President and Chief Executive Officer of the Americas Society, an organization dedicated to education, debate and dialogue in the Americas and of the Council of the Americas, a business organization whose members share a common interest in the western hemisphere
L. Scott Thomson Vancouver, British Columbia, Canada (Director since April 12, 2016)	HRC – Chair RC	President and Chief Executive Officer of Finning International Inc., the world's largest Caterpillar equipment dealer
Benita M. Warmbold Toronto, Ontario, Canada (Director since October 29, 2018)	ACRC HRC	Corporate Director

Notes:
ACRC – Audit and Conduct Review Committee
CGC – Corporate Governance Committee
HRC – Human Resources Committee
RC – Risk Committee

All directors have held the positions, or other executive positions with the same, predecessor or associated firms, set out in this AIF for the past five years with the exception of: Michael D. Penner, who was the President and Chief Executive Officer of Peds Legwear, a clothing manufacturer and distributor until it was sold to Gildan Activewear Inc. in August 2016 and who prior to November 2018, was Chairman of the Board of Directors of Hydro-Québec; Lynn K. Patterson, who was Deputy Governor of the Bank of Canada until her retirement in July 2019; Una M. Power, who prior to March 2016, was Chief Financial Officer of Nexen Energy ULC, an energy company; and Benita M. Warmbold, who prior to July 2017, was Senior Managing Director and Chief Financial Officer of the Canada Pension Plan Investment Board.

Brian Porter is non-independent, due to his position as President and Chief Executive Officer.

Executive Officers of the Bank

The following are the Bank's executive officers, their titles and places of residence in Canada (except as otherwise noted) as of December 1, 2020:

Name and Principal Occupation	Place of Residence
Brian J. Porter President and Chief Executive Officer	Toronto, Ontario
Rajagopal Viswanathan Group Head and Chief Financial Officer	Oakville, Ontario
Ignacio "Nacho" Deschamps Group Head, International Banking and Digital Transformation	Toronto, Ontario
Jake Lawrence Co-Group Head, Global Banking and Markets, Head, Global Capital Markets	Toronto, Ontario
James Neate Co-Group Head, Global Banking and Markets, Head, Global Corporate and Investment Banking	Mississauga, Ontario
Barbara F. Mason Group Head and Chief Human Resources Officer	Toronto, Ontario
Daniel Moore Group Head and Chief Risk Officer	Toronto, Ontario
Dan Rees Group Head, Canadian Banking	Toronto, Ontario
Michael Zerbs Group Head, Technology & Operations	Markham, Ontario
Ian Arellano Executive Vice President and General Counsel	Toronto, Ontario
Paul Baroni Executive Vice President & Chief Auditor	Toronto, Ontario
Tracy Bryan Executive Vice President, Global Operations	Whitby, Ontario
John Doig Executive Vice President, Retail Distribution	Toronto, Ontario
Glen Gowland Group Head, Global Wealth Management	Toronto, Ontario
Michael Henry Executive Vice-President, Enterprise Risk Governance	Mississauga, Ontario
Loretta Marcoccia Executive Vice President & Chief Operating Officer, Global Banking and Markets	Toronto, Ontario
Tom McGuire Executive Vice President and Group Treasurer	Toronto, Ontario
Gillian Riley Executive Vice President, President & CEO, Tangerine	Toronto, Ontario
Shawn Rose Executive Vice President and Chief Digital Officer	Toronto, Ontario
Adrián Otero Rosiles Executive Vice President and Country Head, Mexico	Mexico City, Mexico
Francisco Sardon de Taboada Executive Vice President and Country Head, Chile	Santiago, Chile
Anya M. Schnoor Executive Vice President, Caribbean, Central America and Uruguay	Toronto, Ontario
Kevin Teslyk Executive Vice President, Canadian Business Banking	Oakville, Ontario

Name and Principal Occupation	Place of Residence
Maria Theofilaktidis Executive Vice-President, Finance	Toronto, Ontario
Philip Thomas Executive Vice President, Customer Insights, Data and Analytics	Cobourg, Ontario
Miguel Uccelli Executive Vice President and Country Head, Peru	Lima, Peru
Ashley Veasey Executive Vice President & Global Chief Information Officer, Business Technology	Toronto, Ontario
Alex Besharat Executive Vice President, Canadian Wealth Management	Toronto, Ontario
Nicole Frew Executive Vice President, Chief Compliance Officer	Toronto, Ontario
Stuart Davis Executive Vice President, Financial Crimes Risk Management & Group Chief Anti-Money Laundering Officer	Toronto, Ontario
Anique Asher Executive Vice President, Finance and Strategy	Toronto, Ontario

All of the executive officers of the Bank have been actively engaged for more than five years in the affairs of the Bank in executive or senior management capacities, except: Ian Arellano, who prior to September 2017, was co-head of Torys LLP's International Initiative and a senior partner of Torys LLP law firm; Tom McGuire, who prior to May 2018, was Treasurer of Barclays Americas and Barclays US LLC; Shawn Rose, who prior to June 2016, was Group Chief Product Officer at Moneysupermarket (MSM) Group PLC; Adrián Otero Rosiles, who prior to February 2019, was Head of Wholesale Banking and Head of Investment Banking of BBVA Bancomer and Ashley Veasey, who prior to February 2018 was the Chief Information Officer and Chief Digital Officer for Barclays Bank.

Cease Trade Orders, Bankruptcies, Penalties or Sanctions

To the best of the Bank's knowledge, the Bank confirms that no director or executive officer of the Bank:

(a) is, as at the date of this AIF or has been within the last 10 years, a director, chief executive officer or chief financial officer of any company that was the subject of a cease trade order or similar order or an order that denied the relevant company access to any exemption under securities legislation, for a period of more than 30 consecutive days that was issued:

  (i) while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer; or

  (ii) after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer;

(b) is, as at the date of this AIF, or has been within the last 10 years, a director or executive officer of any company that, while that person was acting in that capacity or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or

(c) has, or within 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director or executive officer.

To the best of the Bank's knowledge, none of the directors or executive officers of the Bank have been subject to (a) any penalties or sanctions imposed by a court relating to Canadian securities legislation or by a Canadian securities regulatory authority or have entered into a settlement agreement with a Canadian securities regulatory authority; or (b) any other penalties or sanctions imposed by a court or a regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

Shareholdings of Management

To the knowledge of the Bank, the directors and executive officers of the Bank as a group own, or exercise control or direction over, less than one per cent of the outstanding common shares of the Bank. The Bank's directors or executive officers own, or exercise control or direction over, less than one percent of the outstanding shares of any of the Bank's subsidiaries.

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

In the ordinary course of business, the Bank and its subsidiaries are routinely defendants in, or parties to a number of pending and threatened legal actions and regulatory proceedings, including actions brought on behalf of various classes of claimants. In view of the inherent difficulty of predicting the outcome of such matters, the Bank cannot state what the eventual outcome of such matters will be. However, based on current knowledge, management does not believe that liabilities, if any, arising from pending litigation or regulatory proceedings will have a material adverse effect on the Consolidated Statement of Financial Position or results of operations of the Bank.

Legal provisions are established when it becomes probable that the Bank will incur an expense related to a legal action and the amount can be reliably estimated. Such provisions are recorded at the best estimate of the amount required to settle any obligation related to these legal actions as at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation. Management and internal and external experts are involved in estimating any amounts that may be required. The actual costs of resolving these claims may vary significantly from the amount of the legal provisions. The Bank's estimate involves significant judgement, given the varying stages of the proceedings, the fact that the Bank's liability, if any, has yet to be determined and the fact that the underlying matters will change from time to time. As such, there is a possibility that the ultimate resolution of those legal actions may be material to the Bank's consolidated results of operations for any particular reporting period.

Furthermore, the Bank and its subsidiaries may be subject to penalties or sanctions imposed by regulatory authorities or enter into settlement agreements with regulatory authorities from time to time. As the Bank and its subsidiaries are subject to numerous regulatory authorities around the world, fees, administrative penalties and sanctions may be categorized differently by each regulator. Any such penalties imposed under these categories against the Bank and its subsidiaries, however, are not material, nor would they likely be considered important to a reasonable investor in making an investment decision, and would include penalties such as late filing fees. The Bank and its subsidiaries have not entered into any material settlement agreements with a court relating to securities legislation or with a securities regulatory authority.[2]

On November 5, 2015, the Bank and its New York Agency entered a written agreement (the "Agreement") with the Federal Reserve Bank of New York and the New York State Department of Financial Services relating to the New York Agency's Bank Secrecy Act/Anti-Money Laundering Program. The Bank has committed significant resources to addressing the findings in the Agreement and has made significant enhancements to its BSA/AML and sanctions program.

On August 19, 2020, the Bank announced that it entered into a Deferred Prosecution Agreement ("DPA") with the U.S. Department of Justice (the "DOJ"). Additionally, the Commodity Futures Trading Commission (the "CFTC") issued three separate orders against the Bank (collectively, the "Orders"). The DPA and the Orders (together, the "Resolutions") resolve the DOJ's and CFTC's previously disclosed investigations into the Bank's activities and trading practices in the metals markets and related conduct as well as pre-trade mid-market marks and related swap dealer compliance issues.

Under the terms of the Resolutions, the Bank made aggregate payments to the DOJ and CFTC of approximately $127.5 million (USD) and has agreed to retain an independent compliance monitor. Under one of the orders, the CFTC will defer

[2] National Instrument 14-101 limits the meaning of "securities legislation" to Canadian provincial and territorial legislation and "securities regulatory authority" to Canadian provincial and territorial securities regulatory authorities.

proceedings to suspend or revoke the Bank's provisional registration as a swap dealer subject to the Bank's implementation of a remediation plan, among other conditions.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

To the best of the Bank's knowledge, the Bank confirms that there are no directors or executive officers or any associate or affiliate of a director or executive officer with a material interest in any transaction within the three most recently completed financial years or during the current financial year that has materially affected or will materially affect the Bank.

TRANSFER AGENT AND REGISTRAR

Computershare Trust Company of Canada is the Bank's transfer agent and registrar at the following addresses: Computershare Trust Company of Canada, 100 University Avenue, 8th Floor, Toronto, Ontario, M5J 2Y1 and Computershare Trust Company N.A., 250 Royall Street, Canton, Massachusetts, 02021, U.S.

CONFLICTS OF INTEREST

To the knowledge of the Bank, no director or executive officer of the Bank has an existing or potential material conflict of interest with the Bank or any of its subsidiaries.

EXPERTS

The Bank's Shareholders' Auditors are KPMG LLP, Bay Adelaide Centre, 333 Bay Street, Suite 4600, Toronto, Ontario, M5H 2S5. KPMG LLP is independent of the Bank within the meaning of the Rules of Professional Conduct / Code of Ethics of various Canadian provincial institutes/ordre and within the meaning of the relevant rules and related interpretations prescribed by the relevant professional bodies and any applicable legislation or regulation.

THE BANK'S AUDIT AND CONDUCT REVIEW COMMITTEE

A copy of the Bank's Audit and Conduct Review Committee charter is attached to this AIF as Schedule C and can also be found on the Bank's website at www.scotiabank.com in the Corporate Governance section.

The following directors are members of the Audit and Conduct Review Committee as of December 1, 2020: Una M. Power (Chair and financial expert), Scott B. Bonham, Charles H. Dallara, Lynn K. Patterson, Michael D. Penner, Aaron W. Regent, Calin Rovinescu, Susan Segal and Benita Warmbold. All of the members of the Committee are financially literate and independent as defined by Canadian and United States securities law. The Bank's Board of Directors has designated each of Una M. Power, Aaron W. Regent and Benita M. Warmbold as an 'audit committee financial expert', as that term is defined by United States securities laws.

The education and related experience (as applicable) of each Audit and Conduct Review Committee member is described below.

Una M. Power (Chair) **–** Ms. Power is corporate director and the former Chief Financial Officer of Nexen Energy ULC, a former publicly-traded energy company that is a wholly-owned subsidiary of CNOOC Limited. During her 24 year career with Nexen, Ms. Power held various executive positions with responsibility for financial and risk management, strategic planning and budgeting, business development, energy marketing and trading, information technology and capital investment. Ms. Power holds a B.Comm. (Honours) from Memorial University and CPA, CA and CFA designations. She has completed executive development programs at Wharton Business School and INSEAD.

Scott B. Bonham – Mr. Bonham is a corporate director and the co-founder of Intentional Capital, a privately held real estate asset management company. From 2000 to 2015, he was co-founder of GGV Capital, an expansion stage venture capital firm with investments in the U.S. and China. Prior to GGV Capital, he served as Vice President of the Capital Group Companies, where he managed technology investments across several mutual funds from 1996 to 2000. Mr. Bonham has a B.Sc. (in electrical engineering) from Queen's University and an M.B.A. from Harvard Business School.

Charles H. Dallara – Dr. Dallara is an Advisory Partner of Partners Group and Chairman of Partners Group Board of Directors, USA, a private market investment and asset management group, based in Switzerland. He has 44 years of industry experience. Dr. Dallara was Chairman of the Americas and a member of the Board of Directors of Partners Group Holding AG until 2019. Prior to joining Partners Group in 2013, Dr. Dallara was the Managing Director and Chief Executive Officer of the Institute of International Finance from 1993 to 2013. Previously, he was a Managing Director at J.P. Morgan & Co. In addition, Dr. Dallara has held senior positions in the U.S. Department of the Treasury and with the IMF. He holds a B. Sc. (in Economics) from the University of South Carolina, a M.A., a M.A.L.D. (in Law & Diplomacy) and a Ph.D. from the Fletcher School of Law and Diplomacy at Tufts University.

Lynn K. Patterson – Ms. Patterson served as Deputy Governor of the Bank of Canada ("BoC") from May 2014 until her retirement from the BoC in July 2019. In this capacity, she was one of two deputy governors responsible for overseeing the BoC's analysis and activities promoting a stable and efficient financial system. Prior to this, Ms. Patterson served as Special Adviser to the Governor and Senior Representative (Financial Markets) at the BoC's Toronto Regional Office. Previous to her time at the BoC, Ms. Patterson was President and Country Head for Bank of America Merrill Lynch Canada. She is a recipient of the Diamond Jubilee Medal as a builder and innovator in Canada's investment industry. Ms. Patterson received an honours degree in Business Administration from the University of Western Ontario and is a Chartered Financial Analyst.

Michael D. Penner – Mr. Penner is Chairman and Leading Operating Director of both US Infrastructure Corporation and Enfragen Energy and a corporate director. Mr. Penner was Chairman of the Board of Directors of Hydro-Québec from 2014 to 2018. He was the President and Chief Executive Officer of Peds Legwear prior to selling his company to Gildan Activewear Inc. in August 2016. Mr. Penner has been active in the community, on the Board of Directors of ICD Quebec and has served as a member of the Board of Directors of Les Grands Ballets Canadiens de Montréal, Selwyn House School, Hofstra University School of Law and McGill University Football. Mr. Penner holds a Bachelor of Arts degree from McGill University and a Juris Doctor from Hofstra University in New York.

Aaron W. Regent – Aaron Regent is Chairman of the Board of Scotiabank. He is the Founding Partner of Magris Resources Inc. and Chairman and Chief Executive Officer of Niobec Inc., companies involved with the acquisition, development and operation of mining and industrial mineral assets on a global basis. He was President and Chief Executive Officer of Barrick Gold Corporation from January 2009 to June 2012. Previously, Mr. Regent was Senior Managing Partner of Brookfield Asset Management and Co-Chief Executive Officer of the Brookfield Infrastructure Group, an asset management company, and President and Chief Executive Officer of Falconbridge Limited. Mr. Regent holds a B.A. from the University of Western Ontario and is a chartered accountant and a Fellow of CPA Ontario.

Calin Rovinescu – Calin Rovinescu has served as President and Chief Executive Officer of Air Canada since April 2009 and announced that he will retire from this position on February 15, 2021. Mr. Rovinescu was the Executive Vice President, Corporate Development & Strategy of Air Canada from 2000 to 2004, and also held the position of Chief Restructuring Officer during the airline's 2003-2004 restructuring. From 2004 to 2009, Mr. Rovinescu was a Co-founder and Principal of Genuity Capital Markets, an independent investment bank. Prior to 2000, he was the Managing Partner of the law firm Stikeman Elliott in Montréal. Mr. Rovinescu was Chair of the Star Alliance Chief Executive Board from 2012 to 2016 and Chair of the International Air Transport Association in 2014-2015 and he continues to serve on its Board of Governors. He is also a member of the Business Council of Canada. Mr. Rovinescu holds Bachelor of law degrees from the Université de Montréal and the University of Ottawa, and has been awarded six Honorary Doctorates from universities in Canada, Europe and the United States. Mr. Rovinescu was named the 14th Chancellor of the University of Ottawa in November 2015. In 2016, Mr. Rovinescu was recognized as Canada's Outstanding CEO of the Year by the Financial Post Magazine. In 2018, Mr. Rovinescu was appointed a member of the Order of Canada. In 2019, Mr. Rovinescu was recognized as Strategist of the Year and as Canada's Outstanding CEO of the Year for the second time by the Globe and Mail's Report on Business magazine.

Susan L. Segal – Susan Segal was elected President and Chief Executive Officer of the Americas Society, an organization dedicated to education, debate and dialogue in the Americas, and Council of the Americas, a business organization whose members share a common interest in the western hemisphere, in August 2003. Previously, she was a banker for over 25 years with JPM Chase and its predecessor banks. Ms. Segal received a B.A. from Sarah Lawrence College and a M.B.A. from Columbia University. In 1999, she was awarded the Order of Bernardo O'Higgins, Grado de Gran Oficial in Chile. In 2009, President Alvaro Uribe of Colombia honored her with the Cruz de San Carlos award and in September 2012, Mexican President Calderón awarded her with the Aguila Azteca, the highest award given to a foreigner. In 2013, the North American-Chilean Chamber of Commerce recognized her as the Honorary Chilean of the Year. In 2018, Ms. Segal was

awarded Peru's Order of "Merit for Distinguished Services" in the rank of Grand Official on behalf of President Martín Vizcarra.

Benita M. Warmbold – Ms. Warmbold is a corporate director, and the former Senior Managing Director and Chief Financial Officer of Canada Pension Plan (CPP) Investment Board having retired in July 2017. Over her nine years at CPP Investment Board, Ms. Warmbold was responsible for finance, risk, performance, tax, internal audit, legal, technology, data and investment operations. Prior to joining CPP Investment Board in 2008, Ms. Warmbold held senior leadership positions with Northwater Capital, Canada Development Investment Corporation and KPMG. She is Chair of the Canadian Public Accountability Board. Ms. Warmbold holds a B. Comm. (Honours) from Queen's University and is a chartered professional accountant and a Fellow of CPA Ontario. Ms. Warmbold has been recognized three times as one of "Canada's Most Powerful Women – Top 100," and in 2016 was inducted into the WXN Hall of Fame.

Shareholders' Auditors

Please refer to Table 81 on page 138 of the MD&A, which is incorporated herein by reference, for disclosure relating to the fees paid by the Bank to the Bank's Shareholders' Auditors, KPMG LLP in each of the last three fiscal years. The nature of these services is described below:

- Audit services generally relate to the statutory audits and review of financial statements, regulatory required attestation reports, as well as services associated with registration statements, prospectuses, periodic reports and other documents filed with securities regulatory bodies or other documents issued in connection with securities offerings.
- Audit-related services include special attest services not directly linked to the financial statements, review of controls and procedures related to regulatory reporting, audits of employee benefit plans and consultation and training on accounting and financial reporting.
- Tax services outside of the audit scope relate primarily to specified review procedures required by local tax authorities, attestation on tax returns of certain subsidiaries as required by local tax authorities, and review to determine compliance with an agreement with the tax authorities.
- Other non-audit services are primarily for the review and translation of English language financial statements into other languages and other services.

The Audit and Conduct Review Committee has adopted policies and procedures (the "Policies") for the pre-approval of services performed by the Bank's Shareholders' Auditors. The objective of the Policies is to specify the scope of services permitted to be performed by the Bank's Shareholders' Auditors and to ensure the independence of the Bank's Shareholders' Auditors is not compromised through engaging them for other services. The Policies state that the Audit and Conduct Review Committee shall pre-approve the following: audit services (all such engagements provided by the Bank's Shareholders' Auditors as well as all such engagements provided by any other registered public accounting firm); and other permitted services to be provided by the Bank's Shareholders' Auditors (primarily audit and audit-related services). The Bank's Shareholders' Auditors shall not be engaged in the provision of tax or other non-audit services, without the pre-approval of the Audit and Conduct Review Committee. The Policies also enumerate pre-approved services including specific audit, audit-related and other limited non-audit services that are consistent with the independence requirements of the U.S. Sarbanes-Oxley Act of 2002, Canadian independence standards for auditors and applicable legal requirements. The Policies are applicable to the Bank, its subsidiaries and entities that are required to be consolidated by the Bank. The Audit and Conduct Review Committee shall review and approve the Policies on a regular basis. The Policies do not delegate any of the Audit and Conduct Review Committee's responsibilities to management of the Bank.

ADDITIONAL INFORMATION

Additional information relating to the Bank may be found on the SEDAR website at www.sedar.com and on the SEC's website at www.sec.gov. For a description of Canadian bank resolution powers and the consequent risk factors attaching to certain liabilities of the Bank reference is made to https://www.scotiabank.com/ca/en/about/investors-shareholders/regulatory-disclosures/canadian-bank-resolution-powers-including-bail-in.html. Such information may also be found at www.sedar.com and at www.sec.gov/edgar. Information contained in or otherwise accessible through the websites mentioned in this Annual Information Form does not form a part of this Annual Information Form. All references in this Annual Information Form to websites are inactive textual references and are for your information only. Additional information, including directors' and officers' compensation, indebtedness and options to purchase securities, principal

holders of the Bank's securities and interests of insiders in material transactions, where applicable, is contained in the Management Proxy Circular. Additional financial information is provided in the Bank's consolidated financial statements and MD&A for the year ended October 31, 2020. A copy of such documents may be obtained upon request from the Corporate Secretary's Department, at Scotia Plaza, 44 King Street West, Toronto, Ontario, M5H 1H1 Tel: (416) 866-3672. E-mail: corporate.secretary@scotiabank.com.

Schedule A

Principal subsidiaries[1]

The following table presents certain operating subsidiaries the Bank owns, directly or indirectly. All of these subsidiaries are included in the Bank's consolidated financial statements.

As at October 31 ($ millions)	Principal office	Carrying value of shares 2020	2019
Canadian			
1832 Asset Management L.P.	Toronto, Ontario	**$ 1,562**	$ 1,691
BNS Investments Inc.	Toronto, Ontario	**14,510**	14,292
Montreal Trust Company of Canada	Montreal, Quebec		
The Bank of Nova Scotia Trust Company	Toronto, Ontario	**155**	127
National Trust Company	Stratford, Ontario	**359**	449
Roynat Inc.	Calgary, Alberta	**409**	439
Scotia Capital Inc.	Toronto, Ontario	**2,338**	1,634
Scotia Dealer Advantage Inc.	Burnaby, British Columbia	**614**	642
Scotia Mortgage Corporation	Toronto, Ontario	**760**	675
Scotia Securities Inc.	Toronto, Ontario	**49**	47
Tangerine Bank	Toronto, Ontario	**3,264**	3,629
Jarislowsky, Fraser Limited	Montreal, Quebec	**957**	952
MD Financial Management Inc.	Ottawa, Ontario	**2,645**	2,639
International			
Scotiabank Colpatria S.A. (51%)	Bogota, Colombia	**1,004**	1,251
The Bank of Nova Scotia Berhad	Kuala Lumpur, Malaysia	**332**	326
BNS International (Bahamas) Limited[2]	Nassau, Bahamas	**18,510**	19,824
BNS Asia Limited	Singapore		
The Bank of Nova Scotia Trust Company (Bahamas) Limited	Nassau, Bahamas		
Grupo BNS de Costa Rica, S.A.	San Jose, Costa Rica		
Scotiabank & Trust (Cayman) Ltd.	Grand Cayman, Cayman Islands		
Scotiabank (Bahamas) Limited	Nassau, Bahamas		
Scotiabank (British Virgin Islands) Limited[3]	Road Town, Tortola, B.V.I.		
Scotiabank (Hong Kong) Limited	Hong Kong, China		
Scotiabank (Ireland) Designated Activity Company	Dublin, Ireland		
Scotiabank (Turks and Caicos) Ltd.	Providenciales, Turks and Caicos Islands		
BNS International (Panama) S.A.	Panama City, Panama		
Grupo Financiero Scotiabank Inverlat, S.A. de C.V. (97.4%)	Mexico City, Mexico	**4,320**	4,512
Nova Scotia Inversiones Limitada	Santiago, Chile	**5,255**	5,096
Scotiabank Chile S.A. (76.01%)	Santiago, Chile		
Scotia Holdings (US) Inc.[4]	New York, New York		
Scotia Capital (USA) Inc.[4][5]	New York, New York		
Scotiabank Brasil S.A. Banco Multiplo	Sao Paulo, Brazil	**282**	382
Scotiabank Caribbean Holdings Ltd.	Bridgetown, Barbados	**1,842**	1,842
Scotia Group Jamaica Limited (71.8%)	Kingston, Jamaica		
The Bank of Nova Scotia Jamaica Limited	Kingston, Jamaica		
Scotia Investments Jamaica Limited	Kingston, Jamaica		
Scotiabank (Belize) Ltd.	Belize City, Belize		
Scotiabank Trinidad and Tobago Limited (50.9%)	Port of Spain, Trinidad and Tobago		
Scotiabank (Panama) S.A.	Panama City, Panama		
Scotiabank Uruguay S.A.	Montevideo, Uruguay	**472**	489
Scotiabank de Puerto Rico[3]	San Juan, Puerto Rico	**—**	1,017
Scotiabank El Salvador, S.A.[3]	San Salvador, El Salvador	**—**	325
Scotiabank Europe plc	London, United Kingdom	**2,505**	2,418
Scotiabank Peru Holding S.A.	Lima Peru	**5,677**	5,676
Scotiabank Peru S.A.A. (98.05%)	Lima, Peru		
Profuturo AFP S.A.	Lima, Peru		
Scotiabank Republica Dominicana, S.A.– Banco Multiple[6]	Santo Domingo, Dominican Republic	**808**	402
Scotiabank Barbados Limited	Bridgetown, Barbados	**219**	—

(1) The Bank (or immediate parent of an entity) owns 100% of the outstanding voting shares of each subsidiary unless otherwise noted.
(2) Formerly The Bank of Nova Scotia International Limited. Effective April 5, 2019, the name was changed to BNS International (Bahamas) Limited.
(3) These subsidiaries were divested during the year.
(4) The carrying value of this subsidiary is included with that of its parent, BNS Investments Inc.
(5) The carrying value of this subsidiary is included with that of its parent, Scotia Holdings (US) Inc.
(6) Formerly Banco Dominicano del Progreso, S.A. – Banco Multiple. Effective June 1, 2020, the name was changed to Scotiabank, Republica Dominicana, S.A. – Banco Multiple.

Subsidiaries may have a different reporting date from that of the Bank of October 31. Dates may differ for a variety of reasons including local reporting requirements or tax laws. In accordance with the Bank's accounting policies, for the purpose of inclusion in the consolidated financial statements of the Bank, adjustments are made where significant for subsidiaries with different reporting dates.

Schedule B

Definition of Credit Ratings

Moody's

Moody's short-term ratings are assigned to obligations with an original maturity of thirteen months or less and reflect both on the likelihood of a default on contractually promised payments and the expected financial loss suffered in the event of default. The "P-1" rating indicates that an issuer has a superior ability to repay short-term debt obligations.

Moody's long-term ratings are assigned to issuers or obligations with an original maturity of one year or more and reflect both on the likelihood of a default on contractually promised payments and the expected financial loss suffered in the event of default. Obligations rated "Aa" are judged to be of high quality and are subject to very low credit risk. Obligations rated "A" are judged to be upper-medium grade and are subject to low credit risk. Obligations rated "Baa" are judged to be medium-grade and subject to moderate credit risk and as such may possess certain speculative characteristics. The numerical modifiers 1, 2 and 3 indicate that the obligation ranks in the higher end, mid-range or lower end, respectively, of that generic rating category.

Additionally, a *(hyb)* indicator is appended to all ratings of hybrid securities issued by banks, insurers, finance companies, and securities firm.

The Moody's rating outlook is an opinion regarding the likely rating direction over the medium term. The "Stable" outlook indicates a low likelihood of a rating change over the medium term.

S&P

S&P short-term issue credit ratings are generally assigned to those obligations considered short-term in the relevant market. Short-term ratings are also used to indicate the creditworthiness of an obligor with respect to put features on long-term obligations. A short-term obligation rated "A-1" is rated in the highest category and indicates S&P's view that an obligor's capacity to meet its financial commitments on these obligations is strong.

S&P long-term issue credit ratings are based, in varying degrees, on S&P Global Ratings' analysis of the following considerations: likelihood of payment – capacity and willingness of the obligor to meet its financial commitment on an obligation in accordance with the terms of the obligation; nature of and provisions of the obligation, and the promise they impute; and protection afforded by, and relative position of, the obligation in the event of bankruptcy, reorganization, or other arrangement under the laws of bankruptcy and other laws affecting creditors' rights. A rating in the "A" category means the obligation is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still strong. An obligation rated in the "BBB" category indicates that the obligation exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation. Ratings from AA to CCC may be modified by the addition of a plus (+) or minus (–) sign to show relative standing within the major rating categories.

An S&P Global Ratings preferred share rating on the Canadian scale is a forward-looking opinion about the creditworthiness of an obligor with respect to a specific preferred share obligation issued in the Canadian market relative to preferred shares issued by other issuers in the Canadian market. There is a direct correspondence between the specific ratings assigned on the Canadian preferred share scale and the various rating levels on the global debt rating scale of S&P Global Ratings. The Canadian scale rating is fully determined by the applicable global scale rating, and there are no additional analytical criteria associated with the determination of ratings on the Canadian scale. It is the practice of S&P Global Ratings to present an issuer's preferred share ratings on both the global rating scale and on the Canadian national scale when listing the ratings for a particular issuer. A reference to "high" or "low" reflects the relative strength within the rating category, and the absence of either a "high" or "low" designation indicates the rating is in the middle of the category.

An S&P Global Ratings outlook assesses the potential direction of a long-term credit rating over the intermediate term (typically six months to two years). In determining a rating outlook, consideration is given to any changes in economic and/or fundamental business conditions. An outlook is not necessarily a precursor of a rating change or future CreditWatch action. The “Stable” rating outlook means that a rating is not likely to change.

Fitch

A short-term issuer or obligation rating is based in all cases on the short-term vulnerability to default of the rated entity and relates to the capacity to meet financial obligations in accordance with the documentation governing the relevant obligation. Short-term deposit ratings may be adjusted for loss severity. Short-Term Ratings are assigned to obligations whose initial maturity is viewed as “short term” based on market convention. A rating of “F1+” denotes the highest short-term credit quality, indicating the strongest intrinsic capacity for the timely payment of financial commitments. The added “+” denotes an exceptionally strong credit feature.

Long-term credit ratings are used as a benchmark measure of probability of default and are formally described as an Issuer Default Rating (“IDR”). IDRs opine on an entity’s relative vulnerability to default (including by way of a distressed debt exchange) on financial obligations. A rating of “AA” denotes expectation of very low default risk and indicates very strong capacity for payment of financial commitments; this capacity is not significantly vulnerable to foreseeable events. A rating of “A” denotes expectations of low default risk and the capacity for payment of financial commitments is considered strong; this capacity may, nevertheless, be more vulnerable to adverse business or economic conditions than is the case for higher ratings. Within some of the rating levels, Fitch further differentiates the rankings by adding the modifiers “+” or “-” to denote relative status within major rating categories.

Rating Outlooks indicate the direction a rating is likely to move over a one-to-two year period. They reflect financial or other trends that have not yet reached or been sustained the level that would cause a rating action, but which may do so if such trends continue. The “Stable” rating outlook means that the rating is not likely to change over a one-to-two year period.

DBRS

The DBRS short-term debt rating scale provides an opinion on the risk that an issuer will not meet its short-term financial obligations in a timely manner. The R-1 and R-2 rating categories are further denoted by the subcategories “high”, “middle” and “low”. An obligation rated R-1(high) is of the highest credit quality and indicates the capacity for the payment of short-term financial obligations as they fall due is exceptionally high; unlikely to be adversely affected by future events.

The DBRS long-term rating scale provides an opinion on the risk of default. That is, the risk that an issuer will fail to satisfy its financial obligations in accordance with the terms under which the obligations have been issued. Ratings are based on quantitative and qualitative considerations relevant to the issuer, and the relative ranking of claims. All rating categories other than AAA and D also contain subcategories “(high)” and “(low)”. The absence of either a “(high)” or “(low)” designation indicates the rating is in the middle of the category. Long-term financial obligations rated “AA” are of superior credit quality and capacity for the payment is considered high; credit quality differs from AAA only to a small degree; unlikely to be significantly vulnerable to future events. Long-term financial obligations rated “A” are of good credit quality and capacity for payment is considered substantial, but of lesser credit quality than AA; and may be vulnerable to future events, but qualifying negative factors are considered manageable.

The DBRS preferred share rating scale is used in the Canadian securities market and is meant to give an indication of the risk that a borrower will not fulfill its full obligations in a timely manner, with respect to both dividend and principal commitments. Every DBRS rating is based on quantitative and qualitative considerations relevant to the borrowing entity. This scale may also apply to certain hybrid securities, in which case references to dividend throughout will reflect interest commitments of the hybrid security. Each rating category is denoted by the subcategories “high” and “low”. The absence of either a “high” or “low” designation indicates the rating is in the middle of the category. The “Pfd-2” rating indicates that the preferred shares are of satisfactory credit quality.

Rating trends provide guidance in respect of DBRSs opinion regarding outlook for the rating in question. The “Stable” rating trend represents an indication that there is less likelihood that the rating could change in the future than would be the case if the rating trend was “Negative”.

Schedule C

CHARTER

AUDIT AND CONDUCT REVIEW COMMITTEE OF THE BOARD OF DIRECTORS OF

THE BANK OF NOVA SCOTIA

The Audit and Conduct Review Committee of the Board of Directors (the "Committee") has the responsibilities and duties as outlined below:

AUDIT

A. Mandate

1. To perform such duties as may be required by:
   - the *Bank Act* (the "Bank Act"), the regulations thereunder and guidelines of the Office of the Superintendent of Financial Institutions Canada ("OSFI"); and
   - other applicable legislation and regulations, including those of the Ontario Securities Commission and the Canadian Securities Administrators, the Toronto Stock Exchange, the New York Stock Exchange ("NYSE"), the Securities and Exchange Commission and the *Sarbanes-Oxley Act, 2002*,

   as more fully described under the heading "**Duties**" below.
2. To assist the Board of Directors (the "Board") in fulfilling its oversight responsibilities for:
   - the integrity of the Bank's consolidated financial statements and related quarterly results releases;
   - the system of internal control, including internal control over financial reporting and disclosure controls and procedures ("internal controls");
   - the external auditor's qualifications, independence and performance; and
   - the Bank's finance, compliance and internal audit functions.
3. To perform such other duties as may from time to time be assigned to the Committee by the Board.
4. To act as the audit committee for any federally chartered Canadian financial institution beneficially owned by the Bank as determined by the Board.

B. Authority

The Committee has authority to:

- conduct or authorize investigations into any matters within its scope of responsibility;
- retain, as appropriate and at the Bank's expense, independent counsel, accountants or others to advise the Committee or assist in the conduct of an investigation;
- meet with Bank officers, the external auditor or outside counsel, as necessary;
- determine appropriate funding for independent advisors;
- communicate directly with the internal and external auditors;
- receive all material correspondence between the external auditor and management related to audit and interim review findings; and
- call a meeting of the Board to consider any matter of concern to the Committee.

C. Duties

The Committee shall:

Financial Information

- review the quarterly and annual consolidated financial statements of the Bank prior to approval by the Board and disclosure to the public, and satisfy itself that the financial statements present fairly the financial position, results of operations and cash flows of the Bank;
    - review should include discussion with management and the external auditor of significant issues, including significant accounting policies, regarding the financial results, accounting principles, practices and management estimates and judgments;
- satisfy itself that the Bank's accounting practices are prudent and appropriate;
- review the quarterly and annual Management's Discussion & Analysis of Financial Condition and Results of Operations ("MD&A") prior to review and approval by the Board;
- review any material proposed changes in accounting standards and securities policies or regulation relevant to the Bank's consolidated financial statements and approve any material changes in accounting policies related to the Bank's consolidated financial statements;
- review any tax matters material to the financial statements;
- be satisfied that adequate procedures are in place for the review of the Bank's public disclosure of all consolidated financial statements, related quarterly results press releases and financial information extracted or derived from the Bank's consolidated financial statements and periodically assess the adequacy of these procedures;
- review material financial press releases prior to public disclosure;
- review earnings press releases, as well as financial information and earnings guidance provided to analysts and rating agencies prior to public disclosure;
- review investments and transactions that could adversely affect the well-being of the Bank brought to its attention by the external auditor or by any officer of the Bank;
- discuss significant financial risk exposures and the steps management of the Bank has taken to monitor, control and report such exposures;
- review the Annual Information Form and Form 40-F; and
- review the process relating to and the certifications of the Chief Executive Officer and the Chief Financial Officer on the integrity of the Bank's quarterly and annual consolidated financial statements.

Internal Controls

- require Bank management to implement and maintain appropriate internal control procedures including anti-fraud controls and review, evaluate and approve these procedures, including the Bank's Internal Control Policy, as part of the Bank's overall internal control framework;
- receive and review reports from management and internal audit on the design and operating effectiveness of the internal control framework and any significant control breakdowns, including any reports concerning significant deficiencies and material weaknesses in the design or operation of internal controls which are reasonably likely to adversely affect the Bank's ability to record, process, summarize and report financial information, and any fraud involving management or other employees who have a significant role in the Bank's internal controls;
    - as part of this review, the Committee should discuss with management whether any deficiencies identified may be systemic or pervasive;
- receive and review the external auditor's audit report on the Bank's internal controls over financial reporting as of the Bank's year end; and
- require management to establish procedures and review and approve the procedures established for the receipt, retention, treatment and resolution of complaints received by the Bank regarding accounting, internal accounting controls or auditing matters, including confidential, anonymous submissions from employees, as part of the Bank's Whistleblower Policy and Procedures, and carry out the Committee's responsibilities under the Bank's Whistleblower Policy and Procedures, as required.

Finance

- oversee the Finance Department, having regard to its independence, by:
  - reviewing and approving the appointment and/or removal of the Chief Financial Officer of the Bank;
  - annually reviewing and approving the mandate of the Chief Financial Officer and the charter of the Finance Department;
  - annually reviewing and approving the organizational structure of the Finance Department;
  - annually reviewing and approving the Finance Department's resources and budget;
  - annually assessing the effectiveness of the Chief Financial Officer and the effectiveness of the Finance Department, and annually approving the performance review of the Chief Financial Officer, taking into consideration any regulatory findings with respect to the finance function;
  - conveying its views to the Human Resources Committee on the following matters:
    - the assessment of the effectiveness and performance review of the Chief Financial Officer;
    - considerations to be factored into the total compensation to be paid to the Chief Financial Officer; and
    - succession planning for the role of Chief Financial Officer;
  - overseeing that the Finance Department has unfettered access and a functional reporting line to the Committee;
  - periodically requesting independent reviews of the Finance Department, reviewing the results of such reviews and reporting such results to the Board; and
  - overseeing that deficiencies identified related to the Finance Department are remedied within an appropriate time frame and reporting to the Board on the progress of necessary corrective actions.

Compliance

- approve the Compliance Risk Summary Framework;
- receive reports from management on the Bank's compliance with legal and regulatory requirements and the adequacy and effectiveness of the Bank's compliance controls, including:
  - review the annual and other periodic reports of Global Compliance; and
  - follow up with management on plans to remediate any deficiencies identified in reports and on any regulatory recommendations or findings, and discuss if weaknesses may exist elsewhere;
- meet, on its own or with the Board, with representatives of OSFI to discuss OSFI's supervisory results;
- meet with Bank management to review and discuss the Bank's response to OSFI's recommendations and suggestions pursuant to their supervisory activities;
- review any issues raised by Internal Audit that address the appropriateness and effectiveness of the Bank's Compliance Risk Summary Framework and management of significant compliance risks;
- oversee the Global Compliance Department, having regard to its independence, by:
  - reviewing and approving the appointment and/or removal of the Chief Compliance Officer;
  - annually reviewing and approving the mandate for the Chief Compliance Officer and the charter of the Global Compliance Department;
  - annually reviewing and approving the organizational structure of the Global Compliance Department;
  - annually reviewing and approving the Global Compliance Department's resources and budget;
  - annually assessing the effectiveness of the Chief Compliance Officer and the effectiveness of the Global Compliance Department, and annually approving the performance review of the Chief Compliance Officer, taking into consideration any regulatory findings with respect to the Global Compliance Department;
  - conveying its view to the Chief Risk Officer and the Human Resources Committee on the following matters:
    - the assessment of the effectiveness and performance review of the Chief Compliance Officer;
    - considerations to be factored into the total compensation to be paid to the Chief Compliance Officer; and
    - succession planning for the role of Chief Compliance Officer;
  - overseeing that Global Compliance has unfettered access and a functional reporting line to the Committee;

- periodically requesting independent reviews of the Global Compliance Department, reviewing the results of such reviews and reporting such results to the Board; and
- overseeing that deficiencies identified related to Global Compliance are remedied within an appropriate time frame and reporting to the Board on the progress of necessary corrective actions.

Internal Audit

- review the quarterly and other reports of the Chief Auditor;
- review any matters of significance that arose from non-audit engagements performed by the Audit Department;
- regularly meet with the Chief Auditor with and/or without management, to discuss the effectiveness of the Bank's internal control, risk management (including anti-money laundering) and governance processes;
  - oversee the Audit Department, having regard to its independence, by:
  - reviewing and approving the appointment and/or removal of the Chief Auditor;
  - annually reviewing and approving the mandate of the Chief Auditor and the charter of the Audit Department;
  - annually reviewing and approving the organizational structure of the Audit Department;
  - annually reviewing and approving the annual audit plan, overall risk assessment methodology, budgets and resources of the Audit Department;
  - annually assessing the effectiveness of the Chief Auditor and the Audit Department, taking into consideration the objectivity and independence of the Bank's internal audit function, and annually approving the performance review of the Chief Auditor, taking into consideration any regulatory findings with respect to the Audit Department;
  - conveying its view to the Human Resources Committee on the following matters:
    - the assessment of the effectiveness and performance review of the Chief Auditor;
    - considerations to be factored into the total compensation to be paid to the Chief Auditor; and
    - succession planning for the role of Chief Auditor;
  - periodically reviewing results of the internal Quality Assurance and Improvement Program;
  - periodically requesting independent reviews of the Audit Department, reviewing the results of such reviews and reporting such results to the Board;
  - overseeing that deficiencies identified related to the Audit Department are remedied within an appropriate time frame and reporting to the Board on the progress of necessary corrective actions; and
  - advising the Board of any recommendations for the continuous improvement of the Audit Department;
- ensure the Audit Department has unfettered access and a direct and independent reporting line to the Committee;
- provide for an open avenue of communication between the Audit Department and the Board;
- ensure that the Audit Department's recommendations are adequately considered and acted on, by providing the Audit Department with the authority to follow-up on observations and recommendations; and
- review and approve the Internal Audit Third Party Risk Management Policy.

External Auditor

- have responsibility for the oversight of the external auditor who reports directly to the Committee;
- recommend to the Board the retention or termination of the Bank's external auditor, subject to shareholder ratification;
- review and approve the annual audit plan and letter(s) of engagement, and as part of such review, satisfy itself that the Bank's audit plan is risk based and covers all relevant activities over a measurable cycle;
- annually review the external auditor's opinion on the annual financial statements;
- review and evaluate the external auditor's qualifications, performance and independence, including a review and evaluation of the lead audit partner, taking into consideration the opinions of management and the Bank's Audit Department in such evaluation and any concerns raised by OSFI or other stakeholders about the external auditor's independence;
- consistent with the Committee's annual assessment and periodic comprehensive review of the external auditors, the Committee shall establish a policy that stipulates the criteria for the Bank tendering the contract for the role of the Bank's external auditor;

- as part of this policy and any review undertaken by the Committee, the Committee should periodically consider whether to put the external auditor contract out for tender, taking into consideration the length of the current external auditor's tenure and the risks that tenure may pose to the external auditor's objectivity and independence;
- receive the CPAB's annual public report, along with any notices required to be communicated by the external auditor to the Committee, including those required by CPAB, OSFI and PCAOB;
- review and recommend to the Board the annual fee for the audit of the Bank's consolidated financial statements;
    - as part of this review, the Committee should satisfy itself that the level of audit fees is commensurate with the scope of work undertaken;
- review and pre-approve in accordance with established pre-approval policy, all services to be provided by the external auditor, including audit and audit related services and permitted tax and non-audit services;
- delegate the authority to pre-approve non-audit services to a member of the Committee;
- review external auditor services pre-approved by the delegate of the Committee;
- review annually the total fees paid to the external auditor by required categories;
- at least annually, obtain and review reporting from the external auditor describing:
- the firm's internal quality-control procedures;
    - any material issues raised by the most recent internal quality-control review, or peer review, of the firm, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, regarding one or more independent audits carried out by the firm, and any steps taken to deal with any such issues;
    - the skill and resources (amount and type) of the firm; and
    - an assessment of all relationships between the external auditor and the Bank that pertain to independence;
- review the rotation plan for partners on the engagement;
- meet with the external auditor and with management to discuss the quarterly and the annual consolidated financial statements and the Bank's disclosure under any MD&A;
- review with management and the external auditor all matters required to be communicated to the Committee under generally accepted auditing standards;
- review with the external auditor any audit problems or difficulties and management's response;
- discuss with the external auditor the OSFI returns, investments or transactions reviewed by the Committee;
- resolve any disputes between the external auditor and management; and
- review and approve policies for the Bank's employment of current and former employees or partners of the current or former external auditor.

Other Duties

- review the periodic reports on litigation matters;
- review such returns as specified by OSFI;
- provide for an open avenue of communication between internal audit, the external auditor and the Board;
- annually, review the charter for the Committee and evaluate the Committee's effectiveness in fulfilling its mandate;
- prepare a committee report for inclusion in the Bank's management proxy circular; and
- institute and oversee special investigations as needed.

CONDUCT REVIEW

D. Mandate

1. To perform the duties with respect to the Bank's procedures for ensuring its transactions with its related parties comply with Part XI of the Bank Act and any regulations thereunder as more fully described under the heading "**Duties**" below.
2. In the event a widely held bank holding company or insurance holding company has a significant interest in any class of shares of the Bank:

- to establish policies for entering into transactions referred to in subsection 495.1(1) of the Bank Act, including transactions with a holding company or any other related party of the Bank that is an entity in which the holding company has a substantial investment; and
- to review certain of the Bank's transactions that are referred to in subsection 495.3(1) of the Bank Act including any transaction with a widely held insurance or bank holding company or any other related party in which they hold a substantial investment.

3. To perform such duties as are required by the Bank Act to be dealt with by a committee of the Board concerning the monitoring of adherence to procedures for identifying potential conflicts of interest and for resolving such conflicts of interest, for restricting the use of confidential information, for providing disclosure of information to customers and for dealing with customer complaints as required under subsection 455(1) of the Bank Act, and as more fully described under the heading "**Duties**" below.
4. To assist the Board in fulfilling its oversight responsibilities for:
   - setting standards of conduct and ethical behaviour; and
   - the oversight of conduct review and conduct risk.
5. To perform such other duties as are required under the Bank Act or by OSFI, or as may from time to time be assigned by the Board.
6. To monitor and fulfill the compliance requirements of the Bank in respect of the Financial Consumer Agency of Canada.
7. To act as the conduct review committee for any federally chartered Canadian financial institution beneficially owned by the Bank as determined by the Board.

E. Duties

1. Establish criteria for determining whether the value of transactions with related parties of the Bank is nominal or immaterial to the Bank;
2. Approve the terms and conditions of:
   - loans, other than margin loans, to senior officers of the Bank on terms and conditions more favourable to the senior officers than those offered to the public; and
   - loans to spouses or common-law partners of senior officers of the Bank on the security of mortgages of the principal residences of such spouses or common-law partners on terms and conditions more favourable than those offered to the public;
3. Approve the practice of the Bank making financial services, other than loans or guarantees, available to senior officers of the Bank or to spouses or common-law partners, or children who are less than 18 years of age of senior officers of the Bank, on terms and conditions more favourable than those offered to the public, provided the financial services are offered by the Bank to its employees on those favourable terms and conditions;
4. Require Bank management to establish procedures to enable the Bank to verify that its transactions with related parties of the Bank comply with Part XI of the Bank Act and to review those procedures and their effectiveness. These procedures should, among other things, enable management to verify that:
   - all related party transactions are on terms and conditions at least as favourable to the Bank as market terms and conditions, other than transactions referred to in clauses 2 and 3 above;
   - loans to full-time senior officers, other than margin loans and mortgages on their principal residences, do not exceed the greater of twice their annual salaries and $100,000;
   - aggregate loans or guarantees to, and investments in the securities of any related party (subject to certain exceptions) do not exceed 2% of the Bank's regulatory capital unless the approval of 2/3 of the Board has been obtained; and
   - aggregate loans or guarantees to, and investments in the securities of all related parties (subject to certain exceptions) do not exceed 50% of the Bank's regulatory capital;

5. Review the practices of the Bank to identify any transactions with related parties of the Bank that may have a material effect on the stability or solvency of the Bank;
6. Monitor the procedures established by the Board to resolve conflicts of interest, including techniques for the identification of potential conflict situations and for restricting the use of confidential information;
7. Monitor the procedures established by the Board to provide disclosure to customers of the Bank of information that is required to be disclosed by the Bank Act, and for dealing with and reporting complaints made by customers of the Bank who have requested or received products or services in Canada and to satisfy itself that these procedures are being adhered to by the Bank;
8. Review the Conduct Risk Summary Framework, prior to review and approval by the Board;
9. Review and, if appropriate, recommend for Board approval the Scotiabank Code of Conduct which includes the standards of business conduct and ethical behaviour for employees, officers and directors of the Bank and its subsidiaries and recommend for approval by the Board any exceptions from the Scotiabank Code of Conduct , as appropriate;
10. Review reports from Global Compliance on compliance with the Scotiabank Code of Conduct and any instances of material deviation therefrom with corrective actions taken;
11. Review the annual letter of certification from the Chief Executive Officer on the Bank's compliance with the Scotiabank Code of Conduct;
12. Monitor the Bank's exposure to material conduct risk and review the Bank's conduct risk management practices including its identification, measurement, monitoring and assessment of conduct risk;
13. Review reports to the Committee relating to conduct risk;
14. Review with management the results of their assessment of the Bank's conduct risk and their plans to remediate any material deficiencies identified; and
15. Monitor the procedures established by the Bank to mitigate conduct risk.

COMMITTEE OPERATIONS

F. Reporting

After each meeting of the Committee, the Committee is required to report to the Board on matters reviewed by the Committee. The Committee shall also report as required to the Risk Committee on relevant issues.

The Chair of the Committee shall review, for completeness, the Board's report to OSFI with respect to conduct review matters on the Committee's activities during the year. This report must be filed within 90 days after the Bank's financial year-end.

The Committee shall review and assess the adequacy of this Charter on an annual basis and report the results of this review to the Corporate Governance Committee of the Board.

G. Composition

Structure

The Committee shall consist of a minimum of three Directors. No member of the Committee may serve on more than three audit committees of public company boards without the consent of the Corporate Governance Committee and the Board.

Each member must be financially literate or become financially literate within a reasonable period of time subsequent to his/her appointment to the Committee. At least one member must be a financial expert. There should also be a reasonable representation of other key competencies on the Committee, as determined by the Corporate Governance Committee.

Independence

The Committee is composed entirely of independent directors as defined in applicable laws, rules and regulations and as determined pursuant to the Director Independence Standards approved by the Board for Committee members.

No member of the Committee may be an officer or employee of the Bank or of any of its subsidiaries or affiliates. No member may be a person who is affiliated with the Bank.

Directors' fees are the only compensation a member of the Committee may be paid by the Bank.

Appointment of Committee Members

Members of the Committee are appointed or reappointed annually by the Board, upon the recommendation of the Corporate Governance Committee, such appointments to take effect immediately following the annual meeting of the shareholders of the Bank. Members of the Committee shall hold office until their successors are appointed, or until they cease to be Directors of the Bank.

Vacancies

Vacancies may be filled for the remainder of the current term of appointment of members of the Committee by the Board, subject to the requirements under the headings "Structure" and "Independence" above.

Appointment and Qualifications of Committee Chair

The Board shall appoint from the Committee membership, a Chair for the Committee to preside at meetings. In the absence of the Chair, one of the other members of the Committee present shall be chosen by the Committee to preside at that meeting.

The Chair for the Committee must have all of the qualifications for Committee membership and have accounting or related financial management expertise.

H. Meetings

Calling of Meetings

Meetings of the Committee may be called by the Chair, by any two members of the Committee or the external auditor. Members may participate in meetings in person or by telephone, electronic or other communications facilities.

Written resolutions in lieu of a meeting are permitted, solely in accordance with the Bank Act.

The Committee shall hold an in camera session immediately prior to and/or following the conclusion of the regular agenda matters. The Committee shall also hold in camera sessions, separately at each Committee meeting, with each of the

Chief Financial Officer, Chief Compliance Officer, Chief Auditor and the external auditor. The Committee shall also meet separately, at least quarterly, with management.

To facilitate communication between the Committee and the Risk Committee, the Chair of the Risk Committee shall receive notice of all Committee meetings and may attend Committee meetings by invitation as a non-voting observer.

The Committee may invite any director, officer or employee or any other person to attend meetings to assist the Committee with its deliberations.

Notice of Meetings

Notice of meeting of the Committee shall be sent by prepaid mail, by personal delivery or other means of transmitted or recorded communication or by telephone at least 12 hours before the meeting to each member of the Committee at the member's address or communication number last recorded with the Corporate Secretary. A Committee member may in any manner waive notice of a meeting of the Committee and attendance at a meeting is a waiver of notice of the meeting, except where a member attends for the express purpose of objecting to the transaction of any business on the ground that the meeting is not lawfully called.

Notice to the Internal Auditor and External Auditor

The Chief Auditor and the external auditor are entitled to receive notice of every meeting of the Committee and, at the expense of the Bank, to attend and be heard at each meeting and to have the opportunity to discuss matters with the independent directors, without the presence of management.

Frequency

The Committee shall meet at least quarterly.

Quorum

The quorum for a meeting of the Committee shall be a majority of its members, subject to a minimum of 2 members.

Secretary and Minutes

The Corporate Secretary or, in the absence of the Corporate Secretary, an Assistant Corporate Secretary of the Bank shall act as Secretary of the Committee.

Minutes of meetings of the Committee shall be recorded and maintained by the Corporate Secretary and subsequently presented to the Committee and to the Board, if required by the Board.

This Charter was last reviewed and approved by the Board on June 23, 2020.

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ENHANCED DISCLOSURE TASK FORCE (EDTF) RECOMMENDATIONS

The Enhanced Disclosure Task Force (EDTF) was established by the Financial Stability Board in May 2012 with the goal of developing fundamental disclosure principles. On October 29, 2012 the EDTF published its report, "Enhancing the Risk Disclosures of Banks", which sets forth recommendations around improving risk disclosures and identifies existing leading practice risk disclosures.

Below is the index of all these recommendations to facilitate easy reference in the Bank's annual report and other public disclosure documents available on www.scotiabank.com/investorrelations.

Reference Table for EDTF

			Pages		
Type of risk	Number	Disclosure	MD&A	Financial Statements	Supplementary Regulatory Capital Disclosures
General	1	The index of risks to which the business is exposed.	85-86, 91, 101		
	2	The Bank's risk to terminology, measures and key parameters.	81-84		
	3	Top and emerging risks, and the changes during the reporting period.	88-90, 95-100		
	4	Discussion on the regulatory development and plans to meet new regulatory ratios.	61-63, 109-110, 126-128		
Risk governance, risk management and business model	5	The Bank's Risk Governance structure.	78-80		
	6	Description of risk culture and procedures applied to support the culture.	81-83		
	7	Description of key risks from the Bank's business model.	85-87		
	8	Stress testing use within the Bank's risk governance and capital management.	81-82		
Capital Adequacy and risk-weighted assets	9	Pillar 1 capital requirements, and the impact for global systemically important banks.	61-63	217	3-4
	10	a) Regulatory capital components.	64		19-22
		b) Reconciliation of the accounting balance sheet to the regulatory balance sheet.			16-17
	11	Flow statement of the movements in regulatory capital since the previous reporting period, including changes in common equity tier 1, additional tier 1 and tier 2 capital.	65-66		75
	12	Discussion of targeted level of capital, and the plans on how to establish this.	61-63		
	13	Analysis of risk-weighted assets by risk type, business, and market risk RWAs.	68-72, 87, 136	187, 241	6, 35-48, 60-62, 66, 78, 84
	14	Analysis of the capital requirements for each Basel asset class.	68-72	187, 235-241	14-15, 35-49, 60-62, 66, 71-74
	15	Tabulate credit risk in the Banking Book.	68-72	236	14-15, 35-49, 71-74
	16	Flow statements reconciling the movements in risk-weighted assets for each risk-weighted asset type.	68-72		50, 65, 77
	17	Discussion of Basel III Back-testing requirement including credit risk model performance and validation.	69-71		51-54, 82
Liquidity Funding	18	Analysis of the Bank's liquid assets.	107-110		
	19	Encumbered and unencumbered assets analyzed by balance sheet category.	109		
	20	Consolidated total assets, liabilities and off-balance sheet commitments analyzed by remaining contractual maturity at the balance sheet date.	112-114		
	21	Analysis of the Bank's sources of funding and a description of the Bank's funding strategy.	111-112		
Market Risk	22	Linkage of market risk measures for trading and non-trading portfolios and the balance sheet.	106		
	23	Discussion of significant trading and non-trading market risk factors.	102-107	240-241	
	24	Discussion of changes in period on period VaR results as well as VaR assumptions, limitations, backtesting and validation.	102-107	240-241	
	25	Other risk management techniques e.g. stress tests, stressed VaR, tail risk and market liquidity horizon.	102-107	241	
Credit Risk	26	Analysis of the aggregate credit risk exposures, including details of both personal and wholesale lending.	95-100, 130-136	198-199, 237-239	6, 35, 37-48, 60-62
	27	Discussion of the policies for identifying impaired loans, defining impairments and renegotiated loans, and explaining loan forbearance policies.		165-167, 199	
	28	Reconciliations of the opening and closing balances of impaired loans and impairment allowances during the year.	97, 130-131, 133, 134	199	32-33
	29	Analysis of counterparty credit risk that arises from derivative transactions.	93-94	185-188	83
	30	Discussion of credit risk mitigation, including collateral held for all sources of credit risk.	93-94, 98		
Other risks	31	Quantified measures of the management of operational risk.	72, 115		
	32	Discussion of publicly known risk items.	77		

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FORWARD LOOKING STATEMENTS

From time to time, our public communications often include oral or written forward-looking statements. Statements of this type are included in this document, and may be included in other filings with Canadian securities regulators or the U.S. Securities and Exchange Commission, or in other communications. In addition, representatives of the Bank may include forward-looking statements orally to analysts, investors, the media and others. All such statements are made pursuant to the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995 and any applicable Canadian securities legislation. Forward-looking statements may include, but are not limited to, statements made in this document, the Management's Discussion and Analysis in the Bank's 2020 Annual Report under the headings "Outlook" and in other statements regarding the Bank's objectives, strategies to achieve those objectives, the regulatory environment in which the Bank operates, anticipated financial results, and the outlook for the Bank's businesses and for the Canadian, U.S. and global economies. Such statements are typically identified by words or phrases such as "believe," "expect," "foresee," "forecast," "anticipate," "intend," "estimate," "plan," "goal," "project," and similar expressions of future or conditional verbs, such as "will," "may," "should," "would" and "could."

By their very nature, forward-looking statements require us to make assumptions and are subject to inherent risks and uncertainties, which give rise to the possibility that our predictions, forecasts, projections, expectations or conclusions will not prove to be accurate, that our assumptions may not be correct and that our financial performance objectives, vision and strategic goals will not be achieved.

We caution readers not to place undue reliance on these statements as a number of risk factors, many of which are beyond our control and effects of which can be difficult to predict, could cause our actual results to differ materially from the expectations, targets, estimates or intentions expressed in such forward-looking statements.

The future outcomes that relate to forward-looking statements may be influenced by many factors, including but not limited to: general economic and market conditions in the countries in which we operate; changes in currency and interest rates; increased funding costs and market volatility due to market illiquidity and competition for funding; the failure of third parties to comply with their obligations to the Bank and its affiliates; changes in monetary, fiscal, or economic policy and tax legislation and interpretation; changes in laws and regulations or in supervisory expectations or requirements, including capital, interest rate and liquidity requirements and guidance, and the effect of such changes on funding costs; changes to our credit ratings; operational and infrastructure risks; reputational risks; the accuracy and completeness of information the Bank receives on customers and counterparties; the timely development and introduction of new products and services; our ability to execute our strategic plans, including the successful completion of acquisitions and dispositions, including obtaining regulatory approvals; critical accounting estimates and the effect of changes to accounting standards, rules and interpretations on these estimates; global capital markets activity; the Bank's ability to attract, develop and retain key executives; the evolution of various types of fraud or other criminal behaviour to which the Bank is exposed; disruptions in or attacks (including cyber-attacks) on the Bank's information technology, internet, network access, or other voice or data communications systems or services; increased competition in the geographic and in business areas in which we operate, including through internet and mobile banking and non-traditional competitors; exposure related to significant litigation and regulatory matters; the occurrence of natural and unnatural catastrophic events and claims resulting from such events; the emergence of widespread health emergencies or pandemics, including the magnitude and duration of the COVID-19 pandemic and its impact on the global economy, financial market conditions and the Bank's business, results of operations, financial condition and prospects; and the Bank's anticipation of and success in managing the risks implied by the foregoing. A substantial amount of the Bank's business involves making loans or otherwise committing resources to specific companies, industries or countries. Unforeseen events affecting such borrowers, industries or countries could have a material adverse effect on the Bank's financial results, businesses, financial condition or liquidity. These and other factors may cause the Bank's actual performance to differ materially from that contemplated by forward-looking statements. The Bank cautions that the preceding list is not exhaustive of all possible risk factors and other factors could also adversely affect the Bank's results, for more information, please see the "Risk Management" section of the Bank's 2020 Annual Report, as may be updated by quarterly reports.

Material economic assumptions underlying the forward-looking statements contained in this document are set out in the 2020 Annual Report under the headings "Outlook", as updated by quarterly reports. The "Outlook" sections are based on the Bank's views and the actual outcome is uncertain. Readers should consider the above-noted factors when reviewing these sections. When relying on forward-looking statements to make decisions with respect to the Bank and its securities, investors and others should carefully consider the preceding factors, other uncertainties and potential events.

Any forward-looking statements contained in this document represent the views of management only as of the date hereof and are presented for the purpose of assisting the Bank's shareholders and analysts in understanding the Bank's financial position, objectives and priorities, and anticipated financial performance as at and for the periods ended on the dates presented, and may not be appropriate for other purposes. Except as required by law, the Bank does not undertake to update any forward-looking statements, whether written or oral, that may be made from time to time by or on its behalf.

Additional information relating to the Bank, including the Bank's Annual Information Form, can be located on the SEDAR website at www.sedar.com and on the EDGAR section of the SEC's website at www.sec.gov.

December 1, 2020

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MANAGEMENT'S DISCUSSION & ANALYSIS

The Management's Discussion and Analysis (MD&A) is provided to enable readers to assess the Bank's financial condition and results of operations as at and for the year ended October 31, 2020. The MD&A should be read in conjunction with the Bank's 2020 Consolidated Financial Statements, including the Notes. This MD&A is dated December 1, 2020.

Additional information relating to the Bank, including the Bank's 2020 Annual Report, are available on the Bank's website at www.scotiabank.com. As well, the Bank's 2020 Annual Report and Annual Information Form are available on the SEDAR website at www.sedar.com and on the EDGAR section of the SEC's website at www.sec.gov.

Non-GAAP Measures

The Bank uses a number of financial measures to assess its performance. Some of these measures are not calculated in accordance with Generally Accepted Accounting Principles (GAAP), which are based on International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), are not defined by GAAP and do not have standardized meanings that would ensure consistency and comparability among companies using these measures. The Bank believes that certain non-GAAP measures are useful in assessing ongoing business performance and provide readers with a better understanding of how management assesses performance. These non-GAAP measures are used throughout this report and defined below.

Adjusted results and diluted earnings per share

The following tables present reconciliations of GAAP Reported financial results to Non-GAAP Adjusted financial results. The financial results have been adjusted for the following:

1. Acquisition and divestiture-related amounts – Acquisition and divestiture-related amounts are defined as:

A. **Acquisition-related costs**

1. Integration costs – Includes costs that are incurred and relate to integrating the acquired operations and are recorded in the Global Wealth Management and International Banking operating segments. These costs will cease once integration is complete. The costs relate to the following acquisitions:

- Banco Cencosud, Peru (*closed Q2, 2019*)
- Banco Dominicano del Progreso, Dominican Republic (*closed Q2, 2019*)
- MD Financial Management, Canada (*closed Q4, 2018*)
- Jarislowsky, Fraser Limited, Canada (*closed Q3, 2018*)
- Citibank consumer and small and medium enterprise operations, Colombia (*closed Q3, 2018*)
- BBVA, Chile (*closed Q3, 2018*)

2. Day 1 provision for credit losses on acquired performing financial instruments, as required by IFRS 9. The standard does not differentiate between originated and purchased performing loans and as such, requires the same accounting treatment for both. These credit losses are considered Acquisition-related costs in periods where applicable and are recorded in the International Banking segment. The provision for 2019 relates to Banco Cencosud, Peru and Banco Dominicano del Progreso, Dominican Republic. The provision for 2018 relates to BBVA, Chile and Citibank, Colombia.

3. Amortization of Acquisition-related intangible assets, excluding software. These costs relate to the six acquisitions above, as well as prior acquisitions and are recorded in the Canadian Banking, International Banking and Global Wealth Management operating segments.

B. **Net (gain)/loss on divestitures** – The Bank announced a number of divestitures in accordance with its strategy to reposition the Bank. The net (gain)/loss on divestitures is recorded in the Other segment, and relates to the following divestitures (refer to Note 37 for further details):

- Operations in Antigua and Barbuda (*announced Q4, 2020*)
- Operations in British Virgin Islands *(closed Q3, 2020)*
- Operations in Belize *(announced Q3, 2020)*
- Equity-accounted investment in Thanachart Bank, Thailand *(closed Q1, 2020)*
- Colfondos AFP, Colombia *(closed Q1, 2020)*
- Operations in Puerto Rico and USVI *(closed Q1, 2020)*
- Insurance and banking operations in El Salvador *(closed Q1, 2020)*
- Banking operations in the Caribbean *(closed Q4, 2019)*
- Insurance and pension operations in the Dominican Republic *(closed Q2, 2019)*

2. Valuation-related adjustments, recorded in Q1, 2020 (pre-tax $315 million) – The Bank modified its allowance for credit losses measurement methodology by adding an additional, more severe pessimistic scenario, consistent with developing practice among major international banks in applying IFRS 9, and the Bank's prudent approach to expected credit loss provisioning. The modification resulted in an increase in provision for credit losses of $155 million which was recorded in Canadian Banking, International Banking, Global Wealth Management and Global Banking and Markets operating segments. The Bank enhanced its fair value methodology primarily relating to uncollateralized OTC derivatives which resulted in a pre-tax charge of $116 million. This charge was recorded in the Global Banking and Markets and Other operating segments. The Bank also recorded an impairment loss in the Other operating segment of $44 million pre-tax, related to one software asset.

T1 Summary of reconciliation of reported and adjusted results by business line

($ millions)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other	Total
			For the year ended October 31, 2020(1)			
Reported net income	**$2,536**	**$1,072**	**$1,262**	**$1,955**	**$28**	**$6,853**
Total adjustments (after tax)	**68**	**200**	**45**	**79**	**(284)**	**108**
Adjusted net income	**$2,604**	**$1,272**	**$1,307**	**$2,034**	**$(256)**	**$6,961**
Adjusted net income attributable to equity holders	**$2,604**	**$1,148**	**$1,297**	**$2,034**	**$(257)**	**$6,826**
			For the year ended October 31, 2019(1)			
Reported net income	$3,488	$3,138	$1,184	$1,534	$(546)	$8,798
Total adjustments (after tax)	16	254	49	–	292	611
Adjusted net income	$3,504	$3,392	$1,233	$1,534	$(254)	$9,409
Adjusted net income attributable to equity holders	$3,504	$2,953	$1,215	$1,534	$(255)	$8,951
			For the year ended October 31, 2018(1)			
Reported net income	$3,559	$2,508	$1,046	$1,758	$(147)	$8,724
Total adjustments (after tax)	16	364	40	–	–	420
Adjusted net income	$3,575	$2,872	$1,086	$1,758	$(147)	$9,144
Adjusted net income attributable to equity holders	$ 3,575	$ 2,588	$ 1,072	$ 1,758	$ (147)	$ 8,846

(1) Refer to Business Line Overview on page 42.

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T2 Reconciliation of reported and adjusted results and diluted earnings per share

($ millions)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other	Total
	For the year ended October 31, 2020(1)					
Reported Results						
Net interest income	$ 7,838	$ 7,603	$ 575	$ 1,435	$ (131)	$ 17,320
Non-interest income	2,461	3,207	4,009	3,947	392	14,016
Total revenue	10,299	10,810	4,584	5,382	261	31,336
Provision for credit losses	2,073	3,613	7	390	1	6,084
Non-interest expenses	4,811	5,943	2,878	2,473	751	16,856
Income before taxes	3,415	1,254	1,699	2,519	(491)	8,396
Income tax expense	879	182	437	564	(519)	1,543
Net income	$ 2,536	$ 1,072	$ 1,262	$ 1,955	$ 28	$ 6,853
Net income attributable to non-controlling interests in subsidiaries (NCI)	–	92	10	–	(27)	75
Net income attributable to equity holders	$ 2,536	$ 980	$ 1,252	$ 1,955	$ 55	$ 6,778
Preferred shareholders and other equity instrument holders						196
Net income attributable to common shareholders						$ 6,582
Diluted earnings per share *(in dollars)*						$ 5.30
Adjustments						
Acquisition-related amounts						
Integration costs(2)	$ –	$ 154	$ 23	$ –	$ –	$ 177
Amortization of Acquisition-related intangible assets, excluding software (2)	22	47	37	–	–	106
Acquisition-related costs	22	201	60	–	–	283
Allowance for credit losses – Additional scenario (3)	71	77	1	6	–	155
Derivatives valuation adjustment(4)	–	–	–	102	14	116
Net (gain)/loss on divestitures(5)	–	–	–	–	(298)	(298)
Impairment charge on software asset (2)	–	–	–	–	44	44
Adjustments (Pre-tax)	93	278	61	108	(240)	300
Income tax expense/(benefit)	(25)	(78)	(16)	(29)	(44)	(192)
Adjustments (After tax)	68	200	45	79	(284)	108
Adjustment attributable to NCI	–	(32)	–	–	(28)	(60)
Adjustments (After tax and NCI)	$ 68	$ 168	$ 45	$ 79	$ (312)	$ 48
Adjusted Results						
Net interest income	$ 7,838	$ 7,603	$ 575	$ 1,435	$ (131)	$ 17,320
Non-interest income	2,461	3,207	4,009	4,049	93	13,819
Total revenue	10,299	10,810	4,584	5,484	(38)	31,139
Provision for credit losses	2,002	3,536	6	384	1	5,929
Non-interest expenses	4,789	5,742	2,818	2,473	692	16,514
Income before taxes	3,508	1,532	1,760	2,627	(731)	8,696
Income tax expense	904	260	453	593	(475)	1,735
Net income	$ 2,604	$ 1,272	$ 1,307	$ 2,034	$ (256)	$ 6,961
Net income attributable to NCI	–	124	10	–	1	135
Net income attributable to equity holders	$ 2,604	$ 1,148	$ 1,297	$ 2,034	$ (257)	$ 6,826
Preferred shareholders and other equity instrument holders						196
Net income attributable to common shareholders						$ 6,630
Adjusted diluted earnings per share						
Adjusted net income attributable to common shareholders						$ 6,630
Dilutive impact of share-based payment options and others						38
Adjusted net income attributable to common shareholders (diluted)						$ 6,668
Weighted average number of basic common shares outstanding *(millions)*						1,212
Dilutive impact of share-based payment options and others *(millions)*						31
Adjusted weighted average number of diluted common shares outstanding *(millions)*						1,243
Adjusted diluted earnings per share *(in dollars)*						$ 5.36
Impact of adjustments on diluted earnings per share *(in dollars)*						$ 0.06

(1) Refer to Business Line Overview on page 42.
(2) Recorded in non-interest expenses.
(3) Recorded in provision for credit losses.
(4) Recorded in non-interest income.
(5) (Gain)/Loss on divestitures is recorded innon-interest income; costs related to divestitures are recorded innon-interest expenses.

T2 Reconciliation of reported and adjusted results and diluted earnings per share

	For the year ended October 31, 2019(1)					
($ millions)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other	Total
Reported Results						
Net interest income	$ 7,848	$ 8,353	$ 564	$ 1,396	$ (984)	$ 17,177
Non-interest income	2,616	4,366	3,937	3,084	(146)	13,857
Total revenue	10,464	12,719	4,501	4,480	(1,130)	31,034
Provision for credit losses	972	2,076	–	(22)	1	3,027
Non-interest expenses	4,772	6,596	2,905	2,463	1	16,737
Income before taxes	4,720	4,047	1,596	2,039	(1,132)	11,270
Income tax expense	1,232	909	412	505	(586)	2,472
Net income	$ 3,488	$ 3,138	$ 1,184	$ 1,534	$ (546)	$ 8,798
Net income attributable to non-controlling interests in subsidiaries (NCI)	–	373	18	–	17	408
Net income attributable to equity holders	$ 3,488	$ 2,765	$ 1,166	$ 1,534	$ (563)	$ 8,390
Preferred shareholders and other equity instrument holders						182
Net income attributable to common shareholders						$ 8,208
Diluted earnings per share *(in dollars)*						$ 6.68
Adjustments						
Acquisition-related amounts						
Day 1 provision for credit losses on acquired performing financial instruments (2)	$ –	$ 151	$ –	$ –	$ –	$ 151
Integration costs(3)	–	151	27	–	–	178
Amortization of Acquisition-related intangible assets, excluding software (3)	22	55	39	–	–	116
Acquisition-related costs	22	357	66	–	–	445
Net (gain)/loss on divestitures(4)	–	–	–	–	148	148
Adjustments (Pre-tax)	22	357	66	–	148	593
Income tax expense/(benefit)	(6)	(103)	(17)	–	144	18
Adjustments (After tax)	16	254	49	–	292	611
Adjustment attributable to NCI	–	(66)	–	–	16	(50)
Adjustments (After tax and NCI)	$ 16	$ 188	$ 49	$ –	$ 308	$ 561
Adjusted Results						
Net interest income	$ 7,848	$ 8,353	$ 564	$ 1,396	$ (984)	$ 17,177
Non-interest income	2,616	4,366	3,937	3,084	(19)	13,984
Total revenue	10,464	12,719	4,501	4,480	(1,003)	31,161
Provision for credit losses	972	1,925	–	(22)	1	2,876
Non-interest expenses	4,750	6,390	2,839	2,463	(20)	16,422
Income before taxes	4,742	4,404	1,662	2,039	(984)	11,863
Income tax expense	1,238	1,012	429	505	(730)	2,454
Net income	$ 3,504	$ 3,392	$ 1,233	$ 1,534	$ (254)	$ 9,409
Net income attributable to NCI	–	439	18	–	1	458
Net income attributable to equity holders	$ 3,504	$ 2,953	$ 1,215	$ 1,534	$ (255)	$ 8,951
Preferred shareholders and other equity instrument holders						182
Net income attributable to common shareholders						$ 8,769
Adjusted diluted earnings per share						
Adjusted net income attributable to common shareholders						$ 8,769
Dilutive impact of share-based payment options and others						160
Adjusted net income attributable to common shareholders (diluted)						$ 8,929
Weighted average number of basic common shares outstanding *(millions)*						1,222
Dilutive impact of share-based payment options and others *(millions)*						29
Adjusted weighted average number of diluted common shares outstanding *(millions)*						1,251
Adjusted diluted earnings per share *(in dollars)* (5)						$ 7.14
Impact of adjustments on diluted earnings per share *(in dollars)*						$ 0.46

(1) Refer to Business Line Overview on page 42.
(2) Recorded in provision for credit losses.
(3) Recorded in non-interest expenses.
(4) Loss/(gain) on divestitures are recorded innon-interest income; costs related to divestitures are recorded innon-interest expenses.
(5) Earnings per share calculations are based on full dollar and share amounts.

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T2 Reconciliation of reported and adjusted results and diluted earnings per share

($ millions)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other	Total
	For the year ended October 31, 2018(1)					
Reported Results						
Net interest income	$ 7,504	$ 7,218	$ 498	$ 1,454	$ (483)	$ 16,191
Non-interest income	2,907	3,475	3,486	3,074	(358)	12,584
Total revenue	10,411	10,693	3,984	4,528	(841)	28,775
Provision for credit losses	790	1,868	3	(50)	–	2,611
Non-interest expenses	4,811	5,700	2,559	2,233	(245)	15,058
Income before taxes	4,810	3,125	1,422	2,345	(596)	11,106
Income tax expense	1,251	617	376	587	(449)	2,382
Net income	$ 3,559	$ 2,508	$ 1,046	$ 1,758	$ (147)	$ 8,724
Net income attributable to non-controlling interests in subsidiaries (NCI)	–	162	14	–	–	176
Net income attributable to equity holders	$ 3,559	$ 2,346	$ 1,032	$ 1,758	$ (147)	$ 8,548
Preferred shareholders and other equity instrument holders						187
Net income attributable to common shareholders						$ 8,361
Diluted earnings per share *(in dollars)*						$ 6.82
Adjustments						
Acquisition-related amounts						
Day 1 provision for credit losses on acquired performing financial instruments (2)	$ –	$ 404	$ –	$ –	$ –	$ 404
Integration costs(3)	–	70	31	–	–	101
Amortization of Acquisition-related intangible assets, excluding software (3)	20	41	25	–	–	86
Acquisition-related costs	20	515	56	–	–	591
Adjustments (Pre-tax)	20	515	56	–	–	591
Income tax expense/(benefit)	(4)	(151)	(16)	–	–	(171)
Adjustments (After tax)	16	364	40	–	–	420
Adjustment attributable to NCI	–	(122)	–	–	–	(122)
Adjustments (After tax and NCI)	$ 16	$ 242	$ 40	$ –	$ –	$ 298
Adjusted Results						
Net interest income	$ 7,504	$ 7,218	$ 498	$ 1,454	$ (483)	$ 16,191
Non-interest income	2,907	3,475	3,486	3,074	(358)	12,584
Total revenue	10,411	10,693	3,984	4,528	(841)	28,775
Provision for credit losses	790	1,464	3	(50)	–	2,207
Non-interest expenses	4,791	5,589	2,503	2,233	(245)	14,871
Income before taxes	4,830	3,640	1,478	2,345	(596)	11,697
Income tax expense	1,255	768	392	587	(449)	2,553
Net income	$ 3,575	$ 2,872	$ 1,086	$ 1,758	$ (147)	$ 9,144
Net income attributable to NCI	–	284	14	–	–	298
Net income attributable to equity holders	$ 3,575	$ 2,588	$ 1,072	$ 1,758	$ (147)	$ 8,846
Preferred shareholders and other equity instrument holders						187
Net income attributable to common shareholders						$ 8,659
Adjusted diluted earnings per share						
Adjusted net income attributable to common shareholders						$ 8,659
Dilutive impact of share-based payment options and others						72
Adjusted net income attributable to common shareholders (diluted)						$ 8,731
Weighted average number of basic common shares outstanding *(millions)*						1,213
Dilutive impact of share-based payment options and others *(millions)*						16
Adjusted weighted average number of diluted common shares outstanding *(millions)*						1,229
Adjusted diluted earnings per share *(in dollars)* (4)						$ 7.11
Impact of adjustments on diluted earnings per share *(in dollars)*						$ 0.29

(1) Refer to Business Line Overview on page 42.
(2) Recorded in provision for credit losses.
(3) Recorded in non-interest expenses.
(4) Earnings per share calculations are based on full dollar and share amounts.

Reconciliation of International Banking's reported results and constant dollar results

International Banking business segment results are analyzed on a constant dollar basis. Under the constant dollar basis, prior period amounts are recalculated using current period average foreign currency rates. The following table presents the reconciliation between reported and constant dollar results for International Banking for prior periods.

For the year ended October 31 ($ millions)	2019			2018		
(Taxable equivalent basis)	Reported	Foreign exchange	Constant dollar	Reported	Foreign exchange	Constant dollar
Net interest income	$ 8,353	$ 500	$ 7,853	$ 7,218	$ 414	$ 6,804
Non-interest income	4,366	148	4,218	3,475	118	3,357
Total revenue	12,719	648	12,071	10,693	532	10,161
Provision for credit losses	2,076	142	1,934	1,868	191	1,677
Non-interest expenses	6,596	389	6,207	5,700	353	5,347
Income tax expense	909	21	888	617	(18)	635
Net Income	$ 3,138	$ 96	$ 3,042	$ 2,508	$ 6	$ 2,502
Net income attributable to non-controlling interest in subsidiaries	$ 373	$ 35	$ 338	$ 162	$ 6	$ 156
Net income attributable to equity holders of the Bank	$ 2,765	$ 61	$ 2,704	$ 2,346	$ –	$ 2,346
Other measures						
Average assets ($ billions)	$ 201	$ 10	$ 191	$ 165	$ 6	$ 159
Average liabilities ($ billions)	$ 153	$ 9	$ 144	$ 127	$ 6	$ 121

The above table is computed on a basis that is different than the table "Impact of foreign currency translation" in Overview of Performance on page 27.

Core banking assets

Core banking assets are average interest earning assets excluding bankers' acceptances and trading assets.

Core banking margin

This ratio represents net interest income divided by core banking assets.

Return on equity

Return on equity is a profitability measure that presents the net income attributable to common shareholders as a percentage of average common shareholders' equity.

In the first quarter of 2020, in line with OSFI's increased Domestic Stability Buffer announced requirements, the Bank increased the capital attributed to its business lines to approximate 10.5% of Basel III common equity capital requirements based on credit, market and operational risks and leverage inherent within each business segment. Previously, capital was attributed based on a methodology that approximated 10.0% of Basel III common equity capital requirements.

Return on equity for the business segments is calculated as a ratio of net income attributable to common shareholders of the business segment and the capital attributed. Prior period returns on equity for the business segments have not been restated.

T3 Financial highlights

As at and for the years ended October 31	2020(1)	2019(1)	2018
Operating results ($ millions)			
Net interest income	**17,320**	17,177	16,191
Non-interest income	**14,016**	13,857	12,584
Total revenue	**31,336**	31,034	28,775
Provision for credit losses	**6,084**	3,027	2,611
Non-interest expenses	**16,856**	16,737	15,058
Income tax expense	**1,543**	2,472	2,382
Net income	**6,853**	8,798	8,724
Net income attributable to common shareholders	**6,582**	8,208	8,361
Operating performance			
Basic earnings per share ($)	**5.43**	6.72	6.90
Diluted earnings per share ($)	**5.30**	6.68	6.82
Return on equity (%)	**10.4**	13.1	14.5
Productivity ratio (%)	**53.8**	53.9	52.3
Operating leverage (%)	**0.3**	(3.3)	3.0
Core banking margin (%)(2)	**2.27**	2.44	2.46
Financial position information ($ millions)			
Cash and deposits with financial institutions	**76,460**	46,720	62,269
Trading assets	**117,839**	127,488	100,262
Loans	**603,263**	592,483	551,834
Total assets	**1,136,466**	1,086,161	998,493
Deposits	**750,838**	733,390	676,534
Common equity	**62,819**	63,638	61,044
Preferred shares and other equity instruments	**5,308**	3,884	4,184
Assets under administration	**558,594**	558,408	517,596
Assets under management	**291,701**	301,631	280,656
Capital and liquidity measures			
Common Equity Tier 1 (CET1) capital ratio (%)	**11.8**	11.1	11.1
Tier 1 capital ratio (%)	**13.3**	12.2	12.5
Total capital ratio (%)	**15.5**	14.2	14.3
Leverage ratio (%)	**4.7**	4.2	4.5
Risk-weighted assets ($ millions) (3)	**417,138**	421,185	400,507
Liquidity coverage ratio (LCR) (%)	**138**	125	124
Credit quality			
Net impaired loans ($ millions)	**3,096**	3,540	3,453
Allowance for credit losses ($ millions) (4)	**7,820**	5,145	5,154
Gross impaired loans as a % of loans and acceptances	**0.81**	0.84	0.89
Net impaired loans as a % of loans and acceptances	**0.50**	0.58	0.60
Provision for credit losses as a % of average net loans and acceptances (5)	**0.98**	0.51	0.48
Provision for credit losses on impaired loans as a % of average net loans and acceptances (5)	**0.56**	0.49	0.43
Net write-offs as a % of average net loans and acceptances	**0.47**	0.50	0.44
Adjusted results(2)			
Adjusted net income ($ millions)	**6,961**	9,409	9,144
Adjusted diluted earnings per share ($)	**5.36**	7.14	7.11
Adjusted return on equity (%)	**10.4**	13.9	14.9
Adjusted productivity ratio (%)	**53.0**	52.7	51.7
Adjusted operating leverage (%)	**(0.6)**	(2.1)	3.7
Adjusted provision for credit losses as a % of average net loans and acceptances (5)	**0.95**	0.49	0.41
Common share information			
Closing share price ($) (TSX)	**55.35**	75.54	70.65
Shares outstanding (millions)			
Average – Basic	**1,212**	1,222	1,213
Average – Diluted	**1,243**	1,251	1,229
End of period	**1,211**	1,216	1,227
Dividends paid per share ($)	**3.60**	3.49	3.28
Dividend yield (%)(6)	**5.8**	4.9	4.2
Market capitalization ($ millions) (TSX)	**67,055**	91,867	86,690
Book value per common share ($)	**51.85**	52.33	49.75
Market value to book value multiple	**1.1**	1.4	1.4
Price to earnings multiple (trailing 4 quarters)	**10.2**	11.2	10.2
Other information			
Employees (full-time equivalent)	**92,001**	101,813	97,021
Branches and offices	**2,618**	3,109	3,095

(1) The amounts for the year ended October 31, 2020 have been prepared in accordance with IFRS 16; amounts for the years ended October 31, 2020 and October 31, 2019 have been prepared in accordance with IFRS 15; prior year amounts have not been restated (refer to Notes 3 and 4 of the Consolidated Financial Statements).
(2) Refer to page 17 for a discussion of Non-GAAP measures.
(3) In accordance with OSFI's requirements, effective January 31, 2019, credit valuation adjustment (CVA) RWA have been fullyphased-in. In 2018, CVA RWA were calculated using scalars of 0.80, 0.83 and 0.86 to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively.
(4) Includes allowance for credit losses on all financial assets—loans, acceptances,off-balance sheet exposures, debt securities, and deposits with financial institutions.
(5) Includes provision for credit losses on certain financial assets—loans, acceptances, andoff-balance sheet exposures.
(6) Based on the average of the high and low common share price for the year.

OVERVIEW OF PERFORMANCE

Financial Results: 2020 vs 2019

Net income was $6,853 million in 2020, down 22% from $8,798 million in 2019. Diluted earnings per share (EPS) were $5.30 compared to $6.68. Return on equity was 10.4% compared to 13.1%.

Adjusted net income was $6,961 million, down 26% from $9,409 million. This decrease was due mainly to the higher provision for credit losses on performing loans resulting from the impact of COVID-19 market and economic conditions. Adjusted Diluted EPS were $5.36 compared to $7.14 and adjusted Return on equity was 10.4% compared to 13.9%.

Net interest income was $17,320 million, an increase of $143 million or 1%. The negative impact of divested operations of approximately 2% was more than offset by business growth of 3%, driven primarily by increases in earning assets and higher contribution from asset/liability management activities, partly offset by the impact of foreign currency translation. The core banking margin was down 17 basis points to 2.27% from lower margins across all business lines due to impact of central bank rate cuts and changes in business mix, as well as an increased mix of lower-margin high quality liquid assets related to higher liquidity levels.

Non-interest income was $14,016 million, up $159 million or 1%. Adjusted non-interest income was $13,819 million, a decrease of $165 million or 1%. The impact of divested operations was approximately 6%, offset by business growth of 5%. This growth was driven by higher trading revenues, underwriting and advisory fees, investment gains, and wealth management fees. These were partly offset by lower banking revenues, insurance income, other fees and commissions, and the negative impact of foreign currency translation.

The provision for credit losses was $6,084 million, compared to $3,027 million last year, an increase of $3,057 million. Adjusted provision for credit losses was $5,929 million, compared to $2,876 million, an increase of $3,053 million or 106% due primarily to higher provision on performing loans across all business lines. The provision for credit losses ratio was 98 basis points, up 47 basis points from 51 basis points last year. Adjusted provision for credit losses ratio was 95 basis points, 46 basis points above last year.

Non-interest expenses were $16,856 million, an increase of $119 million or 1%. Adjusted non-interest expenses were $16,514 million, an increase of 1%. Higher salaries and benefits related to regulatory and technology initiatives, charges related to the metals investigations, COVID-19 related costs and other business growth-related expenses were mostly offset by lower advertising and business development expenses, professional fees, the positive impact of foreign currency translation and divested operations. Operating leverage was positive 0.3% on a reported basis and negative 0.6% on an adjusted basis. Excluding the impact of divested operations, operating leverage was positive 1.0%.

The provision for income taxes was $1,543 million, a decrease of $929 million. The effective tax rate was 18.4% compared to 21.9%, due primarily to significantly higher provision for credit losses recorded in entities that operate in higher tax rate jurisdictions and changes in earnings mix across businesses and jurisdictions.

The Basel III Common Equity Tier 1 ratio was 11.8% as at October 31, 2020, compared to 11.1% last year.

Medium-term financial objectives

The following table provides a summary of our 2020 performance against our medium-term financial performance objectives:

	2020 Results	
	Reported	Adjusted(1)
Diluted earnings per share growth of 7%+	(20.7)%	(24.9)%
Return on equity of 14%+	10.4%	10.4%
Achieve positive operating leverage	Positive 0.3%	Negative 0.6%
Maintain strong capital ratios	CET1 capital ratio of 11.8%	CET1 capital ratio of 11.8%

(1) Refer to non-GAAP measures on page 17.

Shareholder Returns

In fiscal 2020, the total shareholder return on the Bank's shares was negative 22.3%, compared to the total return of the S&P/TSX Composite Index of negative 2.3%.

The total compound annual shareholder return on the Bank's shares over the past five years was 2.7%, and 4.6% over the past 10 years. This is below the total annual return of the S&P/TSX Composite Index, which was 6.1% over the past five years and 5.2% over the last 10 years.

Dividends per share totaled $3.60 for the year, up 3% from $3.49 in 2019. The dividend payout ratio for the year of 66.3% or 65.8% on an adjusted basis, was above the Bank's target payout range of 40-50%. On March 13, 2020, OSFI advised federally regulated deposit taking institutions to suspend dividend increases as part of COVID-19 measures.

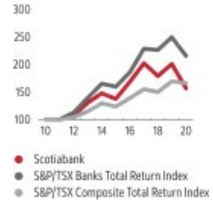
C1 Closing common share price as at October 30



T4 Shareholder returns

For the years ended October 31	2020	2019	2018
Closing market price per common share ($)	**55.35**	75.54	70.65
Dividends paid ($ per share)	**3.60**	3.49	3.28
Dividend yield (%) (1)	**5.8**	4.9	4.2
Increase (decrease) in share price (%)	**(26.7)**	6.9	(15.2)
Total annual shareholder return (%) (2)	**(22.3)**	12.4	(11.6)

(1) Dividend yield is calculated as the dividend paid divided by the average of the high and low common share price for the year.
(2) Total annual shareholder return assumes reinvestment of quarterly dividends, and therefore may not equal the sum of dividend and share price returns in the table.



C2 Return to common shareholders Share price appreciation plus dividends reinvested, 2010=100

Impact of COVID-19

On March 11, 2020, the World Health Organization declared the COVID-19 outbreak a global pandemic. Absent any medical approaches to slow the spread of the virus, governments around the world implemented a number of measures to curtail the outbreak and slow its progression. These included business closures, travel restrictions, quarantines, and limits on public and private gatherings. These measures led to a sharp reduction in economic activity over the March to May period in a large number of developed and emerging economies.

The economic impacts of these measures and uncertainty about the path forward led to severe stresses in financial markets in the early days of the pandemic. To ease strains in funding markets, central banks undertook prompt and large-scale efforts to increase market liquidity. This resulted in sharp cuts in interest rates, quantitative easing programs in some countries, direct lending to businesses, and targeted liquidity injections in various credit product markets. In some countries, regulatory authorities allowed banks to offer deferral programs to customers without requiring them to reclassify affected loans. In addition to these financial measures, fiscal authorities deployed historic amounts of direct support to firms and households including most prominently wage subsidies for firms and generous financial assistance to employees affected by the pandemic. These programs remain in operation in most countries.

As it became clear that measures to slow the spread of the virus were effective, economies were re-opened, leading to a surge in economic activity in those countries. Lower interest rates and direct support measures for firms and households fueled the rebound, as evidenced by the evolution in global consumption observed since economies re-opened. Despite the scale of the rebound observed so far, it will take many quarters to recover lost output. Unemployment remains significantly above pre-pandemic levels in almost all countries. Some sectors will undergo a prolonged adjustment to the behavioral changes caused by the virus, while others have thrived and will continue to do so. We see this unfolding across our footprint. The Bank has demonstrated financial strength and operational resilience despite these events, while protecting the health and safety of employees, and supporting customers.

Despite early success in slowing the spread of COVID-19, the global number of infections has recently risen dramatically. There remains uncertainty about the evolution of the virus, the measures that may be implemented to slow its spread, and the timing of an eventual vaccine, although we are encouraged by recently reported progress towards a vaccine. These factors add to uncertainty surrounding the outlook. It remains clear that substantial policy support remains appropriate globally to help bridge economies to the post-COVID state of the world. Despite this uncertainty, we remain cautiously optimistic that the countries in which we operate will rebound over the next twelve months owing to their strong policy frameworks and the support they have provided to their economies in recent months.

Fiscal and monetary stimulus

Governments have implemented a number of monetary and fiscal stimulus measures to deal with the unprecedented situation.

Central banks in Canada and across the Bank's footprint have enacted monetary policy measures to support economic activity, including lowering interest rates and additional funding measures.

Interest Rate Reductions	Canada	U.S.	Mexico	Peru	Chile	Colombia
March 1, 2020 – October 31, 2020	150bps	150bps	275bps	200bps	125bps	250bps

As part of Canada's response to COVID-19, the Government of Canada launched various programs, starting in March 2020, to provide additional funding to financial institutions in order to support lending to the real economy and promote stability of financial markets, including the following:

Program	Program Description
Term Repo	Bank of Canada acquires assets temporarily through repurchase style transactions. Eligible collateral includes NHA MBS, covered bonds and other marketable securities.
Bankers' Acceptance Purchase Facility	Bank of Canada conducts secondary market asset purchases of Acceptances with a maturity of up to approximately 3 months and subject to a minimum short-term credit rating.
Insured Mortgage Purchase Program	Canada Mortgage and Housing Corporation purchases NHA MBS.
Standing Term Liquidity Facility	Bank of Canada provides secured funding to eligible financial institutions for up to 90 days. The facility is secured by a broad set of collateral including loans and marketable securities.
Secondary Market Asset Purchases	Bank of Canada purchases targeted securities either by way of tender or transactions in the open market.

Outside of Canada, governments in countries in which the Bank operates also announced programs, starting in March 2020, to support lending and liquidity in financial markets. Central Banks across the Pacific Alliance region have developed programs to ensure enough liquidity including increasing both secured and unsecured funding and increasing the range of eligible collateral to secure funding.

Capital and Liquidity measures

OSFI introduced changes to regulations to keep the financial system resilient and well capitalized in response to COVID-19. A suite of temporary adjustments to existing capital and leverage requirements were introduced, including lowering the domestic stability buffer by 125 basis points from 2.25% to 1.0% in March, 2020. For details on capital management measures, refer to the capital management section on page 61.

The Bank has maintained strong capital and liquidity positions with a Common Equity Tier 1 (CET1) ratio of 11.8% as at October 31, 2020 and average Liquidity Coverage Ratio (LCR) of 138% for the year ended October 31, 2020. The Bank continues to ensure that its funding sources are well diversified and bolstered its liquidity position during the second and, to a lesser extent, third and fourth quarters through participation in above listed funding measures for financial institutions announced by governments in Canada and across the footprint.

Pandemic response measures launched by the Bank

Customer Assistance Programs

To support customers, the Bank has implemented a number of customer assistance programs across the footprint.

Canada

Offering of assistance programs largely ended on September 30, 2020. Customers participating in the programs may have deferrals that extend beyond this date. The table below provides a brief description of the nature of these programs and outstanding balances for accounts that remain in active deferral status as of October 31, 2020:

Product	As at October 31, 2020		As at July 31, 2020		As at April 30, 2020		Program Detail
	# of customer accounts (000s)	Amount outstanding ($ MM)	# of customer accounts (000s)	Amount outstanding ($ MM)	# of customer accounts (000s)	Amount outstanding ($ MM)	
Residential Mortgages	16	$4,257	137	$38,959	134	$38,010	Up to six months deferral of total payments
Personal Loans	16	612	66	2,316	164	5,494	Up to six months deferral on minimum requirements for line of credit accounts, and total payments on secured and unsecured term loans including auto
Credit Cards	3	18	33	174	73	411	Up to four months deferral on minimum payment requirements
Commercial & Small Business Loans(1)	1	232	7	1,986	10	4,298	Up to three months payment deferral

(1) Prior period amounts have been restated to conform to current period presentation.

For customer accounts where payment deferrals have expired during the year, approximately 97% are current on payments.

The Bank is participating in the following plans as part of the Government of Canada's COVID-19 Economic Response Plan:

Canada Emergency Wage Subsidy (CEWS)
The Bank is participating in the CEWS by facilitating enrolment in direct deposit where eligible businesses receive a subsidy from the Government of Canada of 75% of employee wages for up to 24 weeks. Businesses are able to re-hire workers previously laid off as a result of COVID-19. The CEWS has been extended until June 2021.

Canada Emergency Business Account (CEBA)
Through the CEBA program the Bank facilitated loans with eligible small business customers and Export Development Canada (EDC). Eligible small business customers received a loan of up to $40,000. The Government has announced an expansion to CEBA which will enable eligible businesses and not-for-profits to access an additional interest free loan of up to $20,000. The application deadline for CEBA has been extended to December 31, 2020.

Business Credit Availability Program (BCAP)
The BCAP provides additional liquidity support to small business and commercial customers through EDC and Business Development Bank of Canada (BDC). The BCAP has been extended until June 2021.

- Under the EDC plan, EDC guarantees an 80% portion of new operating loans made to the export sector as well as domestic companies.
- Under the BCAP, BDC entered into a co-lending facility with the Bank in which BDC purchases an 80% participation in term loans made to eligible small business and commercial customers.
- Under the BCAP Mid-Market Financing Program, BDC will enter into loan syndications with the Bank and underwrite 90% of junior term loans made to eligible medium-sized businesses.

For details on the CEBA and BCAP programs, refer to the off-balance sheet arrangements section on page 72.

International

Offering of assistance programs for retail loans ended on October 31, 2020 and for commercial loans on September 30, 2020 with some exceptions including requirements by local regulators. Customers participating in the programs may have deferrals that extend beyond these

dates. The table below provides a brief description of the nature of these programs and outstanding balances for accounts that remain in active deferral status as of October 31, 2020:

Product	As at October 31, 2020		As at July 31, 2020		As at April 30, 2020		Program Detail
	# of customer accounts (000s)	Amount outstanding ($ MM)	# of customer accounts (000s)	Amount outstanding ($ MM)	# of customer accounts (000s)	Amount outstanding ($ MM)	
Residential Mortgages	36	$3,699	99	$9,428	94	$9,695	Up to six months deferral of total payments
Personal Loans	152	1,342	727	5,160	1,066	6,690	Up to six months deferral on minimum payment requirements for line of credit accounts, and total payments on secured and unsecured term loans including auto
Credit Cards	299	961	1,504	3,530	1,499	3,433	Up to six months deferral on minimum payment requirements
Commercial & Small Business Loans(1)	0.7	4,600	2	8,000	2	6,300	Up to six months payment deferral, increases in short term liquidity lines, and other amendments

(1) Prior period amounts have been restated to conform to current period presentation.

For customer accounts where payment deferrals have expired during the year, approximately 90% are current on payments.

Economic Outlook

The global resurgence in COVID-19 cases is threatening what had been up to now a powerful post-lockdown rebound in economic activity. While this risk had long been identified, the speed at which the virus has returned is of concern, though policy efforts to slow the spread of the virus are much more targeted than in the first phase of the pandemic. This should limit the economic implications of this phase relative to the onset of the pandemic. We remain of the view that the global recovery will continue through 2021, though it will be slower than the torrid post-lockdown pace observed thus far in the second half of 2020.

Policy support remains critical to the recovery and governments in affected countries continue to deploy, or stand ready to increase, substantial support to firms and households to help manage an extension of the pandemic. This is the case in Canada and many European countries. In the United States, the approach to managing the virus stands in sharp contrast to other economies, as legislators seem unable to agree on additional support to households.

Despite the increase in case loads, economic indicators remain generally strong, though the pace of increase in these indicators is naturally slowing from exaggerated post-lockdown readings. In Canada, the strength remains apparent in retail and home sales, and households continue to benefit from exceptional government support, which has recently been extended, and low interest rates.

Inflationary pressures are expected to remain largely muted across the major economies, leading central banks to keep policy interest rates at current levels for an extended period. While yield curves should steepen a bit given the recovery in economic activity, the need for accommodative financial conditions is likely to prompt central banks to act if longer-term interest rates come under significant upward pressure. There is a risk, however, that lack of clarity over the Fed's new approach to managing inflation may lead to greater price pressures than currently assessed.

There is now compelling evidence of a post-lockdown economic rebound in the Pacific Alliance countries. Policy support and a gradual return to more normal life in these countries continues to support our view that a strong rebound is set for the second half of 2020, extending into 2021. Prospects are not uniform across the region. Virus control remains a challenge, as seen elsewhere in the world, and uncertainty about ongoing reform efforts and political processes will affect some countries.

Outlook

The Bank's strategy is expected to deliver better returns for our shareholders in all core markets in the future. While the economic recovery is expected to be staggered, with different countries returning to positive year-over-year economic growth at different times, 2021 is expected to be a transition year towards a return to the full earnings power of the Bank supported by a return to normal provision for credit loss levels. The Bank's capital position is expected to remain strong in 2021.

Impact of Foreign Currency Translation

The impact of foreign currency translation on net income is shown in the table below.

T5 Impact of foreign currency translation

	2020		2019		2018	
For the fiscal years	**Average exchange rate**	**% Change**	Average exchange rate	% Change	Average exchange rate	% Change
U.S. Dollar/Canadian Dollar	**0.744**	**(1.2)%**	0.753	(3.2)%	0.777	1.6%
Mexican Peso/Canadian Dollar	**15.832**	**8.4%**	14.607	(1.3)%	14.802	1.3%
Peruvian Sol/Canadian Dollar	**2.569**	**2.3%**	2.512	(1.0)%	2.538	1.0%
Colombian Peso/Canadian Dollar	**2,722**	**11.2%**	2,447	7.7%	2,272	0.3%
Chilean Peso/Canadian Dollar	**591.712**	**14.3%**	517.805	5.1%	492.892	(1.4)%

Impact on net income [1] ($ millions except EPS)	2020 vs. 2019	2019 vs. 2018	2018 vs. 2017
Net interest income	$ (481)	$ (52)	$ (101)
Non-interest income[2]	(196)	30	(21)
Non-interest expenses	397	60	85
Other items (net of tax)	261	22	17
Net income	$ (19)	$ 60	$ (20)
Earnings per share (diluted)	$ (0.02)	$ 0.05	$ (0.02)
Impact by business line ($ millions)			
Canadian Banking	$ 2	$ 7	$ (4)
International Banking[2]	(23)	51	(42)
Global Wealth Management	(9)	–	(4)
Global Banking and Markets	11	28	(12)
Other[2]	–	(26)	42
	$ (19)	$ 60	$ (20)

(1) Includes impact of all currencies.
(2) Includes the impact of foreign currency hedges.

Impact of Divested Operations

The table below reflects the income earned in each period from divested operations prior to the closing. Refer to Note 37 in the accompanying financial statements for the list of divested operations that have closed.

T6 Impact of divested operations

($ millions)	2020	2019	2018
Net interest income	$ 76	$ 432	$ 440
Non-interest income	72	847	734
Total revenue	148	1,279	1,174
Provision for credit losses	8	11	(40)
Non-interest expenses	65	404	423
Income before taxes	75	864	791
Income tax expense	15	210	189
Net income	$ 60	$ 654	$ 602
Net income attributable to non-controlling interests (NCI)	–	7	6
Net income attributable to equity holders – relating to divested operations	$ 60	$ 647	$ 596

($ millions except EPS)	2020 vs. 2019	2019 vs. 2018
Net interest income	$ (356)	$ (8)
Non-interest income	(775)	113
Total revenue	(1,131)	105
Provision for credit losses	(3)	51
Non-interest expenses	(339)	(19)
Income before taxes	(789)	73
Income tax expense	(195)	21
Net income	$ (594)	$ 52
Net income attributable to equity holders of the Bank	(587)	51
Earnings per share (diluted)	$ (0.47)	$ 0.03

GROUP FINANCIAL PERFORMANCE

Net Income

Net income was $6,853 million, down 22% compared to $8,798 million last year. On an adjusted basis, net income was $6,961 million, down 26% from $9,409 million due mainly to higher provision for credit losses resulting from COVID-19 related events.

Net Interest Income

Net interest income was $17,320 million, an increase of $143 million or 1%. The negative impact of divested operations of approximately 2% was more than offset by business growth of 3%, driven primarily by increases in earning assets and higher contribution from asset/liability management activities, partly offset by the impact of foreign currency translation.

Net interest income in Canadian Banking was in line with the previous year as strong asset and deposit growth was offset by margin compression from central bank rate cuts and changes in business mix. Net interest income decreased $750 million or 9% in International Banking, mainly from the negative impact of foreign currency translation (6%) and divested operations (4%). The benefit of loan growth, mainly in Latin America, was offset by margin compression driven by central bank rate cuts. Global Banking and Markets net interest income increased $39 million or 3% from growth in deposits and loans, partly offset by lower lending margins. The Other Segment net interest income increased $853 million or 87% from the higher contribution from asset/liability management activities.

Core banking assets increased $53 billion or 8% to $757 billion. The increase was driven by growth in high quality liquid assets, reflecting higher liquidity levels, increases in corporate loans in Global Banking and Markets, mainly a result of corporate drawdowns, and higher residential mortgages and business loans in Canadian Banking.

The core banking margin was down 17 basis points to 2.27% from lower margins across all business lines due to the impact of central bank rate cuts and changes in business mix, as well as an increased mix of lower-margin high quality liquid assets related to higher liquidity levels.

T7 Net interest income and core banking margin (1)

	2020			2019			2018		
($ billions, except percentage amounts)	**Average balance**	**Interest**	**Average rate**	Average balance	Interest	Average rate	Average balance	Interest	Average rate
Total average assets and net interest income	**$1,160.6**	**$ 17.3**		$ 1,056.1	$ 17.2		$ 945.7	$ 16.2	
Less: trading related businesses (1)	**321.5**	**0.1**		279.5	0.1		234.6	0.1	
Banking margin on average total assets	**$ 839.1**	**$ 17.2**	**2.05%**	$ 776.6	$ 17.1	2.21%	$ 711.1	$ 16.1	2.26%
Less: non-earning assets and customers' liability under acceptances	**82.1**	**–**		72.8	–		58.7	–	
Core banking assets and margin	**$ 757.0**	**$ 17.2**	**2.27%**	$ 703.8	$ 17.1	2.44%	$ 652.4	$ 16.1	2.46%

(1) Most net interest income from trading assets is recorded in trading revenues imon-interest income.

T8 Average balance sheet(1) and net interest income

For the fiscal years ($ billions)	2020 Average balance	2020 Interest	2020 Average rate	2019 Average balance	2019 Interest	2019 Average rate	2018 Average balance	2018 Interest	2018 Average rate
Assets									
Deposits with financial institutions	**$ 66.0**	**$ 0.4**	**0.63%**	$ 49.6	$ 0.9	1.87%	$ 54.2	$ 0.9	1.59%
Trading assets	**128.1**	**0.4**	**0.36%**	116.9	0.3	0.25%	101.6	0.2	0.17%
Securities purchased under resale agreements and securities borrowed	**128.3**	**0.3**	**0.22%**	121.0	0.5	0.41%	94.4	0.4	0.47%
Investment securities	**105.0**	**1.6**	**1.50%**	87.5	2.0	2.22%	79.8	1.6	2.01%
Loans:									
Residential mortgages	**273.4**	**9.2**	**3.36%**	261.5	9.4	3.59%	244.2	8.3	3.39%
Personal loans	**96.2**	**6.1**	**6.35%**	97.7	6.8	6.98%	92.1	6.0	6.55%
Credit cards	**16.4**	**3.2**	**19.31%**	17.5	3.3	18.76%	15.1	2.8	18.45%
Business and government	**229.7**	**8.5**	**3.71%**	206.3	9.6	4.66%	177.0	7.9	4.45%
Allowance for credit losses	**(6.1)**			(5.2)			(5.0)		
Total loans	**$ 609.6**	**$ 27.0**	**4.43%**	$ 577.8	$ 29.1	5.04%	$ 523.4	$ 25.0	4.77%
Total earning assets	**$ 1,037.0**	**$ 29.7**	**2.87%**	$ 952.8	$ 32.8	3.44%	$ 853.4	$ 28.1	3.29%
Customers' liability under acceptances	**16.0**			16.3			16.3		
Other assets	**107.6**			87.0			76.0		
Total assets	**$ 1,160.6**	**$ 29.7**	**2.56%**	$ 1,056.1	$ 32.8	3.10%	$ 945.7	$ 28.1	2.97%
Liabilities and equity									
Deposits(2):									
Personal	**$ 231.4**	**$ 3.2**	**1.39%**	$ 221.0	$ 3.8	1.70%	$ 204.5	$ 3.3	1.59%
Business and government	**487.3**	**6.9**	**1.42%**	448.3	9.1	2.03%	399.7	6.5	1.64%
Financial institutions	**47.5**	**0.6**	**1.25%**	40.2	1.0	2.56%	42.2	0.7	1.77%
Total deposits	**$ 766.2**	**$ 10.7**	**1.40%**	$ 709.5	$ 13.9	1.95%	$ 646.4	$ 10.5	1.63%
Obligations related to securities sold under repurchase agreements and securities lent	**134.8**	**0.2**	**0.17%**	114.6	0.3	0.29%	96.0	0.3	0.25%
Subordinated debentures	**7.3**	**0.2**	**3.28%**	7.5	0.3	3.91%	5.7	0.2	3.71%
Other interest-bearing liabilities	**69.5**	**1.3**	**1.71%**	63.9	1.1	1.74%	60.1	0.9	1.46%
Total interest-bearing liabilities	**$ 977.8**	**$ 12.4**	**1.27%**	$ 895.5	$ 15.6	1.74%	$ 808.2	$ 11.9	1.47%
Financial instruments designated at fair value through profit or loss	**16.9**			11.3			9.5		
Other liabilities including acceptances	**95.6**			79.8			63.9		
Equity(3)	**70.3**			69.5			64.1		
Total liabilities and equity	**$ 1,160.6**	**$ 12.4**	**1.07%**	$ 1,056.1	$ 15.6	1.48%	$ 945.7	$ 11.9	1.26%
Net interest income		**$ 17.3**			$ 17.2			$ 16.2	

(1) Average of daily balances.
(2) Prior year amounts have been restated to adjust for financial instruments designated at fair value through profit or loss, previously reported under deposits.
(3) Includes non-controlling interest of $2.5 (2019 – $2.7; 2018 – $1.9).

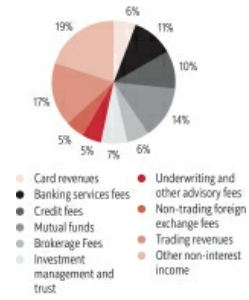
Non-Interest Income

T9 Non-interest income

For the fiscal years ($ millions)	2020	2019	2018	2020 versus 2019
Banking				
Card Revenues(1)	$ 789	$ 977	$ 1,105	(19)%
Banking services fees	1,540	1,812	1,705	(15)
Credit fees	1,348	1,316	1,191	2
Total banking revenues	$ 3,677	$ 4,105	$ 4,001	(10)%
Wealth management				
Mutual funds	$ 1,945	$ 1,849	$ 1,714	5%
Brokerage fees	902	876	895	3
Investment management and trust				
Investment management and custody	749	848	551	(12)
Personal and corporate trust	197	202	181	(2)
	946	1,050	732	(10)
Total wealth management revenues	$ 3,793	$ 3,775	$ 3,341	–%
Underwriting and other advisory	690	497	514	39
Non-trading foreign exchange	708	667	622	6
Trading revenues	2,411	1,488	1,420	62
Net gain on sale of investment securities	607	351	146	73
Net income from investments in associated corporations	242	650	559	(63)
Insurance underwriting income, net of claims	497	676	686	(26)
Other fees and commissions	688	949	841	(28)
Other	703	699	454	1
Total non-interest income	$ 14,016	$ 13,857	$ 12,584	1%

(1) The amounts for the years ended October 31, 2020 and October 31, 2019 have been prepared in accordance with IFRS 15, prior year amounts have not been restated. (Refer to Notes 3 and 4 in the Consolidated Financial Statements).

C3 Sources of non-interest income



Non-interest income was up $159 million or 1% to $14,016 million. Adjusted non-interest income was $13,819 million, a decrease of $165 million or 1%. The impact of divested operations was approximately 6%, offset by growth of 5% driven by higher trading revenues, underwriting and advisory fees, gains on investment securities, and wealth management fees. These were partly offset by lower banking revenues, insurance income, other fees and commissions, and the negative impact of foreign currency translation.

Banking revenues, net of related expenses, were down $428 million or 10% to $3,677 million. The decrease was due to lower card revenues and deposit and payment service fees, driven by lower economic activity due to the pandemic.

Wealth management revenues increased $18 million from higher mutual fund revenues and brokerage fees, partly offset by lower investment management and trust revenues, and the impact of divested operations.

Trading revenues were up $923 million or 62%, mainly from higher revenues from interest rate and credit trading benefiting from market volatility primarily in the second and third quarters.

Net income from investments in associated corporations was down $408 million or 63% primarily due to the divestiture of the Bank's ownership interest in Thanachart Bank.

Insurance underwriting income decreased $179 million or 26% with lower insurance premiums across both Canadian Banking and International Banking, impacted by divested operations and the effect of the pandemic.

Other fees and commissions were down $261 million or 28% mainly due to lower fees in Global Banking and Markets and International Banking.

T10 Trading revenues

For the fiscal years ($ millions)	2020	2019	2018
Trading-related revenue (TEB)(1)			
Net interest income	**$ 112**	$ 67	$ 130
Non-interest income			
Trading revenues	**2,671**	1,652	1,521
Other fees and commissions	**205**	379	405
Total	**$ 2,988**	$ 2,098	$ 2,056
Trading-related revenue by product (TEB)			
Interest rate and credit	**$ 1,552**	$ 644	$ 559
Equities	**631**	696	787
Foreign exchange	**396**	273	299
Commodities	**263**	216	230
Other	**146**	269	181
Total trading-related revenue (TEB)	**$ 2,988**	$ 2,098	$ 2,056
Taxable equivalent adjustment	**(260)**	(164)	(101)
Trading-related revenue (Non-TEB)	**$ 2,728**	$ 1,934	$ 1,955

(1) Trading-related revenue consists of net interest income and non-interest income. Included are unrealized gains and losses on security positions held, realized gains and losses from the purchase and sale of securities, fees and commissions from securities borrowing and lending activities, and gains and losses on trading derivatives. Underwriting and other advisory fees, which are shown separately in the consolidated statement of income, are excluded.

Provision for Credit Losses

The provision for credit losses was $6,084 million, compared to $3,027 million, an increase of $3,057 million from last year. Adjusted provision for credit losses was $5,929 million, compared to $2,876 million, an increase of $3,053 million or 106% due primarily to higher provision for performing loans across all business lines.

The provision for credit losses on impaired loans was $3,468 million, an increase of $569 million from last year. Adjusted provision for credit losses on impaired loans was $3,435 million, an increase of $536 million or 18% due primarily to higher commercial and corporate provisions. The increase is due primarily to new formations in the energy sector and other sectors most impacted by COVID-19, as well as higher retail provisions in International and Canadian Banking. The provision for credit losses ratio on impaired loans was 56 basis points, an increase of seven basis points. Adjusted provision for credit losses ratio on impaired loans increased by six basis points to 55 basis points.

The provision for credit losses on performing loans was $2,616 million, compared to $128 million last year. Adjusted provision for credit losses on performing loans was $2,494 million, compared to a net reversal of $23 million, an increase of $2,517 million. $1,827 million of the increase related to retail, while commercial and corporate performing loan provisions increased by $690 million, across all business lines. The increases were due primarily to the unfavourable macroeconomic outlook driven by the COVID-19 pandemic and its estimated future impact on credit migration as well as the impact of the unfavourable economic conditions in the energy sector and other sectors most impacted by COVID-19.

The provision for credit losses ratio was 98 basis points, up 47 basis points from 51 basis points last year. Adjusted provision for credit losses ratio was 95 basis points, 46 basis points above last year.

T11 Provision for credit losses by business line

For the fiscal years ($ millions)	2020 Performing (Stage 1 and 2)	2020 Impaired (Stage 3)	2020 Total	2019(1) Performing (Stage 1 and 2)	2019(1) Impaired (Stage 3)	2019(1) Total
Canadian Banking						
Retail	**$ 660**	**$ 927**	**$ 1,587**	$ 2	$ 890	$ 892
Commercial	**283**	**203**	**486**	(4)	84	80
Total	**943**	**1,130**	**2,073**	(2)	974	972
International Banking						
Retail	**1,247**	**1,882**	**3,129**	134	1,728	1,862
Commercial	**166**	**319**	**485**	21	194	215
Total	**1,413**	**2,201**	**3,614**	155	1,922	2,077
Global Wealth Management	**5**	**3**	**8**	1	(1)	–
Global Banking and Markets	**257**	**133**	**390**	(25)	4	(21)
Other	**(1)**	**1**	**–**	–	–	–
Provision for credit losses on loans, acceptances and off-balance sheet exposures	**$ 2,617**	**$ 3,468**	**$ 6,085**	$ 129	$ 2,899	$ 3,028
International Banking	**$ (1)**	**$ –**	**$ (1)**	$ (1)	$ –	$ (1)
Global Wealth Management	**$ (1)**	**$ –**	**$ (1)**	$ –	$ –	$ –
Global Banking and Markets	**$ –**	**$ –**	**$ –**	$ (1)	$ –	$ (1)
Other	**1**	**–**	**1**	1	–	1
Provision for credit losses on debt securities and deposits with banks	**$ (1)**	**$ –**	**$ (1)**	$ (1)	$ –	$ (1)
Total provision for credit losses	**$ 2,616**	**$ 3,468**	**$ 6,084**	$ 128	$ 2,899	$ 3,027

(1) Amounts for 2019 have been restated to reflect the impact of the establishment of Global Wealth Management as a separate business segment.

T11A Provisions against impaired financial instruments by business line

For the fiscal years ($ millions)	2020	2019(1)	2018(1)
Canadian Banking			
Retail	**$ 927**	$ 890	$ 759
Commercial	**203**	84	24
	$ 1,130	$ 974	$ 783
International Banking			
Caribbean and Central America	**$ 319**	$ 292	$ 321
Latin America			
Mexico	**400**	291	239
Peru	**484**	446	349
Chile	**582**	403	275
Colombia	**322**	422	358
Other Latin America	**94**	68	55
Total Latin America	**1,882**	1,630	1,276
	$ 2,201	$ 1,922	$ 1,597
Global Wealth Management	**$ 3**	$ (1)	$ 3
Global Banking and Markets			
Canada	**$ 67**	$ 11	$ (1)
U.S.	**6**	(1)	(6)
Asia and Europe	**61**	(6)	(21)
	$ 134	$ 4	$ (28)
Total	**$ 3,468**	$ 2,899	$ 2,355

(1) Amounts for 2019 and 2018 have been restated to reflect the impact of the establishment of Global Wealth Management as a separate business segment.

T12 Provision for credit losses as a percentage of average net loans and acceptances (1)(2)

For the fiscal years (%)	2020	2019(3)	2018(3)
Canadian Banking			
Retail	**0.54%**	0.32%	0.27%
Commercial	**0.84**	0.15	0.08
	0.59	0.29	0.24
International Banking			
Retail	**4.74**	2.57	2.86
Commercial	**0.59**	0.28	0.27
	2.45	1.40	1.52
Global Wealth Management	**0.05**	0.00	0.04
Global Banking and Markets	**0.35**	(0.02)	(0.06)
Provisions against impaired loans	**0.56**	0.49	0.43
Provisions against performing loans	**0.42**	0.02	0.05
Total	**0.98%**	0.51%	0.48%

(1) Includes provision for credit losses on certain financial assets—loans, acceptances, andoff-balance sheet exposures.
(2) 2019 and 2018 include Day 1 acquisition-related impact in International Banking.
(3) Amounts for 2019 and 2018 have been restated to reflect the impact of the establishment of Global Wealth Management as a separate business segment.

T13 Net write-offs(1) as a percentage of average loans and acceptances

For the fiscal years (%)	2020	2019(2)	2018(2)
Canadian Banking			
Retail	**0.29%**	0.32%	0.28%
Commercial	**0.26**	0.15	0.09
	0.29	0.29	0.25
International Banking			
Retail	**2.38**	2.50	2.36
Commercial	**0.31**	0.15	0.23
	1.24	1.29	1.26
Global Wealth Management	**–**	0.02	0.01
Global Banking and Markets	**0.09**	0.03	0.03
Total	**0.47%**	0.50%	0.44%

(1) Write-offs net of recoveries.
(2) Amounts for 2019 and 2018 have been restated to reflect the impact of the establishment of Global Wealth Management as a separate business segment.

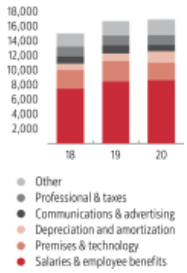
Non-Interest Expenses

T14 Non-interest expenses and productivity

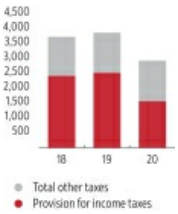
For the fiscal years ($ millions)	2020	2019	2018	2020 versus 2019
Salaries and employee benefits				
Salaries	$ 5,028	$ 4,939	$ 4,454	2%
Performance-based compensation	1,738	1,761	1,624	(1)
Share-based payments	298	278	192	7
Other employee benefits	1,560	1,465	1,185	6
	$ 8,624	$ 8,443	$ 7,455	2%
Premises and technology				
Premises				
Occupancy(1)	25	527	477	(95)
Property taxes	98	95	98	3
Other premises costs(1)	483	458	437	5
	$ 606	$ 1,080	$ 1,012	(44)%
Technology	$ 1,802	$ 1,727	$ 1,565	4%
	$ 2,408	$ 2,807	$ 2,577	(14)%
Depreciation and amortization				
Depreciation(1)	797	402	354	98
Amortization of intangible assets	749	651	494	15
	$ 1,546	$ 1,053	$ 848	47%
Communications	$ 418	$ 459	$ 447	(9)%
Advertising and business development	$ 445	$ 625	$ 581	(29)%
Professional	$ 753	$ 861	$ 881	(13)%
Business and capital taxes				
Business taxes	469	471	419	(0)
Capital taxes	48	44	45	9
	$ 517	$ 515	$ 464	0%
Other(1)	$ 2,145	$ 1,974	$ 1,805	9%
Total non-interest expenses	$16,856	$16,737	$15,058	1%
Productivity ratio	53.8%	53.9%	52.3%	

(1) The adoption of IFRS 16 in 2020 resulted in lower Occupancy of $516 million, partly offset by increases in Other premises costs ($15 million), in Depreciation ($399 million) and in Other ($27 million). The total impact lowered non-interest expenses by $75 million in 2020.

C4 Non-interest expenses $ millions



C5 Direct and indirect taxes $ millions



Non-interest expenses were $16,856 million, an increase of $119 million or 1%. Adjusted non-interest expenses were $16,514 million, an increase of 1%. Higher salaries and benefits related to regulatory and technology initiatives, charges related to the metals investigations, COVID-19 related costs and other business growth-related expenses were partly offset by lower advertising and business development expenses, professional fees, and the positive impact of foreign currency translation and divested operations.

The Bank's total technology cost, that includes Technology expenses in Table T14 and those included within Salaries, Professional, Amortization of Intangible Assets and Depreciation, was approximately $3.7 billion, an increase of 4% compared to 2019 and 11.8% of revenues. This reflects our continued investment in modernization and technology, including cybersecurity.

The productivity ratio was 53.8% compared to 53.9%. On an adjusted basis, the productivity ratio was 53.0%, compared to 52.7%.

With the adoption of IFRS 16 in 2020, adjusted non-interest expenses were lower by $75 million and improved the productivity ratio by 0.1%.

Operating leverage was positive 0.3% on a reported basis and negative 0.6% on an adjusted basis. Excluding the impact of divested operations, operating leverage was positive 1.0%.

Provision for Income Taxes

The provision for income tax expense was $1,543 million compared to $2,472 million last year. The effective tax rate was 18.4% compared to 21.9%, due primarily to significantly higher provision for credit losses recorded in entities that operate in higher tax rate jurisdictions and changes in earnings mix across businesses and jurisdictions.

Financial Results Review: 2019 vs. 2018

In order to identify key business trends between 2019 and 2018, commentary and the related financial results are below.

Net income

Net income was $8,798 million in 2019, up 1% from $8,724 million in 2018. Diluted earnings per share (EPS) were $6.68 compared to $6.82. Return on equity was 13.1% compared to 14.5%.

Adjusting for the impact of Acquisition and divestiture-related amounts (refer to Non-GAAP Measures), net income was $9,409 million, up 3% from $9,144 million. Net income was positively impacted by increases in net interest income and non-interest income. Partly offsetting were higher provision for credit losses and higher non-interest expenses. Adjusted Diluted EPS were $7.14 compared to $7.11 and adjusted Return on equity was 13.9% compared to 14.9%.

Net interest income

Net interest income was $17,177 million in 2019, an increase of $986 million or 6%, mainly from the impact of acquisitions. Also contributing to the increase was growth in core banking assets, partly offset by the negative impact of foreign currency translation.

Non-interest income

Non-interest income was $13,857 million in 2019, up $1,273 million or 10%. The impact of acquisitions contributed 6% of the growth. The remaining 4% growth was primarily from higher banking revenues and gains on investments, partly offset by the higher benefit in 2018 from Alignment of reporting periods for certain businesses with the Bank.

Provision for credit losses

The provision for credit losses was $3,027 million, an increase of $416 million from 2018. Adjusting for the Day 1 provision on acquired performing financial instruments recorded in both years, the provision for credit losses increased $669 million or 30% due primarily to higher provisions in the International Banking and Canadian Banking retail portfolios. The provision for credit losses ratio was 51 basis points, up three basis points from 48 basis points in 2018. Adjusting for the Day 1 provision on acquired performing financial instruments, the provision for credit losses ratio was 49 basis points, eight basis points above 2018.

Non-interest expenses

Non-interest expenses were $16,737 million in 2019, an increase of $1,679 million or 11%. Adjusting for Acquisition and divestiture-related amounts, non-interest expenses grew 10%. 2018 remeasurement of an employee benefit liability from certain plan modifications ("benefits remeasurement"), the impact of acquisitions and the new revenue accounting standard that requires card expenses to be netted against card revenues contributed approximately 6% of the growth. The remaining 4% growth was due to investments in technology and regulatory initiatives, higher performance based compensation and share-based payments, partly offset by the positive impact of foreign currency translation.

Income taxes

The provision for income taxes was $2,472 million in 2019, an increase of $90 million. The Bank's overall effective tax rate for the year was 21.9% compared to 21.5% in 2018. The increase in the effective tax rate was due primarily to higher taxes related to the divestitures of foreign operations.

T15 Financial Results Review

For the year ended October 31, 2019 ($ millions) (1)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other(2)	Total
Net interest income	$ 7,848	$ 8,353	$ 564	$ 1,396	$ (984)	**$ 17,177**
Non-interest income	2,616	4,366	3,937	3,084	(146)	**13,857**
Total revenue	$ 10,464	$ 12,719	$ 4,501	$ 4,480	$ (1,130)	**$ 31,034**
Provision for credit losses	972	2,076	–	(22)	1	**3,027**
Non-interest expenses	4,772	6,596	2,905	2,463	1	**16,737**
Income tax expense	1,232	909	412	505	(586)	**2,472**
Net income	$ 3,488	$ 3,138	$ 1,184	$ 1,534	$ (546)	**$ 8,798**
Net income attributable to non-controlling interests	–	373	18	–	17	**408**
Net income attributable to equity holders of the Bank	$ 3,488	$ 2,765	$ 1,166	$ 1,534	$ (563)	**$ 8,390**

(1) Taxable equivalent basis. Refer to Glossary.

(2) Includes all other smaller operating segments, including Group Treasury, and corporate adjustments, such as the elimination of the tax-exempt income gross-up reported in net interest income, non-interest income and provision for income taxes for the year ended October 31, 2019 – $181 to arrive at the amounts reported in Consolidated Statement of Income, and differences in the actual amount of costs incurred and charged to the operating segments.

For the year ended October 31, 2018 ($ millions) (1)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other(2)	Total
Net interest income	$ 7,504	$ 7,218	$ 498	$ 1,454	$ (483)	**$ 16,191**
Non-interest income	2,907	3,475	3,486	3,074	(358)	**12,584**
Total revenue	$ 10,411	$ 10,693	$ 3,984	$ 4,528	$ (841)	**$ 28,775**
Provision for credit losses	790	1,868	3	(50)	–	**2,611**
Non-interest expenses	4,811	5,700	2,559	2,233	(245)	**15,058**
Income tax expense	1,251	617	376	587	(449)	**2,382**
Net income	$ 3,559	$ 2,508	$ 1,046	$ 1,758	$ (147)	**$ 8,724**
Net income attributable to non-controlling interests	–	162	14	–	–	**176**
Net income attributable to equity holders of the Bank	$ 3,559	$ 2,346	$ 1,032	$ 1,758	$ (147)	**$ 8,548**

(1) Taxable equivalent basis. Refer to Glossary.
(2) Includes all other smaller operating segments, including Group Treasury, and corporate adjustments, such as the elimination of the tax-exempt income gross-up reported in net interest income, non-interest income and provision for income taxes for the year ended October 31, 2018 – $112 to arrive at the amounts reported in Consolidated Statement of Income, and differences in the actual amount of costs incurred and charged to the operating segments.

Fourth Quarter Review

T16 Fourth quarter financial results - reported

($ millions)	For the three months ended October 31 2020	July 31 2020	October 31 2019
Reported results			
Net interest income	**$ 4,258**	$ 4,253	$ 4,336
Non-interest income	**3,247**	3,481	3,632
Total revenue	**$ 7,505**	$ 7,734	$ 7,968
Provision for credit losses	**1,131**	2,181	753
Non-interest expenses	**4,057**	4,018	4,311
Income tax expense	**418**	231	596
Net income	**$ 1,899**	$ 1,304	$ 2,308
Net income attributable to non-controlling interests in subsidiaries	**$ 72**	$ (51)	$ 107
Net income attributable to equity holders of the Bank	**$ 1,827**	$ 1,355	$ 2,201
Preferred shareholders and other equity instrument holders	**82**	23	64
Common shareholders	**$ 1,745**	$ 1,332	$ 2,137

T16A Fourth quarter financial results - adjusted (refer to non-GAAP measures on page 17)

($ millions)	For the three months ended October 31 2020	July 31 2020	October 31 2019
Adjusted results			
Net interest income	**$ 4,258**	$ 4,253	$ 4,336
Non-interest income	**3,247**	3,436	3,626
Total revenue	**$ 7,505**	$ 7,689	$ 7,962
Provision for credit losses	**1,131**	2,181	753
Non-interest expenses	**4,003**	3,951	4,197
Income tax expense	**433**	249	612
Net income	**$ 1,938**	$ 1,308	$ 2,400
Net income attributable to non-controlling interests in subsidiaries	**$ 72**	$ (46)	$ 102
Net income attributable to equity holders of the Bank	**$ 1,866**	$ 1,354	$ 2,298
Preferred shareholders and other equity instrument holders	**82**	23	64
Common shareholders	**$ 1,784**	$ 1,331	$ 2,234

Net income

Q4 2020 vs Q4 2019

Net income was $1,899 million compared to $2,308 million. Adjusted net income was $1,938 million compared to $2,400 million, down 19%, due mainly to lower non-interest income and higher provision for credit losses, partially offset by lower non-interest expenses and provision for income taxes.

Q4 2020 vs Q3 2020

Net income was $1,899 million compared to $1,304 million. Adjusted net income was $1,938 million compared to $1,308 million, an increase of 48%, due mainly to lower provision for credit losses, partially offset by lower non-interest income and higher provision for income taxes.

Total revenue

Q4 2020 vs Q4 2019

Revenues were $7,505 million, a decrease of $463 million or 6%. Adjusted revenues were $7,505 million, a decrease of $457 million or 6%, due mainly to lower net interest income and non-interest income, negatively impacted by divested operations.

Q4 2020 vs Q3 2020

Revenues were $7,505 million, a decrease of $229 million or 3%. Adjusted revenues were $7,505 million, a decrease of $184 million or 2%, due mainly to lower non-interest income driven by lower trading revenues.

Net interest income

Q4 2020 vs Q4 2019

Net interest income was $4,258 million, a decrease of $78 million or 2%. Asset growth and higher contribution from asset/liability management activities were more than offset by the negative impact of foreign currency translation and divested operations.

The core banking margin was down 18 basis points to 2.22%, driven by lower margins across all business lines due to the impact of central bank rate cuts and changes in business mix, as well as increased levels of lower-margin liquid assets.

Q4 2020 vs Q3 2020

Net interest income was in line with the previous quarter. Higher contribution from asset/liability management activities was offset by lower asset volume and the negative impact of foreign currency translation.

The core banking margin was up 12 basis points to 2.22%, driven primarily by higher contribution from asset/liability management activities and lower volumes of lower-margin high quality liquid assets. Margins were stable across all business lines.

Non-interest income

Q4 2020 vs Q4 2019

Non-interest income was $3,247 million, down $385 million or 11%. Adjusted non-interest income declined $379 million or 10%. The impact of divestitures was approximately 5%. The remaining 5% decrease was due to lower banking revenues, insurance revenues, other fees and commissions, as well as the negative impact of foreign currency translation. These were partly offset by higher trading revenues.

Q4 2020 vs Q3 2020

Non-interest income was down $234 million or 7%. Adjusted non-interest income decreased by $189 million or 6%, due primarily to lower trading revenues and underwriting and advisory fees, partly offset by higher banking revenues in Canadian and International Banking, and higher wealth management fees.

Provision for credit losses

Q4 2020 vs Q4 2019

The provision for credit losses was $1,131 million, an increase of $378 million or 50%. The provision for credit losses ratio increased 23 basis points to 73 basis points.

The provision on impaired loans was $835 million, compared to $744 million, up $91 million due primarily to higher commercial and corporate loan provisions, partially offset by lower retail provisions. The provision for credit losses ratio on impaired loans was 54 basis points, an increase of five basis points.

The provision on performing loans was $296 million, compared to $9 million, an increase of $287 million of which $167 million related to retail, mainly in International Banking. Commercial and corporate loan provisions increased $120 million across all business lines. The increase is due primarily to the COVID-19 pandemic impact on the performing portfolio driven by the unfavourable macroeconomic outlook and its estimated future impact on credit migration.

Q4 2020 vs Q3 2020

The provision for credit losses was $1,131 million, a decrease of $1,050 million. The provision for credit losses ratio decreased 63 basis points to 73 basis points.

The provision on impaired loans was $835 million, compared to $928 million, a decrease of $93 million or 10%, due primarily to lower retail provisions driven by lower delinquencies and credit migration. The provision for credit losses ratio on impaired loans was 54 basis points, a decrease of four basis points.

The provision for performing loans was $296 million, compared to $1,253 million, a decrease of $957 million of which $752 million related to retail and $205 million related to commercial. The decrease was driven primarily by improving macroeconomic outlook and stabilizing portfolio credit quality.

Non-interest expenses

Q4 2020 vs Q4 2019

Non-interest expenses were $4,057 million, down $254 million or 6%. Adjusted non-interest expenses of $4,003 million declined by 5%, of which 2% related to the impact of divested operations. The remaining 3% decrease was due to lower professional fees, advertising and business development expenses and the positive impact of foreign currency translation, partly offset by the impact of COVID-19 related costs.

The productivity ratio was 54.1%, in line with last year. On an adjusted basis, the productivity ratio was 53.3%, compared to 52.7%.

Q4 2020 vs Q3 2020

Non-interest expenses were up $39 million or 1%. Adjusted non-interest expenses were also up by 1%, due to higher personnel costs and technology, partly offset by the positive impact of foreign currency translation.

The productivity ratio was 54.1% compared to 52.0%. On an adjusted basis, the productivity ratio was 53.3%, compared to 51.4%.

Provision for income taxes

Q4 2020 vs Q4 2019

The effective tax rate was 18.0% compared to 20.5%, due primarily to changes in earnings mix across businesses and jurisdictions.

Q4 2020 vs Q3 2020

The effective tax rate was 18.0% compared to 15.1%, due primarily to significantly higher provision for credit losses recorded in entities that operate in higher tax rate jurisdictions in the prior quarter.

Trending Analysis

T17 Quarterly financial highlights

($ millions)	For the three months ended							
	October 31 2020(1)	July 31 2020(1)	April 30 2020 (1)	January 31 2020(1)	October 31 2019	July 31 2019	April 30 2019	January 31 2019
Reported results								
Net interest income	**$ 4,258**	$ 4,253	$ 4,417	$ 4,392	$ 4,336	$ 4,374	$ 4,193	$ 4,274
Non-interest income	**3,247**	3,481	3,539	3,749	3,632	3,285	3,610	3,330
Total revenue	**$ 7,505**	$ 7,734	$ 7,956	$ 8,141	$ 7,968	$ 7,659	$ 7,803	$ 7,604
Provision for credit losses	**1,131**	2,181	1,846	926	753	713	873	688
Non-interest expenses	**4,057**	4,018	4,363	4,418	4,311	4,209	4,046	4,171
Income tax expense	**418**	231	423	471	596	753	625	498
Net income	**$ 1,899**	$ 1,304	$ 1,324	$ 2,326	$ 2,308	$ 1,984	$ 2,259	$ 2,247
Basic earnings per share ($)	**1.44**	1.10	1.03	1.86	1.76	1.51	1.74	1.72
Diluted earnings per share ($)	**1.42**	1.04	1.00	1.84	1.73	1.50	1.73	1.71
Core banking margin (%)(2)	**2.22**	2.10	2.35	2.45	2.40	2.45	2.45	2.45
Effective tax rate (%)	**18.0**	15.1	24.2	16.8	20.5	27.5	21.7	18.1
Adjusted results(2)								
Adjusted net income	**$ 1,938**	$ 1,308	$ 1,371	$ 2,344	$ 2,400	$ 2,455	$ 2,263	$ 2,291
Adjusted diluted earnings per share	**$ 1.45**	$ 1.04	$ 1.04	$ 1.83	$ 1.82	$ 1.88	$ 1.70	$ 1.75

(1) The amounts for the year ended October 31, 2020 have been prepared in accordance with IFRS 16; prior period amounts have not been restated (refer to Notes 3 and 4 in the consolidated financial statements).
(2) Refer to page 17 for a discussion of non-GAAP measures.

Earnings generally trended upward over the period, until the most recent quarters which were negatively impacted by the COVID-19 pandemic resulting in significantly higher provision for credit losses on performing loans and lower personal and commercial revenue. The Bank reported strong net income in prior periods, with solid growth in revenue, prudent expense management, and stable loan loss provisions, partly offset by the impact of divested operations.

Canadian Banking revenue has generally increased over the period, prior to the COVID-19 pandemic, driven by steady growth in retail and commercial loans partly offset by lower fee income. Results in the recent quarters reflected the impact of the COVID-19 pandemic, with higher provision for credit losses, lower fee revenue and lower net interest margins due to spread compression in a lower interest rate environment.

International Banking results in the recent quarters were negatively impacted by the COVID-19 pandemic, reflecting significantly higher loan loss provisions, margin contraction and lower non-interest income, and the negative impact from divested operations. These were partially offset by lower expenses driven by effective cost management initiatives.

Global Banking and Markets results are mainly driven by market conditions that impact client activity in the corporate and investment banking and capital markets businesses. The strong revenue in the most recent quarters was largely driven by higher trading revenue, as capital markets businesses, especially fixed income trading, benefited from the market opportunities created by the COVID-19 pandemic. This more than offset the impact of higher provision for credit losses driven by the unfavourable macroeconomic outlook and the estimated future impact on credit migration due to the crisis.

Global Wealth Management has delivered steady earnings growth over the past eight quarters. Revenue increase was driven by strong growth in the Canadian asset management and wealth advisory businesses. Expenses were down, resulting from disciplined expense management.

Provision for credit losses

The provision for credit losses increased significantly in the recent quarters due largely to the COVID-19 impact on the macroeconomic outlook, and its estimated future impact on credit migration. The remaining changes were driven by organic and acquisition driven portfolio growth.

Non-interest expenses

Non-interest expenses have steadily declined in the recent quarters reflecting tight expense control during the COVID-19 pandemic. In the prior periods, non-interest expenses generally trended upwards mostly from the ongoing impact of acquisitions, to support business growth, and investments in technology, regulatory and strategic initiatives.

Provision for income taxes

The effective tax rate was 18.0% this quarter and averaged 20.2% over the period, with a range of 15.1% to 27.5%. Effective tax rates were impacted by divested operations, varying levels of provision for credit losses and net income earned in foreign jurisdictions, as well as the variability of tax-exempt dividend income.

BUSINESS LINE OVERVIEW

Reorganization of Business Segments

Effective November 1, 2019, the Bank established Global Wealth Management as a separate business segment. Wealth Management results previously reported in the Canadian Banking and International Banking business segments are now being reported in the new business segment. Prior period comparative information for Canadian Banking and International Banking has been restated to reflect this change.

The Bank now publishes financial information across five business segments including:

- Canadian Banking (excluding Canadian Wealth Management)
- International Banking (excluding International Wealth Management)
- Global Wealth Management (including Canadian Wealth Management and International Wealth Management)
- Global Banking and Markets; and
- Other

Business line results are presented on a taxable equivalent basis, adjusting for the following:

- The Bank analyzes revenue on a taxable equivalent basis (TEB) for business lines. This methodology grosses up tax-exempt income earned on certain securities reported in either net interest income or non-interest income to an equivalent before tax basis. A corresponding increase is made to the provision for income taxes; hence, there is no impact on net income. Management believes that this basis for measurement provides a uniform comparability of net interest income and non-interest income arising from both taxable and non-taxable sources and facilitates a consistent basis of measurement. While other banks also use TEB, their methodology may not be comparable to the Bank's methodology. A segment's revenue and provision for income taxes are grossed up by the taxable equivalent amount. The elimination of the TEB gross up is recorded in the Other segment.
- For business line performance assessment and reporting, net income from associated corporations, which is a after-tax number, is adjusted to normalize for income taxes. The tax normalization adjustment grosses up the amount of net income from associated corporations and normalizes the effective tax rate in the business lines to better present the contribution of the associated corporations to the business line results.
- International Banking business segment results are analyzed on a constant dollar basis. Under constant dollar basis, prior period amounts are recalculated using current period average foreign currency rates thereby eliminating the impact of foreign currency translation. The Bank believes that reporting in constant dollar is useful for readers in assessing ongoing business performance.

Below are the results of the Bank's four business operating segments for 2020.

CANADIAN BANKING

Canadian Banking reported net income attributable to equity holders of $2,536 million in 2020, a decrease of $952 million or 27% compared to prior year. Adjusted net income was $2,604 million, a decrease of $900 million or 26%. The decline was due primarily to higher provision for credit losses on performing loans, lower non-interest income, and higher non-interest expenses. Return on equity was 15.1% compared to 23.2% in the prior year. The adjusted return on equity was 15.5% compared to 23.3% in the prior year.

INTERNATIONAL BANKING

Net income attributable to equity holders was $980 million, a decrease of $1,785 million or 65%. Adjusted net income attributable to equity holders was $1,148 million, down $1,805 million or 61%. The decline was due largely to higher provision for credit losses on performing loans and the impact of divested operations. The remaining decline was due primarily to lower net interest income and non-interest income, partly offset by lower non-interest expenses and income tax expense. Return on equity was 5.0% compared to 13.2% last year. Adjusting return on equity was 5.8% compared to 14.1% last year.

GLOBAL WEALTH MANAGEMENT

Net income attributable to equity holders was $1,252 million, an increase of $86 million or 7%. Adjusted net income attributable to equity holders increased $82 million, also up 7%. The negative impact of divested operations was 1%. The remaining 8% growth was driven by solid AUM growth across our businesses partly offset by higher non-interest expenses, margin compression, and customer relief programs largely impacting our international pensions business. Return on equity was 13.5% compared to 12.7% in the prior year. The adjusted return on equity was 14.0% compared to 13.2% in the prior year.

GLOBAL BANKING AND MARKETS

Global Banking and Markets reported net income attributable to equity holders of $1,955 million, an increase of $421 million or 27% from last year. Adjusted net income was $2,034 million, an increase of $500 million or 33%. Strong performance in capital markets businesses, higher revenue in business banking, and relatively flat expenses, were partly offset by higher provision for credit losses. Return on equity was 14.8% compared to 13.3% last year. The adjusted return on equity was 15.4% compared to 13.3% last year.

KEY PERFORMANCE INDICATORS FOR ALL BUSINESS LINES

Management uses a number of key metrics to monitor business line performance:

- Net income
- Return on equity
- Productivity ratio
- Provision for credit losses ratio

T18 Financial performance - Reported

For the year ended October 31, 2020 ($ millions) (1)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other(2)	Total
Net interest income(3)	$ 7,838	$ 7,603	$ 575	$ 1,435	$ (131)	$ 17,320
Non-interest income(3)	2,461	3,207	4,009	3,947	392	14,016
Total revenue(3)	10,299	10,810	4,584	5,382	261	31,336
Provision for credit losses	2,073	3,613	7	390	1	6,084
Non-interest expenses	4,811	5,943	2,878	2,473	751	16,856
Provision for income taxes (3)	879	182	437	564	(519)	1,543
Net income	$ 2,536	$ 1,072	$ 1,262	$ 1,955	$ 28	$ 6,853
Net income attributable to non-controlling interests in subsidiaries	–	92	10	–	(27)	75
Net income attributable to equity holders of the Bank	$ 2,536	$ 980	$ 1,252	$ 1,955	$ 55	$ 6,778
Return on equity(%) (4)	15.1%	5.0%	13.5%	14.8%	–%	10.4%
Total average assets ($ billions)	$ 359	$ 206	$ 26	$ 412	$ 158	$ 1,161
Total average liabilities ($ billions)	$ 277	$ 155	$ 39	$ 379	$ 240	$ 1,090

(1) The amounts for the year ended October 31, 2020 have been prepared in accordance with IFRS 16; amounts for the years ended October 31, 2020 and October 31, 2019 have been prepared in accordance with IFRS 15; prior year amounts have not been restated.
(2) The Other category represents smaller operating segments, including Group Treasury, and other corporate adjustments that are not allocated to an operating segment. Corporate adjustments include the net residual in matched maturity transfer pricing, the elimination of the tax-exempt income gross-up reported in net interest income, non-interest income and provision for income taxes, and differences in the actual amount of costs incurred and charged to the operating segments.
(3) Taxable equivalent basis. Refer to Glossary.
(4) Refer to Glossary.

For the year ended October 31, 2019 ($ millions)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other(1)	Total
Net interest income(2)	$ 7,848	$ 8,353	$ 564	$ 1,396	$ (984)	$ 17,177
Non-interest income(2)	2,616	4,366	3,937	3,084	(146)	13,857
Total revenue(2)	10,464	12,719	4,501	4,480	(1,130)	31,034
Provision for credit losses	972	2,076	–	(22)	1	3,027
Non-interest expenses	4,772	6,596	2,905	2,463	1	16,737
Provision for income taxes (2)	1,232	909	412	505	(586)	2,472
Net income	$ 3,488	$ 3,138	$ 1,184	$ 1,534	$ (546)	$ 8,798
Net income attributable to non-controlling interests in subsidiaries	–	373	18	–	17	408
Net income attributable to equity holders of the Bank	$ 3,488	$ 2,765	$ 1,166	$ 1,534	$ (563)	$ 8,390
Return on equity(%) (3)	23.2%	13.2%	12.7%	13.3%	–%	13.1%
Total average assets ($ billions)	$ 340	$ 201	$ 25	$ 372	$ 118	$ 1,056
Total average liabilities ($ billions)	$ 255	$ 153	$ 32	$ 304	$ 243	$ 987

(1) The Other category represents smaller operating segments, including Group Treasury, and other corporate adjustments that are not allocated to an operating segment. Corporate adjustments include the net residual in matched maturity transfer pricing, the elimination of the tax-exempt income gross-up reported in net interest income, non-interest income and provision for income taxes, and differences in the actual amount of costs incurred and charged to the operating segments.
(2) Taxable equivalent basis. Refer to Glossary.
(3) Refer to Glossary.

For the year ended October 31, 2018 ($ millions)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other(1)	Total
Net interest income(2)	$ 7,504	$ 7,218	$ 498	$ 1,454	$ (483)	$ 16,191
Non-interest income(2)	2,907	3,475	3,486	3,074	(358)	12,584
Total revenue(2)	10,411	10,693	3,984	4,528	(841)	28,775
Provision for credit losses	790	1,868	3	(50)	–	2,611
Non-interest expenses	4,811	5,700	2,559	2,233	(245)	15,058
Provision for income taxes (2)	1,251	617	376	587	(449)	2,382
Net income	$ 3,559	$ 2,508	$ 1,046	$ 1,758	$ (147)	$ 8,724
Net income attributable to non-controlling interests in subsidiaries	–	162	14	–	–	176
Net income attributable to equity holders of the Bank	$ 3,559	$ 2,346	$ 1,032	$ 1,758	$ (147)	$ 8,548
Return on equity(%) (3)	25.8%	13.6%	17.1%	16.0%	–%	14.5%
Total average assets ($ billions)	$ 327	$ 165	$ 17	$ 321	$ 116	$ 946
Total average liabilities ($ billions)	$ 234	$ 127	$ 24	$ 265	$ 232	$ 882

(1) The Other category represents smaller operating segments, including Group Treasury, and other corporate adjustments that are not allocated to an operating segment. Corporate adjustments include the net residual in matched maturity transfer pricing, the elimination of the tax-exempt income gross-up reported in net interest income, non-interest income and provision for income taxes, and differences in the actual amount of costs incurred and charged to the operating segments.
(2) Taxable equivalent basis. Refer to Glossary.
(3) Refer to Glossary.

T18A Financial performance - Adjusted

For the year ended October 31, 2020 ($ millions) (1)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other	Total
Net interest income	$ 7,838	$ 7,603	$ 575	$ 1,435	$ (131)	$ 17,320
Non-interest income	2,461	3,207	4,009	4,049	93	13,819
Total revenue	10,299	10,810	4,584	5,484	(38)	31,139
Provision for credit losses	2,002	3,536	6	384	1	5,929
Non-interest expenses	4,789	5,742	2,818	2,473	692	16,514
Provision for income taxes	904	260	453	593	(475)	1,735
Net income	$ 2,604	$ 1,272	$ 1,307	$ 2,034	$ (256)	$ 6,961
Net income attributable to non-controlling interests in subsidiaries	–	124	10	–	1	135
Net income attributable to equity holders of the Bank	$ 2,604	$ 1,148	$ 1,297	$ 2,034	$ (257)	$ 6,826

(1) Refer to Non-GAAP Measures for the reconciliation of Reported and Adjusted results.

For the year ended October 31, 2019 ($ millions) (1)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other	Total
Net interest income	$ 7,848	$ 8,353	$ 564	$ 1,396	$ (984)	$ 17,177
Non-interest income	2,616	4,366	3,937	3,084	(19)	13,984
Total revenue	10,464	12,719	4,501	4,480	(1,003)	31,161
Provision for credit losses	972	1,925	–	(22)	1	2,876
Non-interest expenses	4,750	6,390	2,839	2,463	(20)	16,422
Provision for income taxes	1,238	1,012	429	505	(730)	2,454
Net income	$ 3,504	$ 3,392	$ 1,233	$ 1,534	$ (254)	$ 9,409
Net income attributable to non-controlling interests in subsidiaries	–	439	18	–	1	458
Net income attributable to equity holders of the Bank	$ 3,504	$ 2,953	$ 1,215	$ 1,534	$ (255)	$ 8,951

(1) Refer to Non-GAAP Measures for the reconciliation of Reported and Adjusted results.

For the year ended October 31, 2018 ($ millions) (1)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other	Total
Net interest income	$ 7,504	$ 7,218	$ 498	$ 1,454	$ (483)	$ 16,191
Non-interest income	2,907	3,475	3,486	3,074	(358)	12,584
Total revenue	10,411	10,693	3,984	4,528	(841)	28,775
Provision for credit losses	790	1,464	3	(50)	–	2,207
Non-interest expenses	4,791	5,589	2,503	2,233	(245)	14,871
Provision for income taxes	1,255	768	392	587	(449)	2,553
Net income	$ 3,575	$ 2,872	$ 1,086	$ 1,758	$ (147)	$ 9,144
Net income attributable to non-controlling interests in subsidiaries	–	284	14	–	–	298
Net income attributable to equity holders of the Bank	$ 3,575	$ 2,588	$ 1,072	$ 1,758	$ (147)	$ 8,846

(1) Refer to Non-GAAP Measures for the reconciliation of Reported and Adjusted results.

Canadian Banking

2020 Achievements

Improve sustained business performance

- Awarded the Best Bank in North America for Innovation in Digital Banking by The Banker magazine, recognizing excellence in financial technology and innovative strategies
- Ranked #1 for Online Banking Satisfaction in the J.D. Power Canadian Online Banking Study, driven by our commitment to delivering the best customer experience, and focus on providing fast, easy-to-use and secure online banking services through the COVID-19 pandemic
- Awarded 2020 Retail Banking Security Innovation of the Year by Retail Banker International, recognizing focus and investment in Financial Crimes Risk Management market-leading technology-based capabilities
- Increased business clients usage of ScotiaConnect, our secure digital cash management and payments banking channel, for a more seamless customer experience

Instill a winning team culture

- Launched new Canadian Banking Diversity & Inclusion council, with a focus on concrete, results-oriented actions
- Activated business continuity plans across our businesses, enabling remote working conditions to our employees
- Supported employee health, well-being and engagement through the pandemic
- 39% women in VP+ roles across the Canadian Bank. Significant progress made in retail sales leadership, achieving >50% gender balance at the Regional VP+ leadership team
- Introduced two video series, "In Conversation With" and "Canadian Banking Leadership," to advance internal discussions around the Scotiabank culture, leadership, diversity and inclusion

Superior customer experience

- Ranked #1 in Customer Satisfaction for response to COVID-19 crisis amongst Canadian business owners, according to the Bond COVID-19 Canadian Client Impact Study
- Scotiabank ranked #1 in J.D. Power Credit Card Satisfaction amongst the Big 5 banks and Retail Banking ranked #1 in Branch Satisfaction
- Tangerine ranked #1 in Customer Satisfaction by J.D. Power for the 9th consecutive year and ranked #1 in J.D. Power Credit Card Satisfaction Study overall for the second year in a row
- Launched ScotiaAdvice+, a comprehensive, new way to elevate the way we deliver advice to our customers
- Introduced the "Bank Your Way" tool, designed specifically to guide seniors through digital banking and challenges presented by COVID-19 pandemic
- Kept 97% of Scotiabank branch network open through COVID-19 pandemic in order to continue to serve our customers and provided financial relief to over 370,000 Scotiabank customers across $54 billion in lending products
- Partnered with Government of Canada and peer financial institutions to provide lending capital of up to $128 million for the Black Entrepreneurship Program
- On target to support women-led businesses with a commitment to deploy $3 billion in funding in the first three years of The Scotiabank Women Initiative
- Interac e-Transfer for Business and Real-Time Payments first in market to launch enhanced e-Transfer for business allowing customers to send and receive funds in near real-time

Scale our unique partnership and assets

- In partnership with MLSE and others, transformed the Scotiabank Arena into Toronto's largest kitchen, preparing up to 10,000 meals per day for frontline healthcare workers, their families and community agencies throughout COVID-19
- Introduced new customer benefits for award-winning credit card products with Scotiabank Passport Visa Infinite Card and Scotiabank Gold American Express Card ranked as the best travel cards, and the Scotia Momentum Visa Infinite Card named as the best cash-back credit card
- Further enhanced branch-based advice offering, with a new customer experience model for Financial Advisors and improved financial planning tools

Business Profile

Canadian Banking provides a full suite of financial advice and banking solutions, supported by an excellent customer experience, to over 11 million Retail, Small Business and Commercial Banking customers. It serves these customers through its network of 952 branches and 3,540 automated banking machines (ABMs), as well as online, mobile and telephone banking, and specialized sales teams. Canadian Banking also provides an alternative self-directed banking solution to over two million Tangerine Bank customers. Canadian Banking is comprised of the following areas:

- Retail banking provides financial advice and solutions along with day-to-day banking products, including debit cards, chequing accounts, credit cards, investments, mortgages, loans and related creditor insurance products to retail customers. Tangerine Bank provides day-to-day banking products, including chequing and saving accounts, credit cards, mortgages, loans and investments to self-directed customers.
- Business banking delivers advice and a full suite of lending, deposit, cash management and trade finance solutions to small, medium and large businesses, including automotive dealers and their customers to whom we provide retail automotive financing solutions.

Strategy

In response to the pandemic, Canadian Banking prioritized providing customer and employee support initiatives throughout 2020. This included prioritizing the health and safety of both customers and employees, supporting Retail and Business Banking customers financially and credit de- risking, while continuing to execute on its long-term strategy to deliver stable, above-market revenue and earnings growth to solidify our top 3 position in Canada across key market share measures.

This long-term strategy remains focused on sustaining growth in businesses and products that deliver higher returns on equity, by building stronger relationships with our customers to increase engagement and loyalty. These efforts are enabled by a high-quality, diverse and highly engaged team of Scotiabank employees.

2021 Priorities

- **Improve business performance:** Continue to execute on the strategy to deliver consistent and stable long-term earnings growth by enhancing our return on equity across Retail and Business Banking. Sharpened focus on credit risk management and further leverage the Scotia Total Equity Plan program to drive higher secured lending and risk-adjusted returns.
- **Deliver a differentiated customer experience:** Progress toward becoming the #1 bank for our customers, by providing differentiated focus, service, and advice to drive deeper relationships, loyalty and customer engagement.
- **Strengthen our winning team culture:** Continue to instill a winning and inclusive culture, with a focus on prioritizing customers and improving sustainable business performance, further strengthening our RESULTS-driven engagement (RESULTS: Revenue, Earnings, Simplify, Urgency, Listen, Trust, Support).
- **Accelerate digital enablement:** Strengthen digital capabilities across the Bank by accelerating enablement of salesforce to support mobility and virtual advice, while enhancing insight-driven management reporting.
- **Leverage unique partnerships and assets:** Further utilize our dynamic long-term partnerships and assets, including MLSE (Toronto Maple Leafs & Raptors), SCENE, and Wealth businesses, to generate customer awareness, engagement and growth across the Canadian Banking franchise.

T19 Canadian Banking financial performance

($ millions)	2020(1)	2019(1)(2)	2018(2)
Reported results			
Net interest income(3)	**$ 7,838**	$ 7,848	$ 7,504
Non-interest income(3)(4)	**2,461**	2,616	2,907
Total revenue(3)	**10,299**	10,464	10,411
Provision for credit losses	**2,073**	972	790
Non-interest expenses	**4,811**	4,772	4,811
Income tax expense	**879**	1,232	1,251
Net income	**$ 2,536**	$ 3,488	$ 3,559
Net income attributable to non-controlling interests in subsidiaries	**–**	–	–
Net income attributable to equity holders of the Bank	**$ 2,536**	$ 3,488	$ 3,559
Key ratios and other financial data			
Return on equity(5)	**15.1%**	23.2%	25.8%
Productivity(3)	**46.7%**	45.6%	46.2%
Net interest margin(6)	**2.30%**	2.41%	2.39%
Provision for credit losses - performing (Stages 1 and 2)	**$ 943**	$ (2)	$ 8
Provision for credit losses - impaired (Stage 3)	**$ 1,130**	$ 974	$ 782
Provision for credit losses as a percentage of average net loans and acceptances	**0.59%**	0.29%	0.24%
Provision for credit losses on impaired loans as a percentage of average net loans and acceptances	**0.32%**	0.29%	0.24%
Net write-offs as a percentage of average net loans and acceptances	**0.29%**	0.29%	0.25%
Selected Consolidated Statement of Financial Position data (average balances)			
Earning assets	**$ 354,669**	$ 336,813	$ 323,642
Total assets	**358,770**	340,171	326,719
Deposits	**261,172**	241,944	222,685
Total liabilities	**276,774**	255,255	233,512

(1) The amounts for the year ended October 31, 2020 have been prepared in accordance with IFRS 16; amounts for the years ended October 31, 2020 and October 31, 2019 have been prepared in accordance with IFRS 15; prior year amounts have not been restated.
(2) The amounts for the years ended October 31, 2019 and October 31, 2018 have been restated to reflect the impact of the establishment of Global Wealth Management as a separate business segment.
(3) Taxable equivalent basis (TEB).
(4) Includes net income from investments in associated corporations of $56 (2019 – $65; 2018 – $93).
(5) Refer to Glossary.
(6) Net interest income (TEB) as % of average earning assets excluding bankers acceptances.

T19A Adjusted Canadian Banking financial performance(1)

($ millions)	2020	2019	2018
Adjusted results			
Net interest income	**$ 7,838**	$ 7,848	$ 7,504
Non-interest income	**2,461**	2,616	2,907
Total revenue	**10,299**	10,464	10,411
Provision for credit losses	**2,002**	972	790
Non-interest expenses	**4,789**	4,750	4,791
Income before taxes	**3,508**	4,742	4,830
Income tax expense	**904**	1,238	1,255
Net income	**$ 2,604**	$ 3,504	$ 3,575
Net income attributable to non-controlling interests in subsidiaries (NCI)	**–**	–	–
Net income attributable to equity holders	**$ 2,604**	$ 3,504	$ 3,575

(1) Refer to Non-GAAP Measures for the reconciliation of Reported and Adjusted results.

Financial Performance

Net income

Canadian Banking reported net income to equity holders of $2,536 million in 2020, a decrease of $952 million or 27% compared to prior year. Adjusted net income was $2,604, a decrease of $900 million or 26%. The decline was due primarily to higher provision for credit losses on performing loans, lower non-interest income, and higher non-interest expenses.

Average assets and liabilities

Average assets grew $19 billion or 5% to $359 billion. The growth included $13 billion or 6% in residential mortgages and $5 billion or 10% in business loans and acceptances, partially offset by declines in credit cards.

Average liabilities increased $22 billion or 8%, including solid growth of $11 billion or 7% in personal deposits and $8 billion or 10% in non-personal deposits.

Revenues

Revenues were $10,299 million, a decrease of $165 million or 2%. The decline was due primarily to lower non-interest income.

Net interest income

Net interest income of $7,838 million was in line with the prior year as strong volume growth was offset by a margin decline of 11 basis points to 2.30%. The margin decline was primarily driven by the rate environment, including interest rate decreases by the Bank of Canada and changes to business mix.

Non-interest income

Non-interest income of $2,461 million decreased $155 million or 6%. The decline was due primarily to lower insurance, banking and foreign exchange fees.

Retail Banking

Total retail banking revenues were $6,971 million, a decrease of $221 million or 3%. Net interest income decreased $64 million or 1%, primarily driven by the rate environment, including interest rate decreases by the Bank of Canada, partially offset by solid volume growth. Non-interest income decreased $157 million or 9%, due primarily to lower insurance and banking fees mainly as a result of a decline in economic activity and transaction volumes and a decrease in foreign exchange fees.

Business Banking

Total business banking revenues increased $56 million or 2% to $3,328 million. Net interest income increased $54 million or 2% due primarily to growth in loans and business operating accounts. This was partially offset by a margin decline mainly driven by the rate environment, including interest rate decreases by the Bank of Canada. Non-interest income of $772 million was in line with the prior year.

Non-interest expenses

Non-interest expenses were $4,811 million, an increase of $39 million or 1%, largely driven by higher personnel and technology costs to support business development, partially offset by lower marketing-related costs.

Provision for credit losses

Provision for credit losses was $2,073 million, compared to $972 million last year, an increase of $1,101 million. Adjusted provision for credit losses increased by $1,030 million to $2,002 million. The provision for credit losses ratio was 59 basis points, an increase of 30 basis points. Adjusted provision for credit losses ratio increased by 28 basis points to 57 basis points.

Provision on impaired loans was $1,130 million, an increase of $156 million. Adjusted provision on impaired loans was up $152 million due primarily to higher commercial provisions. The provision for credit losses ratio on impaired loans was 32 basis points, an increase of three basis points.

Provision on performing loans was $943 million, an increase of $945 million. Adjusted provision on performing loans was up $878 million, mostly related to the unsecured retail and auto portfolio. This is due primarily to the unfavourable macroeconomic outlook in Canada driven by the COVID-19 pandemic and its estimated future impact on credit migration.

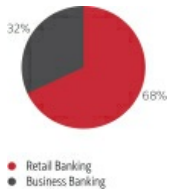
Provision for income taxes

The effective tax rate of 25.7% decreased from 26.1% in the prior year.

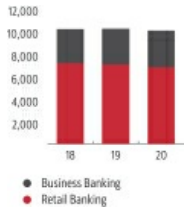
Outlook

Canadian Banking growth in 2021 is expected to be driven by an increase in both retail and business banking, underpinned by an improving economic environment. Assets and deposits are expected to grow across businesses, with margins expected to remain relatively stable over the next year. Revenues are expected to improve along with the pace of the economic activity, while provisions for credit losses are expected to moderate from the elevated levels in 2020. Key priorities for 2021 will be to strategically invest in our core businesses while maintaining disciplined expense management, which is expected to underpin improved operating leverage. Overall , we expect to deliver solid results in 2021.

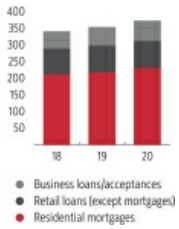
C6 Total revenue



C7 Total revenue by sub-segment
$ millions



C8 Average loans and acceptances
$ billions



International Banking

2020 Achievements

Optimize footprint

- Aligned with our strategy to lead in the Americas, we successfully completed integrations of our acquisitions in Chile, Colombia, and the Dominican Republic.
- BBVA Chile integration recognized by Euromoney Magazine as Latin America's Best Bank Transformation.
- Closed 13 divestitures in non-core markets and businesses during the last two years.

Lead in customer focus and digital

- Provided financial relief to over 3 million Scotiabank customer accounts across ~$25 billion in lending products, to support our Retail and Small Business customers in International Banking. Currently, ~80% of the cumulative relief balances have expired and of the remaining balances, ~90% remain current.
- Delivered significant acceleration in Digital; exceeded annual targets for our core Digital metrics, reaching 51% in Digital Sales, 46% in Digital Adoption, and 9% in Branch Transactions in the Pacific Alliance countries.
- Accelerated deployment of Digital onboarding tools in branches, enabling a superior experience to customers and employees alike.
- Proactively implemented efficiency initiatives by leveraging Digital to consistently drive expense reductions.
- Over 90% of our branches remained operational during the pandemic, following strict safety guidelines to ensure continued service for our customers.
- Recognized by Euromoney Magazine as Best Bank in Chile.

Accelerate growth drivers

- Delivered strong growth in the Corporate & Commercial business with a loan growth of 13% excluding the impact of divestitures by deepening our relationships with existing high-quality clients. Achieved great progress against peers, ranked: #1 in Syndicated Loans in LATAM, up from #3 in fiscal 2019, and #6 in DCM in LATAM.
- Demonstrated high deposit growth at 9% excluding the impact of divested operations.
- Achieved 16% in AUA growth and 18% deposit growth in our International Wealth Business.

Instill a winning team culture

- Won several awards throughout our international footprint, including Top 20 best workplace across all industries in Latin America by Great Place to Work.
- Made significant progress on women in leadership, reaching over 30% women representation for the total executive level pool and 50% for the newly appointed executives.
- Supported employee health, well-being and engagement through the pandemic.
- Activated business continuity plans across our markets, enabling remote working conditions for our employees.

Business Profile

International Banking has a strong and diverse franchise with more than 10 million Retail, Corporate, and Commercial customers. We are served by a network of more than 1,400 branches, 5,200 ATMs and 22 contact centres. International Banking continues to offer significant potential for the Bank, with a geographical footprint encompassing the Pacific Alliance countries of Mexico, Colombia, Peru and Chile as well as Central America and the Caribbean. The Pacific Alliance countries remain attractive with a combined GDP that is more than double the size of Canada's, solid macroeconomic fundamentals, attractive demographics and connectivity with Canada and the US.

Strategy

As economic conditions evolved throughout the year, International Banking deployed a series of initiatives to soften the impact of the pandemic and selectively capture opportunities. These included prioritizing the health and safety of our customers and employees, assisting our customers with financial relief, prudently managing credit-risk and sharpening our focus on expense management, while executing on our long-term strategy to be a Leading Bank in the Americas.

Underpinning our long-term strategy is our focus on being the preferred choice for our customers, leveraging digital engagement to deliver superior customer experience while driving operational efficiency and outpacing our competition in our priority businesses. All enabled by a diverse and talented winning team.

2021 Priorities

- **Improve business performance:** Manage our balance sheet prudently and in accordance to the macro environment, adapting our growth over time as economies in our footprint rebound. Continue managing expenses actively and informed by revenue growth.
- **Accelerate growth drivers:** Outpace the competition by growing our Corporate and Commercial business in the Pacific Alliance, scaling our Wealth business in close collaboration with Global Wealth Management and leveraging strategic partnerships to accelerate the Insurance business.
- **Accelerate Digital Transformation:** Further accelerate our digital offerings to lead in customer experience, optimize distribution costs, and enable sales and services capabilities.
- **Focused customer strategy:** Deliver superior customer experience leveraging digital interaction, while deepening relationships with our retail and commercial clients to achieve best-in-class customer loyalty and engagement.
- **Enhance our winning team culture:** Continue providing our employees a safe, inclusive, and engaging work environment to attract and retain key talent, while fostering a high performance and results-driven mindset.

T20 International Banking financial performance

($ millions)	2020(1)	2019(1)(2)	2018(2)
Reported results			
Net interest income(3)	$ 7,603	$ 8,353	$ 7,218
Non-interest income(3)(4)(5)(6)	3,207	4,366	3,475
Total revenue(3)	10,810	12,719	10,693
Provision for credit losses(7)	3,613	2,076	1,868
Non-interest expenses	5,943	6,596	5,700
Income tax expense(3)	182	909	617
Net income	$ 1,072	$ 3,138	$ 2,508
Net income attributable to non-controlling interests in subsidiaries	92	373	162
Net income attributable to equity holders of the Bank	$ 980	$ 2,765	$ 2,346
Key ratios and other financial data			
Return on equity(8)	5.0%	13.2%	13.6%
Productivity(3)	55.0%	51.9%	53.3%
Net interest margin(9)	4.18%	4.54%	4.68%
Provision for credit losses – performing (Stages 1 and 2)	$ 1,412	$ 154	$ 312
Provision for credit losses – impaired (Stage 3)	$ 2,201	$ 1,922	$ 1,556
Provision for credit losses as a percentage of average net loans and acceptances (10)	2.45%	1.40%	1.52%
Provision for credit losses on impaired loans as a percentage of average net loans and acceptances	1.49%	1.30%	1.29%
Net write-offs as a percentage of average net loans and acceptances	1.24%	1.29%	1.26%
Selected Consolidated Statement of Financial Position data (average balances)			
Earning assets	$ 188,308	$ 186,331	$ 155,221
Total assets	206,382	200,596	164,959
Deposits	110,668	114,671	100,320
Total liabilities	154,894	152,858	127,191

(1) The amounts for the year ended October 31, 2020 have been prepared in accordance with IFRS 16; amounts for the years ended October 31, 2020 and October 31, 2019 have been prepared in accordance with IFRS 15; prior year amounts have not been restated.
(2) The amounts for the years ended October 31, 2019 and October 31, 2018 have been restated to reflect the impact of the establishment of Global Wealth Management as a separate business segment.
(3) Taxable equivalent basis (TEB).
(4) Includes net income from investments in associated corporations of $243 (2019 – $753; 2018 – $629).
(5) Includes BBVA Chile third quarter 2018 before tax earnings of $21. BBVA Chile fourth quarter earnings have been reflected in all P&L lines.
(6) Includes one additional month of earnings relating to Mexico of $51 (after tax and NCI $37) for the year ended October 31, 2020. Includes one additional month of earnings relating to Peru of $57 (after tax and NCI $41) for the year ended October 31, 2019. Includes one additional month of earnings relating to Thanachart Bank of $30 (after tax and NCI $22), and Chile of $36 (after tax and NCI $26) for the year ended October 31, 2018.
(7) 2019 and 2018 include Day 1 provision for credit losses on acquired performing financial instruments of $151 for the year ended October 31, 2019, and $404 for the year ended October 31, 2018.
(8) Refer to Glossary.
(9) Net interest income (TEB) as % of average earning assets excluding bankers acceptances.
(10) Provision for credit losses as a percentage of average net loans and acceptances adjusted for Day 1 provision for credit losses was 1.19% in 2018 and 1.30% in 2019.

T20A Adjusted International Banking financial performance(1)

($ millions)	2020	2019	2018
Adjusted results			
Net interest income	$ 7,603	$ 8,353	$ 7,218
Non-interest income	3,207	4,366	3,475
Total revenue	10,810	12,719	10,693
Provision for credit losses	3,536	1,925	1,464
Non-interest expenses	5,742	6,390	5,589
Income before taxes	1,532	4,404	3,640
Income tax expense	260	1,012	768
Net income	$ 1,272	$ 3,392	$ 2,872
Net income attributable to non-controlling interests (NCI)	124	439	284
Net income attributable to equity holders	$ 1,148	$ 2,953	$ 2,588

(1) Refer to Non-GAAP measures for reconciliation of Reported and Adjusted results.

T21 International Banking – Income from divested operations

($ millions)	2020	2019	2018
Net interest income	$ 76	$ 430	$ 438
Non-interest income	64	734	596
Total revenue	140	1,164	1,034
Provision for credit losses	8	11	(40)
Non-interest expenses	57	323	338
Income before taxes	75	830	736
Income tax expense	15	200	171
Net income	$ 60	$ 630	$ 565
Net income attributable to non-controlling interests (NCI)	–	–	–
Net income attributable to equity holders – relating to divested operations	$ 60	$ 630	$ 565

Financial Performance

Net income

Net income attributable to equity holders was $980 million, a decrease of $1,785 million or 65%. Adjusted net income attributable to equity holders was $1,148 million, down $1,805 million or 61%. The decline was due largely to a higher provision for credit losses on performing loans and the impact of divested operations. The remaining decline was due primarily to lower net interest income and non-interest income, partially offset by lower non-interest expenses and income tax expense.

Financial Performance on Constant Dollar Basis

The discussion below on the results of operations is on a constant dollar basis that excludes the impact of foreign currency translation, and is a non-GAAP financial measure (refer to Non-GAAP Measures). The Bank believes that reporting in constant dollars is useful to readers in assessing ongoing business performance. Ratios are on a reported basis.

T22 International Banking financial performance on constant dollar basis

($ millions)	2020(1)	2019(1)(2)	2018(2)
Net interest income(3)	$ 7,603	$ 7,853	$ 6,804
Non-interest income(3)(4)	3,207	4,218	3,357
Total revenue(3)	10,810	12,071	10,161
Provision for credit losses	3,613	1,934	1,677
Non-interest expenses	5,943	6,207	5,347
Income tax expense(3)	182	888	635
Net income on constant dollar basis	$ 1,072	$ 3,042	$ 2,502
Net income attributable to non-controlling interests in subsidiaries on a constant dollar basis	92	338	156
Net income attributable to equity holders of the Bank on a constant dollar basis	$ 980	$ 2,704	$ 2,346
Selected Consolidated Statement of Financial Position data (average balances)			
Total assets	206,382	191,152	158,831
Total liabilities	154,894	144,094	120,745

(1) The amounts for the year ended October 31, 2020 have been prepared in accordance with IFRS 16; amounts for the years ended October 31, 2020 and October 31, 2019 have been prepared in accordance with IFRS 15; prior year amounts have not been restated.
(2) The amounts for the years ended October 31, 2019 and October 31, 2018 have been restated to reflect the impact of the establishment of Global Wealth Management as a separate business segment.
(3) Taxable equivalent basis.
(4) Includes net income from investments in associated corporations of $243 (2019 – $771; 2018 – $670).

Net income

Net income attributable to equity holders was $980 million, a decrease of $1,724 million or 64%. Adjusted net income attributable to equity holders was $1,148 million, down $1,729 million or 60%. The decline was due largely to higher provision for credit losses on performing loans and the impact of divested operations. The remaining decline was due primarily to lower non-interest income, partially offset by higher net interest income and lower provision for income taxes.

Assets and liabilities

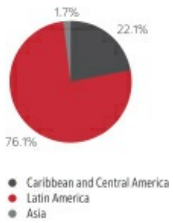
Average assets of $206 billion increased $15 billion or 8%. Total loan growth was 5%, with strong commercial loan growth of 11% primarily in Latin America offset by a decline in retail loans of 1%. The remaining increase was driven by higher deposits with central banks and investment securities. The impact of divested operations on total loan growth was 5%, retail loans 7% and commercial loans 2%.

Average liabilities of $155 billion increased $11 billion or 7% with deposit growth of 1%. Non-personal deposit growth was 5% while retail deposit declined 5%. The remaining increase was driven by higher funding from central banks. The impact of divested operations on total deposit growth was 8%, non-personal deposits 4% and retail deposits 14%.

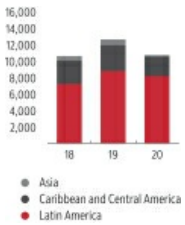
Revenues

Total revenues were $10,810 million, down $1,262 million or 10%. The impact of divested operations was 8%. The remaining decline of 2% was due mainly to lower banking, card and insurance fees due to the slowdown in consumer activity partially offset by higher net interest income.

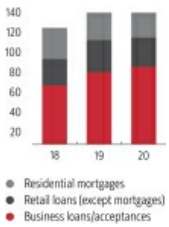
C9 Total revenue



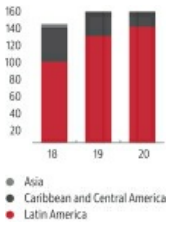
C10 Total revenue by region
$ millions



C11 Average loans and acceptances
$ billions



C12 Average earning assets(1) by region
$ billions



(1) Average earning assets excluding bankers acceptances

Latin America

Total revenues of $8,227 million were in line with last year. Net interest income was up $137 million or 2%, driven by loan growth of 12% partially offset by margin compression. Non-interest income was down $129 million or 5%, driven primarily by lower banking and card fees due to the slowdown in consumer activity.

Caribbean and Central America

Total revenues were $2,394 million, down $767 million or 24% over last year, with net interest income down $389 million or 19% and non-interest income down $378 million or 35%. The impact of divested operations was 14%. The remaining decrease of 10% was driven primarily by margin compression, lower banking and card fees due to the slowdown in consumer activity, and lower investment gains.

Asia

Total revenues were $189 million, down $503 million or 73% over last year, due largely to the impact of divested operations.

Non-interest expenses

Non-interest expenses were $5,943 million, down $264 million or 4%. On an adjusted basis, non-interest expenses decreased 5% due to the impact of divested operations, synergies from acquisitions and cost-savings initiatives.

Provision for credit losses

The provision for credit losses was $3,613 million compared to $1,934 million last year. Adjusted provision for credit losses increased $1,745 million primarily driven by higher retail provisions on performing loans. The provision for credit losses ratio was 245 basis points, an increase of 105 basis points. Adjusted provision for credit losses ratio was 240 basis points, an increase of 110 basis points.

Provision on impaired loans was $2,201 million, up $414 million. Adjusted provision on impaired loans was up $386 million due primarily to higher retail provisions driven by higher write-offs in most Pacific Alliance countries, and higher commercial provisions. The provision for credit losses ratio on impaired loans was 149 basis points, an increase of 19 basis points. Adjusted provision for credit losses ratio on impaired loans was 147 basis points, an increase of 17 basis points.

Provision on performing loans was $1,412 million, up $1,265 million. Adjusted provision on performing loans increased $1,359 million, of which $1,218 million related to retail. Commercial performing loan provisions increased by $142 million. This is due primarily to the unfavourable macroeconomic outlook driven by the COVID-19 pandemic and its estimated future impact on credit migration.

Provision for income taxes

The effective tax rate was 14.5%. On an adjusted basis, the effective tax rate was 17.0%, compared to 23.0% last year, due primarily to significantly higher loan loss provisions recorded in entities that operate in higher tax rate jurisdictions, offset by the tax benefits in Mexico last year.

Outlook

With improved economic activity and strong growth of the Pacific Alliance countries key trade partners, US and China, International Banking's business performance is expected to continue to grow through 2021, building towards its target earnings. Provision for credit losses are expected to moderate as economies recover. The Businesses remain focused on prudent expense management and will continue to benefit from digital investments, while improving efficiency and enhancing customer experience.

Global Wealth Management

2020 Achievements

Maximize growth in asset management and advisory businesses

- Strong investment results in 1832 Asset Management, with 78% of AUM in the top two quartiles of their peer groups for 5-year returns (as of September 2020)
- Positive mutual fund net sales in Scotia Global Asset Management with #2 ranking fiscal year to date amongst bank peers
- Stable platforms and client-focused teams in Scotia iTRADE have enabled the business to manage sustained record call volumes and new account growth, leading to higher commission and FX revenues
- 100% of all Scotia Wealth Management branches remained open to serve customers during the COVID-19 pandemic

Leverage Jarislowsky Fraser and MD Financial to grow in new segments

- Solid new business development in Jarislowsky Fraser and the addition of new institutional and private client mandates
- Strong sales momentum in MD Financial
- Scotia and MD Financial continue to make a meaningful impact in support of Canada's physicians and the communities they serve through the Canadian Medical Association affinity agreement
- Scotiabank and MD have committed over $4.5MM in partnership funds to support physician-centric associations and programs during the COVID-19 pandemic and created the Physician Wellness+ Initiative, with $15 million targeted to address the urgent and ongoing health and wellness needs of physicians and medical learners

Expand international capabilities and offering

- International Wealth Management's Asset Management teams gained market share within Mexico and moved up to fifth place in terms of market share in Chile
- Bahamas was recognized as Best Full-Service Wealth Manager by Capital Finance International

Select award highlights

- Scotia Global Asset Management was recognized for its strong performance by winning seven 2019 Lipper Fund Awards and 27 FundGrade A+ awards
- Dynamic Funds was named the 2020 Wealth Professional Award for Fund Provider of the Year
- ScotiaMcLeod ranked #2 bank-owned brokerage firm in the 2020 Investment Executive Brokerage Report Card
- Jarislowsky Fraser was named one of the 2019 Greenwich Leaders in Canadian Institutional Investment Management Service and received a "straight A" scorecard in the 2020 Principles for Responsible Investment report
- Mexico's Scotia Global Asset Management team was recognized by Morningstar as the best overall Asset Management firm for 2019
- International Wealth Management was recognized by global Finance as 2020 Best Private Bank for business owners in the Caribbean, and Best Private Bank in Cayman Islands, Bahamas, and Peru

Business Profile

Global Wealth Management is focused on delivering comprehensive wealth management advice and solutions to clients across Scotiabank's footprint. Global Wealth Management serves over 1.5 million investment fund and advisory clients across 14 countries – managing over $500 billion in assets.

Through organic growth and acquisitions, Global Wealth Management has built a robust client-centric business with comprehensive advice, products, and platforms to meet a broad range of client needs.

Global Wealth Management is comprised of the following businesses:

- **Advisory:** Online brokerage (Scotia iTRADE), Mobile investment specialists (Scotiabank), Full-service brokerage (ScotiaMcLeod), Trust, Private Banking, Private Investment Counsel (Scotia Wealth Management and MD Financial Management)
- **Product Manufacturing:** Retail mutual funds (Scotia & Dynamic Funds), Exchange Traded Funds (Scotia & Dynamic Funds), Liquid Alternatives (Dynamic Funds), Institutional funds (Scotia & Jarislowsky Fraser)

Scotiatrust, ScotiaMcLeod, Scotia iTRADE, Private Banking, Private Investment Counsel, 1832 Asset Management and Dynamic Funds are top performers in key industry metrics.

Strategy

Global Wealth Management continues to execute on its strategic focus on providing clients with strong risk adjusted investment results and financial planning to provide investment solutions to meet their complex needs. The focus continues to be delivering on partnerships and Total Wealth advice to best serve clients in the current economic environment and through all market conditions. To best drive that focus, Global Wealth Management is prioritizing investments in digital and investment capabilities, growing our product shelf to serve both retail and institutional clients.

In addition, Global Wealth Management is focused on maximizing our international footprint, including leveraging our institutional management capabilities in priority markets across Latin America.

2021 Priorities

- **Continue product innovation:** Drive innovation in products to deliver industry-leading investment capabilities and performance through purpose-built solutions for customers across Global Wealth Management's brands and channels.
- **Focus on partnerships:** Continued focus on Total Wealth to deliver the entire bank to clients and drive partnerships across our businesses. Continued leverage of our acquisitions by expanding our proven Total Wealth approach to both MD Financial and Jarislowsky Fraser.
- **Invest in digital:** Digitally enable sales and advice to support all our distribution channels, including proprietary and 3rd party sales.
- **Leverage institutional capabilities:** Expand our institutional sales internationally with a focus on value added investment mandates in priority Latin American markets.
- **Focus on international:** Maximize our international footprint by growing the product shelf, and by enhancing internal capabilities in sales and distributions. Invest and grow the International Wealth business by following our retail footprint.
- **Enhance our winning team culture:** Cultivate a talented, diverse workforce, and foster an environment to keep our customers and employees safe, while delivering outstanding results and client experiences.

T23 Global Wealth Management financial performance

($ millions)	2020(1)	2019(1)	2018
Reported results			
Net interest income(2)	**$ 575**	$ 564	$ 498
Non-interest income(2)	**4,009**	3,937	3,486
Total revenue(2)	**4,584**	4,501	3,984
Provision for credit losses	**7**	–	3
Non-interest expenses	**2,878**	2,905	2,559
Income tax expense	**437**	412	376
Net income	**$ 1,262**	$ 1,184	$ 1,046
Net income attributable to non-controlling interests in subsidiaries	**10**	18	14
Net income attributable to equity holders of the Bank	**$ 1,252**	$ 1,166	$ 1,032
Key ratios and other financial data			
Return on equity(3)	**13.5%**	12.7%	17.1%
Productivity(2)	**62.8%**	64.5%	64.2%
Selected Consolidated Statement of Financial Position data (average balances)			
Earning assets	**$ 15,435**	$ 13,892	$ 12,158
Total assets	**26,036**	24,664	17,260
Deposits	**32,066**	25,880	21,485
Total liabilities	**38,637**	31,896	23,672
Other ($ billions)			
Assets under administration	**$ 502**	$ 497	$ 446
Assets under management	**$ 292**	$ 302	$ 281

(1) The amounts for the year ended October 31, 2020 have been prepared in accordance with IFRS 16; amounts for the years ended October 31, 2020 and October 31, 2019 have been prepared in accordance with IFRS 15; prior year amounts have not been restated.
(2) Taxable equivalent basis (TEB).
(3) Refer to Glossary.

T23A Adjusted Global Wealth Management financial performance(1)

($ millions)	2020	2019	2018
Adjusted results			
Net interest income	**$ 575**	$ 564	$ 498
Non-interest income	**4,009**	3,937	3,486
Total revenue	**4,584**	4,501	3,984
Provision for credit losses	**6**	–	3
Non-interest expenses	**2,818**	2,839	2,503
Income before taxes	**1,760**	1,662	1,478
Income tax expense	**453**	429	392
Net income	**$ 1,307**	$ 1,233	$ 1,086
Net income attributable to non-controlling interests in subsidiaries (NCI)	**10**	18	14
Net income attributable to equity holders	**$ 1,297**	$ 1,215	$ 1,072

(1) Refer to Non-GAAP Measures for the reconciliation of Reported and Adjusted results.

Financial Performance

Net income

Net income attributable to equity holders was $1,252 million, an increase of $86 million or 7%. Adjusted net income attributable to equity holders increased $82 million, also up 7%. The negative impact of divested operations was 1%. The remaining 8% growth was driven by solid AUM growth across our businesses partly offset by higher non-interest expenses, margin compression, and the negative impact of customer relief programs mainly on our international pension earnings.

Assets under management (AUM) and assets under administration (AUA)

Assets under management of $292 billion declined $10 billion or 3%, while assets under administration of $502 billion increased $5 billion or 1%. The negative impact of divested operations was 5% on AUM and 3% on AUA. The remaining growth in AUM and AUA was due primarily to higher net sales and market appreciation.

Revenues

Revenues of $4,584 million were up $83 million or 2%, due primarily to higher net interest income, and growth in mutual fund and brokerage revenues partly offset by lower revenues within our international operations due to the slowdown in consumer activity. The impact of divested operations was 2%.

Net interest income

Net interest income of $575 million increased $11 million or 2%, due primarily to strong deposit growth, partially offset by margin compression.

Non-interest income

Non-interest income of $4,009 million increased $72 million or 2%, due primarily to higher mutual fund and brokerage revenues partly offset by lower revenues within our international operations due to the slowdown in consumer activity. The impact of divested operations was 3%.

Non-interest expenses

Non-interest expenses of $2,878 million were down $27 million or 1%, as the benefit from prior period divested operations and lower communications, travel, and business development expenses were offset by higher volume-related expenses and technology costs to support business development.

Provision for credit losses

The provision for credit losses was $7 million compared to nil last year. The provision for credit losses ratio was five basis points on a reported and adjusted basis.

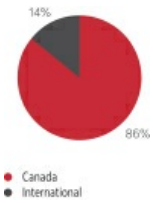
Provision for income taxes

The effective tax rate was 25.8% compared to 25.7% in the prior year.

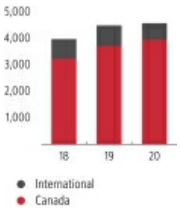
Outlook

Global Wealth Management is well positioned for growth in 2021. This will be underpinned by strong volume growth driven by robust active management, multi-brand distribution and leveraging the Jarislowsky Fraser brand and market position to more effectively target the institutional and Ultra High Net Worth segments across the Americas. Key priorities for 2021 include strategically investing in the business while remaining focused on expense management and delivering positive operating leverage.

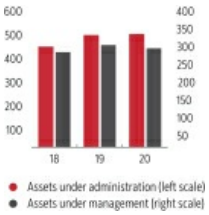
C13 Total revenue



C14 Total revenue by sub-segment
$ millions



C15 Wealth management asset growth
$ billions, as at October 31



Global Banking and Markets

2020 Achievements

Increase our relevance to our corporate clients and capture more of the non-lending wallet:

- Delivered record revenue growth and increased market share as demonstrated by leadership in marquee transactions
- Joint Bookrunner on the largest-ever IPO of a Canadian company (US$2.2 billion combined IPO for GFL Environmental Inc.)
- Lead Arranger and Bookrunner on the largest CAD-denominated MBS issuance ever placed in a single offering (C$1.5 billion National Housing Act insured MBS issuance)
- Continued to drive growth in our non-lending business, resulting in increased multiproduct transactions

Strengthen capital markets offerings:

- Focused on origination businesses, solidifying areas of strength and growing in select new sectors
- Prioritized balance sheet to align with higher potential institutional clients
- Launched the Sustainable Finance Group, ranked #2 for C$ sustainability bonds as at October 31, 2020

Build on our presence in the Americas:

- Continuous progress on multi-year strategy of creating a top-tier local and cross-border wholesale banking business in the Americas
- Progress made on peer placement in YTD 2020 in Loans (#1), DCM (#3), and ECM (#4) in Canada as at October 31, 2020

Select awards and deal highlights:

- M&A Deal of the Year by Power Finance & Risk for TerraForm Power's acquisition of the Arcadia portfolio from AltaGas.
- Deal of the Year Awards by LatinFinance: Sovereign Bond of the Year and Local Currency Deal of the Year (Republic of Peru), and Financing Innovation of the Year (Fibra Uno).
- Global Business Payments awarded Highest Customer Service for First Call Resolution (business banking technical helpdesk) by SQM Group, and Judges Choice for Responsible Innovation in Financial Services by the Digital Finance Institute.
- Joint Lead Arranger and Joint Bookrunner on financing for the acquisition of Genesee & Wyoming Inc. for US$8.4 billion by Brookfield Infrastructure, Brookfield Infrastructure's institutional partners and GIC. Acted as an underwriter on US$3.2 billion of credit facilities in connection with the transaction.
- Joint Bookrunner on a US$8 billion 4-part bond offering and previously on a US$4.5 billion 2-part bond offering, for Broadcom Inc.
- Exclusive Financial Advisor to Alacer Gold Corp. on its merger with SSR Mining Inc., valued at C$5.5 billion.
- Joint Bookrunner on GFL Environmental Inc.'s Initial Public Offering (IPO) of US$1.4 billion subordinate voting shares and US$775 million tangible equity units. The combined US$2.2 billion IPO was the largest IPO of a Canadian company in history.
- Joint Bookrunner in a dual-currency transaction by the Republic of Chile, a reopening of its outstanding Euro-denominated Notes due 2025 for €500 million, and US$1.5 billion due 2031. Also acted as Billing and Delivery agent on the USD tranche of the issue.
- Joint Lead and Bookrunner on a new C$2 billion7-year Notes offering for TransCanada Pipelines Limited. This was the largest ever offering by a domestic corporate borrower in the Canadian Debt Capital Markets.
- Joint Bookrunner for Manulife Financial Corporation on a new C$2 billion dual tranche Subordinated Debt offering. This marked the largest ever CAD-denominated bond offering from a Canadian insurance company.
- Global Coordinator, Joint Bookrunner and Dealer Manager on a Sustainability-Linked SEC Registered Notes Issuance and anAny-and-All Cascade Tender Offer for Suzano. The new 10-year US$750 million bond offering was the first Sustainability-Linked Bond (SLB) aligned to ICMA's SLB Principles.
- Sole Structuring Bank, Joint Lead Arranger and Joint Bookrunner on a ~US$340 million equivalent, multi-currency senior facility for Caoba Inversiones, owned by Celsia Colombia S.A. E.S.P and Cubico Sustainable Investment. This was the first ever structured financing of a portfolio of transmission lines in Colombia.

Business Profile

Global Banking and Markets (GBM) provides corporate clients with lending and transaction services, investment banking advice and access to capital markets. GBM is a full-service wholesale bank in the Americas, with operations in 21 countries, serving clients across Canada, the United States, Latin America, Europe and Asia-Pacific.

Strategy

To be recognized as the leading Wholesale Bank in the Americas, Global Banking and Markets' strategy is grounded in three key pillars: Client, Product and Geography. We are focused on increasing our relevance with our global clients with leading financial advice and solutions and on expanding our full-service corporate offering, with a key focus on the Americas. We are leveraging our regional and institutional capabilities and delivering profitable growth for our shareholders.

2021 Priorities

- **Client Focus:** Leverage coverage operating model with aligned sector and product expertise to focus on up-tiering and adding new client relationships.
- **Strengthen our capital markets offering:** Execute on capital markets client strategy to drive origination, supported by a strong distribution network, and advance electronic trading capabilities to improve client experience and increase competitiveness.
- **Build on our presence in the Americas:** Deliver Americas strategy, leveraging Europe and Asia for distribution of Americas product and in support of our global corporate clients.
- **Continue enabling our winning culture:** Attract, develop and retain diverse talent in an inclusive and high-performance environment, while keeping the Bank safe.

T24 Global Banking and Markets financial performance

($ millions)	2020(1)	2019(1)	2018
Net interest income(2)	$ 1,435	$ 1,396	$ 1,454
Non-interest income(2)	3,947	3,084	3,074
Total revenue(2)	5,382	4,480	4,528
Provision for credit losses	390	(22)	(50)
Non-interest expenses	2,473	2,463	2,233
Income tax expense(2)	564	505	587
Net income	$ 1,955	$ 1,534	$ 1,758
Net income attributable to non-controlling interests in subsidiaries	–	–	–
Net income attributable to equity holders of the Bank	$ 1,955	$ 1,534	$ 1,758
Key ratios and other financial data			
Return on equity(3)	14.8%	13.3%	16.0%
Productivity(2)	45.9%	55.0%	49.3%
Provision for credit losses – performing (Stages 1 and 2)	$ 257	$ (26)	$ (22)
Provision for credit losses – impaired (Stage 3)	$ 133	$ 4	$ (28)
Provision for credit losses as a percentage of average net loans and acceptances	0.35%	(0.02)%	(0.06)%
Provision for credit losses on impaired loans as a percentage of average net loans and acceptances	0.12%	–%	(0.03)%
Net write-offs as a percentage of average net loans and acceptances	0.09%	0.03%	0.03%
Selected Consolidated Statement of Financial Position data (average balances)			
Trading assets	$ 119,611	$ 112,317	$ 98,130
Loans and acceptances	103,634	92,977	81,838
Earning assets	366,329	337,589	282,997
Total assets	412,125	371,909	320,850
Deposits	133,536	99,346	86,260
Total liabilities	378,971	304,253	264,983

(1) The amounts for the year ended October 31, 2020 have been prepared in accordance with IFRS 16; amounts for the years ended October 31, 2020 and October 31, 2019 have been prepared in accordance with IFRS 15; prior year amounts have not been restated.
(2) Taxable equivalent basis (TEB).
(3) Refer to Glossary.

T24A Adjusted Global Banking and Markets financial performance (1)

($ millions)	2020	2019	2018
Adjusted results			
Net interest income	$ 1,435	$ 1,396	$ 1,454
Non-interest income	4,049	3,084	3,074
Total revenue	5,484	4,480	4,528
Provision for credit losses	384	(22)	(50)
Non-interest expenses	2,473	2,463	2,233
Income before taxes	2,627	2,039	2,345
Income tax expense	593	505	587
Net income	$ 2,034	$ 1,534	$ 1,758
Net income attributable to non-controlling interests in subsidiaries (NCI)	–	–	–
Net income attributable to equity holders	$ 2,034	$ 1,534	$ 1,758

(1) Refer to Non-GAAP Measures for the reconciliation of Reported and Adjusted results.

Financial Performance

Net income

Global Banking and Markets reported net income attributable to equity holders of $1,955 million, an increase of $421 million or 27%. Adjusted net income was $2,034 million, an increase of $500 million or 33%. Higher net interest income, trading revenue and underwriting fees, were partly offset by higher provision for credit losses.

Average assets and liabilities

Average assets increased by $40 billion or 11% to $412 billion this year, mainly due to increases in business loans, securities purchased under resale agreements, trading securities and the impact of foreign currency translation.

Average liabilities increased by $75 billion or 25% to $379 billion this year mainly due to growth in deposits, securities sold under repurchase agreements and the impact of foreign currency translation.

Revenues

Revenues were $5,382 million, an increase of $902 million or 20%. Adjusted revenues were $5,484 million, an increase of $1,004 million or 22%. This growth was due mainly to higher non-interest income driven by increases in fixed income trading revenues, higher net interest income and the favourable impact of foreign currency translation.

Net interest income

Net interest income increased by 3% to $1,435 million, mainly driven by higher deposit and loan volumes, partly offset by lower lending margins.

Non-interest income

Non-interest income of $3,947 million increased by $863 million or 28%. Adjusted non-interest income increased by $965 million or 31%. This growth was due mainly to higher fixed income trading revenues, as well as higher underwriting and credit fees.

Non-interest expense

Non-interest expenses increased slightly by $10 million to $2,473 million. Increases in personnel costs were partly offset by decreases in professional fees and business development expenses.

Provision for credit losses

The provision for credit losses was $390 million, an increase of $412 million from last year while adjusted provision for credit losses was $384 million, an increase of $406 million. The provision for credit losses ratio was 35 basis points, an increase of 37 basis points. On an adjusted basis, the provision for credit losses ratio was also 35 basis points.

Provision on impaired loans was $133 million, up $129 million, due primarily to new formations in the Energy sector. The provision for credit losses ratio on impaired loans was 12 basis points.

Provision on performing loans was $257 million, up $283 million. Adjusted provision on performing loans increased $277 million, driven by the unfavourable economic conditions in the Energy sector and other sectors most impacted by COVID-19, as well as the impact of the unfavourable macroeconomic outlook and its estimated future impact on credit migration.

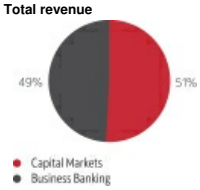
Provision for income taxes

The effective tax rate was 22.4%, compared to 24.8% the prior year. The adjusted effective tax rate was 22.6%. The lower rate was due mainly to changes in earnings mix across jurisdictions.

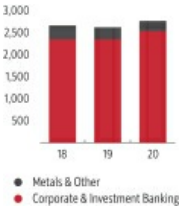
Outlook

Global Banking and Markets will continue to execute on its strategy focusing across clients, products and geographies. The Business is uniquely positioned to service clients across the footprint. After a strong performance in 2020, which benefited from market conditions, the Business is operating from a stronger platform and is expected to continue this momentum in 2021. Provisions for credit losses are expected to decline from peak levels in 2020 and the Businesses remain focused on disciplined expense management.

C16 Total revenue



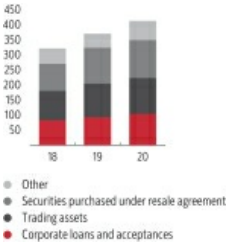
C17 Business banking revenue
$ millions



C18 Capital markets revenue by business line
$ millions



C19 Composition of average assets
$ billions



C20 Trading day losses



Other

The Other segment includes Group Treasury, smaller operating segments, Net gain/loss on divestitures, and corporate items which are not allocated to a business line.

Financial Performance

T25 Other financial performance

($ millions)	2020(1)	2019(1)(2)	2018(2)
Net interest income(3)	**$ (131)**	$ (984)	$ (483)
Non-interest income(3)(4)	**392**	(146)	(358)
Total revenue(3)	**261**	(1,130)	(841)
Provision for (recovery of) credit losses	**1**	1	–
Non-interest expenses	**751**	1	(245)
Income tax expense(3)	**(519)**	(586)	(449)
Net income (loss)	**$ 28**	$ (546)	$ (147)
Net income attributable to non-controlling interests in subsidiaries	**(27)**	17	–
Net income (loss) attributable to equity holders	**$ 55**	$ (563)	$ (147)

(1) The amounts for the year ended October 31, 2020 have been prepared in accordance with IFRS 16; the amounts for the years ended October 31, 2020 and October 31, 2019 have been prepared in accordance with IFRS 15; prior period amounts have not been restated.
(2) The amounts for the years ended October 31, 2019 and October 31, 2018 have been restated to reflect the impact of the establishment of Global Wealth Management as a separate business segment.
(3) Includes the net residual in matched maturity transfer pricing, and the elimination of the tax-exempt income gross-up reported in net interest income, non-interest income, and provision for income taxes in the business segments, which are reported on a taxable equivalent basis.
(4) Includes net income from investments in associated corporations of $(70) in 2020; (2019 – $(178); 2018 – $(177)).

T25A Adjusted Other financial performance(1)

($ millions)	2020	2019	2018
Adjusted results			
Net interest income	**$ (131)**	$ (984)	$ (483)
Non-interest income	**93**	(19)	(358)
Total revenue	**(38)**	(1,003)	(841)
Provision for credit losses	**1**	1	–
Non-interest expenses	**692**	(20)	(245)
Income before taxes	**(731)**	(984)	(596)
Income tax expense	**(475)**	(730)	(449)
Net income (loss)	**$ (256)**	$ (254)	$ (147)
Net income (loss) attributable to non-controlling interests (NCI)	**1**	1	–
Net income (loss) attributable to equity holders	**$ (257)**	$ (255)	$ (147)

(1) Refer to Non-GAAP measures for reconciliation of Reported and Adjusted results.

Net income

Net interest income, other operating income, and the provision for income taxes in each period include the elimination of tax-exempt income gross-up. This amount is included in the operating segments, which are reported on a taxable equivalent basis.

Net income from investments in associated corporations and the provision for income taxes in each period include the tax normalization adjustments related to the gross-up of income from associated corporations. This adjustment normalizes the effective tax rate in the divisions to better present the contribution of the associated corporations to the divisional results.

The Other segment reported net income attributable to equity holders of $55 million in 2020. On an Adjusted basis, Other segment had a net loss attributable to equity holders of $257 million compared to $255 million in 2019 as higher net interest income and non-interest revenues were offset by higher expenses.

Revenues

Revenue of $261 million included $298 million from net gains on divestitures. On an adjusted basis, revenues of $(38) million increased $965 million due mainly to lower funding costs resulting from lower interest rates and asset/liability management activities, as well as higher net gains from investment securities.

Non-interest expenses

Non-interest expenses were $751 million. On an adjusted basis, non-interest expenses were $692 million compared to $20 million in 2019. The higher expenses are due mainly to charges related to the metals investigations, increased expenditure on technology and regulatory initiatives, as well as incremental operating costs related to COVID-19.

Financial Performance of Business Lines: 2019 vs. 2018

Canadian Banking

Canadian Banking reported net income attributable to equity holders of $3,488 million in 2019, down 2% from the prior year. Adjusting for Acquisition-related costs, net income was $3,504 million, down 2%.

Lower gains on sale of real estate, the prior year gain on the reorganization of Interac, and benefit from the Alignment of reporting period impacted earnings growth by 3%. The remaining growth of 1% was due primarily to higher revenue driven by solid volume growth and improved margins, and lower non-interest expenses, partially offset by higher provision for credit losses. Return on equity was 23.2%, compared with 25.8% last year. Adjusting for Acquisition-related costs, the return on equity was 23.3%.

International Banking

International Banking reported net income attributable to equity holders of $2,765 million, up $419 million or 18% from last year. Adjusting for Acquisition-related costs, net income attributable to equity holders increased by $365 million or 14% to $2,953 million. Strong results in Latin America, including benefits from acquisitions, and Asia, complemented by good earnings in Caribbean. The impact of acquisitions and divestitures contributed approximately 7% to the adjusted earnings growth. The remaining increase of 7% was driven by strong loan growth in Latin America, higher net interest income and higher non-interest income. This was partly offset by higher provisions for credit losses, non-interest expenses, and income taxes. Return on equity was 13.2% compared to 13.6% last year. Adjusting for Acquisition-related costs, the return on equity was 14.1% compared to 15.0%.

Global Wealth Management

Global Wealth Management reported net income attributable to equity holders of $1,166 million, an increase of $134 million or 13% from the prior year. Adjusting for Acquisition-related costs, net income was $1,215 million, up 13%. Solid AUM growth across our businesses, including benefits from acquisitions contributed to strong growth in 2019. This was partly offset by higher non-interest expenses. The impact of acquisitions and divestitures contributed approximately 7% to the adjusted earnings growth. Return on equity was 12.7%, compared with 17.1% in the prior year. Adjusting for Acquisition-related costs, the return on equity was 13.2%, compared to 17.7%.

Global Banking and Markets

Global Banking and Markets reported net income attributable to equity holders of $1,534 million, a decrease of $224 million or 13% from last year. Lower income from capital markets businesses and higher expenses were partly offset by stronger results in corporate lending, as well as lower provision for credit losses. Return on equity was 13.3% compared to 16.0% last year.

Other

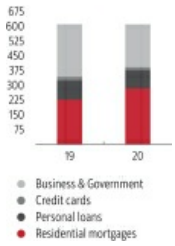
The Other segment had a net loss attributable to equity holders of $563 million in 2019 compared to $147 million in 2018. This was primarily due to the benefits remeasurement of $150 million ($203 million pre-tax).

GROUP FINANCIAL CONDITION

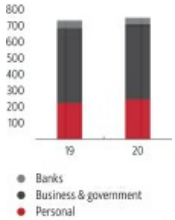
T26 Condensed statement of financial position

As at October 31 ($ billions)	2020	2019
Assets		
Cash, deposits with financial institutions and precious metals	$ 77.6	$ 50.4
Trading assets	117.8	127.5
Securities purchased under resale agreements and securities borrowed	119.7	131.2
Investment securities	111.4	82.4
Loans	603.3	592.5
Other	106.7	102.2
Total assets	$ 1,136.5	$ 1,086.2
Liabilities		
Deposits	$ 750.8	$ 733.4
Obligations related to securities sold under repurchase agreements and securities lent	137.8	124.1
Other liabilities	170.0	151.2
Subordinated debentures	7.4	7.3
Total liabilities	$ 1,066.0	$ 1,016.0
Equity		
Common equity	62.8	63.6
Preferred shares and other equity instruments	5.3	3.9
Non-controlling interests in subsidiaries	2.4	2.7
Total equity	$ 70.5	$ 70.2
Total liabilities and shareholders' equity	$ 1,136.5	$ 1,086.2

C21 Loan portfolio loans & acceptances, $ billions, as at October 31



C22 Deposits $ billions, as at October 31



Statement of Financial Position

Assets

The Bank's total assets as at October 31, 2020 were $1,136 billion, up $50 billion or 5% from October 31, 2019. This increase was primarily in cash and deposits with financial institutions, investment securities and loans, partially offset by decreases in securities purchased under resale agreements and securities borrowed and trading assets.

Cash and deposits with financial institutions increased $30 billion due primarily to higher balances on deposit with central banks driven by the increase in liquidity. Securities purchased under resale agreements and securities borrowed decreased by $11 billion due mainly to lower customer activity and trading assets decreased $10 billion due to a reduction in trading loans from the metals business wind-down and a decrease in trading securities due to lower client demand.

Investment securities increased $29 billion from October 31, 2019 due primarily to higher holdings of Canadian federal and provincial debt in the liquidity portfolio. As at October 31, 2020, the net unrealized gain on debt securities measured at fair value through other comprehensive income was $334 million, after the impact of qualifying hedges.

Loans increased $11 billion from October 31, 2019. Residential mortgages increased $17 billion primarily in Canada. Personal loans and credit cards decreased by $8 billion due to lower customer activity. Business and government loans increased $5 billion due to new originations and to support COVID-19 customer financing needs.

Property plant and equipment increased $3 billion due to the adoption of IFRS 16 with an offsetting increase in other liabilities. Investments in associates decreased $3 billion due mainly to the divestiture of Thanachart Bank.

Liabilities

Total liabilities were $1,066 billion as at October 31, 2020, up $50 billion or 5% from October 31, 2019. This increase was primarily in deposits, obligations related to securities sold under repurchase agreements and securities lent and other liabilities.

Total deposits increased $17 billion. Personal deposits grew by $21 billion due primarily to growth in Canada. Business and government deposits grew by $3 billion due mainly to growth in Canada. Deposits from financial institutions decreased $7 billion due mainly to lower demand.

Obligations related to securities sold under repurchase agreements and securities lent increased by $14 billion due mainly to higher participation in the Bank of Canada's term repo program, partially offset by a decrease in the U.S. Other liabilities increased $8 billion due mainly to IFRS 16 and higher derivative related amounts.

Equity

Total shareholders' equity increased $311 million from October 31, 2019. The increase was driven mainly by current year earnings of $6,853 million, the issuance of other equity instruments of $1,689 million and changes in securities measured at fair value through other comprehensive income of $208 million. This was partly offset by dividends paid of $4,559 million and a decrease of $2,239 million in the cumulative foreign currency translation amount. Total shareholders' equity was further impacted by the revaluation of the Bank's employee benefit plans of $465 million, share buybacks of $414 million, changes in own credit risk on financial liabilities of $298 million, redemption of preferred shares of $265 million and a decrease in non-controlling interests of $201 million due to divestitures and distributions.

Capital Management

Overview

Scotiabank is committed to maintaining a strong capital base to support the risks associated with its diversified businesses. Strong capital levels contribute to financial safety for the Bank's customers, foster investor confidence and support strong credit ratings. It also allows the Bank to take advantage of growth opportunities as they arise and enhance shareholder returns through increased dividends. The Bank's capital management framework includes a comprehensive internal capital adequacy assessment process (ICAAP), aimed at ensuring that the Bank's capital is adequate to meet current and future risks and achieve its strategic objectives. Key components of the Bank's ICAAP include sound corporate governance; creating a comprehensive risk appetite for the Bank; managing and monitoring capital, both currently and prospectively; and utilizing appropriate financial metrics which relate risk to capital, including internal capital and regulatory capital measures.

Governance and oversight

The Bank has a sound capital management framework to measure, deploy and monitor its available capital and assess its adequacy. Capital is managed in accordance with the Board-approved Capital Management Policy. In addition, the Board reviews and approves the Bank's annual capital plan. The Asset-Liability Committee and senior executive management provide governance over the capital management process. The Bank's Finance, Treasury and Global Risk Management groups take a coordinated approach to implementing the Bank's capital plan.

Risk appetite

The risk appetite framework that establishes enterprise-wide risk tolerances in addition to capital targets are detailed in the Risk Management section "Risk Appetite". The framework encompasses medium-term targets with respect to regulatory capital thresholds, earnings and other risk-based parameters. These targets drive behaviour to ensure the Bank achieves the following overall objectives: exceed regulatory and internal capital targets, manage capital levels commensurate with the risk profile of the Bank, maintain strong credit ratings and provide the Bank's shareholders with acceptable returns.

Regulatory capital

Canadian banks are subject to the revised capital adequacy requirements as published by the Basel Committee on Banking Supervision (BCBS) and commonly referred to as Basel III. Under Basel III, there are three primary risk-based regulatory capital ratios used to assess capital adequacy: Common Equity Tier 1 (CET1), Tier 1 and Total capital, which are determined by dividing those capital components by risk-weighted assets. Basel III also provides guidance on non-viability contingent capital (NVCC). The guidance stipulates that in order to qualify as regulatory capital, non-common share capital instruments must be convertible into common equity upon a trigger event as defined within the guidance. All non-common share capital instruments issued after December 31, 2012, are required to meet these NVCC requirements to qualify as regulatory capital.

The Office of the Superintendent of Financial Institutions, Canada (OSFI) has issued guidelines, reporting requirements and disclosure guidance which are consistent with the international implementation of Basel III. OSFI requires Canadian deposit-taking institutions to meet minimum requirements related to risk-weighted assets of 7%, 8.5% and 10.5% for CET1, Tier 1 and Total Capital ratios, respectively, which includes the capital conservation buffer of 2.5%. OSFI has also designated the Bank a domestic systemically important bank (D-SIB), increasing its minimum capital ratio requirements by 1% across all tiers of capital, in line with the requirements for global systemically important banks. OSFI's minimum Pillar 1 capital ratio requirements, including the D-SIB 1% surcharge, are 8.0%, 9.5% and 11.5% for Common Equity Tier 1, Tier 1 and Total capital ratios, respectively.

In addition to risk-based capital requirements, the Basel III reforms introduced a simpler, non risk-based Leverage ratio requirement to act as a supplementary measure to its risk-based capital requirements. The Leverage ratio is defined as a ratio of Basel III Tier 1 capital to a leverage exposure measure which includes on-balance sheet assets and off-balance sheet commitments, derivatives and securities financing transactions, as defined within the requirements. OSFI's Basel III Leverage Ratio Requirements Guideline and Public Disclosure Requirements outline the application and disclosure of the Basel III Leverage ratio in Canada. Institutions are expected to maintain a material operating buffer above the 3% minimum.

Domestic Stability Buffer

In June 2018, OSFI implemented the Domestic Stability Buffer, to be held by Domestic Systemically Important Banks (D-SIBs) as a Pillar 2 buffer, in addition to the capital conservation buffer requirement of 2.5% and the D-SIB surcharge of 1.0%. Breaches of this buffer will not result in banks being subject to automatic constraints on capital distributions. Instead, OSFI will require a remediation plan to address any shortfall to their minimum. Supervisory interventions pursuant to OSFI's Guide to Intervention would occur in cases where a remediation plan is not produced or executed in a timely manner satisfactory to OSFI.

The Domestic Stability Buffer ranges between 0 and 2.5% of a bank's total risk-weighted assets (RWA). OSFI undertakes a review of the buffer on a semi-annual basis, in June and December, and any changes to the buffer are made public, along with supporting rationale. In exceptional circumstances, OSFI may make and announce adjustments to the buffer in-between scheduled review dates.

In December 2019, OSFI announced a 25 basis point increase to its Domestic Stability Buffer to 2.25% of total risk-weighted assets. Subsequently, in response to COVID-19, in March 2020 the Domestic Stability Buffer was reduced to 1.0% of total risk-weighted assets through the remainder of 2020 and until further notice from OSFI.

Total Loss Absorbing Capacity (TLAC)

OSFI has issued its guideline on Total Loss Absorbing Capacity (TLAC), which applies to Canada's D-SIBs as part of the Federal Government's bail-in regime. The standards are intended to address the sufficiency of a systemically important bank's loss absorbing capacity to support its recapitalization in the event of its failure. Effective November 1, 2021, D-SIBs will be required to maintain a minimum risk-based TLAC ratio and a minimum TLAC leverage ratio. TLAC is defined as the aggregate of Tier 1 capital, Tier 2 capital, and other TLAC instruments that are subject to conversion in whole or in part into common shares under the CDIC Act and meet all of the eligibility criteria under the guidelines. The Bank's minimum TLAC ratio requirements consist of 21.5% of risk-weighted assets (plus the Domestic Stability Buffer requirement) and 6.75% of leverage ratio exposures. OSFI may subsequently vary the minimum TLAC requirements for individual D-SIBs or groups of D-SIBs. Where a D-SIB falls below the minimum TLAC requirements, OSFI may take any measures deemed appropriate, including measures set out in the Bank Act. As at October 31, 2020, the Bank exceeds the OSFI minimum TLAC and TLAC leverage ratios.

Regulatory capital developments during the year in response to COVID-19

During the year, in response to COVID-19, OSFI introduced changes to regulations to keep the financial system resilient and well capitalized. A suite of temporary adjustments to existing capital and leverage requirements were introduced which include the following:

- Announcement of a 125 basis point decrease to the Domestic Stability Buffer (buffer) to 1.0% in March, 2020. OSFI has required that banks not increase their dividends nor execute share buybacks while the decrease in buffer remains in effect. As a result, OSFI's minimum regulatory capital ratio requirements, including the Domestic Systemically Important Banks (D-SIB) 1.0% surcharge and the Domestic Stability Buffer of 1.0% are 9.0%, 10.5% and 12.5% for CET1, Tier 1 and Total Capital ratios, respectively. In June 2020, OSFI announced that the buffer will remain at 1.0%. OSFI will continue to monitor conditions, vulnerabilities and signs of risks to the banking system, and the impact of COVID-19 policy responses. If conditions warrant, OSFI is prepared to release the buffer further.
- Preferential treatment of performing loans granted payment deferrals; these remain classified as performing loans under OSFI's Capital Adequacy Requirements (CAR) guideline. This temporary capital treatment remains in place for the duration of the payment deferral, up to a maximum of 6 months (or 3 months if the deferral was granted after August 30, 2020 and before September 30, 2020). Loans granted payment deferrals after September 30, 2020 are not eligible for this temporary capital relief.
- New transitional arrangements for the regulatory capital treatment of expected credit loss provisioning that are available under the Basel Framework, enabling a portion of the allowance that would otherwise be included in Tier 2 capital to instead be included in CET1 capital. The adjustment is measured quarterly as the increase in Stage 1 and Stage 2 allowances relative to their baseline level as at January 31, 2020, tax effected and subject to a scaling factor of 70% in 2020, 50% in 2021, and 25% in 2022.
- Reduction of an institution's Stressed Value-at-Risk (VaR) multipliers used in the calculation of market risk capital by a factor of 2 and the removal of Funding Valuation Adjustment (FVA) hedges in the calculation of market risk capital, both changes were made effective from the commencement of the second quarter of 2020.
- For institutions using the Internal Ratings-Based (IRB) approach for credit risk, a lowering of OSFI's regulatory capital floor factor from 75% to 70%, effective from the second quarter of 2020. The 70% factor is expected to remain in place until OSFI's domestic implementation of the revised Basel III reforms, delayed to the first quarter of 2023.
- For the Leverage ratio, central bank reserves and sovereign-issued securities that qualify as High Quality Liquid Assets (HQLA) under the Liquidity Adequacy Requirements guideline are to be temporarily excluded from the Leverage ratio exposure measure until December 31, 2021.

The Bank has adopted the above changes in line with OSFI's expectations. In addition, we continue to monitor and prepare for new regulatory capital developments in response to ongoing changes from COVID-19.

Planning, managing and monitoring capital

Capital is managed and monitored based on planned changes in the Bank's strategy, identified changes in its operating environment or changes in its risk profile. As part of the Bank's comprehensive ICAAP, sources and uses of capital are continuously measured and monitored through financial metrics, including regulatory thresholds, and internal capital. These results are used in capital planning and strategic decision-making.

The Bank's assessment of capital adequacy is in the context of its current position and its expected future risk profile and position relative to its internal targets while considering the potential impact of various stress scenarios. Specific scenarios are selected based on the current economic conditions and business events facing the Bank. In addition, the Bank's forward looking capital adequacy assessment includes a consideration of the results of more severe multi-risk scenarios within its enterprise-wide stress testing. This testing is used to determine the extent to which severe, but plausible events, impact the Bank's capital.

The Bank sets internal regulatory capital targets to ensure the Bank's available capital is sufficient within the context of its risk appetite.

The Bank's internal target includes an adequate buffer over the regulatory minimum ensuring sufficient flexibility for future capital deployment and in consideration of the Bank's risk appetite, the volatility of planning assumptions, the results from stress testing and contingency planning.

The Bank has a comprehensive risk management framework to ensure that the risks taken while conducting its business activities are consistent with its risk appetite, its impact on capital relative to internal targets, and that there is an appropriate balance between risk and return. Refer to the Risk Management section for further discussion on the Bank's risk management framework. In managing the Bank's capital base, close attention is paid to the cost and availability of the various types of capital, desired leverage, changes in the assets and risk-weighted assets, and the opportunities to profitably deploy capital. The amount of capital required for the business risks being assumed, and to meet regulatory requirements, is balanced against the goal of generating an appropriate return for the Bank's shareholders.

Capital generation

Capital is generated internally through net earnings after dividend payments. As well, capital is generated by the issuance of common shares, preferred shares and other equity instruments, and subordinated debentures, net of redemptions.

Capital deployment

The Bank deploys capital to support sustainable, long-term revenue and net income growth. The growth can be through existing businesses by attracting new customers, increasing cross-selling activities to existing customers, adding new products and enhancing sales productivity, or

through acquisitions. All major initiatives to deploy capital are subject to rigorous analysis, validation of business case assumptions and evaluation of expected benefits. Key financial criteria include impact on earnings per share, capital ratios, return on invested capital, expected payback period and internal rate of return based on discounted cash flows.

Regulatory capital ratios

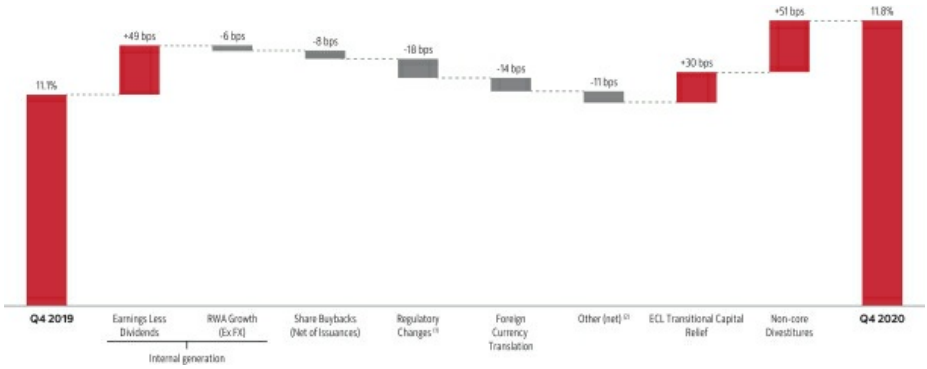
The Bank continues to maintain strong, high quality capital levels which position it well for resiliency during the COVID-19 pandemic. The CET1 ratio as at October 31, 2020 was 11.8%, an increase of approximately 70 basis points from the prior year due primarily to strong internal capital generation and the impact from the Bank's divestitures during the year, partly offset by the adoption of regulatory changes, the impact from foreign currency translation on capital requirements, the remeasurement of the employee pension obligations, and share buybacks. The CET1 ratio also benefited 30 basis points from OSFI's transitional adjustment for the partial inclusion of increases in Stage 1 and Stage 2 expected credit losses (ECL) relative to their pre-crisis baseline levels as at January 31, 2020.

The Bank's Tier 1 capital ratio was 13.3% as at October 31, 2020, an increase of approximately 110 basis points from the prior year, due primarily to the issuance of US$1.25 billion of Scotiabank additional Tier 1 capital securities and the above noted impacts to the CET1 ratio, partly offset by the redemption of $265 million of preferred shares during the year. The Total capital ratio was 15.5% as at October 31, 2020, an increase of approximately 130 basis points from 2019, due primarily to the above noted changes to the CET1 and Tier 1 capital ratios.

The Leverage ratio was 4.7%, an increase of approximately 50 basis points in 2020 due primarily to OSFI's temporary Leverage ratio exclusions for central bank reserves and sovereign-issued securities and transitional adjustment for the partial inclusion of ECL, internal capital generation and the issuance of US$1.25 billion of Scotiabank additional Tier 1 capital securities, partly offset by the redemption of $265 million of preferred shares during the year.

The Bank's capital ratios continue to be well in excess of OSFI's minimum capital ratio requirements for 2020 of 9.0%, 10.5% and 12.5% for CET1, Tier 1 and Total Capital, respectively. The Bank was well above the OSFI minimum Leverage ratio as at October 31, 2020.

C23 Continuity of Common Equity Tier 1 ratio



(1) Includes the impact from the adoption of IFRS 16 (-10 bps) and transition to OSFI's new securitization requirements (-8 bps).
(2) Other includes the impact from the remeasurement of the employee pension obligation (-7 bps).

T27 Regulatory capital(1)

As at October 31 ($ millions)	Basel III 2020	2019
Common Equity Tier 1 capital		
Total Common Equity	**$ 62,502**	$ 63,320
Qualifying non-controlling interest in common equity of subsidiaries	**1,769**	1,734
ECL transitional adjustment(2)	**1,304**	–
Goodwill and intangibles, net of deferred tax liabilities (3)	**(15,505)**	(16,144)
Threshold related deductions	**–**	(907)
Net deferred tax assets (excluding those arising from temporary differences)	**(226)**	(286)
Other Common Equity Tier 1 capital deductions(4)	**(679)**	(1,139)
Common Equity Tier 1	**49,165**	46,578
Preferred shares(5)	**2,059**	2,324
Subordinated additional Tier 1 capital securities (NVCC)	**3,249**	1,560
Capital instrument liabilities – trust securities (5)	**750**	750
Other Tier 1 capital adjustments(6)	**139**	92
Net Tier 1 capital	**55,362**	51,304
Tier 2 capital		
Subordinated debentures, net of amortization (5)	**7,355**	7,252
Allowance for credit losses eligible for inclusion in Tier 2 and excess allowance (re: IRB approach) (7)	**1,647**	1,200
Qualifying non-controlling interest in Tier 2 capital of subsidiaries	**148**	96
Other Tier 2 capital adjustments	**–**	(2)
Tier 2 capital	**9,150**	8,546
Total regulatory capital	**64,512**	59,850
Risk-weighted assets ($ billions)		
Credit risk	**362.0**	365.4
Market risk	**7.3**	8.7
Operational risk	**47.8**	47.1
Risk-weighted assets(8)	**$ 417.1**	$ 421.2
Capital ratios		
Common Equity Tier 1	**11.8%**	11.1%
Tier 1	**13.3%**	12.2%
Total	**15.5%**	14.2%
Leverage:		
Leverage exposures	**$ 1,170,290**	$ 1,230,648
Leverage ratio	**4.7%**	4.2%

(1) Regulatory capital ratios are determined in accordance with Basel III rules.
(2) The ECL transitional adjustment was introduced by OSFI in Q2, 2020.
(3) Reported amounts are based on OSFI's requirements that goodwill relating to investments in associates be classified as goodwill for regulatory reporting purposes.
(4) Other CET1 capital deductions under Basel III include gains/losses due to changes in own credit risk on fair valued liabilities, pension plan assets and other items.
(5) Non-qualifying Tier 1 and Tier 2 capital instruments are subject to a phase-out period of 10 years.
(6) Other Tier 1 capital adjustments under Basel III rules include eligible non-controlling interests in subsidiaries.
(7) Eligible allowances for 2020 and 2019.
(8) OSFI has prescribed a minimum capital floor for institutions that use the advanced internal ratings-based approach for credit risk. The Basel II capital floor add-on is determined by comparing a capital requirement under the Basel II standardized approach for credit risk, in addition to OSFI prescribed requirements for market risk and credit valuation adjustment RWA. A shortfall in the Basel III capital requirement as compared with the Basel II capital floor is added to RWA. Under this Basel II regulatory capital floor requirement, the Bank does not have a capital floor add-on as at October 31, 2020 (October 31, 2019 - nil).

T28 Changes in regulatory capital

	Basel III	
For the fiscal years ($ millions)	**2020**	2019
Total capital, beginning of year	**$ 59,850**	$ 57,364
Changes in Common Equity Tier 1		
Net income attributable to common equity holders of the Bank	**6,582**	8,208
Dividends paid to equity holders of the bank	**(4,363)**	(4,260)
Shares issued	**59**	255
Shares repurchased/redeemed	**(414)**	(1,075)
Gains/losses due to changes in own credit risk on fair valued liabilities	**347**	(37)
ECL transitional adjustment(1)	**1,304**	–
Movements in accumulated other comprehensive income, excluding cash flow hedges	**(2,684)**	(1,193)
Change in non-controlling interest in common equity of subsidiaries	**35**	105
Change in goodwill and other intangible assets (net of related tax liability) (2)	**639**	284
Other changes including regulatory adjustments below:	**1,082**	(152)
– Deferred tax assets that rely on future profitability (excluding those arising from temporary differences)	**60**	49
– IFRS 15 impact(3)	**–**	(58)
– Significant investments in the common equity of other financial institutions (amount above 10% threshold)	**907**	(330)
– Other capital deductions	**102**	242
– Other	**13**	(55)
Changes in Common Equity Tier 1	**$ 2,587**	$ 2,135
Changes in Additional Tier 1 Capital		
Issued	**1,689**	–
Redeemed	**(265)**	(950)
Other changes including regulatory adjustments and phase-out of non-qualifying instruments	**47**	(68)
Changes in Additional Tier 1 Capital	**$ 1,471**	$ (1,018)
Changes in Tier 2 Capital		
Issued	**–**	3,250
Redeemed	**(9)**	(1,771)
Allowance for credit losses eligible for inclusion in Tier 2 and Excess Allowance under AIRB (4)	**446**	(180)
Other changes including regulatory adjustments and phase-out of non-qualifying instruments	**167**	70
Changes in Tier 2 Capital	**$ 604**	$ 1,369
Total capital generated (used)	**$ 4,662**	$ 2,486
Total capital, end of year	**$ 64,512**	$ 59,850

(1) The ECL transitional adjustment was introduced by OSFI in Q2, 2020.
(2) Reported amounts are based on OSFI's requirements that goodwill relating to investments in associates be classified as goodwill for regulatory reporting purposes.
(3) Represents the full transitional impact on retained earnings from the Bank's adoption of IFRS 15 (Revenue from Contracts with Customers) on November 1, 2018.
(4) Eligible allowances for 2020 and 2019.

Regulatory capital components

The Bank's regulatory capital is divided into three components – CET1, Tier 1 capital and Tier 2 capital, depending on their degree of permanency and loss absorbency. All components of capital provide support for banking operations and protect depositors.

CET1 consists primarily of common shareholders' equity, regulatory derived non-controlling interest capital, and prescribed regulatory adjustments or deductions. These regulatory deductions include goodwill, intangible assets (net of deferred tax liabilities), deferred tax assets that rely on future profitability, defined-benefit pension assets, shortfall (if any) of the allowance for credit losses to regulatory parameter-based expected losses and significant investments in the common equity of other financial institutions.

Additional Tier 1 capital consists primarily of qualifying non-cumulative preferred shares, qualifying other equity instruments (as described in Note 24), and non-qualifying preferred shares and innovative Tier 1 instruments subject to phase-out. Tier 2 capital consists mainly of qualifying subordinated debentures, or non-qualifying subordinated debentures subject to phase-out, and any eligible allowances for credit losses.

The Bank's CET1 capital was $49.2 billion as at October 31, 2020, an increase of $2.6 billion from the prior year primarily due to:

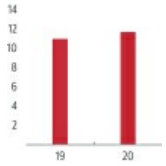
- $2.2 billion growth from internal capital generation, including the impacts on retained earnings from the Bank's divestitures;
- $2.1 billion from lower regulatory capital deductions, mainly relating to divestiture driven reductions in goodwill and significant investments in banking, financial and insurance entities that are outside the scope of regulatory consolidation; and,
- $1.3 billion from OSFI's transitional adjustment for the partial inclusion of increases in Stage 1 and Stage 2 expected credit losses.

Partly offset by:

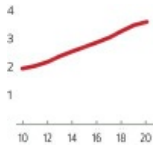
- $2.7 billion decrease from movements in Accumulated Other Comprehensive Income, excluding cash flow hedges, primarily from the impact of foreign currency translation and changes in employee pensions and benefits plans net liability; and,
- $0.4 billion from common share buybacks net of common share issuances under the Bank's employee share purchase and stock options plans.

The Bank's Tier 1 capital increased by $4.1 billion, primarily due to the above impacts to CET1 capital and the issuance of US$1.25 billion of subordinated additional Tier 1 capital securities partly offset by the planned redemptions of $265 million of preferred shares during the year. In addition, Total capital increased by $4.7 billion, mainly due to the impacts to CET1 and Tier 1 capital and growth in eligible allowances included in Tier 2 capital.

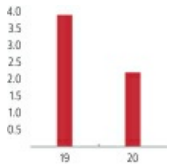
C24 CET1 capital
%, as at October 31



C25 Dividend growth
dollars per share



C26 Internally generated capital
$ billions, for years ended October 31



Dividends

The annual dividend in 2020 was $3.60, compared to $3.49 in 2019, an increase of 3.2%. The whole year dividend payout ratio on an adjusted basis was 65.8%.

T29 Selected capital management activity

For the fiscal years ($ millions)	2020	2019
Dividends		
Common	**$4,363**	$4,260
Preferred and other equity instruments	**196**	182
Common shares issued(1)	**59**	255
Common shares repurchased for cancellation under the Normal Course Issuer Bid(2)	**414**	1,075
Preferred shares and other equity instruments issued(3)	**1,689**	–
Preferred shares and other equity instruments redeemed(4)	**265**	300
Subordinated debentures issued	**–**	3,250
Maturity, redemption and repurchase of subordinated debentures	**9**	1,771

(1) Represents primarily cash received for stock options exercised during the year, common shares issued in connection with acquisitions, and common shares issued pursuant to the Dividend and Share Purchase Plan.
(2) Represents reduction to Common shares and Retained earnings (refer to the Consolidated Statement of Changes in Equity).
(3) Represents the issuance of US$1.25 billion USD-denominated fixed rate resetting perpetual subordinated additional Tier 1 capital securities (NVCC), on June 4, 2020.
(4) Represents the redemption of preferred shares series 30 & 31 on April 27, 2020.

Normal Course Issuer Bid

On May 30, 2019, the Bank announced that OSFI and the Toronto Stock Exchange approved a normal course issuer bid (the "2019 NCIB") pursuant to which it may repurchase for cancellation up to 24 million of the Bank's common shares. Purchases under the 2019 NCIB commenced on June 4, 2019 and terminated on June 3, 2020. Under the 2019 NCIB, the Bank has cumulatively repurchased and cancelled approximately 11.8 million common shares at an average price of $72.41 per share.

During the year ended October 31, 2020, the Bank repurchased and cancelled approximately 5.6 million common shares (2019 – 15 million) at a volume weighted average price of $73.95 per share (2019 – $71.51) for a total amount of $414 million (2019 – $1,075 million).

On March 13, 2020, OSFI advised federally regulated deposit taking institutions to suspend common share buybacks as part of COVID-19 measures. The Bank does not currently have an active NCIB program.

Share data and other capital instruments

The Bank's common and preferred share data, as well as other capital instruments, are shown in T30. Further details, including exchangeability features, are discussed in Note 21 and Note 24 of the consolidated financial statements.

T30 Shares and other instruments

As at October 31, 2020	Amount ($ millions)	Dividends declared per share(1)	Number outstanding (000s)	Conversion features
Common shares(2)	$ 18,239	$ 3.60	1,211,479	n/a
Preferred shares				
Preferred shares Series 30(3)	–	0.227500	–	–
Preferred shares Series 31(3)	–	0.331828	–	–
Preferred shares Series 32(4)(5)	279	0.515752	11,162	Series 33
Preferred shares Series 33(4)(6)	130	0.579323	5,184	Series 32
Preferred shares Series 34(4)(7)(8)	350	1.375000	14,000	Series 35
Preferred shares Series 36(4)(7)(9)	500	1.375000	20,000	Series 37
Preferred shares Series 38(4)(7)(10)	500	1.212500	20,000	Series 39
Preferred shares Series 40(4)(7)(11)	300	1.212500	12,000	Series 41

Additional Tier 1 securities	Amount ($ millions)	Distribution(12)	Yield (%)	Number outstanding (000s)
Scotiabank Trust Securities – Series 2006-1 issued by Scotiabank Capital Trust (13a,b)	$ 750	28.25	5.650	750
Subordinated additional Tier 1 capital securities (NVCC)	US$ 1,250	US$ 23.25	4.650	1,250
Subordinated additional Tier 1 capital securities (NVCC) (14)	US$ 1,250	US$ 12.25	4.900	1,250

NVCC subordinated debentures	Amount ($ millions)	Interest Rate (%)
Subordinated debentures due March 2027	$ 1,250	2.58
Subordinated debentures due December 2025 (15)	750	3.37
Subordinated debentures due December 2025	US$ 1,250	4.50
Subordinated debentures due January 2029	1,750	3.89
Subordinated debentures due July 2029	1,500	2.84

Options	Number outstanding (000s)
Outstanding options granted under the Stock Option Plans to purchase common shares (2)	11,792

(1) Dividends declared from November 1, 2019 to October 31, 2020.
(2) Dividends on common shares are paid quarterly, if and when declared. As at November 20, 2020, the number of outstanding common shares and options was 1,211,691 thousand and 11,580 thousand, respectively.
(3) On April 27, 2020, the Bank redeemed all outstandingNon-cumulative Preferred shares series 30 and Series 31 and paid a dividend of $0.113750 and $0.166480, respectively, per share.
(4) These shares are entitled to non-cumulative preferential cash dividends payable quarterly. These preferred shares have conversion features. Refer to Note 24 of the consolidated financial statements in the Bank's 2020 Annual Report for further details.
(5) Subsequent to the initial five-year fixed rate period which ended on February 1, 2016, and resetting every five years thereafter, the dividends, if and when declared, will be determined by the sum of the five-year Government of Canada Yield plus 1.34%, multiplied by $25.00.
(6) Dividends, if and when declared, are determined by the sum of the three-month Government of Canada Treasury Bill Yield plus 1.34%, multiplied by $25.00, which will be reset quarterly.
(7) These preferred shares contain Non-Viability Contingent Capital (NVCC) provisions necessary for the shares to qualify as Tier 1 regulatory capital under Basel III. Refer to Note 24 of the consolidated financial statements in the Bank's 2019 Annual Report for further details.
(8) Subsequent to the initial five-year fixed rate period ending on April 25, 2021, and resetting every five years thereafter, the dividends, if and when declared, will be determined by the sum of the five-year Government of Canada Yield plus 4.51%, multiplied by $25.00.
(9) Subsequent to the initial five-year fixed rate period ending on July 25, 2021, and resetting every five years thereafter, the dividends, if and when declared, will be determined by the sum of the five-year Government of Canada Yield plus 4.72%, multiplied by $25.00.
(10) Subsequent to the initial five-year fixed rate period ending on January 26, 2022, and resetting every five years thereafter, the dividends, if and when declared, will be determined by the sum of the five-year Government of Canada Yield plus 4.19%, multiplied by $25.00.
(11) Subsequent to the initial five-year fixed rate period ending on January 26, 2024, and resetting every five years thereafter, the dividends, if and when declared, will be determined by the sum of the five-year Government of Canada Yield plus 2.43%, multiplied by $25.00
(12) Distributions made per face amount of $1,000 or US$1,000 semi-annually or quarterly, as applicable.
(13)(a) On September 28, 2006, Scotiabank Capital Trust issued 750,000 Scotiabank Trust Securities – Series 2006-1 (Scotia BaTS II Series 2006-1). The holders of Scotia BaTS II Series 2006-1 are entitled to receive non-cumulative fixed cash distributions payable semi-annually in an amount of $28.25 per security. With regulatory approval, these securities may be redeemed in whole upon the occurrence of certain tax or regulatory capital changes, or in whole or in part on December 30, 2011 and on any distribution date thereafter at the option of Scotiabank Capital Trust. The holder has the right at any time to exchange their security into Non-cumulative Preferred Shares Series S of the Bank. The Series S shares will be entitled to cash dividends payable semi-annually in an amount of $0.4875 per $25.00 share. Refer to Note 24(c) – Restrictions on payment of dividends and retirement of shares. The Scotia BaTS II Series 2006-1 may be automatically exchanged, without the consent of the holder, intoNon-cumulative Preferred Shares Series T of the Bank in the following circumstances: (i) proceedings are commenced for the winding-up of the Bank; (ii) the Superintendent takes control of the Bank or its assets; (iii) the Bank has a Tier 1 Capital ratio of less than 5% or a Total Capital ratio of less than 8%; or (iv) the Superintendent has directed the Bank to increase its capital or provide additional liquidity and the Bank elects such automatic exchange or the Bank fails to comply with such direction. The Series T shares will be entitled to non-cumulative cash dividends payable semi-annually in an amount of $0.625 per $25.00 share. If there is an automatic exchange of the Scotia BaTS II Series 2006-1 into Preferred Shares Series T of the Bank, then the Bank would become the sole beneficiary of the Trust.
(13)(b) No cash distributions will be payable on the Scotia BaTS II Series 2006-1 in the event that the regular dividend is not declared on the Bank's preferred shares and, if no preferred shares are outstanding, the Bank's common shares. In such a circumstance the net distributable funds of the Trust will be payable to the Bank as the holder of the residual interest in the Trust. Should the Trust fail to pay the semi-annual distributions on the Scotia BaTS II Series 2006-1 in full, the Bank will not declare dividends, of any kind on any of its preferred or common shares for a specified period of time. Refer to Note 24(c)—Restrictions on payment of dividends and retirement of shares.
(14) On June 4, 2020, the Bank issued US$1.25 billion 4.90% fixed rate resetting perpetual subordinated additional Tier 1 capital securities (NVCC). Refer to Note 24 (b) Preferred shares and other equity instruments.
(15) On October 20, 2020, the Bank announced its intention to redeem these notes on December 8, 2020 at 100% of their principal amount plus accrued interest to the redemption date.

Credit ratings

Credit ratings are one of the factors that impact the Bank's access to capital markets and the terms on which it can conduct derivatives, hedging transactions and borrow funds. The credit ratings and outlook that the rating agencies assign to the Bank are based on their own views and methodologies.

The Bank continues to have strong credit ratings and its deposits and legacy senior debt are rated AA by DBRS, Aa2 by Moody's, AA by Fitch and A+ by Standard and Poor's (S&P). The Bank's bail-inable senior debt is rated AA (low) by DBRS, A2 by Moody's, AA- by Fitch and A- by S&P. The Bank's outlook is rated Stable by DBRS, Moody's and S&P, and Negative by Fitch.

On April 3, 2020, Fitch upgraded the Bank's non-bail in obligations including legacy senior debt, short-term (less than 400 days) senior obligations, derivative counterparty ratings (DCRs) and long-term deposit ratings by one notch to 'AA' in recognition of the build-up of total loss absorbing capital (TLAC) and other qualifying junior debt buffers to a level sufficient to recapitalize under an assumed resolution scenario. Along with other Canadian banks, Fitch's Outlook was revised to Negative from Stable due to the disruption to economic activity and financial markets from the coronavirus pandemic.

Risk-weighted assets

Regulatory capital requirements are based on OSFI's target minimum percentage of risk-weighted assets (RWA). RWA represent the Bank's exposure to credit, market and operational risk and are computed by applying a combination of the OSFI approved Bank's internal risk models and OSFI prescribed risk weights to on- and off-balance sheet exposures.

As at year end, the Bank's RWA of $417.1 billion, represents a decrease of approximately $4.1 billion, or 1.0%, from 2019, driven by divestitures, improvement in book quality and the benefit from foreign currency translation of a stronger Canadian dollar, partly offset by organic growth in RWA.

Credit risk-weighted assets

Credit risk-weighted assets decreased by $3.4 billion to $362.0 billion. The key drivers or components of the change are reflected in Table T31, below.

T31 Flow statement for Basel III credit risk-weighted assets ($ millions)

	2020		2019	
Credit risk-weighted assets movement by key driver ($ millions)	**Credit risk**	**Of which counterparty credit risk**	Credit risk	Of which counterparty credit risk
Credit risk-weighted assets as at beginning of year	**$ 365,431**	**$ 20,126**	$ 347,096	$ 17,543
Book size(1)	**15,641**	**8,798**	19,722	1,645
Book quality(2)	**(6,396)**	**(2,160)**	(2,000)	(499)
Model updates(3)	**(431)**	**(431)**	1,127	169
Methodology and policy(4)	**2,106**	**(7,422)**	1,238	1,238
Acquisitions and disposals	**(9,756)**	**–**	614	–
Foreign exchange movements	**(3,792)**	**70**	(955)	30
Other	**(799)**	**–**	(1,411)	–
Credit risk-weighted assets as at end of year	**$ 362,004**	**$ 18,981**	$ 365,431	$ 20,126

(1) Book size is defined as organic changes in book size and composition (including new business and maturing loans).
(2) Book quality is defined as quality of book changes caused by experience such as underlying customer behaviour or demographics, including changes through model calibrations/realignments.
(3) Model updates are defined as model implementation, change in model scope or any change to address model enhancement.
(4) Methodology and policy is defined as methodology changes to the calculations driven by regulatory policy changes, such as new regulation (e.g. Basel III).

T32 Internal rating scale(1) and mapping to external rating agencies

Equivalent Rating External Rating – S&P	External Rating – Moody's	External Rating – DBRS	Grade	IG Code	PD Range(2)
AAA to AA+	Aaa to Aa1	AAA to AA (high)		99-98	0.0000% – 0.0428%
AA to A+	Aa2 to A1	AA to A (high)	Investment	95	0.0428% – 0.1159%
A to A-	A2 to A3	A to A (low)	grade	90	0.0512% – 0.1271%
BBB+	Baa1	BBB (high)		87	0.0800% – 0.2027%
BBB	Baa2	BBB		85	0.1143% – 0.2950%
BBB-	Baa3	BBB (low)		83	0.1632% – 0.4293%
BB+	Ba1	BB (high)		80	0.2638% – 0.4731%
BB	Ba2	BB	Non-Investment	77	0.4264% – 0.5215%
BB-	Ba3	BB (low)	grade	75	0.5215% – 0.6892%
B+	B1	B (high)		73	0.6892% – 1.3282%
B to B-	B2 to B3	B to B (low)		70	1.3282% – 2.5597%
CCC+	Caa1	–		65	2.5597% – 9.3860%
CCC	Caa2	–	Watch list	60	9.3860% – 17.8585%
CCC- to CC	Caa3 to Ca	–		40	17.8585% – 34.4434%
–	–	–		30	34.4434% – 58.6885%
Default			Default	21	100%

(1) Applies to non-retail portfolio.
(2) PD ranges overlap across IG codes as the Bank utilizes two risk rating systems for its AIRB portfolios and each risk rating system has its own separate IG to PD mapping.

T33 Non-retail AIRB portfolio exposure by internal rating grade(1)

As at October 31 ($ millions)		2020					2019				
Grade	IG Code	Exposure at default ($)(3)	RWA ($)(4)	PD (%)(5)(8)	LGD (%)(6)(8)	RW (%)(7)(8)	Exposure at default ($)(3)	RWA ($)(4)	PD (%)(5)(8)	LGD (%)(6)(8)	RW (%)(7)(8)
	99-98	116,335	964	–	12	1	81,333	920	—	14	1
	95	78,361	7,567	0.05	27	10	55,829	5,780	0.05	32	10
Investment grade(2)	90	67,164	8,475	0.06	34	13	65,058	10,040	0.07	36	15
	87	63,827	14,022	0.09	40	22	59,294	14,323	0.10	40	24
	85	45,973	15,509	0.15	45	34	49,291	18,101	0.15	46	37
	83	53,969	24,944	0.25	46	46	44,253	19,920	0.23	45	45
	80	42,509	21,015	0.31	44	49	48,807	27,178	0.33	45	56
	77	33,708	19,245	0.46	43	57	29,938	17,928	0.47	43	60
Non-Investment grade	75	25,527	15,576	0.69	41	61	21,049	13,444	0.72	40	64
	73	10,326	7,789	1.33	37	75	8,539	6,505	1.39	36	76
	70	4,555	4,079	2.56	37	90	3,485	3,068	2.68	35	88
Watch list	65	1,224	1,707	9.39	35	139	727	1,202	9.78	42	165
	60	1,801	2,702	17.87	30	150	1,198	1,404	18.47	25	117
	40	506	994	27.13	35	196	616	1,296	29.96	40	210
	30	109	214	55.94	46	196	225	425	57.31	46	189
Default(9)	21	1,555	2,946	100.00	41	189	990	2,727	100.00	42	275
Total		547,449	147,748	0.59	33	27	470,632	144,261	0.55	36	31
Government guaranteed residential mortgages		78,754	–	–	22	–	76,114	–	–	24	–
Total		626,203	147,748	0.52	32	24	546,746	144,261	0.47	34	26

(1) Excludes securitization exposures.
(2) Excludes government guaranteed residential mortgages of $78.8 billion ($76.1 billion in 2019).
(3) After credit risk mitigation.
(4) RWA prior to 6% scaling factor.
(5) PD – Probability of Default.
(6) LGD – Loss Given Default.
(7) RW – Risk Weight.
(8) Exposure at default used as basis for estimated weightings.
(9) Gross defaulted exposures, before any related allowances.

Credit risk-weighted assets – non-retail

Credit risk measures the risk that a borrower or counterparty will fail to honour its financial or contractual obligations to the Bank. The Bank uses the Advanced Internal Ratings Based (AIRB) approach under Basel III to determine minimum regulatory capital requirements for its domestic, U.S. and European credit portfolios, and certain international non-retail portfolios. The remaining credit portfolios are subject to the Standardized approach, which relies on the external credit ratings (e.g. S&P, Moody's, DBRS, etc.) of borrowers, if available, to compute regulatory capital for credit risk. For the Bank's Corporate, Bank and Sovereign AIRB portfolios, the key risk measures used in the quantification of regulatory capital for credit risk include probability of default (PD), loss given default (LGD) and exposure at default (EAD).

- Probability of default (PD) measures the likelihood that a borrower, with an assigned Internal Grade (IG) code, will default within a one-year time horizon. IG codes are a component of the Bank's risk rating system. Each of the Bank's internal borrower IG codes is mapped to a PD estimate.

- Loss given default (LGD) measures the severity of loss on a facility in the event of a borrower's default. The Bank's internal LGD grades are mapped to ranges of LGD estimates. LGD grades are assigned based on facility characteristics such as seniority, collateral type, collateral coverage and other structural elements. LGD for a defaulted exposure is based on the concept of economic loss and is calculated using the present value of repayments, recoveries and related direct and indirect expenses.
- Exposure at default (EAD) measures the expected exposure on a facility at the time of default.

All three risk measures are estimated using the Bank's historical data, as well as available external benchmarks, and are updated on a regular basis. The historical data used for estimating these risk measures exceeds the minimum five-year AIRB requirement for PD estimates and the minimum seven-year AIRB requirement for LGD and EAD estimates. Further analytical adjustments, as required under the Basel III Framework and OSFI's requirements set out in its Domestic Implementation Notes, including any input floor requirements, are applied to average estimates obtained from historical data. These analytical adjustments incorporate the regulatory requirements pertaining to:

- Long-run estimation of PD, which requires that PD estimates capture average default experience over a reasonable mix of high-default andlow-default years of the economic cycle;
- Downturn estimation for LGD, which requires that LGD estimates appropriately reflect conditions observed during periods where credit losses are substantially higher than average; and
- Downturn estimation for EAD, which requires that EAD estimates appropriately reflect conditions observed during periods of economic downturn; and
- The addition of a margin of conservatism, which is related to the likely range of errors based on the identification and quantification of the various sources of uncertainty inherent in historical estimates.

These risk measures are used in the calculation of regulatory capital requirements based on formulas specified by the Basel framework. The credit quality distribution of the Bank's AIRB non-retail portfolio is shown in Table T33. Year-over-year, the higher overall portfolio average PD is primarily due to customer ratings changes and increases in defaulted exposures. Reductions in average LGD are mainly from changes in business mix (new vs. maturing business) and parameter recalibrations. Overall, the portfolio decline in average RW is primarily due to a significant increase in exposures to highly rated sovereigns.

The risk measures are subject to a rigorous back-testing framework which uses the Bank's historical data to ensure that they are appropriately calibrated. Based on results obtained from the back-testing process, risk measures are reviewed, re-calibrated and independently validated on at least an annual basis in order to reflect the implications of new data, technical advances and other relevant information.

- As PD estimates represent long-run parameters, back-testing is performed using historical data spanning at least one full economic cycle. Realized PDs are back-tested using pre-defined confidence intervals, and the results are then aggregated to provide an overall assessment of the appropriateness of each PD estimate;
- The back-testing for LGD and EAD estimates is conducted from both long-run and downturn perspectives, in order to ensure that these estimates are adequately conservative to reflect both long-run and downturn conditions.

Portfolio-level back-testing results, based on a comparison of estimated and realized parameters for the four-quarter period ended at July 31, 2020, are shown in Table T34. During this period the actual experience was more favourable than the estimates as reflected within the risk parameters.

T34 Portfolio-level comparison of estimated and actual non-retail percentages

	Estimated[1]	Actual
Average PD	0.70	0.44
Average LGD	40.16	38.54
Average CCF[2]	48.61	11.47

(1) Estimated parameters are based on portfolio averages at Q3/19, whereas actual parameters are based on averages of realized parameters during the subsequent four quarters.
(2) EAD back-testing is performed through Credit Conversion Factor (CCF) back-testing, as EAD is computed using the sum of the drawn exposure and undrawn exposure multiplied by the estimated CCF.

Credit risk-weighted assets – Canadian retail

The AIRB approach is used to determine minimum regulatory capital requirements for the retail credit portfolio in Canada. The retail portfolio is comprised of the following Basel-based pools:

- Residential real estate secured exposures consist of conventional and high ratio residential mortgages and all other products opened under the Scotia Total Equity Plan (STEP), such as loans, credit cards and secured lines of credit;
- Qualifying revolving retail exposures consists of all unsecured credit cards and lines of credit;
- Other retail consists of term loans (secured and unsecured), as well as credit cards and lines of credit which are secured by assets other than real estate.

For the AIRB portfolios, the following models and parameters are estimated, subject to parameter input floors as required by OSFI:

- Probability of default (PD) is the likelihood that the facility will default within the next 12 months.
- Loss Given Default (LGD) measures the economic loss as a proportion of the defaulted balance.
- Exposure at Default (EAD) is the portion of expected exposures at time of default.

The data observation period used for PD/EAD/LGD estimates meets the five year minimum. Various statistical techniques including predictive modeling and decision trees were used to develop models. The models assign accounts into homogenous segments using internal and external borrower/facility-level credit experience. Every month, exposures are automatically re-rated based on risk and loss characteristics. PD, LGD and EAD estimates are then assigned to each of these segments incorporating the following regulatory requirements:

- PD incorporates the average long run default experience over an economic cycle. This long run average includes a mix of high and low default years.
- LGD is adjusted to appropriately reflect economic downturn conditions.
- EAD may also be adjusted to reflect downturn conditions when PD and EAD are highly correlated.
- Sources of uncertainty are reviewed regularly to ensure uncertainties are identified, quantified and included in calculations so that all parameter estimates reflect appropriate levels of conservatism.

The table below summarizes the credit quality distribution of the Bank's AIRB retail portfolio as at October 31, 2020.

Year-over-year reductions in the average risk weight are primarily due to a lower portfolio average PD which is mainly from reduced delinquencies, which are partly driven by loan payment deferral programs, and lower revolving credit account utilization rates.

T35 Retail AIRB portfolio exposure by PD range(1)

As at October 31 ($ millions)		2020					2019				
Category	PD Range	Exposure at default ($)(1)	RWA ($)(2)	PD (%)(3)(6)	LGD (%)(4)(6)	RW (%)(5)(6)	Exposure at default ($)(1)	RWA ($)(2)	PD (%)(3)(6)	LGD (%)(4)(6)	RW (%)(5)(6)
Exceptionally low	0.0000% – 0.0499%	**14,985**	**391**	**0.04**	**74**	**3**	12,792	330	0.04	74	3
Very low	0.0500% – 0.1999%	**99,114**	**4,775**	**0.08**	**28**	**5**	92,440	4,687	0.09	29	5
Low	0.2000% – 0.9999%	**129,345**	**24,387**	**0.51**	**30**	**19**	121,184	24,557	0.52	32	20
Medium low	1.0000% – 2.9999%	**20,162**	**11,150**	**1.93**	**52**	**55**	22,015	12,436	1.98	51	56
Medium	3.0000% – 9.9999%	**7,698**	**7,553**	**5.34**	**71**	**98**	9,039	8,994	5.41	70	100
High	10.0000% – 19.9999%	**631**	**842**	**12.16**	**48**	**133**	886	1,190	12.57	46	134
Extremely high	20.0000% – 99.9999%	**1,388**	**2,275**	**31.17**	**62**	**164**	2,107	3,421	32.36	58	162
Default(7)(8)	100%	**522**	**1,982**	**100.00**	**78**	**380**	617	–	100.00	81	–
Total		**273,845**	**53,355**	**0.94**	**35**	**19**	261,080	55,615	1.17	36	21

(1) After credit risk mitigation.
(2) RWA prior to 6% scaling factor.
(3) PD – Probability of Default.
(4) LGD – Loss Given Default.
(5) RW – Risk Weight.
(6) Exposure at default used as basis for estimated weightings.
(7) Gross defaulted exposures, before any related allowances.
(8) Commencing in Q1 2020, RWA is being calculated on defaulted retail exposures. Previously, the risk impact was reflected in Expected Losses.

All AIRB models and parameters are monitored on a quarterly basis and independently validated annually by the Global Risk Management group. These models are tested to ensure rank ordering and back testing of parameters is appropriate. Comparison of estimated and actual loss parameters for the period ended July 31, 2020 is shown in Table T36. During this period the actual experience was materially more favourable than the estimates as reflected within the risk parameters.

T36 Estimated and actual loss parameters (1)

($ millions)	Average estimated PD (%)(2)(7)	Actual default rate (%)(2)(5)	Average estimated LGD (%)(3)(7)	Actual LGD (%)(3)(6)	Estimated EAD ($)(4)(7)	Actual EAD ($)(4)(5)
Residential real estate secured						
Residential mortgages						
Insured mortgages(8)	0.71	0.43	–	–	–	–
Uninsured mortgages	0.57	0.27	19.00	13.48	–	–
Secured lines of credit	0.37	0.20	28.74	17.66	83	76
Qualifying revolving retail exposures	2.02	1.38	79.33	72.90	705	613
Other retail	1.86	1.29	61.23	55.00	7	7

(1) Estimates and actual values are recalculated to align with new models implemented during the period.
(2) Account weighted aggregation.
(3) Default weighted aggregation.
(4) EAD is estimated for revolving products only.
(5) Actual based on accounts not at default as at four quarters prior to reporting date.
(6) Actual LGD calculated based on 24 month recovery period after default and therefore excludes any recoveries received after the 24 month period.
(7) Estimates are based on the four quarters prior to the reporting date.
(8) Actual and estimated LGD for insured mortgages are not shown. Actual LGD includes the insurance benefit, whereas estimated LGD may not.

Credit risk-weighted assets – International retail

International retail credit portfolios follow the Standardized approach and consist of the following components:

- Residential real estate secured lending; and,
- Other retail, consisting of term loans, credit cards and lines of credit.

Under the standardized approach, in general, residential real estate secured lending products are risk-weighted 35% and other retail products receive a 75% risk-weight.

Market risk

Market risk is the risk of loss from changes in market prices including interest rates, credit spreads, equity prices, foreign exchange rates, and commodity prices, the correlations between them, and their levels of volatility.

For all material trading portfolios, the Bank applies its internal models to calculate the market risk capital charge. OSFI has approved the Bank's internal VaR, Stressed VaR, Incremental Risk Charge and Comprehensive Risk Measure models for the determination of market risk capital. The attributes and parameters of these models are described in the Risk Measurement Summary.

During the year, OSFI introduced changes to regulations to keep the financial system resilient and well capitalized in response to COVID-19. Included within these changes, OSFI reduced the Bank's Stressed Value-at-Risk (VaR) multipliers used in the calculation of market risk capital by a factor of 2 and also allowed the removal of Funding Valuation Adjustment (FVA) hedges in the calculation of market risk capital. Both changes were made effective from the commencement of the second quarter of 2020.

In addition, for some non-material trading portfolios, the Bank applies the Standardized Approach for calculating market risk capital. The standardized method uses a "building block" approach, with the capital charge for each risk category calculated separately.

Below are the market risk requirements as at October 31, 2020 and 2019:

T37 Total market risk capital (1)

($ millions)	2020	2019
All-Bank VaR	**$ 157**	$ 128
All-Bank stressed VaR(2)	**119**	430
Incremental risk charge(3)	**227**	87
Comprehensive risk measure	**–**	–
Standardized approach	**83**	49
Total market risk capital	**$ 586**	$ 694

(1) Equates to $7,327 million of market risk-weighted assets (2019 – $8,674 million).
(2) OSFI implemented the reduction in the stressed VaR multiplier (by a factor of 2) effective since the second quarter of 2020.
(3) Increase from prior year primarily due to higher fixed income exposures and increased ratings volatility.

T38 Risk-weighted assets movement by key drivers

	Market risk	
($ millions)	2020	2019
RWA as at beginning of the year	**$ 8,674**	$ 8,357
Movement in risk levels (1)	**8,695**	145
Model updates(2)	**(242)**	172
Methodology and policy(3)	**(9,800)**	–
Acquisitions and divestitures	**–**	–
RWA as at end of the year	**$ 7,327**	$ 8,674

(1) Movement in risk levels are defined as changes in risk due to position changes and market movements. Foreign exchange movements are embedded within Movement in risk levels.
(2) Model updates are defined as updates to the model to reflect recent experience, change in model scope.
(3) Methodology and policy is defined as methodology changes to the calculations driven by regulatory policy changes (e.g. Basel III).

Market risk-weighted assets decreased by $1.3 billion to $7.3 billion, as shown in the table above, due primarily to methodology and policy changes from OSFI's reduction of the stressed VaR multiplier and model updates that were partly offset by movements in risk levels.

Operational risk

Operational risk is the risk of loss, whether direct or indirect, to which the Bank is exposed due to external events, human error, or the inadequacy or failure of processes, procedures, systems or controls.

In January 2020, OSFI revised its capital requirements for operational risk in consideration of the finalized Basel III revisions, requiring that institutions previously approved for the Basel II Advanced Measurement Approach (AMA) for operational risk capital are to report operational risk capital using the existing Basel II Standardized Approach for fiscal years 2020, 2021 and 2022. Consistent with OSFI's requirements, the Bank applies the Standardized Approach for calculating operational risk capital as per the applicable Basel standards.

Under the Standardized Approach, total capital is determined as the sum of capital for each of eight Basel defined business activities. The capital for each activity is the product of the relevant risk factor, as defined by Basel, applied to the gross income of each respective business activity.

Operational risk-weighted assets increased by $0.7 billion during the year to $47.8 billion primarily due to the growth in calculated gross income, partly offset by the impact from the Bank's divestitures which closed during the year.

Internal capital

The Bank utilizes economic capital methodologies and measures to calculate internal capital. Internal capital is a measure of the unexpected losses inherent in the Bank's business activities. The calculation of internal capital relies on models that are subject to independent vetting and validation as required by the Bank's Model Risk Management Policy.

Management assesses its risk profile to determine those risks for which the Bank should attribute internal capital. The major risk categories included in internal capital are:

- Credit risk measurement is based on the Bank's internal credit risk ratings for derivatives, corporate and commercial loans, and credit scoring for retail loans. It is also based on the Bank's actual experience with recoveries and takes into account differences in term to maturity, probabilities of default, expected severity of loss in the event of default, and the diversification benefits of certain portfolios.
- Market risk for internal capital incorporates models consistent with the regulatory basis, with some exclusions, and calibrated to a higher 99.95% confidence interval, and models of other market risks, mainly structural interest rate and foreign exchange risks.
- Operational risk for internal capital is calculated based on an approach consistent with the Bank's regulatory capital requirements including a conservative forward-looking view of gross income.
- Other risks include additional risks for which internal capital is attributed, such as business risk, significant investments, insurance risk and real estate risk.

In addition, the Bank's measure of internal capital includes a diversification benefit which recognizes that all of the above risks will not occur simultaneously. The Bank also includes the full amount of goodwill and intangible assets in the internal capital amount.

For further discussion on risk management and details on credit, market and operational risks, refer to the Risk Management section.

Off-Balance Sheet Arrangements

In the normal course of business, the Bank enters into contractual arrangements that are either consolidated or not required to be consolidated in its financial statements, but could have a current or future impact on the Bank's financial performance or financial condition. These arrangements can be classified into the following categories: structured entities, securitizations, guarantees and other commitments.

Structured entities

Structured entities are designed to accomplish certain well-defined objectives and for which voting or similar rights are not the dominant factor in deciding who controls the entity. The Bank may become involved with structured entities either at the formation stage or at a later date. The Bank controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The Bank's arrangements with structured entities include:

- Structured entities that are used to provide a wide range of services to customers, such as structured entities established to allow clients to securitize their financial assets while facilitating cost-efficient financing, and to provide certain investment opportunities.
- Structured entities that the Bank sponsors and actively manages (see discussion on other unconsolidated structured entities and securitizations on page 74).

All structured entities are subject to a rigorous review and approval process to ensure that all significant risks are properly identified and addressed. The Bank consolidates all structured entities that it controls. For many of the structured entities that are used to provide services to customers, the Bank does not guarantee the performance of the structured entities' underlying assets and does not absorb any related losses. For other structured entities, such as securitization and investment vehicles, the Bank may be exposed to credit, market, liquidity or operational risks. Noteholders of securitizations may also be exposed to these risks. The Bank may earn fees based on the nature of its association with a structured entity.

Consolidated structured entities

The Bank controls its U.S. based multi-seller conduit and certain funding and other vehicles, and consolidates these structured entities in the Bank's consolidated financial statements.

As at October 31, 2020, total assets of consolidated structured entities were $84 billion, compared to $55 billion at the end of 2019. The increase in total assets was primarily due to increased mortgages sold into the Scotiabank Covered Bond Guarantor Limited Partnership in connection with the increased issuance of covered bonds including those used to participate in the Bank of Canada term repo program (see discussion on fiscal and monetary stimulus on page 25). More details of the Bank's consolidated structured entities are provided in Note 15(a) to the consolidated financial statements.

Unconsolidated structured entities

There are two primary types of association the Bank has with unconsolidated structured entities:

- Canadian multi-seller conduits administered by the Bank, and
- Structured finance entities.

The Bank earned total fees of $30 million in 2020 (October 31, 2019 – $24 million) from certain structured entities in which it had a significant interest at the end of the year but did not consolidate. More information with respect to the Bank's involvement with these unconsolidated structured entities, including details of liquidity facilities and maximum loss exposure by category is provided below and in Note 15(b) to the consolidated financial statements.

Canadian multi-seller conduits administered by the Bank

The Bank sponsors two Canadian-based multi-seller conduits that are not consolidated. During the year the Bank continued to assess its control conclusion for these conduits and there were no changes to the Bank's assessment. The Bank earned commercial paper issuance fees, program management fees, liquidity fees and other fees from these multi-seller conduits, which totaled $28 million in 2020, compared to $22 million in 2019. These multi-seller conduits purchase high-quality financial assets and finance these assets through the issuance of highly-rated commercial paper.

As further described below, the Bank's exposure to these off-balance sheet conduits primarily consists of liquidity support and temporary holdings of commercial paper. Although the Bank has power over the relevant activities of the conduits, it has limited exposure to variability in returns, which results in the Bank not consolidating the two Canadian conduits. The Bank has a process to monitor these exposures and significant events impacting the conduits to ensure there is no change in control, which could require the Bank to consolidate the assets and liabilities of the conduits at fair value.

A significant portion of the conduits' assets have been structured to receive credit enhancements from the sellers, including overcollateralization protection and cash reserve accounts. Each asset purchased by the conduits is supported by a backstop liquidity facility provided by the Bank in the form of a liquidity asset purchase agreement (LAPA). The primary purpose of the backstop liquidity facility is to provide an alternative source of financing in the event the conduits are unable to access the commercial paper market. Under the terms of the LAPA, in most cases, the Bank is not obliged to purchase defaulted assets.

The Bank's primary exposure to the Canadian-based conduits is the liquidity support provided, with total liquidity facilities of $4.2 billion as at October 31, 2020 (October 31, 2019 – $3.8 billion). The year-over-year increase was due to normal business operations. As at October 31, 2020, total commercial paper outstanding for the Canadian-based conduits was $3.1 billion (October 31, 2019 – $2.6 billion) and the Bank held 0.1% of the total commercial paper issued by these conduits. Table T39 presents a summary of assets purchased and held by the Bank's two Canadian multi-seller conduits as at October 31, 2020 and 2019, by underlying exposure.

All of the funded assets have at least an equivalent rating of AA or higher based on the Bank's internal rating program. Assets held in these conduits were investment grade as at October 31, 2020. Approximately 68% of the funded assets have final maturities falling within four years, and the weighted-average repayment period, based on cash flows, approximates 2.2 years.

T39 Assets held by Bank-sponsored Canadian-based multi-seller conduits

	2020			2019		
As at October 31 ($ millions)	**Funded assets(1)**	**Unfunded commitments**	**Total exposure(2)**	Funded assets(1)	Unfunded commitments	Total exposure(2)
Auto loans/leases	**$ 1,940**	**$ 444**	**$ 2,384**	$ 1,833	$ 652	$ 2,485
Trade receivables	**186**	**596**	**782**	259	522	781
Canadian residential mortgages	**434**	**76**	**510**	484	26	510
Equipment rental contracts	**537**	**34**	**571**	–	–	–
Total(3)	**$ 3,097**	**$ 1,150**	**$ 4,247**	$ 2,576	$ 1,200	$ 3,776

(1) Funded assets are reflected at original cost, which approximates estimated fair value.
(2) Exposure to the Bank is through global-style liquidity facilities.
(3) These assets are substantially sourced from Canada.

Structured finance entities
The Bank has interests in structured finance entities used to assist corporate clients in accessing cost-efficient financing through their securitization structures. The Bank's maximum exposure to loss from structured finance entities was $2,014 million as at October 31, 2020 (October 31, 2019 – $2,194 million). The year-over-year decrease was due to normal business operations.

Other unconsolidated structured entities
The Bank sponsors unconsolidated structured entities including mutual funds, in which it has insignificant or no interest at the reporting date. The Bank is a sponsor when it is significantly involved in the design and formation at inception of the structured entity, and the Bank's name is used by the structured entity to create an awareness of the instruments being backed by the Bank's reputation and obligation. The Bank also considers other factors, such as its continuing involvement and obligations to determine if, in substance, the Bank is a sponsor. For the year ended October 31, 2020, the Bank earned $2,165 million income from its involvement with the unconsolidated Bank-sponsored structured entities, all of which is from Bank-sponsored mutual funds (for the year ended October 31, 2019 – $2,190 million).

Securitizations
The Bank securitizes its retail loans, as described further below, as an efficient source of financing its operations.

The Bank securitizes fully insured residential mortgage loans, originated by the Bank and third parties, through the creation of mortgage-backed securities that are sold to Canada Housing Trust (CHT), Canada Mortgage and Housing Corporation (CMHC) or third party investors. The sale of such mortgages does not meet the derecognition requirements, where the Bank retains substantially all of the risks and rewards of ownership of the securitized mortgages. The transferred mortgages continue to be recognized on the Consolidated Statement of Financial Position, along with the proceeds from sale treated as secured borrowings. More details have been provided in Note 14 of the consolidated financial statements.

Third-party originated mortgages purchased by the Bank and social housing mortgage pools originated by the Bank qualify for derecognition where the Bank transfers substantially all of the risks and rewards of ownership to third parties. As at October 31, 2020, the outstanding amount of off-balance sheet securitized third-party originated mortgages was $6,741 million (October 31, 2019 – $2,734 million) and off-balance sheet securitized social housing pools was $870 million (October 31, 2019 – $945 million).

The Bank securitizes a portion of its Canadian personal and small business credit card receivables (receivables) through Trillium Credit Card Trust II (Trillium), a Bank-sponsored structured entity. Trillium issues senior and subordinated notes to investors and previously also issued subordinated notes to the Bank. The proceeds of such issuances are used to purchase co-ownership interests in the receivables originated by the Bank. The sale of such co-ownership interests does not qualify for derecognition and therefore the receivables continue to be recognized on the Bank's Consolidated Statement of Financial Position. Recourse of the noteholders is limited to the purchased co-ownership interests. During the year, $638 million of receivables were securitized through Trillium (2019 – $1,792 million). As at October 31, 2020, the outstanding Bank-held subordinated notes issued by Trillium were nil (2019 – $134 million, eliminated on consolidation).

The Bank previously securitized a portion of its Canadian unsecured personal lines of credit (receivables) through Halifax Receivables Trust (Halifax), a Bank-sponsored structured entity. Halifax issued Class A notes to third-party investors and subordinated notes to the Bank, proceeds of which were used to purchase co-ownership interests in the receivables originated by the Bank. The sale of such co-ownership interests did not qualify for derecognition and therefore the receivables were recognized on the Bank's Consolidated Statement of Financial Position. Recourse of the noteholders was limited to the purchased co-ownership interests. The Bank's outstanding receivables securitized under this program matured in February 2020. As such, as at October 31, 2020, the outstanding Bank-held subordinated notes issued by Halifax were nil (2019 – $102 million, eliminated on consolidation).

The Bank securitizes a portion of its Canadian auto loan receivables (receivables) through Securitized Term Auto Receivables Trust 2017-2, 2018-1, 2018-2, 2019-1 and 2019-CRT (START) Bank-sponsored structured entities. The START entities issue senior and subordinated notes to the Bank and/or third-party investors, and the proceeds of such issuances are used to purchase discrete pools of retail indirect auto loan receivables from the Bank on a fully serviced basis. The sale of such pools does not qualify for derecognition and therefore the receivables continue to be recognized on the Bank's Consolidated Statement of Financial Position. Recourse of the note holders is limited to the receivables. During the year, assets of $1,392 million were securitized through the START program (2019 – $896 million). As at October 31, 2020, the outstanding senior and subordinated notes issued by the START entities and are held by the Bank of $1,017 million (2019 – $325 million) are eliminated on consolidation.

Guarantees and other commitments
Guarantees and other commitments are fee-based products that the Bank provides to its customers. These products can be categorized as follows:

- Standby letters of credit and letters of guarantee. As at October 31, 2020, these amounted to $35 billion, compared to $36 billion last year. These instruments are issued at the request of a Bank customer to secure the customer's payment or performance obligations to a third party.
- Liquidity facilities. These generally provide an alternate source of funding to asset-backed commercial paper conduits in the event a general market disruption prevents the conduits from issuing commercial paper or, in some cases, when certain specified conditions or performance measures are not met;
- Indemnification contracts. In the ordinary course of business, the Bank enters into many contracts where it may indemnify contract counterparties for certain aspects of its operations that are dependent on other parties' performance, or if certain events occur. The Bank cannot estimate, in all cases, the maximum potential future amount that may be payable, nor the amount of collateral or assets available under recourse provisions that would mitigate any such payments. Historically, the Bank has not made any significant payments under these indemnities;
- Loan commitments. The Bank has commitments to extend credit, subject to specific conditions, which represent undertakings to make credit available in the form of loans or other financings for specific amounts and maturities. As at October 31, 2020, these commitments amounted to $235 billion, compared to $212 billion last year. The year-over-year increase is primarily due to an increase in business activity.

These guarantees and loan commitments may expose the Bank to credit or liquidity risks, and are subject to the Bank's standard review and approval processes. For the guaranteed products, the dollar amounts represent the maximum risk of loss in the event of a total default by the guaranteed parties, and are stated before any reduction for recoveries under recourse provisions, insurance policies or collateral held or pledged.

Fees from the Bank's guarantees and loan commitment arrangements, recorded as credit fees in non-interest income in the Consolidated Statement of Income, were $622 million in 2020, compared to $588 million in the prior year. Detailed information on guarantees and loan commitments is disclosed in Note 35 in the consolidated financial statements.

Canadian Government Economic Response Plans

The Bank participated in the following plans as part of the Government of Canada's COVID-19 Economic Response Plan.

Canada Emergency Business Account (CEBA)

Through the CEBA program, the Bank facilitated loans with eligible small business customers and Export Development Canada (EDC).

Eligible small business customers received a loan of up to $40,000. The CEBA loans are derecognized from the Bank's Consolidated Statement of Financial Position as the program meets the pass-through criteria for derecognition of financial assets under IFRS 9. As at October 31, 2020, loans issued under the CEBA were approximately $3 billion.

Business Credit Availability Program (BCAP)

The BCAP provides additional liquidity support to small business and commercial customers through EDC and Business Development Bank of Canada (BDC).

Under the EDC plan, EDC guarantees an 80% portion of new operating loans made to the export sector as well as domestic companies. Loans guaranteed by EDC continue to be recognized on the Consolidated Statement of Financial Position.

Under the BCAP, BDC entered into a co-lending facility with the Bank in which BDC purchases an 80% participation in term loans made to eligible small business and commercial customers. The portion of loans sold to BDC are derecognized from the Bank's Consolidated Statement of Financial Position as the program meets the derecognition criteria for a transfer under IFRS 9.

Under the BCAP Mid-Market Financing Program, BDC will enter into loan syndications with the Bank and underwrite 90% of junior term loans made to eligible medium-sized businesses. The portion of the syndicated loans funded by the Bank will be recognized on the Consolidated Statement of Financial Position.

Financial Instruments

Given the nature of the Bank's main business activities, financial instruments make up a substantial portion of the Bank's financial position and are integral to the Bank's business. Assets that are financial instruments include cash resources, securities, securities purchased under resale agreements, loans and customers' liability under acceptances. Financial instrument liabilities include deposits, acceptances, obligations related to securities sold under repurchase agreements, obligations related to securities sold short, subordinated debentures and capital instrument liabilities. In addition, the Bank uses derivative financial instruments for both trading and hedging purposes.

Financial instruments are generally carried at fair value, except for non-trading loans and receivables, certain securities and most financial liabilities, which are carried at amortized cost unless designated as fair value through profit and loss at inception.

Unrealized gains and losses on the following items are recorded in other comprehensive income (OCI):

- debt instruments measured at fair value through OCI,
- equity instruments measured at fair value through OCI,
- derivatives designated as cash flow hedges, and
- net investment hedges.

Gains and losses on derecognition of debt instruments at FVOCI and impairment provisions are reclassified from OCI to the Consolidated Statement of Income under non-interest income. Gains and losses on derecognition of equity instruments designated at FVOCI are not reclassified from OCI to the consolidated statement of income. Gains and losses on cash flow hedges and net investment hedges are recorded in the Consolidated Statement of Income when the hedged item affects income.

The Bank's accounting policies for derivatives and hedging activities are further described in Note 3 to the consolidated financial statements.

Interest income and expense on non-trading interest-bearing financial instruments are recorded in the Consolidated Statement of Income as part of net interest income. Credit losses related to loans are recorded in the provision for credit losses in the Consolidated Statement of Income. Interest income and expense, as well as gains and losses, on trading securities and trading loans are recorded in non-interest income – trading revenues.

Several risks arise from transacting financial instruments, including credit risk, liquidity risk, operational risk and market risk. The Bank manages these risks using extensive risk management policies and practices, including various Board-approved risk management limits.

A discussion of the Bank's risk management policies and practices can be found in the Risk Management section on pages 78 to 119. In addition, Note 36 to the consolidated financial statements presents the Bank's exposure to credit risk, liquidity risk and market risks arising from financial instruments as well as the Bank's corresponding risk management policies and procedures.

There are various measures that reflect the level of risk associated with the Bank's portfolio of financial instruments. For example, the interest rate risk arising from the Bank's financial instruments can be estimated by calculating the impact of a 100 basis point increase or decrease in interest rates on annual income, and the economic value of shareholders' equity, as described on page 104. For trading activities, Table T51 discloses the average one-day Value at Risk by risk factor. For derivatives, based on the maturity profile of the notional amount of the Bank's derivative financial instruments, only 17% (2019 – 18%) had a term to maturity greater than five years.

Note 10 to the consolidated financial statements provides details about derivatives used in trading and hedging activities, including notional amounts, remaining term to maturity, credit risk and fair values.

The fair value of the Bank's financial instruments is provided in Note 7 to the consolidated financial statements along with a description of how these amounts were determined.

The fair value of the Bank's financial instruments was favourable when compared to their carrying value by $3.5 billion as at October 31, 2020 (October 31, 2019 – favourable $5 billion). This difference relates mainly to loan assets, deposit liabilities, subordinated debentures and other liabilities. These changes are primarily driven by movements in interest rates and by volume changes. Fair value estimates are based on market conditions as at October 31, 2020, and may not be reflective of future fair values. Further information on how fair values are estimated is contained in the section on critical accounting estimates.

Disclosures specific to certain financial instruments designated at fair value through profit and loss can be found in Note 9 to the consolidated financial statements. These designations were made primarily to significantly reduce accounting mismatches.

Selected Credit Instruments – Publicly Known Risk Items

Mortgage-backed securities

Total mortgage-backed securities held in the Non-trading and Trading portfolios are shown in Table T40.

T40 Mortgage-backed securities

As at October 31 Carrying value ($ millions)	2020 Non-trading portfolio(1)	2020 Trading portfolio	2019 Non-trading portfolio	2019 Trading portfolio
Canadian NHA mortgage-backed securities(2)	$ 6,459	$ 2,224	$ 3,502	$ 2,081
Canadian residential mortgage-backed securities	–	5	–	–
Commercial mortgage-backed securities	–	8	–	11
U.S. Agency mortgage-backed securities(3)	8,539	–	9,452	–
Total	$ 14,998	$ 2,237	$ 12,954	$ 2,092

(1) The balances are comprised of securities under the amortized cost and FVOCI measurement categories.
(2) Canada Mortgage and Housing Corporation is a corporation of the Government of Canada that provides a guarantee of timely payment to NHA mortgage-backed security investors.
(3) The Government National Mortgage Association (Ginnie Mae) is a U.S. Government corporation that provides a guarantee of timely payment to U.S. Agency mortgage-backed security investors.

Other

As at October 31, 2020, the Bank has insignificant exposure to highly leveraged loans awaiting syndication, auction-rate securities,Alt-A type loans, monoline insurance and investments in structured investment vehicles.

Risk Management

Effective risk management is fundamental to the success and resilience of the Bank and is recognized as key in the Bank's overall approach to strategy management. Scotiabank has a strong, disciplined risk culture where managing risk is a responsibility shared by all of the Bank's employees.

Risk Management Framework

The primary goals of risk management are to ensure that the outcomes of risk-taking activities are consistent with the Bank's strategies and risk appetite, and that there is an appropriate balance between risk and reward in order to maximize shareholder value. Scotiabank's Enterprise-Wide Risk Management Framework articulates the foundation for achieving these goals.

This Framework is subject to constant evaluation in order for it to meet the challenges and requirements of the global markets in which the Bank operates, including regulatory standards and industry best practices. The risk management programs of the Bank's subsidiaries align in all material respects to the Bank's risk management framework, although the actual execution of their programs may be different.



The Bank's risk management framework is applied on an enterprise-wide basis and consists of five key elements:

- Risk Governance
- Risk Appetite
- Risk Management Tools
- Risk Identification and Assessment
- Risk Culture

Risk Management Principles

Risk-taking and risk management activities across the enterprise are guided by the following principles:

Balancing Risk and Reward – business and risk decisions are consistent with strategies and risk appetite.

Understand the Risks – all material risks to which the Bank is exposed, including both financial and non-financial, are identified and managed.

Forward Thinking – emerging risks and potential vulnerabilities are proactively identified.

Shared Accountability – every employee is responsible for managing risk.

Customer Focus – understanding our customers and their needs is essential to all business and risk decision-making.

Protect our Brand – all risk-taking activities must be in line with the Bank's risk appetite, Scotiabank Code of Conduct, values and policy principles.

Controls – maintaining a robust and resilient control environment to protect our stakeholders.

Resilience – being prepared operationally and financially to respond to adverse events.

Compensation – performance and compensation structures reinforce the Bank's values and promote sound risk taking behaviour.

Risk Governance

Effective risk management begins with effective risk governance.

The Bank has a well-established risk governance structure, with an active and engaged Board of Directors supported by an experienced executive management team. Decision-making is highly centralized through a number of executive and senior risk management committees.

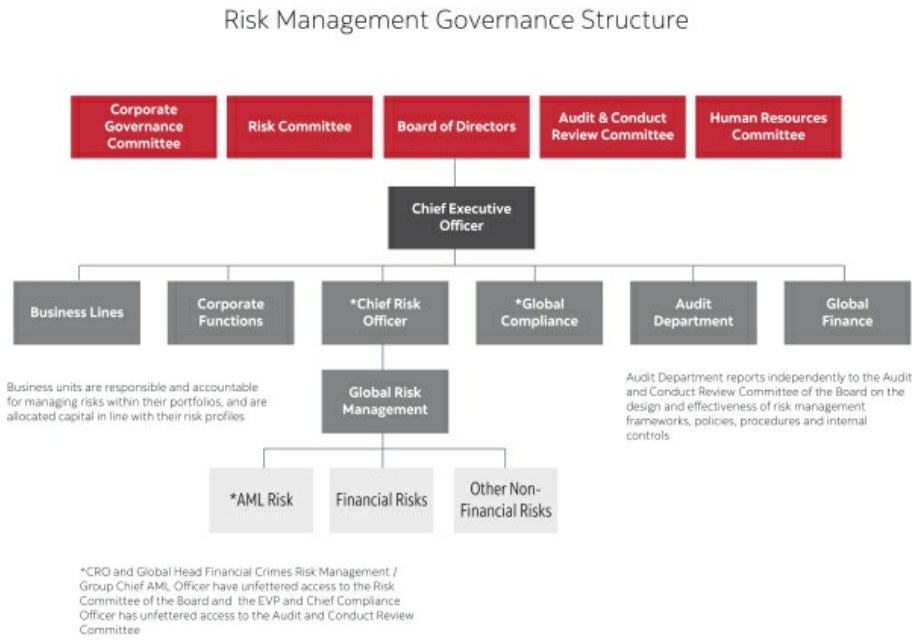
The Bank's risk management framework is predicated on the three lines of defence model. Within this model

- The First Line of Defence (typically comprised of the business lines and most corporate functions)
  - Incurs and owns the risks
  - Designs and executes internal controls
  - Ensures that the risks generated are identified, assessed, managed and monitored, are within risk appetite, and are in compliance with relevant policies, guidelines and limits
- The Second Line of Defence (typically comprised of control functions such as Global Risk Management and Global Finance)
  - Provides independent assessment, oversight and objective challenge to the First Line of Defence, as well as monitoring and control of risk
  - Establishes risk appetite, risk limits, policies and frameworks, in accordance with best practice and regulatory requirements
  - Measures, monitors and reports on risks taken in relation to limits and risk appetite, and on emerging risks
- The Third Line of Defence (Audit Department) provides enterprise-wide independent, objective assurance over the design and operation of the Bank's internal control, risk management and governance processes.

All employees are, for some of their activities, risk owners, as all employees are capable of generating reputational and operational risks in their day to day activities and must be held accountable for owning and managing these risks.

Governance Structure

The Bank's Board of Directors and its Committees provide oversight and governance over the Bank's Risk Management program which is supported by the President and Chief Executive Officer and Group Head & Chief Risk Officer.



The Board of Directors: as the top of the Bank's risk management governance structure, provides oversight, either directly or through its committees, to satisfy itself that decision making is aligned with the Bank's strategies and risk appetite. The Board receives regular updates on the key risks of the Bank – including a quarterly comprehensive summary of the Bank's risk profile and performance of the portfolio against defined limits – and approves key risk frameworks, policies, and limits.

The Risk Committee of the Board: assists the Board in fulfilling its responsibilities for the review of the Bank's risk appetite and identifying and monitoring key financial and non-financial risks and the oversight of the promotion and maintenance of a strong risk-aware culture throughout the Bank. The Committee assists the Board by providing oversight of the risk management and anti-money laundering / anti-terrorist finance functions at the Bank. This includes periodically reviewing and approving the Bank's key risk management frameworks, policies, and limits and satisfying itself that management is operating within the Bank's Enterprise Risk Appetite Framework. The Committee also oversees the independence of each of these control functions, including the effectiveness of the heads of these functions, as well as the functions themselves.

Audit and Conduct Review Committee of the Board: assists the Board by providing oversight on the effectiveness of the Bank's system of internal controls. The Committee oversees the integrity of the Bank's consolidated financial statements and related quarterly results. This includes oversight of climate-change related disclosure as part of the Bank's financial reporting as well as the external auditor's qualifications, independence and performance. This Committee assists the Board in fulfilling its oversight responsibilities for setting standards of conduct and ethical behaviour, and the oversight of conduct review and conduct risk management. The Committee also oversees the Bank's compliance with legal and regulatory requirements, and oversees the Global Finance, Global Compliance and Audit Department functions at the Bank. The Committee also oversees the independence of each of these control functions, including the effectiveness of the heads of these functions, as well as the functions themselves.

Human Resources Committee of the Board: in conjunction with the Risk Committee of the Board, satisfies itself that adequate procedures are in place to identify, assess and manage the risks (including conduct risk) associated with the Bank's material compensation programs and that such procedures are consistent with the Bank's risk management programs. The Committee has further responsibilities relating to leadership, succession planning and total rewards.

Corporate Governance Committee of the Board: acts in an advisory capacity to the Board to enhance the Bank's corporate governance through a continuing assessment of the Bank's approach to corporate governance and makes policy recommendations.

President and Chief Executive Officer (CEO): reports directly to the Board and is responsible for defining, communicating and implementing the strategic direction, goals and core values for Scotiabank that maximize long term shareholder value and returns, and meeting the needs of the Bank's other key stakeholders. The CEO oversees the establishment of the Bank's risk appetite, in collaboration with the CRO and CFO, which is consistent with the Bank's short and long term strategy, business and capital plans, as well as compensation programs.

Group Head and Chief Risk Officer (CRO): reports jointly to the CEO and the Risk Committee of the Board and is responsible for the overall management of Global Risk Management which includes AML Risk. The CRO and the Group Chief AML Officer each have unfettered access to the Risk Committees of the Board to ensure their independence. As a senior member of the Bank's executive management team, the CRO participates in strategic decisions related to where and how the Bank will deploy its various sources of capital to meet the performance targets of the business lines.

Global Risk Management (GRM): supports the Bank's objectives and is mandated to maintain an ongoing and effective enterprise-wide risk management framework that resonates through all levels of the Bank. GRM is responsible for providing effective challenge and reasonable assurance to executive management, the Board of Directors and shareholders that risks are actively identified, managed and communicated to all key stakeholders. GRM's mission is to ensure that the outcomes of risk-taking activities are consistent with the Bank's strategies and risk appetite, and that there is an appropriate balance between risk and reward in order to maximize shareholder value.

AML Risk: on an enterprise-wide basis, develops policies, standards and controls to be followed in effectively managing money laundering, terrorist financing, and sanctions risks. AML Risk is responsible for maintaining the program current with Scotiabank needs, industry practice, and AML/ATF and sanctions legal and regulatory requirements, as well as providing risk-based independent oversight of Scotiabank's compliance with these standards and requirements.

Global Compliance: on an enterprise-wide basis, manages compliance risk which includes regulatory compliance, conduct, and privacy risks throughout Scotiabank. A primary objective of Global Compliance is to take a holistic view of compliance risk to ensure consistency in the application of the Compliance Program, and assurance of outputs from its compliance risk management processes. The head of Global Compliance has unfettered access to the Audit and Conduct Review Committee of the Board to ensure their independence. Global Compliance provides independent oversight of Compliance Risk through the Compliance Program by:

- developing and maintaining compliance frameworks, policies, standards, and procedures;
- effectively challenging compliance risk management in the Bank's Business Lines and Corporate Functions;
- acting as a consultant and educator on regulatory compliance, internal policies and procedures; and
- being responsible for conducting ongoing risk-based enterprise-wide assessment, governance, monitoring, testing, issues management, regulatory relationship management, regulatory change management, and reporting.

Global Finance: leads enterprise-wide financial strategies which support the Bank's ability to maximize sustainable shareholder value, and actively manages the reliable and timely reporting of financial information to management, the Board of Directors and shareholders, regulators, as well as other stakeholders. This reporting includes the Bank's consolidated financial statements and related quarterly and annual results, as well as all financial reporting related regulatory filings. Global Finance executes the Bank's financial and capital management strategies with appropriate governance and control, while ensuring its processes are efficient and effective.

Business Lines and Corporate Functions: as the first line of defence in the Three Lines of Defence model, own the risks generated by their activities, are accountable for effective management of the risks within their business lines and functions through identifying, assessing, mitigating, monitoring and reporting the risks. Business lines and corporate functions actively design and implement effective internal controls as well as governance activities to manage risk and maintain activities within risk appetite and policies. Further, business lines have processes to be able to effectively identify, assess, monitor and report against allocated risk appetite limits and are in compliance with relevant policies, standards and guidelines.

Audit Department: reports independently to the Audit and Conduct Review Committee of the Board on the design and operating effectiveness of the Bank's risk management processes. The mission of the Audit Department is to provide enterprise-wide independent, objective assurance over the design and operating effectiveness of the Bank's internal controls, risk management and governance processes and to provide consulting services designed to improve the Bank's operations.

Risk Appetite

Effective risk management requires clear articulation of the Bank's risk appetite and how the Bank's risk profile will be managed in relation to that appetite.

The Bank's Enterprise Risk Appetite Framework (RAF) governs the risk activities undertaken by the Bank on an enterprise-wide basis. It articulates the amount and types of risk the Bank is willing to take to achieve its strategic and financial objectives. A clearly articulated and effectively embedded risk appetite supports a strong risk culture and helps to ensure that the Bank stays within the established risk boundaries, while finding an optimal balance between risk and return. The main elements of the Enterprise RAF include the identification of risk capacity, a risk appetite statement, risk appetite metrics, and articulation of the roles and responsibilities of those overseeing the implementation and monitoring of the Enterprise RAF.

Scotiabank's risk appetite is integrated into the strategic and capital planning process and compensation programs. Roles and responsibilities for development and implementation of the Enterprise RAF are well defined and are embedded in executive management mandates. The RAF is reviewed annually by senior management who recommend it to the Board for approval. Business lines, control functions and key business units and subsidiaries develop their own risk appetite statements, which are aligned with the Bank's Enterprise RAF.



Risk Appetite Statement

The Bank's Risk Appetite Statement articulates the aggregate level and types of risk the Bank is willing to accept, or to avoid, in order to achieve its business objectives. It includes qualitative statements as well as quantitative measures and considers all the Bank's Principal Risks.

The Bank's Risk Appetite Statement can be summarized as follows:

- The Bank has no appetite for breaches of the Scotiabank Code of Conduct. All Bank employees are responsible for acting in accordance with the Bank's values and for understanding the limits, policies, procedures and regulations that apply to their activities.
- The Bank favours businesses that generate sustainable, consistent and predictable earnings.
- The Bank limits its risk taking activities to those that are understood and in line with Bank's risk appetite, risk culture, values and strategic objectives.
- The Bank strives to maintain a robust and resilient control environment to protect its stakeholders and be prepared operationally and financially to respond to adverse events.
- The Bank has no appetite for reputational, legal, or regulatory risk, that would undermine the trust of our stakeholders.
- The Bank aims to maintain a strong capital and liquidity position and optimally allocate capital to support its strategic and financial objectives.

Risk Appetite Metrics

Risk appetite metrics provide clear risk limits, which are critical in implementing effective risk management. Certain risk appetite metrics are supported by management level limit structures and controls, as applicable.

Other components of Scotiabank's risk appetite metrics:

- Set risk capacity and appetite in relation to regulatory constraints
- Use stress testing to provide forward-looking metrics
- Minimize earnings volatility
- Limit exposure to operational events that can have an impact on earnings, including regulatory fines
- Ensure reputational risk is top of mind and strategy is being executed within operating parameters

Risk Management Tools

Effective risk management includes tools that are guided by the Bank's Enterprise Risk Appetite Framework and integrated with the Bank's strategies and business planning processes.

Scotiabank's risk management framework is supported by a variety of risk management tools that are used together to manage enterprise-wide risks. Risk management tools are regularly reviewed and updated to ensure consistency with risk-taking activities, and relevance to the business and financial strategies of the Bank.

Frameworks, Policies & Limits

Frameworks and Policies

The Bank develops and implements its key risk frameworks and policies in consultation with the Board. Such frameworks and policies and are also subject to the requirements and guidelines of the Office of the Superintendent of Financial Institutions (OSFI), the Bank Act, and the requirements and expectations of other regulators in the jurisdictions and activities in which we conduct business, and in consideration of industry best practices. Framework and policy development and implementation reflect best governance practices which the Bank strives to adhere to at all times. The Bank also provides advice and counsel to its subsidiaries in respect of their risk frameworks and policies to ensure alignment with the Bank, subject to the local regulatory requirements of each subsidiary.

Frameworks and policies apply to specific types of risk or to the activities that are used to measure and control risk exposure. They are based on recommendations from risk management and other control and corporate functions including the Audit Department; Business Lines; and senior and executive management. Industry best practices and regulatory requirements are also factored into the frameworks and policies, are guided by the Bank's risk appetite, and set the limits and controls within which the Bank and its subsidiaries can operate. Key risk frameworks and policies are supported by standards, procedures, guidelines and manuals.

Limits

Limits govern and control risk-taking activities within the appetite and tolerances established by the Board and executive management. Limits also establish accountability for key tasks in the risk-taking process and establish the level or conditions under which transactions may be approved or executed.

Risk Measurement

The Bank's measurement of risk is a key component of its risk management framework. The measurement methodologies may apply to a group of risks or a single risk type and are supported by an assessment of qualitative risk factors to ensure the level of risks are within the Bank's risk appetite. The Bank utilizes various risk techniques such as: models; stress testing; scenario and sensitivity analysis; and back testing using data with forward-looking projections based on plausible and worst case economic and financial market events; to support its risk measurement activities.

Models

The use of quantitative risk methodologies and models is subject to a strong governance framework and includes the application of sound and experienced judgment. The development, design, independent review and testing, and approval of models are subject to formalized policies. The Bank employs models for a number of important risk measurement and management processes including:

- regulatory and internal capital
- internal risk management
- valuation/pricing and financial reporting
- meeting initial margin requirements
- business decision-making for risk management
- stress testing

The Bank's Model Risk Management Policy (MRMP) describes the overarching principles, policies, and procedures that provide the framework for managing model risk in a sound and prudent manner. These cover all stages of the model risk management cycle, including development, independent pre-implementation review, approval and post-implementation review.

Monitoring and Reporting

The Bank continuously monitors its risk exposures to ensure business activities are operating within approved limits or guidelines, and the Bank's strategies and risk appetite. Breaches of these limits or guidelines are reported to senior management and/or the Board depending on the limit or guideline.

Risk reporting to senior management and the Board of Directors aggregates measures of risk across products and businesses, across the Bank's global footprint, and are used to ensure compliance with risk policies, appetite, limits, and guidelines. They also provide a clear statement of the amounts, types, and sensitivities of the various risks in the portfolio. Senior management and the Board use this information to understand the Bank's risk profile and the performance of the portfolios. A comprehensive summary of the Bank's risk profile and performance of the portfolio is presented quarterly to the Board of Directors.

Forward-Looking Exercises

Stress Testing

Stress testing programs at both the enterprise-wide level and individual risk level allow the Bank to estimate the potential impact on the Bank's income and capital resulting from significant changes in market conditions, credit environment, liquidity demands, or other risk factors. Enterprise-wide stress testing is also integrated with both the strategic and financial planning processes, as well as financial crisis management planning. The development, approval and on-going review of the Bank's stress testing programs are subject to policy, and the oversight of the Stress & Scenarios Committee (SSC) or other management committees as appropriate. The Stress & Scenarios Model Review Committee (SSMRC) was established as a subcommittee of the SSC to review and approve enterprise-wide stress testing models as well as review IFRS 9 models prior to submission for approval to the SSC. Where appropriate, the Board of Directors or the Risk Committee of the Board approves stress testing limits for certain risk factors, and receives reports on performance regularly. Each program is developed with input from a broad base of stakeholders, and results are integrated into management decision making processes for capital, funding, market risk limits, and credit risk appetite. The stress testing programs are designed to capture a number of stress scenarios with differing severities and time horizons.

Other Testing

Other tests are conducted, as required, at the enterprise-wide level and within specific functional areas to test the decision-making processes of the Senior Management team and key personnel, by simulating a potential stress scenario. Simulated stress scenarios may include several complexities and disruptions through which Senior Management are engaged to make certain key decisions. Generally, the objectives of the simulations can include testing (1) the executability of activation protocols, (2) operational readiness, (3) the flexibility of the executive decision-making process, and (4) the process by which actions to be taken are prioritized. The exercises may also be designed to test the applicability and relevance of available data and the timeliness of reporting for decision making under stressed/crisis conditions.

Risk Identification and Assessment

Effective risk management requires a comprehensive process to identify risks and assess their materiality. We define Risk as the potential impact of deviations from expected outcomes on the Bank's earnings, capital, liquidity, reputation and resilience caused by internal and external vulnerabilities.

Risk Assessment

Risk identification and assessment is performed on an ongoing basis through the following:

- Transactions – risks, including credit and market exposures, are assessed by the business lines and reviewed by GRM, as applicable
- Monitoring – risks are identified by constantly monitoring and reporting current trends and analysis
- New Products and Services – new products and services are assessed for potential risks through a standardized process
- Strategic Investments – investment transactions are thoroughly reviewed for risks and are approved by the Operating Committee Strategic Transactions and Investment Committee (STIC) who provides direction and guidance on effective allocation and prioritization of resources

On an annual basis, the Bank undergoes a Bank-wide risk assessment that identifies the material risks faced by the Bank for the Internal Capital Adequacy Assessment Process (ICAAP) and the determination of internal capital. This process evaluates the risks and determines the pervasiveness of the risk across multiple business lines, the significance of the risk to a specific business line, the likelihood and potential impact of the risk and whether the risk may cause unexpected losses in income and therefore would be mitigated by internal capital. The process also reviews other evolving and emerging risks and includes qualitative considerations such as strategic, economic and environmental risk factors. The identified risks are ascribed a rating of how probable and impactful they may be and are used as an important input in the ICAAP process and the determination of internal capital.

As part of this annual risk assessment process the Bank's Principal Risks for the year are identified and confirmed by Executive Management.

Principal Risk Types

The Bank's Principal Risk types are reviewed annually as part of the Assessment of Risks process to determine that they adequately reflect the Bank's risk profile. Principal Risks are defined as:

Those risks which management considers of primary importance: i) having a significant impact or influence on the Bank's primary business and revenue generating activities (Financial Risks) or ii) inherent in the Bank's business and can have significant negative strategic, business, financial and/or reputational consequences (Non-Financial Risks).

Principal Risks are assessed on an annual basis considering, amongst other things, the following factors:

- Potential impact (direct or indirect) on the Bank's financial results, operations, management and strategy
- Effect on the Bank's long term prospects and ongoing viability
- Regulatory focus and/or social concern
- Short to mid-term macroeconomic and market environment
- Financial and human resources required to manage and monitor the risk
- Establishment of key risk indicators, performance indicators or management limits to monitor and control the risk
- Peer identification and global best practices
- Regular monitoring and reporting to the Board on the risk is warranted

Once a Principal Risk has been identified, governance structures and mechanisms must be in place for that risk:

- Committee governance structures have been established to manage the risk
- Dedicated 2nd line resources are in place providing effective challenge
- Frameworks and supporting policies, procedures and guidelines have been developed and implemented to manage the risk as appropriate
- Risk appetite limits have been established supported by management limits, early warning thresholds and key risk indicators as appropriate for the risk
- Adequate and effective monitoring and reporting has been established to the Board, executive and senior management, including from subsidiaries
- Board and executive management have clear roles and responsibilities in relation to risk identification, assessment, measurement, monitoring and reporting in order to support effective governance and oversight

Principal risks are categorized into two main groups:

Financial Risks:

Credit, Liquidity, Market
These are risks that are directly associated with the Bank's primary business and revenue generating activities. The Bank understands these risks well and takes them on in order to generate sustainable, consistent and predictable earnings. Financial risks are generally quantifiable and are relatively predictable. The Bank has higher risk appetite for financial risks which are considered to be a fundamental part of doing business; but only when they are well understood, within established limits, and meet the desired risk and return profile.

Non-Financial Risks:

Compliance, Data, Environmental, Information Technology & Cyber Security, Model, Money Laundering / Terrorist Financing and Sanctions, Operational, Reputational, Strategic
These are risks that are inherent in the Bank's business and can have significant negative strategic, business, financial and/or reputational consequences if not managed properly. In comparison to financial risks, Core Risks are less predictable and more difficult to define and measure. The Bank has low risk appetite for Non-Financial Risks and mitigates these accordingly.

Risk Culture

Effective risk management requires a strong, robust, and pervasive risk management culture where every Bank employee is a risk manager and is responsible for managing risks.

The Bank's risk culture is influenced by numerous factors including the interdependent relationship amongst the Bank's risk governance structure, risk appetite, strategy, organizational culture, and risk management tools.



A strong risk culture promotes behaviours that align to the Bank's values, supports sound risk taking and enables employees to identify risk taking activities that are beyond the established risk appetite.

The Bank's Risk Culture Program is based on four indicators of a strong risk culture:

1. Tone at the Top – Leading by example including clear and consistent communication on risk behaviour expectations, the importance of Scotiabank's values, and fostering an environment where everyone has ownership and responsibility for "doing the right thing".
2. Accountability – All employees are accountable for risk management. There is an environment of open communication where employees feel safe to speak-up and raise concerns without fear of retaliation and consequences for not adhering to the desired behaviours.
3. Risk Management – Risk taking activities are consistent with the Bank's strategies and risk appetite. Risk appetite considerations are embedded in key decision making processes.
4. People Management – Performance and compensation structures encourage desired behaviours and reinforce the Bank's values and risk culture.

Other elements that influence and support the Bank's risk culture:

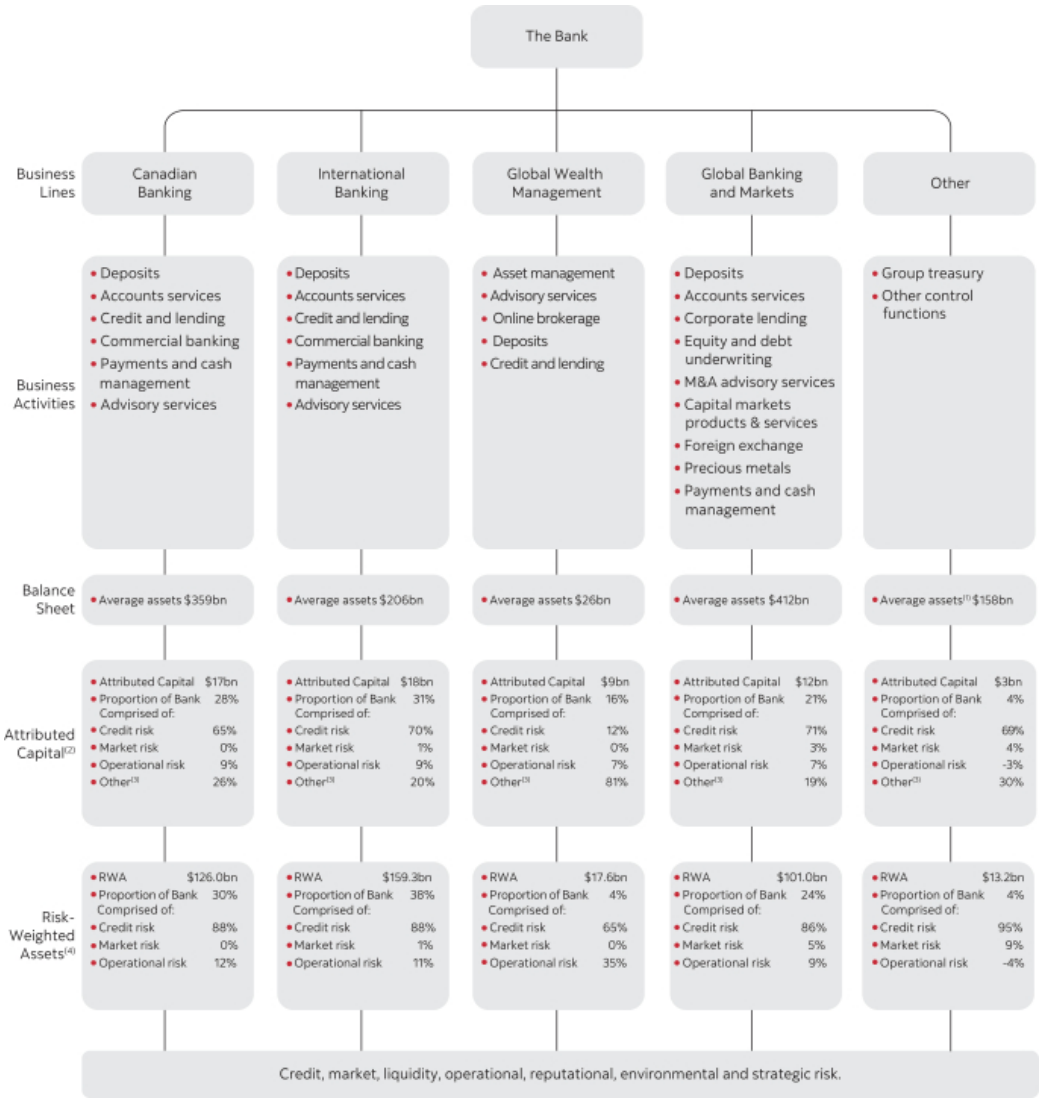
- Scotiabank Code of Conduct: describes standards of conduct to which all directors, officers, and employees must adhere and attest to on an annual basis.
- Values: Integrity – Act With Honour; Respect – Value Every Voice; Accountability – Make It Happen; Passion – Be Your Best.
- Communication: the Bank actively communicates risk appetite, and how it relates to Scotiabankers, to promote a sound risk culture.
- Compensation: programs are structured to discourage behaviours that are not aligned with the Bank's values and Scotiabank Code of Conduct, and ensure that such behaviours are not rewarded.
- Training: risk culture is continually reinforced by providing effective and informative mandatory and non-mandatory training modules for all employees on a variety of risk management topics.
- Decision-making on risk issues is highly centralized: the flow of information and transactions to senior and executive committees keeps management well informed of the risks the Bank faces and ensures that transactions and risks are aligned with the Bank's risk appetite.
- Executive Mandates: all Executives across the Bank have risk management responsibilities within their mandates.

Principal Risk Types

Risk Type	Key Governing Documentation	Ways that they support Risk Appetite
Financial Risks		
Credit Risk	• Credit Risk Summary Framework • Credit Risk Policy • Credit Risk Appetite • Residential Mortgage Underwriting Policy	Quantitative limits, such as: Credit Risk Appetite limits at the all-Bank level and Business Line level; Exposure to a single counterparty or group of related parties; Country risk; and Industry concentrations.
Market Risk	• Market and Structural Risk Summary Framework • Market and Structural Risk Management Policy	Quantitative limits, such as: Value at Risk (VaR); Stress test results; Debt investment exposures; and Structural interest rate and foreign exchange exposures.
Liquidity Risk	• Liquidity Risk Management Summary Framework • Liquidity Risk and Collateral Management Policy • Liquidity Stress Testing Framework	Quantitative limits, such as: Liquidity Coverage Ratio (LCR); Net Stable Funding Ratio (NSFR); Minimum amounts of high quality liquid assets that can be readily sold or pledged to provide contingent liquidity; Limits to control the maximum net cash outflow over a specified horizon; and minimize concentration through diversification of funding source.
Non-Financial Risks		
Money Laundering & Terrorist Financing and Sanctions Risks	• AML/ATF Policy • Sanctions Policy	The Bank has no appetite for knowingly allowing its products or services to be used to facilitate money laundering, terrorist financing, human trafficking, or any activity that is prohibited by applicable laws and regulations. The Bank has no appetite for any business activity or services to Clients that are prohibited by sanctions laws and regulations, or for the changing, manipulation, or stripping of data with an intent to avoid sanctions obligation.
Operational Risk	• Operational Risk Management Summary Framework • Operational Risk Management Policy and Framework • Internal Control Policy • New Initiative Risk Management Policy • Global Third Party Risk Management Policy • Financial Crisis Management Planning policies & framework	Operational risk appetite expresses how much residual risk the Bank is willing to tolerate and is expressed quantitatively by an aggregate loss event limit, a single event loss limit, and a variety of limits for individual categories of operational risk.
Information Technology & Cyber Security Risk	• IT & Cyber Security Risk Management Policy and Framework • Information Security Policy • Information Security Governance Framework • Cybersecurity Policy • Enterprise Portfolio Management & Project Governance Policy • Information Technology and Information Security Risk Management Summary Framework	The Bank has established minimum expectations and requirements for the systematic identification, measurement, mitigation and monitoring of IT and Cyber Security risk, including requirements for the protection of information throughout its lifecycle.

Compliance Risk	• Compliance Risk Summary Framework • Risk Culture & Conduct Risk Summary Framework • Risk Culture & Conduct Risk Management Framework • Conduct Risk Management Policy • Anti-Bribery and Anti-Corruption Policy • Global Compliance Risk Management Policy • Privacy Risk Management Framework • Scotiabank Code of Conduct	The Compliance Risk Appetite benchmark, expressed as an all-Bank residual compliance risk rating, is based on the results from the Compliance Risk and Control Assessment.
Environmental Risk	• Environmental Policy	The Bank has policies and procedures in place to ensure that it provides loans to borrowers that demonstrate an ability and willingness to practice sound environmental risk management.
Data Risk	• Data Risk Summary Framework • Data Risk Framework • Scotiabank Data Management & Governance Policy	The Framework and the Policy outline the governance, committee structure, roles and responsibilities, risk appetite, and high-level descriptions of the programs, processes, and controls for governing data risk. They set out principles creating accountability for management and governance of the Bank's data.
Model Risk	• Model Risk Management Policy	The Bank has key model risk metrics in place which along with governing policies and procedures, support the management of model risk in a sound and prudent manner.
Reputational Risk	• Reputational Risk Policy	No appetite for reputational, legal, or taxation risk arising in business activities, initiatives, products, services, transactions or processes, or from a lack of suitability of products for clients.
Strategic Risk	• Annual Strategy Report to the Board of Directors	Strategy report considers linkages between the Bank's Enterprise Risk Appetite Framework with the enterprise strategy, business line strategies and corporate function strategies.

T41 Exposure to risks arising from the activities of the Bank's businesses



(1) Average assets for the Other segment include certain non-earning assets related to the business lines.
(2) Attributed Capital is a combination of regulatory: (i) Risk-based capital and (ii) Leverage capital. Attributed Capital is reported on a quarterly average basis.
(3) Includes Attributed Capital for significant investments, goodwill, intangibles and leverage capital.
(4) Risk-weighted assets (RWA) are as at October 31, 2020 as measured for regulatory purposes in accordance with the Basel III approach.

Top and emerging risks

The Bank is exposed to a variety of top and emerging risks. These risks can potentially adversely affect the Bank's business strategies, financial performance and reputation. As part of our risk management approach, we proactively identify, assess, review, monitor and manage a broad range of top and emerging risks and undertake appropriate risk mitigation strategies.

We assess top and emerging risks in terms of impact and timeframe and use a combined bottom-up and top-down approach when considering risks. Risks are identified and discussed with Senior Management and reported quarterly to the Risk Committee and the Board of Directors. Action plans are in place to mitigate top and emerging risks and are adjusted as required on an ongoing basis.

The Bank's top and emerging risks are as follows:

Geopolitical risk and macroeconomic uncertainty

Geopolitical risks, including trade tensions, could affect volatility in foreign exchange and capital markets globally. This affects all participants in these markets. In the short run, a market shock could potentially impact the Bank's trading and non-trading market activities and revenues. Over a longer period of time, the more broadly based macroeconomic effects could potentially impact the Bank's exposures to customers and market segments impacted by those shocks. Although it is difficult to predict where new geopolitical disruption will occur or economic consequences of trade-related events, the Bank's stress testing program assists in evaluating the potential impact of severe conditions, whether caused by geopolitical or other circumstances. Management's strong understanding of the local political landscapes and macroeconomic environments in which the Bank operates, combined with the Bank's business model and diversified geographic footprint, serve as ongoing mitigants to this risk.

Money laundering, terrorist financing and sanctions compliance

Money laundering, terrorist financing and sanctions compliance continues to receive significant attention as nations attempt to deal with the harmful legal, economic, and social consequences of criminal activities. Governments, law enforcement agencies, and regulators around the world employ a variety of means, including establishing regulatory requirements on financial institutions, to curtail the ability of criminal and terrorist elements to profit from, or finance, their activities. It is widely recognized that financial institutions are uniquely positioned and possess the means to assist in the fight against money laundering, terrorist financing, and criminal activity (including anti-trafficking and exploitation) through prevention, detection, deterrence and the exchange/reporting of information.

Scotiabank is subject to the expanding and constantly evolving anti-money laundering/anti-terrorist financing and economic sanctions, laws and regulations internationally across the Bank's global footprint. Money laundering, terrorist financing, and economic sanctions violations represent material risk to the Bank including regulatory, legal, financial and reputational exposure.

The Bank is committed to sustaining secure financial systems in the countries in which it maintains a presence by taking the necessary action, using a risk tailored approach. The Bank's AML Risk program includes policies, procedures and control standards relating to client identification and due diligence, transaction monitoring, payment and name screening, investigating and reporting of suspicious activity, and evaluation of new products and services to prevent and/or detect activities that may pose risk to the Bank. The AML Risk program also facilitates an annual enterprise-wide AML/ATF and Sanctions risk assessment process and ensures that all employees, including Executive Management, and the Board of Directors undergo initial and ongoing AML/ATF and Sanctions training.

Information Technology and cyber security risk

Technology, information and cyber security risks continue to impact financial institutions and other businesses in Canada and around the globe. Under COVID-19, the threat landscape has changed. Threat actors are adapting to the changing environment and continue to increase in sophistication, severity and prevalence as adversaries use ever evolving technologies and attack methodologies. The technology environment of the Bank, its customers and the third parties providing services to the Bank, may be subject to attacks, breaches or other compromises. Incidents like these can result in disruption to operations, misappropriation or unauthorized release of confidential, financial or personal information, and reputational damage, among other things. The Bank proactively monitors and manages the risks and constantly updates and refines programs as threats emerge to minimize disruptions and keep systems and information protected. In addition, the Bank has purchased insurance coverage to help mitigate against certain potential losses associated with cyber incidents.

Technology innovation and disruption

Ongoing technology innovation continues to impact the financial services industry and its customers, and with COVID-19, the pace of digital adoption has accelerated. Global regulators continue to push for increased competition with open banking, in addition to, non-traditional new participants entering certain segments of the market and challenging the position of financial institutions. New participants are disrupting the traditional Bank operating model with the use of advanced technologies, agile delivery methodologies and analytical tools offering a highly customized user experience with lower fixed costs which has the potential to impact revenues and costs in certain areas of the Bank's businesses. In response to increased customer demands, needs and expectations, the Bank has embarked on a multi-year digital transformation with the aspiration to be a digital leader in the financial services industry. To support this strategy the Bank has opened digital factories in Toronto and its key international focus markets, in Mexico, Peru, Chile and Colombia to contribute to financial innovation, while continuing to monitor for evolving risks in new technology tools. Investments in agile, analytics and digital technology have supported the Banks' response to the pandemic, its shifting portfolio and addressing customer needs faster and with greater insight. The agile delivery methodology provides the process mechanisms to adapt to disruption events, conduct trade-off assessments and shift priorities and/or resources in a disciplined manner, which in turn supports resiliency in operating practices. Throughout the pandemic, the Bank has proven that it can be digital and provide leading customer experience.

Third party service providers

As the Bank continues to expand its ecosystem of third party service providers, the Bank is enhancing its third party risk management oversight and governance. There is an increased regulatory focus on third party services and risk governance. There is a growing dependency on the effectiveness of the control environment in place at vendors to limit the impacts of vendor availability and security incidents on the Bank's operations, intellectual property, and reputation. Additionally, third party service providers to those third parties (i.e. fourth party vendors) can also fall victim to systems, data and privacy breaches if their control environments fail to operate effectively. Any such breaches could impact the Bank, if the Bank's data is shared with such third parties in the course of their provision of services to the Bank. Enhanced monitoring is in place across the enterprise, to detect potential emerging third party liquidity issues. The Bank continues to enhance the resources, capabilities and accountabilities of third party risk management areas within the first and second line of defence areas.

Legal and compliance risk

The Bank is subject to extensive regulation in the jurisdictions in which it operates. Although the Bank continually monitors and evaluates the potential impact of regulatory developments to assess the impact on our businesses and to implement any necessary changes, regulators and private parties may challenge our compliance. Failure to comply with legal and regulatory requirements may result in fines, penalties, litigation, regulatory sanctions, enforcement actions and limitations or prohibitions from engaging in business activities, all of which may negatively impact the Bank's financial performance and its reputation. In addition, day-to-day compliance with existing laws and regulations has involved and will continue to involve significant resources, including requiring the Bank to take actions or incur greater costs than anticipated, which may negatively impact the Bank's financial performance. Such changes could also adversely impact the Bank's business strategies or limit its product or service offerings, or enhance the ability of the Bank's competitors to offer their own products and services that rival the Bank's. Regulators have also evidenced an increased focus on risks associated with conduct, privacy, model risk, and operational resilience. This focus could lead to more regulatory or other enforcement actions including for practices which may historically have been considered acceptable. Regulators across the Bank's geographic footprint continue to focus on ensuring operational resilience of regulated firms and that consumers are protected. Regulatory environment experienced a shift away from regulatory forbearance to increased regulatory reporting obligations and information requests with respect to certain subjects, such as customer assistance programs, liquidity, trade reporting and market conduct.

The Bank continues to monitor and respond to global regulatory developments relating to a broad spectrum of topics, such that control and business units are responsive on a timely basis and business impacts, if any, are minimized.

For additional information on some of the key regulatory developments that have the potential of impacting the Bank's operations, see "Regulatory Developments" on page 126.

Canadian household indebtedness

The COVID-19 pandemic has had disruptive effects in Canada including increased unemployment levels and changes to the macroeconomic environment. Volatility and unemployment levels have eased since the spike in Q2 2020 but continue to remain elevated. With the slowdown in economic activity, this has resulted in widespread job-related income losses, creating a challenging situation for many Canadian households, especially those that are highly indebted. While lower interest rates are reducing debt service costs, the recent housing price rebound, and high levels of unemployment continue to leave Canadian households vulnerable. The Bank proactively adjusts lending strategies across all markets and portfolios to reflect any change in risk profile, while considering government support programs available for temporary relief and customers enrolled in the Bank's customer relief programs. Additional steps have been taken to expand collections capabilities to enable the Bank to support customers that are experiencing prolonged or acute financial distress. The Bank also performs stress tests considering these sensitivities and continues to enhance risk management capabilities through investments in technology and analytics.

Climate change

Climate change has the potential to impact the Bank's Retail and Business Banking profitability through credit losses. Severe weather can damage Bank properties and disrupt operations. Emerging policy/regulatory actions on climate can elevate the Bank's reputational, legal and regulatory compliance risks. There are also climate change and sustainable finance opportunities to invest in. For further details on the Bank's Climate Change Strategy and actions taken, please refer to the Environmental risk section on page 116.

Model Risk

Model risk continues to receive increasing regulatory focus given growing adoption of analytics-driven insights across financial institutions. Regulatory guidelines for model risk set out expectations for the establishment of an enterprise-wide risk management framework, including policies and procedures to identify, assess and manage the risks inherent in any model. The Bank proactively monitors and manages the risks associated with the development and use of models. It has an enterprise-wide model risk management policy in place, supported by appropriate processes and procedures, that support the identification and management of material risks associated with models. The Bank also continues to enhance model risk governance practices, processes and controls to effectively monitor and mitigate risks.

Pandemic Risk

On March 11, 2020, the World Health Organization declared COVID-19 a global pandemic. Governments and regulatory bodies in affected areas have imposed a number of measures designed to contain the outbreak, including government-mandated social distancing measures, travel restrictions, quarantines, and stay at home directives. The breadth and depth of the impact of COVID-19 on the global economy and financial markets continues to evolve with disruptive effects in countries in which the Bank operates and the global economy. While some of the Government and Regulatory measures have been eased across regions and the economy has started to recover, subsequent spikes in the virus have caused some measures to be reinstated and future economic activity to be uncertain. COVID-19 continues to impact the Bank's employees, customers and communities, impacting the Bank's operations, financial results and present and future risks to the Bank's businesses. The Bank is closely monitoring the potential effects and impact of the pandemic, which is an evolving situation.

The COVID-19 pandemic has had disruptive effects in Canada and other countries in which the Bank operates and the global economy more widely, as well as causing increased volatility and disruption in financial markets, interruption to supply chains, increased unemployment levels and changes to the macroeconomic environment. Volatility and unemployment levels have eased since the spike in Q2 2020, however, continue to remain elevated. The disruptive effects of the pandemic have contributed to economic slowdowns both domestically and globally, leading to lower GDP growth, and concerns about a prolonged Canadian recession and the sustainability of Canadian household indebtedness. For most industrialized economies, including Canada, economic activity is not expected to return to the 2019 levels until early 2022.

Governments and central banks around the world, including Canada, have taken, and are continuing to take, significant measures to provide economic assistance to individual households and businesses, stabilize the markets, and support economic growth. While many of these measures have been relaxed, the resurgence in the spread of COVID-19 has caused certain restrictions to be reimposed and the Bank's participation directly or on behalf of customers and clients in these programs may face challenges, including increased risk of client disputes, negative publicity, exposure to litigation, or government and regulatory scrutiny, all of which could increase the Bank's operational, legal and compliance costs and damage to its reputation. The effectiveness of these programs will depend on the duration and scale of COVID-19 and will vary by region and industry, with varying degrees of benefit to the Bank's customers.

In addition to the impact that theCOVID-19 pandemic has on the Bank's business, it may also continue to increase financial stress on the Bank's customers. This could lead to increased pressure on our individual customers, as well as on the financial performance of the Bank's small business, commercial and corporate clients in conjunction with operational constraints due to the impacts of social distancing, including but not limited to continued closures or reduced operating hours, lost sales opportunities and/or increased operating costs. A substantial amount of the Bank's business involves making loans or otherwise committing resources to borrowers, including individuals, companies in various industries and governments. The COVID-19 pandemic's impact on such borrowers could have significant adverse effects on the Bank's financial results, businesses, financial condition or liquidity, including influencing the recognition of credit losses in our loan portfolios and increasing our allowance for credit losses, particularly if businesses remain closed or operate at reduced capacities and as more customers are expected to draw on their lines of credit or seek additional loans to help finance their businesses.

The COVID-19 pandemic has and may continue to result in disruptions to the Bank's customers and the way in which the Bank conducts business. This includes the closure of certain branches, increased staff working off premise, and changes to operations due to higher volumes of client request, as well as disruptions to key suppliers of the Bank's goods and services. Although the Bank has initiated work from home arrangements and restricted business travel of the Bank's workforce, if significant portions of the Bank's workforce, including key personnel, are unable to work effectively because of illness, government actions, or other restrictions in connection with the pandemic, the impact of the pandemic on the Bank's businesses and operations could be exacerbated.

The Bank has put in place proactive measures to manage the heightened risks caused by COVID-19, including risks relating to privacy, third party, credit, and business continuity. There are Government Relief Programs and Bank relief measures in place to protect customers against adverse economic conditions caused by the Pandemic. Refer to the impact of COVID-19 section on page 25 for further details on the relief programs in place.

Credit Risk

Credit risk is the risk of loss resulting from the failure of a borrower or counterparty to honour its financial or contractual obligations to the Bank. Credit risk arises in the Bank's direct lending operations, and in its funding, investment and trading activities where counterparties have repayment or other obligations to the Bank.

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Credit risk summary

- The Bank's overall loan book as of October 31, 2020 increased to $625 billion versus $611 billion as of October 31, 2019, with growth reflected in Personal, and Business and Government lending. Residential mortgages were $285 billion as of October 31, 2020, with 86% in Canada. The corporate loan book, which accounts for 37% of the total loan book, is composed of 55% of loans with an investment grade rating as of October 31, 2020, unchanged from October 31, 2019.
- Loans and acceptances (Retail and Non-Retail) remained diversified by region, industry and customer. Regional exposure is spread across our key markets (Canada 66%, United States 7%, Chile 8%, Mexico 5% and Other 14%). Financial Services constitutes 4.8% of overall gross exposures (before consideration of collateral) and was $30 billion, an increase of $4 billion from October 31, 2019. These exposures are predominately to highly rated counterparties and are generally collateralized.

The effective management of credit risk requires the establishment of an appropriate risk culture. Key credit risk policies and appetite statements are important elements used to create this culture.

The Board of Directors, either directly or through the Risk Committee (the Board), reviews and approves the Bank's Credit Risk Appetite limits annually and Credit Risk Policy limits biennially.

- The objectives of the Credit Risk Appetite are to ensure that:
  - target markets and product offerings are well defined at both the enterprise-wide and business line levels;
  - the risk parameters for new underwritings and for the portfolios as a whole are clearly specified; and
  - transactions, including origination, syndication, loan sales and hedging, are managed in a manner that is consistent with the Bank's risk appetite.
- The Credit Risk Policy articulates the credit risk management framework, including:
  - key credit risk management principles;
  - delegation of authority;
  - the credit risk management program;
  - counterparty credit risk management for trading and investment activities; and
  - aggregate limits, beyond which credit applications must be escalated to the Board for approval.

GRM develops the credit risk management framework and policies that detail, among other things, the credit risk rating systems and associated parameter estimates; the delegation of authority for granting credit; the calculation of the allowance for credit losses; and the authorization of write-offs.

Corporate and commercial credit exposures are segmented by country and by major industry group. Aggregate credit risk limits for each of these segments are also reviewed and approved annually by the Board. Portfolio management objectives and risk diversification are key factors in setting these limits.

Consistent with the Board-approved limits, borrower limits are set within the context of established lending criteria and guidelines for individual borrowers, particular industries, countries and certain types of lending, to ensure the Bank does not have excessive concentration in any single borrower, or related group of borrowers, particular industry sector or geographic region. Through the portfolio management process, loans may be syndicated to reduce overall exposure to a single name. For certain segments of the portfolio, credit derivative contracts are also used to mitigate the risk of loss due to borrower default. Risk is also mitigated through the selective sale of loans.

Banking units and GRM regularly review the various segments of the credit portfolio on an enterprise-wide basis to assess the impact of economic trends or specific events on the performance of the portfolio, and to determine whether corrective action is required. These reviews include the examination of the risk factors for particular products, industries and countries. The results of these reviews are reported to the Risk Policy Committee and, when significant, to the Board.

Risk measures

The credit risk rating systems support the determination of key credit risk parameter estimates which measure credit and transaction risk. These risk parameters – probability of default, loss given default and exposure at default are transparent and may be replicated in order to provide accuracy and consistency of credit adjudication, as well as minimum lending standards for each of the risk rating categories. The parameters are an integral part of enterprise-wide policies and procedures encompassing governance, risk management, and control structure, and are used in various internal and regulatory credit risk quantification calculations.

The Bank's credit risk rating system is subject to a rigorous validation, governance and oversight framework. The objectives of this framework are to ensure that:

- Credit risk rating methodologies and parameters are appropriately designed and developed, independently validated, and regularly reviewed; and
- The review and validation processes represent an effective challenge to the design and development process.

Non-retail credit risk rating methodologies and parameters are reviewed and validated at least annually. Units within GRM are responsible for design and development, validation and review, and are functionally independent from the business units responsible for originating transactions. Within GRM, they are also independent from the units involved in risk rating approval and credit adjudication.

Internal credit risk ratings and associated risk parameters affect lending decisions, loan pricing, computation of the collective allowance for credit losses, and return on equity.

Corporate and commercial

Corporate and commercial credit exposure arises in the Bank's business lines.

Risk ratings

The Bank's risk rating system utilizes internal grade (IG) ratings – an 18 point scale used to differentiate the risk of default of borrowers, and the risk of loss on facilities. The general relationship between the Bank's IG ratings and external agency ratings is shown in table T32.

IG ratings are also used to define credit adjudication authority levels appropriate to the size and risk of each credit application. Lower-rated credits require increasingly more senior management involvement depending upon the aggregate exposure. Where the decision is beyond their authority levels, credit units will refer the request – with its recommendation – to a senior credit committee for adjudication. In certain cases, these must be referred to the Risk Committee of the Board of Directors.

Adjudication
Credit adjudication units within GRM analyze and evaluate all significant credit requests for corporate and commercial credit exposures, to ensure that risks are adequately assessed, properly approved, continually monitored and actively managed. The decision-making process begins with an assessment of the credit risk of the individual borrower or counterparty. Key factors considered in the assessment include:

- The borrower's management;
- The borrower's current and projected financial results and credit statistics;
- The industry in which the borrower operates;
- Economic trends; and
- Geopolitical risk.

Based on this assessment, a risk rating is assigned to the individual borrower or counterparty, using the Bank's risk rating systems.

A separate risk rating is also assigned at the facility level, taking into consideration additional factors, such as security, seniority of claim, structure, term and any other forms of credit risk mitigation that affect the amount of potential loss in the event of a default of the facility. Security typically takes the form of charges over inventory, receivables, real estate, and operating assets when lending to corporate and commercial borrowers; and cash or treasuries for trading lines such as securities lending, repurchase transactions, and derivatives. The types of acceptable collateral, and related valuation processes are documented in risk management policies and manuals.

Other forms of credit risk mitigation include third party guarantees and, in the case of derivatives facilities, master netting agreements.

Internal borrower and facility risk ratings are assigned when a facility is first authorized, and are promptlyre-evaluated and adjusted, if necessary, as a result of changes to the customer's financial condition or business prospects. Re-evaluation is an ongoing process, and is done in the context of general economic changes, specific industry prospects, and event risks, such as revised financial projections, interim financial results and extraordinary announcements.

The internal credit risk ratings are also considered as part of the Bank's adjudication limits, as guidelines for hold levels are tied to different risk ratings. Single borrower limits are much lower for higher risk borrowers than low risk borrowers.

The credit adjudication process also uses a risk-adjusted return on equity profitability model to ensure that the client and transaction structure offers an appropriate return for a given level of risk. For the corporate portfolio, and the large borrowers in International, the Loan Portfolio Management Group reviews the profitability model results, together with external benchmarks, and provides an opinion on the relative return and pricing of each transaction above a minimum threshold.

Individual credit exposures are regularly monitored by both the business line units and GRM for any signs of deterioration. In addition, the business line units and GRM conduct a review and risk analysis of each borrower annually, or more frequently for higher-risk borrowers. If, in the judgement of management, an account requires the expertise of specialists in workouts and restructurings, it will be transferred to a special accounts group for monitoring and resolution.

Credit Risk Mitigation – Collateral/Security
Traditional Non-retail Products (e.g. Operating lines of Credit, Term Loans)

Collateral values are accurately identified at the outset and throughout the tenure of a transaction by using standard evaluation methodologies. Collateral valuation estimates are conducted at a frequency that is appropriate to the frequency by which the market value fluctuates, using the collateral type and the borrower risk profile.

In addition, when it is not cost effective to monitor highly volatile collateral (e.g. accounts receivable, inventory), appropriate lending margins are applied to compensate (e.g. accounts receivable are capped at 80% of value, inventory at 50%). The frequency of collateral valuations is also increased when early warning signals of a borrower's deteriorating financial condition are identified.

Borrowers are required to confirm adherence to covenants including confirmation of collateral values on a periodic basis, which are used by the Bank to provide early warning signals of collateral value deterioration. Periodic inspections of physical collateral are performed where appropriate and where reasonable means of doing so are available.

Bank procedures require verification including certification by banking officers during initial, annual, and periodic reviews, that collateral values/margins/etc. have been assessed and, where necessary, steps have been taken to mitigate any decreased collateral values.

The Bank does not use automated valuation models (AVMs) for valuation purposes for traditional non-retail products. GRM performs its own valuations of companies based on various factors such as book value, discounted book value, enterprise value etc.

Commercial/Corporate Real Estate
New or updated appraisals are generally obtained at inception of a new facility, as well as during loan modifications, loan workouts and troubled debt restructure. The primary reason for requiring a new appraisal is if, in the reasonable opinion of the banking execution unit, or GRM, there has been a material change in value. Additionally, none of the appraisal guidelines contained within the policies should dissuade the Bank from requesting an appraisal more frequently if an adverse change in market conditions, sponsorship, credit worthiness, or other underwriting assumptions is realized or expected.

Appraisals must be in writing and must contain sufficient information and analysis to support the Bank's decision to make the loan. Moreover, in rendering an opinion of the property's market value, third party appraisers are responsible for establishing the scope of work necessary to develop credible assignment results. The appraisal must meet the regulatory and industry requirements which, depending on the type of property being appraised, contain any or all of the following three approaches to value:

i. comparable sales approach
ii. replacement cost approach
iii. income approach

The appraiser must disclose the rationale for the omission of any valuation approach. Furthermore, the appraiser must disclose whether the subject property was physically inspected and whether anyone provided significant assistance to the person signing the appraisal report. The report must contain a presentation and explanation of the assumptions used in determining value under each of the above mentioned approaches.

Review of every appraisal is conducted by the banking units and GRM to confirm that the appraisal identifies all of the relevant issues for the specific asset class, location and economic environment and incorporates all appropriate valuation methodologies and assumptions. In most cases, the banking units also include comparable properties in addition to what is included in the appraisal to further justify value.

When third party assessors are used, they must be accredited and satisfactory to the Bank. In addition, GRM validates any third party valuations via internal desktop estimates either based on comparables or discounted income valuations.

Traded products

Traded products are transactions such as OTC derivatives (including foreign exchange and commodity based transactions), Securities Financing Transactions (including repurchase/reverse repurchase agreements, and securities lending/borrowing), and on-exchange futures. Credit risks arising from traded products cannot be determined with certainty at the outset, because during the tenure of a transaction the dollar value of the counterparty's obligation to the Bank will be affected by changes in the capital markets (such as changes in stock prices, interest rates, and exchange rates). The Bank adjudicates credit exposures arising from transacting in traded products by considering their current fair value plus an additional component to reflect potential future changes in their mark-to-market value. The credit adjudication process also includes an evaluation of potential wrong-way risk, which arises when the exposure to a counterparty is positively correlated to the probability of default of that counterparty.

Credit risk associated with traded products is managed within the same credit adjudication process as the lending business. The Bank considers the credit risk arising from lending activities, as well as the potential credit risk arising from transacting in traded products with that counterparty.

Credit risk mitigation – collateral/security

Derivatives are generally transacted under industry standard International Swaps and Derivatives Association (ISDA) master netting agreements, which allow for a single net settlement of all transactions covered by that agreement in the event of a default or early termination of the transactions. ISDA agreements are frequently accompanied by an ISDA Credit Support Annex (CSA), the terms of which may vary according to each party's view of the other party's creditworthiness. CSAs and regulation in some jurisdictions can require both parties to post initial margin (regulatory and non-regulatory). CSAs also allow for variation margin to be called if total uncollateralized mark-to-market exposure exceeds an agreed upon threshold. Such variation margin provisions can be one-way (only one party will ever post collateral) or bilateral (either party may post depending upon which party is in-the-money). The CSA will also detail the types of collateral that are acceptable to each party, and the haircuts that will be applied against each collateral type. The terms of the ISDA master netting agreements and CSAs are taken into consideration in the calculation of counterparty credit risk exposure.

For derivative transactions, investment grade counterparties account for approximately 79% of the credit risk. Approximately 23% of the Bank's derivative counterparty exposures are to bank counterparties. After taking into consideration, where applicable, netting and collateral arrangements, no net credit risk amount arising from traded products transactions with any single counterparty was considered material to the financial position of the Bank as at October 31, 2020. No individual exposure to an investment grade bilateral counterparty exceeded $1,181 million and no individual exposure to a corporate counterparty exceeded $420 million.

Retail

Retail credit exposures arise in the Canadian Banking and International Banking business lines.

Adjudication

The decision-making process for retail loans ensures that credit risks are adequately assessed, properly approved, continually monitored and actively managed. Generally, credit decisions on consumer loans are processed by proprietary adjudication software and are based on risk ratings, which are generated using predictive credit scoring models.

The Bank's credit adjudication and portfolio management methodologies are designed to ensure consistent underwriting and early identification of problem loans in line with our risk appetite. The Bank's rigorous credit underwriting and retail risk modeling methodologies are more customer focused than product focused. The Bank's view is that a customer-centric approach provides better risk assessment than product-based approaches, a more consistent experience to the customer, and should result in lower loan losses over time.

All credit scoring and policy changes are initiated by units within GRM that are functionally independent from the business units responsible for retail portfolios. Risk models and parameters are also subject to independent validation and review from the units involved in the design and development of models. The review process includes referral to the appropriate Senior Credit Committee for approval, where required. Consumer credit portfolios are reviewed at least monthly to identify emerging trends in loan quality and to assess whether corrective action is required.

Risk ratings

The Bank's consumer risk rating systems are oriented to borrower or transaction risk. Each retail exposure is assigned a risk grade based on the customer's credit history and/or internal credit score. The Bank's automated risk rating systems assess the ongoing credit-worthiness of individual customers on a monthly basis. This process provides for meaningful and timely identification and management of problem loans.

The risk rating system under the AIRB approach is subject to regular review and ongoing performance monitoring of key components. Risk model validations are conducted independently from the areas responsible for rating system development and implementation, to ensure effective independence in design and performance review.

Customer behavior characteristics which are used as inputs within the Bank's Basel III AIRB models are consistent with those used by the Bank's Canadian consumer risk rating systems. The International portfolios are subject to the Standardized approach at this time.

Credit risk mitigation – collateral/security

The property values for residential real estate secured exposures are confirmed at origination through a variety of validation methodologies, including AVM and full appraisal's (in-person inspection). The appraisal is completed by a third party, Bank approved appraiser. For monitoring of material portfolios, property values are indexed quarterly to house prices. For loan impairment within material portfolios, residential property values are re-confirmed using third party AVM's.

Where AVM values are used, these AVM values are subject to routine validation through a continuous random sampling process that back-tests AVM values against available property appraisals (primarily third party AVMs). Where third party appraisals are obtained, the Bank relies on the professional industry accreditation of the appraiser. Samples of approved appraisal reports are reviewed by the Bank's senior appraisers to ensure consistent appraisal quality and satisfactory appraisal values. The third party appraisers are selected from a pre-approved list of Bank-vetted appraisers.

Credit Quality

Impact of COVID-19

The COVID-19 pandemic's significant impact to economies around the world, with regions in different stages of lockdown and re-opening, resulted in continued uncertainty on timing of recovery. This required additional considerations to determine the allowance for credit losses this year.

IFRS 9 requires the consideration of past events, current conditions and reasonable and supportable forward-looking information over the life of the exposure to measure expected credit losses. Furthermore, to assess significant increase in credit risk, the Standard requires that entities assess changes in the risk of a default occurring over the expected life of a financial instrument when determining staging. The IASB and global regulators issued guidance for entities, consistent with IFRS 9, to consider the exceptional circumstances of the COVID-19 pandemic. This includes consideration of significant government support and the high degree of uncertainty around historical long-term economic trends used in determining reasonable and supportable forward-looking information.

The Bank's models are calibrated to consider past performance and macroeconomic forward-looking variables as inputs as further described below. Expert credit judgement is applied to consider the exceptional circumstances this period, including consideration of the significant government assistance programs, both domestically and internationally, in the assessment of underlying credit deterioration and migration of balances to progressive stages.

Consistent with requirements of IFRS 9, the Bank considered both quantitative and qualitative information in the assessment of significant increase in risk. First time utilization of a payment deferral program was not considered an immediate trigger, in keeping with IASB and regulatory guidance, for an account to migrate to a progressive stage, given the purpose of these programs is to provide temporary cashflow relief to the Bank's customers. Early observations of payment behaviour of expiries for this year were considered in the assessment of the longer-term probability of the customers' ability to pay, a key input in determining migration.

The Bank has generated a forward-looking base case scenario and three alternate forward-looking scenarios (one optimistic and two pessimistic scenarios) as key inputs into the expected credit loss provisioning models. In these scenarios the Bank considered recovery time periods ranging from more immediate (V shape), mid-term (W shape) to longer-term (L shape) periods. This year, the Bank increased the weight of the pessimistic scenarios in calculating the allowance for credit losses. The pessimistic scenario features a W-shaped recovery with a delay to the re-opening of the economy, which results in a deeper contraction in 2020 with growth rebounding in 2021. The more severe pessimistic front loaded scenario, with an L-shaped recovery, sees continued contraction into the first half of 2021 before availability of a vaccine, leading to contraction across all markets in 2020 and 2021.

The base case scenario expects the overall economy to trace a gradual V shape recovery, even though growth and employment in individual industries are expected to show considerable heterogeneity. While some industries are expected to fully recover over the course of the next few quarters, others are expected to languish below the pre-pandemic levels. This industry-level pattern of activity is referred to as a K-shaped recovery, and while not explicitly simulated in the base case scenario, it is incorporated through the consideration of significant increase in risk through expert credit judgement.

The table below shows a comparison of projections for the next 12 months, as at October 31, 2020, and October 31, 2019, of select macroeconomic variables that impact the expected credit loss calculations (see page 200 for all key variables):

T42 Select macroeconomic variable projections

	Base Case Scenario		Alternative Scenario - Optimistic		Alternative Scenario - Pessimistic		Alternative Scenario - Pessimistic Front Loaded	
Next 12 months	**As at October 31 2020**	As at October 31 2019	**As at October 31 2020**	As at October 31 2019	**As at October 31 2020**	As at October 31 2019	**As at October 31 2020(1)**	As at October 31 2019
Canada								
Real GDP growth, y/y % change	**3.1**	1.9	**4.7**	2.4	**-2.0**	1.3	**-10.8**	n/a
Unemployment rate, average %	**7.3**	5.8	**6.7**	5.6	**9.9**	6.1	**14.1**	n/a
US								
Real GDP growth, y/y % change	**2.5**	1.8	**3.6**	2.3	**-0.5**	1.4	**-7.4**	n/a
Unemployment rate, average %	**6.3**	3.9	**6.1**	3.7	**8.1**	4.0	**10.5**	n/a
Global								
WTI oil price, average USD/bbl	**48**	54	**52**	56	**42**	53	**37**	n/a

(1) Scenario added in Q1, 2020

The table below shows a quarterly breakdown of the projections for the above macroeconomic variables, as at October 31, 2020 and October 31, 2019, under the base case scenario:

T43 Quarterly breakdown of macroeconomic variables

	Base Case Scenario									
	Calendar Quarters				Average	Calendar Quarters				Average*
Next 12 months	Q4 2020	Q1 2021	Q2 2021	Q3 2021	October 31 2020	Q4 2019	Q1 2020	Q2 2020	Q3 2020	October 31 2019
Canada										
Real GDP growth, y/y % change	**3.9**	**0.4**	**12.9**	**3.7**	**3.1**	1.8	2.3	1.8	1.8	1.9
Unemployment rate, average %	**8.1**	**7.1**	**6.9**	**6.9**	**7.3**	5.8	5.9	5.9	5.9	5.8
US										
Real GDP growth, y/y % change	**3.7**	**1.1**	**9.9**	**4.8**	**2.5**	2.1	1.7	1.5	1.3	1.8
Unemployment rate, average %	**7.7**	**6.6**	**5.8**	**5.4**	**6.3**	3.9	3.9	4.0	4.0	3.9
Global										
WTI oil price, average USD/bbl	**45**	**48**	**50**	**51**	**48**	56	53	54	56	54

* Average for October 31, 2019 computed over 2019Q3 – 2020Q2.

T44 Allowance for credit losses by business line

As at October 31 ($ millions)	2020	2019
Canadian Banking		
Retail	**$ 2,051**	$ 1,342
Commercial	**558**	253
	$ 2,609	$ 1,595
International Banking		
Retail		
Caribbean	**$ 716**	$ 576
Mexico	**576**	413
Peru	**1,242**	654
Chile	**584**	533
Colombia	**638**	405
Other	**106**	77
Commercial	**860**	715
	$ 4,722	$ 3,373
Global Wealth Management	**$ 19**	$ 5
Global Banking and Markets	**$ 289**	$ 104
Allowance for credit losses on loans	**$ 7,639**	$ 5,077
Allowance for credit losses on:		
Acceptances	**$ 77**	$ 6
Off-balance sheet exposures	**101**	56
Debt securities and deposits with financial institutions	**3**	6
Total Allowance for credit losses	**$ 7,820**	$ 5,145

Allowance for credit losses

The Bank revised its allowance for credit losses (ACL) methodology in Q1, 2020, by adding an additional, more severe pessimistic forward-looking scenario. In periods prior to Q1, 2020, the Bank determined its ACL using three probability-weighted forward-looking scenarios. The base case represents the most likely outcome and the other scenarios represent more optimistic and pessimistic outcomes, to which probabilities are assigned.

The total allowance for credit losses as at October 31, 2020 was $7,820 million. The allowance for credit losses for loans was $7,639 million, up $2,562 million from October 31, 2019. The increase was due primarily to higher retail and commercial loan provision for performing loans.

The allowance for credit loss on impaired loans increased to $1,957 million from $1,595 million as at October 31, 2019 due primarily to higher provisions in International Retail. Allowances for impaired loans in Canadian Banking increased by $112 million to $475 million, due primarily to higher retail and commercial loan provisions. In International Banking, allowances for impaired loans increased by $222 million to $1,413 million, primarily in the retail portfolio. In Global Banking and Markets, allowances for impaired loans increased by $24 million to $61 million, due primarily to new formations in the energy sector.

The allowance for credit loss against performing loans was higher at $5,682 million compared to $3,482 million as at October 31, 2019. The increase was due primarily to higher retail and commercial loan provisions driven by the unfavourable macroeconomic outlook related mainly to higher unemployment, lower GDP, unfavourable economic conditions, and their estimated future impact on credit migration.

T45 Impaired loans by business line

As at October 31 ($ millions)	2020 Gross impaired loans	2020 Allowance for credit losses	2020 Net impaired loans	2019 Gross impaired loans	2019 Allowance for credit losses	2019 Net impaired loans
Canadian Banking						
Retail	$ 707	$ 326	$ 381	$ 878	$ 265	$ 613
Commercial	342	149	193	209	98	111
	$ 1,049	$ 475	$ 574	$ 1,087	$ 363	$ 724
International Banking						
Caribbean and Central America	$ 878	$ 254	$ 624	$ 1,197	$ 265	$ 932
Latin America						
Mexico	570	222	348	485	178	307
Peru	824	498	326	642	332	310
Chile	775	233	542	844	180	664
Colombia	459	102	357	505	151	354
Other Latin America	170	104	66	128	85	43
Total Latin America	2,798	1,159	1,639	2,604	926	1,678
	$ 3,676	$ 1,413	$ 2,263	$ 3,801	$ 1,191	$ 2,610
Global Wealth Management	$ 26	$ 8	$ 18	$ 10	$ 4	$ 6
Global Banking and Markets						
Canada	$ 57	$ 5	$ 52	$ 41	$ 8	$ 33
U.S.	116	4	112	94	5	89
Asia and Europe	129	52	77	102	24	78
	$ 302	$ 61	$ 241	$ 237	$ 37	$ 200
Totals	$ 5,053	$ 1,957	$ 3,096	$ 5,135	$ 1,595	$ 3,540

Impaired loan metrics

As at October 31 ($ millions)	Net impaired loans 2020	Net impaired loans 2019
Net impaired loans as a % of loans and acceptances	0.50%	0.58%
Allowance against impaired loans as a % of gross impaired loans	39%	31%

Impaired loans

Gross impaired loans decreased to $5,053 million as at October 31, 2020, from $5,135 million last year. Impaired loans in Canadian Banking decreased by $38 million, due primarily to lower new formations in retail banking. In International Banking, impaired loans decreased by $125 million, mainly driven by lower delinquency and credit migration in retail portfolio, partially offset by new formations in the commercial portfolio. Impaired loans in Global Banking and Markets increased by $65 million, driven by new formations primarily in the energy sector. Impaired loans in Global Wealth Management increased by $16 million from last year.

Net impaired loans, after deducting the allowance for credit losses, were $3,096 million as at October 31, 2020, a decrease of $444 million from a year ago. Net impaired loans as a percentage of loans and acceptances were 0.50% as at October 31, 2020, a decrease of eight basis points from 0.58% a year ago.

Portfolio review

Canadian Banking

Gross impaired loans in the retail portfolio decreased by $171 million or 19% from last year, due primarily to lower delinquency and credit migration due to payment deferrals. The allowance for credit losses on impaired loans in the retail portfolio was $326 million, up $61 million or 23% from last year.

In the commercial loan portfolio, gross impaired loans increased by $133 million to $342 million, due to new formations partially offset by write-offs. The allowance for credit losses on impaired loans was $149 million, up $51 million or 52% from last year due primarily to new provisions related to new formations.

International Banking

In the retail portfolio, gross impaired loans decreased by $247 million to $1,799 million, due primarily to lower delinquency and credit migration due to payment deferrals. The allowance for credit losses on impaired loans in the retail portfolio was $883 million, increased by $232 million or 36% from last year, driven in part due to timing of write offs.

In the commercial portfolio, gross impaired loans were $1,877 million, an increase of $122 million over the last year, due primarily to new formations partially offset by write-offs. The allowance for credit losses on impaired loans was $530 million, decreased by $10 million or 2% from last year.

Global Wealth Management

Gross impaired loans in Global Wealth Management increased by $16 million to $26 million. The allowance for credit losses on impaired loans was $8 million, increased by $4 million from last year.

Global Banking and Markets

Gross impaired loans in Global Banking and Markets increased by $65 million to $302 million, driven by new formations primarily in the energy sector partially offset by write-offs. The allowance for credit losses on impaired loans was $61 million, increased by $24 million or 65% from last year due primarily to new provisions related to new formations.

Risk diversification

The Bank's exposure to various countries and types of borrowers are well diversified (see T64 and T68). Chart C27 shows loans and acceptances by geography. Ontario represents the largest Canadian exposure at 35% of the total. Latin America was 20% of the total exposure and the U.S. was 7%.

Chart C28 shows loans and acceptances by type of borrower (see T68). Excluding loans to households, the largest industry exposures were financial services (4.8% including banks and non-banks), real estate and construction (6.0%), wholesale and retail (4.2%), and technology and media (2.7%).

Risk mitigation

To mitigate exposures in its performing corporate portfolios, the Bank uses diversification by company, industry, and country, with loan sales and credit derivatives used sparingly. In 2020, loan sales totaled $724 million, compared to $8 million in 2019. The largest volume of loan sales in 2020 related to loans in the utilities industry. As at October 31, 2020, no credit derivatives were used to mitigate exposures in the portfolios down from October 31, 2019 ($13 million). The Bank actively monitors industry and country concentrations. As is the case with all industry exposures, the Bank continues to closely follow developing trends and takes additional steps to mitigate risk as warranted.

Overview of loan portfolio

The Bank has a well-diversified portfolio by product, business and geography. Details of certain portfolios of current focus are highlighted below.

Energy

The Bank's outstanding loan exposure to commercial and corporate companies in the Energy sector was $16.4 billion as at October 31, 2020 (October 31, 2019 – $16.6 billion), reflecting approximately 2.6% (October 31, 2019 – 2.7%) of the Bank's total loan portfolio, of which $8.5 billion is related to oil field services and exploration and production. In addition, the Bank has related undrawn Energy loan commitments of $13.5 billion as at October 31, 2020 (October 31, 2019 – $13.4 billion). The Bank has recorded credit losses on impaired loans of $104 million or 0.64% of outstanding loan exposure relating to the Energy sector during the year. Approximately 51% of the Bank's outstanding Energy loan exposure is investment grade. Management's focus pertains to non-investment grade accounts in the upstream and oil fields services subsectors. The Bank continues to consider the impact of lower Energy prices in its ongoing stress testing program.

Real estate secured lending

A large portion of the Bank's lending portfolio is comprised of residential mortgages and consumer loans, which are well diversified by borrower. As at October 31, 2020, these loans accounted for $393 billion or 63% of the Bank's total loans and acceptances outstanding (October 31, 2019 – $385 billion or 63%). Of these, $306 billion or 78% are real estate secured loans (October 31, 2019 – $289 billion or 75%). The tables below provide more details by portfolios.

C27 Well diversified in Canada and internationally... loans and acceptances, October 2020



C28 ...and in household and business lending loans and acceptances, October 2020



Insured and uninsured residential mortgages and home equity lines of credit

The following table presents amounts of insured and uninsured residential mortgages and home equity lines of credit (HELOCs), by geographic area.

T46 Insured and uninsured residential mortgages and HELOCs, by geographic areas

	2020											
	Residential mortgages						Home equity lines of credit					
As at October 31	Insured (1)		Uninsured		Total		Insured (1)		Uninsured		Total	
($ millions)	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Canada(2)												
Atlantic provinces	$ 5,779	2.3	$ 5,327	2.2	$ 11,106	4.5	$ –	–	$ 1,109	5.3	$ 1,109	5.3
Quebec	8,444	3.5	8,431	3.4	16,875	6.9	–	–	957	4.6	957	4.6
Ontario	41,574	17.0	87,480	35.7	129,054	52.7	–	–	11,506	54.8	11,506	54.8
Manitoba & Saskatchewan	5,658	2.3	4,124	1.7	9,782	4.0	–	–	716	3.4	716	3.4
Alberta	18,458	7.5	12,935	5.3	31,393	12.8	1	–	2,794	13.3	2,795	13.3
British Columbia & Territories	13,771	5.6	33,063	13.5	46,834	19.1	–	–	3,896	18.6	3,896	18.6
Canada(3)	$93,684	38.2%	$151,360	61.8%	$245,044	100%	$ 1	–%	$ 20,978	100%	$ 20,979	100%
International	–	–	39,640	100	39,640	100	–	–	–	–	–	–
Total	$93,684	32.9%	$191,000	67.1%	$284,684	100%	$ 1	–%	$ 20,978	100%	$ 20,979	100%
	2019											
Canada(3)	$87,905	38.8%	$138,704	61.2%	$226,609	100%	$ 1	–%	$ 21,034	100%	$ 21,035	100%
International	–	–	41,560	100	41,560	100	–	–	–	–	–	–
Total	$87,905	32.8%	$180,264	67.2%	$268,169	100%	$ 1	–%	$ 21,034	100%	$ 21,035	100%

(1) Default insurance is contractual coverage for the life of eligible facilities whereby the Bank's exposure to real estate secured lending is protected against potential shortfalls caused by borrower default. This insurance is provided by either government-backed entities or private mortgage insurers.
(2) The province represents the location of the property in Canada.
(3) Includes multi-residential dwellings (4+ units) of $3,671 (October 31, 2019 – $3,365) of which $2,630 are insured (October 31, 2019 – $2,424).

Amortization period ranges for residential mortgages

The following table presents the distribution of residential mortgages by remaining amortization periods, and by geographic areas.

T47 Distribution of residential mortgages by remaining amortization periods, and by geographic areas

	2020					
	Residential mortgages by remaining amortization periods					
As at October 31	Less than 20 years	20-24 years	25-29 years	30-34 years	35 years and greater	Total residential mortgage
Canada	33.5%	37.5%	27.6%	1.2%	0.2%	100%
International	64.9%	17.4%	14.4%	3.2%	0.1%	100%
	2019					
Canada	33.7%	38.4%	26.8%	1.0%	0.1%	100%
International	65.9%	17.3%	13.7%	3.0%	0.1%	100%

Loan to value ratios

The Canadian residential mortgage portfolio is 62% uninsured (October 31, 2019 – 61%). The average loan-to-value (LTV) ratio of the uninsured portfolio is 52% (October 31, 2019 – 55%).

The following table presents the weighted average LTV ratio for total newly originated uninsured residential mortgages and home equity lines of credit during the year, which include mortgages for purchases, refinances with a request for additional funds and transfers from other financial institutions, by geographic areas.

T48 Loan to value ratios

	Uninsured LTV ratios(1)	
	For the year ended October 31, 2020	
	Residential mortgages LTV%	Home equity lines of credit(2) LTV%
Canada:		
Atlantic provinces	67.0%	63.8%
Quebec	67.4	72.3
Ontario	64.1	63.1
Manitoba & Saskatchewan	68.6	61.9
Alberta	66.9	74.0
British Columbia & Territories	64.1	63.3
Canada	64.6%	64.2%
International	73.2%	n/a
	For the year ended October 31, 2019	
Canada	64.5%	63.0%
International	71.4%	n/a

(1) The province represents the location of the property in Canada.
(2) Includes all HELOCs. For Scotia Total Equity Plan HELOC's, LTV is calculated based on the sum of residential mortgages and the authorized limit for related HELOCs, divided by the value of the related residential property, and presented on a weighted average basis for newly originated mortgages and HELOCs.

Potential impact on residential mortgages and real estate home equity lines of credit in the event of an economic downturn
The Bank undertakes regular stress testing of its mortgage book to determine the impact of various combinations of home price declines and unemployment increases. Those results continue to show that credit losses and impacts on capital ratios are within a level the Bank considers manageable. In addition, the Bank has undertaken extensive all-Bank scenario analyses to assess the impact to the enterprise of different scenarios related to COVID-19 and is confident that it has the financial resources to withstand even a very negative outlook. In practice, the mortgage portfolio is robust to such scenarios due to the low LTV of the book, the high proportion of insured exposures and the diversified composition of the portfolio.

Loans to Canadian condominium developers

With respect to loans to Canadian condominium developers, the Bank had loans outstanding of $1,447 million as at October 31, 2020 (October 31, 2019 – $1,461 million). This is a high quality portfolio with well-known developers who have long-term relationships with the Bank.

European exposures

The Bank believes that its European exposures are manageable, are sized appropriately relative to the credit worthiness of the counterparties (91% of the exposures are to investment grade counterparties based on a combination of internal and external ratings), and are modest relative to the capital levels of the Bank. The Bank's European exposures are certified at amortized cost or fair value using observable inputs, with negligible amounts valued using models with unobservable inputs (Level 3). There were no significant events during the year that materially impacted the Bank's exposures.

The Bank's exposure to sovereigns was $12.6 billion as at October 31, 2020 (October 31, 2019 – $6.7 billion), $4.4 billion to banks (October 31, 2019 – $6.5 billion) and $14.6 billion to corporates (October 31, 2019 – $18.4 billion).

In addition to exposures detailed in the table below, the Bank had indirect exposures consisting of securities exposures to non-European entities whose parent company is domiciled in Europe of $0.3 billion as at October 31, 2020 (October 31, 2019 – $0.5 billion).

The Bank's current European exposure is distributed as follows:

T49 Bank's exposure distribution by country

As at October 31	2020							2019
($ millions)	Loans and loan equivalents(1)	Deposits with financial institutions	Securities(2)	SFT and derivatives(3)	Funded Total	Undrawn Commitments(4)	Total	Total
Greece	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ 54
Ireland	1,412	558	(33)	217	2,154	454	2,608	2,760
Italy	113	–	(3)	9	119	203	322	167
Portugal	–	–	–	3	3	–	3	17
Spain	959	1	77	60	1,097	293	1,390	1,564
Total GIIPS	$ 2,484	$ 559	$ 41	$ 289	$ 3,373	$ 950	$ 4,323	$ 4,562
U.K.	$ 6,825	$ 5,819	$ 1,022	$ 2,305	$ 15,971	$ 14,801	$ 30,772	$ 23,830
Germany	581	282	1,852	32	2,747	812	3,559	3,202
France	1,206	93	923	171	2,393	1,775	4,168	3,193
Netherlands	643	120	1,005	295	2,063	1,043	3,106	3,301
Switzerland	769	17	(11)	167	942	1,076	2,018	1,910
Other	1,399	159	2,113	505	4,176	2,209	6,385	7,196
Total Non-GIIPS	$ 11,423	$ 6,490	$ 6,904	$ 3,475	$ 28,292	$ 21,716	$ 50,008	$ 42,632
Total Europe	$ 13,907	$ 7,049	$ 6,945	$ 3,764	$ 31,665	$ 22,666	$ 54,331	$ 47,194
As at October 31, 2019	$ 18,226	$ 3,799	$ 5,745	$ 3,870	$ 31,640	$ 15,554	$ 47,194	

(1) Individual allowances for credit losses are $24. Letters of credit and guarantees are included as funded exposure as they have been issued. Included in loans and loans equivalent are letters of credit and guarantees which total $4,069 as at October 31, 2020 (October 31, 2019 – $4,008).
(2) Exposures for securities are calculated taking into account derivative positions where the security is the underlying reference asset and short trading positions, with net short positions in brackets.
(3) SFT comprise of securities purchased under resale agreements, obligations related to securities sold under repurchase agreements and securities lending and borrowing transactions. Gross and net funded exposures represent all net positive positions after taking into account collateral. Collateral held against derivatives was $3,183 and collateral held against SFT was $29,543.
(4) Undrawn commitments represent an estimate of the contractual amount that may be drawn upon by the obligor and include commitments to issue letters of credit on behalf of other banks in a syndicated bank lending arrangement.

Market Risk

Market risk is the risk of loss from changes in market prices and rates (including interest rates, credit spreads, equity prices, foreign exchange rates and commodity prices), the correlations between them, and their levels of volatility. Market risk includes trading risk, investment risk, structural interest rate risk and structural foreign exchange risk. Below is an index of market risk disclosures:

Index of all market risk disclosures

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Market risk factors

Interest rate risk

The risk of loss due to changes in the level and/or the volatility of interest rates. This risk affects instruments such as, but not limited to, debt securities, loans, mortgages, deposits and derivatives.

Interest rate risks are managed through sensitivity analysis (including economic value of equity and net interest income), stress testing, and VaR limits and mitigated through portfolio diversification and hedges using interest rate derivatives and debt securities.

Credit spread risk

The risk of loss due to changes in the market price and volatility of credit, or the creditworthiness of issuers. This risk is mainly concentrated in loan and debt securities portfolios. Risk is managed through sensitivity, jump-to-default, stress testing and VaR limits and mitigated through hedges using credit derivatives.

Foreign currency risk

The risk of loss resulting from changes in currency exchange rates and exchange rate volatility. Foreign currency denominated debt and other securities as well as future cash flows in foreign currencies are exposed to this type of risk. Risk is managed through maximum net trading position, sensitivity, stress testing and VaR limits and mitigated through hedges using foreign exchange positions and derivatives.

Equity risk

The risk of loss due to changes in prices, volatility or any other equity related risk factor of individual equity or equity linked securities. This risk affects instruments such as, but not limited to, equities, exchange traded funds, mutual funds, derivatives and other equity linked products. Risk is managed through sensitivity, stress testing and VaR limits and mitigated through hedges using physical equity and derivatives instruments.

Commodity risk

The risk of loss due to changes in prices or volatility of precious metal, base metal, energy and agriculture products. Both physical commodity and derivatives positions are exposed to this risk. Risk is managed through aggregate and net trading position, sensitivity, stress testing and VaR limits and mitigated through hedges using physical commodity and derivative positions.

The following maps risk factors to trading and non-trading activities:

Non-trading Funding	Investments	Trading
Interest rate risk	Interest rate risk	Interest rate risk
Foreign currency risk	Credit spread risk	Credit spread risk
	Foreign currency risk	Foreign currency risk
	Equity risk	Equity risk
		Commodity risk

Market risk governance

Overview

The Board of Directors reviews and approves market risk policies and limits annually. The Bank's Asset-Liability Committee (ALCO) and Market Risk Management and Policy Committee (MRMPC) oversee the application of the framework set by the Board, and monitor the Bank's market risk exposures and the activities that give rise to these exposures. The MRMPC establishes specific operating policies and sets limits at the product, portfolio, business unit and business line levels, and for the Bank in total. Limits are reviewed at least annually.

Global Risk Management provides independent oversight of all significant market risks, supporting the MRMPC and ALCO with analysis, risk measurement, monitoring, reporting, proposals for standards and support for new product development. To ensure compliance with policies and limits, market risk exposures are independently monitored on a continuing basis, either by Global Risk Management, the back offices, or Finance. They provide senior management, business units, the ALCO, and the MRMPC with a series of daily, weekly and monthly reports of market risk exposures by business line and risk type.

The Bank uses a variety of metrics and models to measure and control market risk exposures. These measurements are selected based on an assessment of the nature of risks in a particular activity. The principal measurement techniques are Value at Risk (VaR), Incremental Risk Charge, stress testing, and sensitivity analysis. The use and attributes of each of these techniques are noted in the Risk Measurement Summary.

Risk measurement summary

Value at risk (VaR)

VaR is a statistical method of measuring potential loss due to market risk based upon a common confidence interval and time horizon. The Bank calculates VaR daily using a 99% confidence level, and a one-day holding period for its trading portfolios. This means that once in every 100 days, the trading positions are expected to lose more than the VaR estimate. VaR has two components: general market risk and debt specific risk. The Bank calculates general market risk VaR using historical simulation based on 300 days of market data. Obligor specific risk on debt instruments and credit derivatives not captured in general market risk VaR is calculated through the debt specific risk VaR, which uses historical resampling. In addition, the Bank calculates a Stressed VaR measure which follows the same basic methodology as VaR but is calibrated to a one year stressed period. The stressed period is determined based on analysis of the trading book's risk profile against historical market data. Stressed VaR complements VaR in that it evaluates the impact of market volatility that is outside the VaR's historical set.

All material risk factors are captured in VaR. Where historical data is not available, proxies are used to establish the relevant volatility for VaR and Stressed VaR until sufficient data is available. Changes in VaR between reporting periods are generally due to changes in positions, volatilities and/or correlations between asset classes. VaR is also used to evaluate risks arising in certain funding and investment portfolios. Backtesting is also an important and necessary part of the VaR process. The Bank backtests the actual trading profit and loss against the VaR result to validate the quality and accuracy of the Bank's VaR model. The Board reviews VaR results quarterly.

Incremental Risk Charge (IRC)
Basel market risk capital requirements includes IRC which captures the following:

Default risk: This is the potential for direct losses due to an obligor's (equity/bond issuer or counterparty) default.

Credit migration risk: This is the potential for direct losses due to a credit rating downgrade or upgrade.

A Monte Carlo model is used to perform default and migration simulations for the obligors underlying credit derivative and bond portfolios. IRC is calculated at the 99.9th percentile with a one year liquidity horizon. The Board reviews IRC results quarterly.

Stress testing
A limitation of VaR and Stressed VaR is that they only reflect the recent history of market volatility and a specific one year stressed period, respectively. To complement these measures, stress testing examines the impact that abnormally large changes in market factors and periods of prolonged inactivity might have on trading portfolios. Stress testing scenarios are designed to include large shifts in risk factors as well as historical and theoretical multi risk market events. Historical scenarios capture severe movements over periods that are significantly longer than the one-day holding period captured in VaR, such as the 2008 Credit Crisis or the 1998 Russian Financial Crisis. Similar to Stressed VaR, stress testing provides management with information on potential losses due to tail events. In addition, the results from the stress testing program are used to verify that the Bank's market risk capital is sufficient to absorb these potential losses.

The Bank subjects its trading portfolios to a series of daily, weekly and monthly stress tests. The Bank also evaluates risk in its investment portfolios monthly, using stress tests based on risk factor sensitivities and specific market events. The stress testing program is an essential component of the Bank's comprehensive risk management framework which complements the VaR methodology and other risk measures and controls employed by the Bank.

Sensitivity analysis
In trading portfolios, sensitivity analysis is used to measure the effect of changes in risk factors, including prices and volatility, on financial products and portfolios. These measures apply across product types and geographies and are used for limit monitoring and management reporting.

In non-trading portfolios, sensitivity analysis assesses the effect of changes in interest rates on current earnings and on the economic value of shareholders' equity. It is applied globally to each of the major currencies within the Bank's operations. The Bank's sensitivity analysis for limit and disclosure purposes is measured through positive and negative parallel shifts in the underlying interest rate curves. These calculations are based on models that consider a number of inputs and are on a constant balance sheet and make no assumptions for management actions that may mitigate the risks. The Bank also performs sensitivity analysis using various non-parallel interest rate curve shifts, for example: curve steepeners, curve flatteners and curve twists.

Validation of market risk models
Prior to the implementation of new market risk models, rigorous validation and testing is conducted. Validation is conducted when the model is initially developed and when any significant changes are made to the model. The models are also subject to ongoing validation, the frequency of which is determined by model risk ratings. Models may also be triggered for earlier revalidation when there have been significant structural changes in the market or changes to the composition of the portfolio. Model validation includes backtesting, and additional analysis such as:

- Theoretical review or tests to demonstrate whether assumptions made within the internal model are appropriate; and
- Impact tests including stress testing that would occur under historical and hypothetical market conditions.

The validation process is governed by the Bank's Model Risk Management Policy.

Non-trading market risk

Funding and investment activities
Market risk arising from the Bank's funding and investment activities is identified, managed and controlled through the Bank's asset-liability management processes. The Asset-Liability Committee meets monthly to review risks and opportunities, and evaluate performance including the effectiveness of hedging strategies.

Interest rate risk
Interest rate risk arising from the Bank's lending, funding and investment activities is managed in accordance with Board-approved policies and global limits, which are designed to control the risk to net interest income and economic value of shareholders' equity. The net interest income limit measures the effect of a specified change in interest rates on the Bank's annual net interest income over the next twelve months, while the economic value limit measures the impact of a specified change in interest rates on the present value of the Bank's net assets. These limits are set according to the documented risk appetite of the Bank. Board-level limit utilization is reported to both the Asset-Liability Committee and the Board on a regular basis. Any limit exceptions are reported according to the Limit Monitoring and Compliance Policy of the Bank.

Net interest income and the economic value of equity result from the differences between yields earned on the Bank'snon-trading assets and interest rate paid on its liabilities. The difference in yields partly reflects mismatch between the maturity and re-pricing characteristics of the assets and liabilities. This mismatch is inherent in the non-trading operations of the Bank and exposes it to adverse changes in the level of interest rates. The Asset-Liability Committee provides strategic direction for the management of structural interest rate risk within the risk appetite framework authorized by the Board of Directors. The asset/liability management strategy is executed by Group Treasury with the objective of protecting and enhancing net interest income within established risk tolerances.

Simulation modeling, sensitivity analysis and VaR are used to assess exposures and for limit monitoring and planning purposes. The Bank's interest rate risk exposure calculations are generally based on the earlier of contractual re-pricing or maturity of on-balance sheet and off-balance sheet assets and liabilities, although certain assets and liabilities such as credit cards and deposits without a fixed maturity are assigned a maturity profile based on the longevity of the exposure. Expected prepayments from loans and cashable investment products are also incorporated into the exposure calculations.

Table T50 shows the pro-forma after-tax impact on the Bank's net interest income over the next twelve months and economic value of shareholders' equity of an immediate and sustained 100 basis points increase and decrease in interest rate across major currencies as defined by the Bank. The interest rate sensitivities tabulated are based on models that consider a number of inputs and are on a constant balance sheet. There are no assumptions made for management actions that may mitigate risk. Based on the Bank's interest rate positions at year-end 2020, an immediate and sustained 100 basis point increase in interest rates across all major currencies and maturities would increase after-tax net interest income by approximately $134 million over the next 12 months, assuming no further management actions. During fiscal 2020, this measure ranged between loss of $197 million and gain of $190 million. Corresponding with the current low interest rate environment, starting in Q2, 2020, the net interest income and economic value for a downward shock scenario are measured using 25 basis points decline rather than 100 basis points previously, to account for certain rates being floored at zero.

This same increase in interest rates would result in an after-tax decrease in the present value of the Bank's net assets of approximately $510 million. During fiscal 2020, this measure ranged between $83 million and $1,205 million. The directional sensitivity of these two key metrics is largely determined by the difference in time horizons (net interest income captures the impact over the next twelve months only, whereas economic value considers the potential impact of interest rate changes on the present value of all future cash flows). The net interest income and economic value results are compared to the authorized Board limits. Both interest rate sensitivities remained within the Bank's approved consolidated limits in the reporting period.

T50 Structural interest sensitivity

	2020			2019	
As at October 31 ($ millions)	Economic Value of Shareholders' Equity	Net Interest Income		Economic Value of Shareholders' Equity	Net Interest Income
After-tax impact of 100bp increase in rates			After-tax impact of 100bp increase in rates		
Non-trading risk	**$ (510)**	**$ 134**	Non-trading risk	$ (1,448)	$ (273)
25bp decrease in rates			100bp decrease in rates		
Non-trading risk	**$ 63**	**$ (38)**	Non-trading risk	$ 1,173	$ 267

Foreign currency risk

Foreign currency risk in the Bank's unhedged funding and investment activities arises primarily from the Bank's net investments in foreign operations as well as foreign currency earnings in its domestic and remitting foreign branch operations.

The Bank's foreign currency exposure to its net investments in foreign operations is controlled by a Board-approved limit. This limit considers factors such as potential volatility to shareholders' equity as well as the potential impact on capital ratios from foreign exchange fluctuations. On a monthly basis, the Asset-Liability Committee reviews the Bank's foreign currency net investment exposures and determines the appropriate hedging strategies. These may include funding the investments in the same currency or using other financial instruments, including derivatives.

Foreign currency translation gains and losses from net investments in foreign operations, net of related hedging activities and tax effects, are recorded in accumulated other comprehensive income within shareholders' equity. However, the Bank's regulatory capital ratios are not materially affected by these foreign exchange fluctuations because the risk-weighted assets of the foreign operations tend to move in a similar direction.

The Bank is also subject to foreign currency translation risk on the earnings of its domestic and remitting foreign branch operations. The Bank forecasts foreign currency revenues and expenses, over a number of future fiscal quarters. The Asset-Liability Committee also assesses economic data trends and forecasts to determine if some or all of the estimated future foreign currency revenues and expenses should be hedged. Hedging instruments normally include foreign currency spot and forward contracts, as well as foreign currency options and swaps. Certain of these economic hedges may not qualify for hedge accounting resulting in a potential for a mismatch in the timing of the recognition of economic hedge gains/losses and the underlying foreign earnings translation gains/losses. In accordance with IFRS, foreign currency translation gains and losses relating to monetary and non-monetary items are recorded directly in earnings.

As at October 31, 2020, a one percent increase (decrease) in the Canadian dollar against all currencies in which the Bank operates decreases (increases) the Bank's before-tax annual earnings by approximately $66 million (October 31, 2019 – $64 million) in the absence of hedging activity, primarily from the exposure to U.S. dollars.

Investment portfolio risks

The Bank holds investment portfolios to meet liquidity and statutory reserve requirements and for investment purposes. These portfolios expose the Bank to interest rate, foreign currency, credit spread and equity risks. Debt investments primarily consist of government, agency, and corporate bonds. Equity investments include common and preferred shares, as well as a diversified portfolio of third-party managed funds. The majority of these securities are valued using prices obtained from external sources. These portfolios are controlled by a Board-approved policy and limits.

Trading market risk

The Bank's policies, processes and controls for trading activities are designed to achieve a balance between pursuing profitable trading opportunities and managing earnings volatility within a framework of sound and prudent practices. Trading activities are primarily customer focused.

Market risk arising from the Bank's trading activities is managed in accordance with Board-approved policies, and aggregate VaR and stress testing limits. The quality of the Bank's VaR is validated by regular backtesting analysis, in which the VaR is compared to both theoretical profit and loss results based on fixed end of day positions and actual reported profit and loss. A VaR at the 99% confidence interval is an indication of a 1% probability that losses will exceed the VaR if positions remain unchanged during the next business day. Trading positions are however managed dynamically and, as a result, actual profit/loss backtesting exceptions are uncommon.

In fiscal 2020, the total one-day VaR for trading activities averaged $23.9 million, compared to $12.4 million in 2019. The significant increase of average one-day VaR was due to volatile market conditions during February to May period, as a result of the COVID-19 pandemic, but the increase was partially offset by favourable temporary capital rule changes by OSFI.

T51 Market risk measures

	2020				2019			
($ millions)	Year end	Avg	High	Low	Year end	Avg	High	Low
Credit Spread plus Interest Rate	$ 11.5	$ 22.1	$ 60.8	$ 9.4	$ 13.8	$ 11.1	$ 17.5	$ 7.7
Credit Spread	11.1	18.5	55.0	6.2	8.0	7.7	11.2	3.8
Interest Rate	11.4	11.2	18.0	4.8	7.2	7.8	12.6	5.1
Equities	3.1	6.5	27.4	1.8	3.4	3.5	8.1	1.0
Foreign Exchange	4.6	3.5	10.3	1.4	2.7	3.5	7.0	1.5
Commodities	5.0	5.4	9.1	2.2	3.1	2.3	4.7	1.3
Debt Specific	5.2	5.9	14.1	2.5	3.3	3.9	5.9	2.0
Diversification Effect	(14.8)	(19.5)	n/a	n/a	(10.9)	(11.9)	n/a	n/a
All-Bank VaR	$ 14.6	$ 23.9	$ 63.6	$ 10.1	$ 15.4	$ 12.4	$ 17.9	$ 9.2
All-Bank Stressed VaR	$ 37.0	$ 38.7	$ 61.3	$ 14.9	$ 45.9	$ 40.1	$ 60.6	$ 26.7
Incremental Risk Charge	$ 233.2	$ 197.3	$ 334.9	$ 78.2	$ 80.0	$ 108.9	$ 208.8	$ 79.4

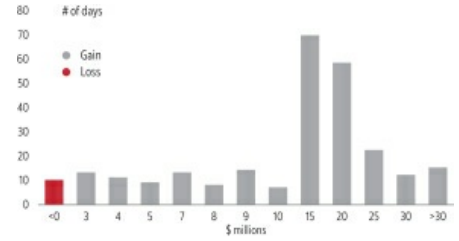
The Bank also calculates a Stressed VaR which uses the same basic methodology as the VaR. However, Stressed VaR is calculated using market volatility from a one-year time period identified as stressful, given the risk profile of the trading portfolio. Throughout most of 2020, the Stressed VaR was calculated using the 2008/2009 credit crisis period, surrounding the collapse of Lehman Brothers. However, for a brief period, (from end of Q3 to early Q4), the Stressed VaR was calculated using the 2019/2020 period, which reflects increased volatility due to the COVID-19 pandemic. In fiscal 2020, the total one-day Stressed VaR for trading activities averaged $38.7 million compared to $40.1 million in 2019.

In fiscal 2020, the average IRC increased to $197.3 million from $108.9 million in 2019. The noticeable increase was primarily driven by increased fixed income positions and rating volatilities occurred since March 2020.

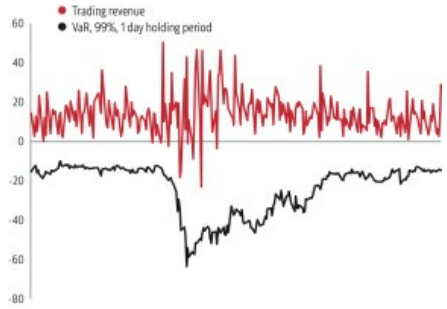
Description of trading revenue components and graphical comparison of VaR to daily P&L

Chart C29 shows the distribution of daily trading revenue for fiscal 2020 and Chart C30 compares that distribution to daily VaR results. Trading revenue includes changes in portfolio value as well as the impact of new trades, commissions, fees and reserves. Some components of revenue which are calculated less frequently are pro-rated. Trading revenue averaged $13.9 million per day, compared to $9.8 million in 2019. Revenue was positive on 96.1% of trading days during the year, which was lower than the level in 2019 due to heightened market volatility in March. During the year, the largest single day trading loss was $23.1 million which occurred on March 31, 2020, and was smaller than the total VaR of $50.1 million on the same day.

C29 Trading revenue distribution Year ended October 31, 2020



C30 Daily trading revenue vs. VaR $ millions, November 1, 2019 to October 31, 2020



Market risk linkage to Consolidated Statement of Financial Position

Trading assets and liabilities are marked to market daily and included in trading risk measures such as VaR. Derivatives captured under trading risk measures are related to the activities of Global Banking and Markets, whiles derivatives captured under non-trading risk measures comprise those used in asset/liability management and designated in a hedge relationship. A comparison of Consolidated Statement of Financial Position items which are covered under the trading and non-trading risk measures is provided in the table below.

T52 Market risk linkage to Consolidated Statement of Financial Position of the Bank

As at October 31, 2020 ($ millions)	Consolidated Statement of Financial Position	Market Risk Measure: Trading Risk	Market Risk Measure: Non-trading risk	Market Risk Measure: Not subject to market risk	Primary risk sensitivity of non-trading risk
Precious metals	$ 1,181	$ 1,181	$ –	$ –	n/a
Trading assets	117,839	117,492	347	–	Interest rate, FX
Derivative financial instruments	45,065	39,294	5,771	–	Interest rate, FX, equity
Investment securities	111,389	–	111,389	–	Interest rate, FX, equity
Loans	603,263	–	603,263	–	Interest rate, FX
Assets not subject to market risk (1)	257,729	–	–	257,729	n/a
Total assets	$ 1,136,466	$ 157,967	$ 720,770	$ 257,729	
Deposits	$ 750,838	$ –	$ 709,850	$ 40,988	Interest rate, FX, equity
Financial instruments designated at fair value through profit or loss	18,899	–	18,899	–	Interest rate, equity
Obligations related to securities sold short	31,902	31,902	–	–	n/a
Derivative financial instruments	42,247	36,038	6,209	–	Interest rate, FX, equity
Trading liabilities(2)	1,112	1,112	–	–	n/a
Retirement and other benefit liabilities	3,464	–	3,464	–	Interest rate, credit spread, equity
Liabilities not subject to market risk (3)	217,501	–	–	217,501	n/a
Total liabilities	$ 1,065,963	$ 69,052	$ 738,422	$ 258,489	

(1) Includes goodwill, intangibles, other assets and securities purchased under resale agreements and securities borrowed.
(2) Gold and silver certificates and bullion included in other liabilities.
(3) Includes obligations related to securities sold under repurchase agreements and securities lent and other liabilities.

As at October 31, 2019 ($ millions)	Consolidated Statement of Financial Position	Market Risk Measure: Trading Risk	Market Risk Measure: Non-trading risk	Market Risk Measure: Not subject to market risk	Primary risk sensitivity of non-trading risk
Precious metals	$ 3,709	$ 3,709	$ –	$ –	n/a
Trading assets	127,488	126,846	642	–	Interest rate, FX
Derivative financial instruments	38,119	34,489	3,630	–	Interest rate, FX, equity
Investment securities	82,359	–	82,359	–	Interest rate, FX, equity
Loans	592,483	–	592,483	–	Interest rate, FX
Assets not subject to market risk (1)	242,003	–	–	242,003	n/a
Total assets	$ 1,086,161	$ 165,044	$ 679,114	$ 242,003	
Deposits	$ 733,390	$ –	$ 699,462	$ 33,928	Interest rate, FX, equity
Financial instruments designated at fair value through profit or loss	12,235	–	12,235	–	Interest rate, equity
Obligations related to securities sold short	30,404	30,404	–	–	n/a
Derivative financial instruments	40,222	34,820	5,402	–	Interest rate, FX, equity
Trading liabilities(2)	4,124	4,124	–	–	n/a
Retirement and other benefit liabilities	2,956	–	2,956	–	Interest rate, credit spread, equity
Liabilities not subject to market risk (3)	192,638	–	–	192,638	n/a
Total liabilities	$ 1,015,969	$ 69,348	$ 720,055	$ 226,566	

(1) Includes goodwill, intangibles, other assets and securities purchased under resale agreements and securities borrowed.
(2) Gold and silver certificates and bullion included in other liabilities.
(3) Includes obligations related to securities sold under repurchase agreements and securities lent and other liabilities.

Derivative instruments and structured transactions

Derivatives

The Bank uses derivatives to meet customer needs, generate revenues from trading activities, manage market and credit risks arising from its lending, funding and investment activities, and to lower its cost of capital. The Bank uses several types of derivative products, including interest rate swaps, futures and options, to hedge interest rate risk exposure. Forward contracts, swaps and options are used to manage foreign currency risk exposures. Credit exposures in its lending and investment books are managed using credit default swaps. As a dealer, the Bank markets a range of derivatives to its customers, including interest rate, foreign exchange, equity, commodity and credit derivatives.

Market risk arising from derivatives transactions is subject to the control, reporting and analytical techniques noted above. Additional controls and analytical techniques are applied to address certain market-related risks that are unique to derivative products.

Structured transactions
Structured transactions are specialized transactions that may involve combinations of cash, other financial assets and derivatives designed to meet the specific risk management or financial requirements of customers. These transactions are carefully evaluated by the Bank to identify and address the credit, market, legal, tax, reputational and other risks, and are subject to a cross-functional review and sign-off by Trading Management, Global Risk Management, Taxation, Finance and Legal departments. Large structured transactions are also subject to review by senior risk management committees and evaluated in accordance with the procedures described below in Reputational Risk.

The market risk in these transactions is usually minimal, and returns are earned by providing structuring expertise and by taking credit risk. Once executed, structured transactions are subject to the same ongoing credit reviews and market risk analysis as other types of derivatives transactions. This review and analysis includes careful monitoring of the quality of the reference assets, and ongoing valuation of the derivatives and reference assets.

Liquidity Risk

Liquidity risk is the risk that the Bank is unable to meet its financial obligations in a timely manner at reasonable prices. Financial obligations include liabilities to depositors, payments due under derivative contracts, settlement of securities borrowing and repurchase transactions, and lending and investment commitments.

Effective liquidity risk management is essential to maintain the confidence of depositors and counterparties, manage the Bank's cost of funds and to support core business activities, even under adverse circumstances.

Liquidity risk is managed within the framework of policies and limits that are approved by the Board of Directors. The Board receives reports on risk exposures and performance against approved limits. The Asset-Liability Committee (ALCO) provides senior management oversight of liquidity risk.

The key elements of the liquidity risk framework are:

- Measurement and modeling – the Bank's liquidity model measures and forecasts cash inflows and outflows, including off-balance sheet cash flows on a daily basis. Risk is managed by a set of key limits over the maximum net cash outflow by currency over specified short-term horizons (cash gaps), a minimum level of core liquidity, and liquidity stress tests.
- Reporting – Global Risk Management provides independent oversight of all significant liquidity risks, supporting the ALCO with analysis, risk measurement, stress testing, monitoring and reporting.
- Stress testing – the Bank performs liquidity stress testing on a regular basis, to evaluate the effect of both industry-wide and Bank-specific disruptions on the Bank's liquidity position. Liquidity stress testing has many purposes including:
  - Helping the Bank understand the potential behavior of various on-balance sheet and off-balance sheet positions in circumstances of stress; and
  - Based on this knowledge, facilitating the development of risk mitigation and contingency plans.

  The Bank's liquidity stress tests consider the effect of changes in funding assumptions, depositor behavior and the market value of liquid assets. The Bank performs industry standard stress tests, the results of which are reviewed at senior levels of the organization and are considered in making liquidity management decisions.
- Contingency planning – the Bank maintains a liquidity contingency plan that specifies an approach for analyzing and responding to actual and potential liquidity events. The plan outlines an appropriate governance structure for the management and monitoring of liquidity events, processes for effective internal and external communication, and identifies potential counter measures to be considered at various stages of an event. A contingency plan is maintained both at the parent-level as well as for major subsidiaries.
- Funding diversification – the Bank actively manages the diversification of its deposit liabilities by source, type of depositor, instrument, term and geography.
- Core liquidity – the Bank maintains a pool of highly liquid, unencumbered assets that can be readily sold or pledged to secure borrowings under stressed market conditions or due to Bank-specific events. The Bank also maintains liquid assets to support its intra-day settlement obligations in payment, depository and clearing systems.

Liquid assets
Liquid assets are a key component of liquidity management and the Bank holds these types of assets in sufficient quantity to meet potential needs for liquidity management.

Liquid assets can be used to generate cash either through sale, repurchase transactions or other transactions where these assets can be used as collateral to generate cash, or by allowing the asset to mature. Liquid assets include deposits at central banks, deposits with financial institutions, call and other short-term loans, marketable securities, precious metals and securities received as collateral from securities financing and derivative transactions. Liquid assets do not include borrowing capacity from central bank facilities.

Marketable securities are securities traded in active markets, which can be converted to cash within a timeframe that is in accordance with the Bank's liquidity management framework. Assets are assessed considering a number of factors, including the expected time it would take to convert them to cash.

Marketable securities included in liquid assets are comprised of securities specifically held as a liquidity buffer or for asset liability management purposes; trading securities, which are primarily held by Global Banking and Markets; and collateral received for securities financing and derivative transactions.

The Bank maintains large holdings of unencumbered liquid assets to support its operations. These assets generally can be sold or pledged to meet the Bank's obligations. As at October 31, 2020, unencumbered liquid assets were $250 billion (October 31, 2019 – $211 billion). Securities including NHA mortgage-backed securities, comprised 72% of liquid assets (October 31, 2019 – 80%). Other unencumbered liquid assets, comprising cash

and deposits with central banks, deposits with financial institutions, precious metals and call and short loans, were 28% (October 31, 2019 – 20%). The increase in liquid assets was mainly attributable to an increase in cash and deposits with central banks and Canadian and foreign government obligations, partially offset by a decrease in other liquid securities, NHA mortgage-backed securities, precious metals, deposits with financial institutions, and call and short loans.

The carrying values outlined in the liquid asset table are consistent with the carrying values in the Bank's Consolidated Statement of Financial Position as at October 31, 2020. The liquidity value of the portfolio will vary under different stress events as different assumptions are used for the stress scenarios.

The Bank's liquid asset pool is summarized in the following table:

T53 Liquid asset pool

As at October 31, 2020 ($ millions)	Bank-owned liquid assets	Securities received as collateral from securities financing and derivative transactions	Total liquid assets	Encumbered liquid assets: Pledged as collateral	Encumbered liquid assets: Other(1)	Unencumbered liquid assets: Available as collateral	Unencumbered liquid assets: Other
Cash and deposits with central banks	$ 66,252	$ –	$ 66,252	$ –	$ 7,019	$ 59,233	$ –
Deposits with financial institutions	10,208	–	10,208	–	74	10,134	–
Precious metals	1,181	–	1,181	–	–	1,181	–
Securities:							
Canadian government obligations	74,943	14,890	89,833	37,991	–	51,842	–
Foreign government obligations	71,686	79,032	150,718	83,117	–	67,601	–
Other securities	69,470	78,238	147,708	114,867	–	32,841	–
Loans:							
NHA mortgage-backed securities(2)	35,267	–	35,267	8,010	–	27,257	–
Call and short loans	165	–	165	–	–	165	–
Total	$ 329,172	$ 172,160	$ 501,332	$ 243,985	$ 7,093	$ 250,254	$ –

As at October 31, 2019 ($ millions)	Bank-owned liquid assets	Securities received as collateral from securities financing and derivative transactions	Total liquid assets	Encumbered liquid assets: Pledged as collateral	Encumbered liquid assets: Other(1)	Unencumbered liquid assets: Available as collateral	Unencumbered liquid assets: Other
Cash and deposits with central banks	$ 36,068	$ –	$ 36,068	$ –	$ 9,604	$ 26,464	$ –
Deposits with financial institutions	10,652	–	10,652	–	71	10,581	–
Precious metals	3,709	–	3,709	–	58	3,651	–
Securities:							
Canadian government obligations	42,508	19,622	62,130	31,798	–	30,332	–
Foreign government obligations	70,101	78,904	149,005	90,617	–	58,388	–
Other securities	78,422	78,415	156,837	106,179	–	50,658	–
Loans:							
NHA mortgage-backed securities(2)	33,571	–	33,571	3,602	–	29,969	–
Call and short loans	525	–	525	–	–	525	–
Total	$ 275,556	$ 176,941	$ 452,497	$ 232,196	$ 9,733	$ 210,568	$ –

(1) Assets which are restricted from being used to secure funding for legal or other reasons.
(2) These mortgage-backed securities, which are available for sale, are reported as residential mortgage loans on the Consolidated Statement of Financial Position.

A summary of total unencumbered liquid assets held by the parent bank and its branches, and domestic and foreign subsidiaries, is presented below:

T54 Total unencumbered liquid assets held by the parent bank and its branches, and domestic and foreign subsidiaries

As at October 31 ($ millions)	2020	2019
The Bank of Nova Scotia (Parent)	$ 192,490	$ 153,584
Bank domestic subsidiaries	14,517	17,667
Bank foreign subsidiaries	43,247	39,317
Total	$ 250,254	$ 210,568

The Bank's liquidity pool is held across major currencies, mostly comprised of Canadian and U.S. dollar holdings. As shown above, the vast majority (83%) of liquid assets are held by the Bank's corporate office, branches of the Bank, and Canadian subsidiaries of the Bank. To the extent a liquidity reserve held in a foreign subsidiary of the Bank is required for regulatory purposes, it is assumed to be unavailable to the rest of the Group. Other liquid assets held by a foreign subsidiary are assumed to be available only in limited circumstances. The Bank monitors and ensures compliance in relation to minimum levels of liquidity required and assets held within each entity, and/or jurisdiction.

Encumbered assets

In the course of the Bank's day-to-day activities, securities and other assets are pledged to secure an obligation, participate in clearing or settlement systems, or operate in a foreign jurisdiction. Securities are also pledged under repurchase agreements. A summary of encumbered and unencumbered assets is presented below:

T55 Asset encumbrance

As at October 31, 2020 ($ millions)	Bank-owned assets	Securities received as collateral from securities financing and derivative transactions	Total assets	Encumbered assets: Pledged as collateral	Encumbered assets: Other(1)	Unencumbered assets: Available as collateral(2)	Unencumbered assets: Other(3)
Cash and deposits with central banks	$ 66,252	$ –	$ 66,252	$ –	$ 7,019	$ 59,233	$ –
Deposits with financial institutions	10,208	–	10,208	–	74	10,134	–
Precious metals	1,181	–	1,181	–	–	1,181	–
Liquid securities:							
Canadian government obligations	74,943	14,890	89,833	37,991	–	51,842	–
Foreign government obligations	71,686	79,032	150,718	83,117	–	67,601	–
Other liquid securities	69,470	78,238	147,708	114,867	–	32,841	–
Other securities	3,621	7,794	11,415	3,227	–	–	8,188
Loans classified as liquid assets:							
NHA mortgage-backed securities	35,267	–	35,267	8,010	–	27,257	–
Call and short loans	165	–	165	–	–	165	–
Other loans	576,183	–	576,183	7,640	81,780	17,702	469,061
Other financial assets(4)	182,671	(109,231)	73,440	6,182	–	–	67,258
Non-financial assets	44,819	–	44,819	–	–	–	44,819
Total	$ 1,136,466	$ 70,723	$ 1,207,189	$ 261,034	$ 88,873	$ 267,956	$ 589,326

As at October 31, 2019 ($ millions)	Bank-owned assets	Securities received as collateral from securities financing and derivative transactions	Total assets	Encumbered assets: Pledged as collateral	Encumbered assets: Other(1)	Unencumbered assets: Available as collateral(2)	Unencumbered assets: Other(3)
Cash and deposits with central banks	$ 36,068	$ –	$ 36,068	$ –	$ 9,604	$ 26,464	$ –
Deposits with financial institutions	10,652	–	10,652	–	71	10,581	–
Precious metals	3,709	–	3,709	–	58	3,651	–
Liquid securities:							
Canadian government obligations	42,508	19,622	62,130	31,798	–	30,332	–
Foreign government obligations	70,101	78,904	149,005	90,617	–	58,388	–
Other liquid securities	78,422	78,415	156,837	106,179	–	50,658	–
Other securities	3,992	5,633	9,625	4,329	–	–	5,296
Loans classified as liquid assets:							
NHA mortgage-backed securities	33,571	–	33,571	3,602	–	29,969	–
Call and short loans	525	–	525	–	–	525	–
Other loans	572,216	–	572,216	9,102	54,814	13,293	495,007
Other financial assets(4)	189,802	(119,889)	69,913	5,433	–	–	64,480
Non-financial assets	44,595	–	44,595	–	–	–	44,595
Total	$ 1,086,161	$ 62,685	$ 1,148,846	$ 251,060	$ 64,547	$ 223,861	$ 609,378

(1) Assets which are restricted from being used to secure funding for legal or other reasons.
(2) Assets that are readily available in the normal course of business to secure funding or meet collateral needs including central bank borrowing immediately available.
(3) Other unencumbered assets are not subject to any restrictions on their use to secure funding or as collateral but the Bank would not consider them to be readily available. These include loans, a portion of which may be used to access central bank facilities outside of the normal course or to raise secured funding through the Bank's secured funding programs.
(4) Securities received as collateral against other financial assets are included within liquid securities and other securities.

As of October 31, 2020 total encumbered assets of the Bank were $350 billion (October 31, 2019 – $316 billion). Of the remaining $857 billion (October 31, 2019 – $833 billion) of unencumbered assets, $268 billion (October 31, 2019 – $224 billion) are considered readily available in the normal course of business to secure funding or meet collateral needs as detailed above.

In some over-the-counter derivative contracts, the Bank would be required to post additional collateral or receive less collateral in the event its credit rating was downgraded. The Bank maintains access to sufficient collateral to meet these obligations in the event of a downgrade of its ratings by one or more of the rating agencies. As at October 31, 2020 the potential adverse impact on derivatives collateral that would result from a one-notch or two-notch downgrade of the Bank's rating below its lowest current rating was $19 million or $133 million, respectively.

Encumbered liquid assets are not considered to be available for liquidity management purposes. Liquid assets which are used to hedge derivative positions in trading books or for hedging purposes are considered to be available for liquidity management provided they meet the criteria discussed in liquid assets above.

Liquidity coverage ratio

The Liquidity Coverage Ratio measure (LCR) is based on a 30-day liquidity stress scenario, with assumptions defined in the OSFI Liquidity Adequacy Requirements (LAR) Guideline. The LCR is calculated as the ratio of high quality liquid assets (HQLA) to net cash outflows. The Bank is subject to a regulatory minimum LCR of 100%.

OSFI's LAR stipulates that banks must maintain an adequate level of unencumbered HQLA that can be converted into cash to meet liquidity needs over a 30 calendar day horizon under a pre-defined significantly severe liquidity stress scenario. The LCR-prescribed liquidity stress scenario includes assumptions for asset haircuts, deposit run-off, wholesale rollover rates, and outflow rates for commitments.

HQLA are grouped into three categories: Level 1, Level 2A and Level 2B, based on guidelines from the LAR. Level 1 HQLA receive no haircuts, and includes cash, deposits with central banks, central bank reserves available to the Bank in times of stress, and securities with a 0% risk weight. Level 2A and 2B include HQLA of lesser quality and attracts haircuts ranging from 15%-50%.

The total weighted values for net cash outflows for the next 30 days are derived by applying the assumptions specified in the LAR Guideline to specific items, including loans, deposits, maturing debt, derivative transactions and commitments to extend credit.

The following table presents the Bank's average LCR for the quarter ended October 31, 2020 based on the average daily position in the quarter.

T56 Bank's average LCR

For the quarter ended October 31, 2020 ($ millions) (1)	Total unweighted value (Average)(2)	Total weighted value (Average)(3)
High-quality liquid assets		
Total high-quality liquid assets (HQLA)	*	**$ 209,777**
Cash outflows		
Retail deposits and deposits from small business customers, of which:	$ 211,956	17,997
Stable deposits	89,784	2,891
Less stable deposits	122,172	15,106
Unsecured wholesale funding, of which:	231,102	104,319
Operational deposits (all counterparties) and deposits in networks of cooperative banks	87,409	20,822
Non-operational deposits (all counterparties)	122,730	62,534
Unsecured debt	20,963	20,963
Secured wholesale funding	*	47,692
Additional requirements, of which:	232,234	50,241
Outflows related to derivative exposures and other collateral requirements	43,786	25,711
Outflows related to loss of funding on debt products	2,642	2,642
Credit and liquidity facilities	185,806	21,888
Other contractual funding obligations	1,362	1,250
Other contingent funding obligations(4)	460,982	8,924
Total cash outflows	*	**$ 230,423**
Cash inflows		
Secured lending (e.g. reverse repos)	$ 155,378	$ 35,873
Inflows from fully performing exposures	25,336	16,055
Other cash inflows	26,598	26,598
Total cash inflows	**$ 207,312**	**$ 78,526**
		Total adjusted value(5)
Total HQLA	*	**$ 209,777**
Total net cash outflows	*	**$ 151,897**
Liquidity coverage ratio (%)	*	**138%**

For the quarter ended October 31, 2019 ($ millions)		Total adjusted value(5)
Total HQLA	*	$ 165,088
Total net cash outflows	*	$ 132,125
Liquidity coverage ratio (%)	*	125%

* Disclosure is not required under regulatory guideline.
(1) Based on the average daily positions of the 62 business days in the quarter.
(2) Unweighted values represent outstanding balances maturing or callable within the next 30 days.
(3) Weighted values represent balances calculated after the application of HQLA haircuts or inflow and outflow rates, as prescribed by the OSFI LAR guidelines.
(4) Total unweighted value includes uncommitted credit and liquidity facilities, guarantees and letters of credit, outstanding debt securities with remaining maturity greater than 30 days, and other contractual cash outflows.
(5) Total adjusted value represents balances calculated after the application of both haircuts and inflow and outflow rates and any applicable caps.

HQLA is substantially comprised of Level 1 assets (as defined in the LAR guideline), such as cash, deposits with central banks available to the Bank in times of stress, and highly rated securities issued or guaranteed by governments, central banks and supranational entities.

The increase in the Bank's average LCR for the quarter ended October 31, 2020 versus the quarter ended October 31, 2019 was attributable to central bank actions to support the Canadian economy and financial systems and deposit growth, partially offset by lower wholesale funding. The Bank monitors its significant currency exposures, Canadian and U.S. dollars, in accordance with its liquidity risk management framework and risk appetite.

Funding

The Bank ensures that its funding sources are well diversified. Funding concentrations are regularly monitored and analyzed by type. The sources of funding are capital, deposits from retail and commercial clients sourced through the Canadian and international branch network, deposits from financial institutions as well as wholesale debt issuances.

Capital and personal deposits are key components of the Bank's core funding and these amounted to $325 billion as at October 31, 2020 (October 31, 2019 – $303 billion). The increase since October 31, 2019, was primarily due to personal deposit growth. A portion of commercial deposits, particularly those of an operating or relationship nature, are also considered part of the Bank's core funding. Furthermore, core funding is augmented by longer term wholesale debt issuances (original maturity over 1 year) of $168 billion (October 31, 2019 – $164 billion). Longer term wholesale debt issuances include senior notes, mortgage securitizations, asset-backed securities and covered bonds.

The Bank operates in many different currencies and countries. From a funding perspective, the most significant currencies are Canadian and U.S. dollars. With respect to the Bank's operations outside Canada, there are different funding strategies depending on the nature of the activities in each country. For those countries where the Bank operates a branch banking subsidiary, the strategy is for the subsidiary to be substantially self-funding in its local market. For other subsidiaries or branches outside Canada where local deposit gathering capability is not sufficient, funding is provided through the wholesale funding activities of the Bank.

From an overall funding perspective, the Bank's objective is to achieve an appropriate balance between the cost and the stability of funding. Diversification of funding sources is a key element of the funding strategy.

The Bank's wholesale debt diversification strategy is primarily executed via the Bank's main wholesale funding centres, located in Toronto, New York, London and Singapore. The majority of these funds are sourced in Canadian and U.S. dollars. Where required, these funds are swapped to fund assets in different currencies. The funding strategy deployed by wholesale funding centres and the management of associated risks, such as geographic and currency risk, are managed centrally within the framework of policies and limits that are approved by the Board of Directors.

In the normal course, the Bank uses a mix of unsecured and secured wholesale funding instruments across a variety of markets. The choice of instruments and markets is based on a number of factors, including relative cost and market capacity as well as an objective of maintaining a diversified mix of sources of funding. Market conditions can change over time, impacting cost and capacity in particular markets or instruments. Changing market conditions can include periods of stress where the availability of funding in particular markets or instruments is constrained. In these circumstances the Bank would increase its focus on sources of funding in functioning markets and secured funding instruments. Should a period of extreme stress exist such that all wholesale funding sources are constrained, the Bank maintains a pool of liquid assets to mitigate its liquidity risk. This pool includes cash, deposits with central banks and securities.

In Canada, the Bank raises short- and longer-term wholesale debt through the issuance of senior unsecured notes. Additional longer-term wholesale debt may be generated through the Bank's Canadian Debt and Equity Shelf, the securitization of Canadian insured residential mortgages through CMHC securitization programs (such as Canada Mortgage Bonds), uninsured residential mortgages through the Bank's Covered Bond Program, retail credit card receivables through the Trillium Credit Card Trust II program and retail indirect auto loan receivables through the Securitized Term Auto Receivables Trust program. Prior to maturities in February 2020, unsecured personal lines of credit were securitized through the Halifax Receivables Trust program. While the Bank includes CMHC securitization programs in its view of wholesale debt issuance, this source of funding does not entail the run-off risk that can be experienced in funding raised from capital markets.

Outside of Canada, short-term wholesale debt may be raised through the issuance of negotiable certificates of deposit in the United States, Hong Kong, the United Kingdom, and Australia and the issuance of commercial paper in the United States. The Bank operates longer-term wholesale debt issuance registered programs in the United States, such as its SEC Registered Debt and Equity Shelf, and non-registered programs, such as the securitization of retail indirect auto loan receivables through the Securitized Term Auto Receivables Trust program and the securitization of retail credit card receivables through the Trillium Credit Card Trust II program. The Bank's Covered Bond Program is listed with the U.K. Listing Authority, and the Bank may issue under the program in Europe, the United Kingdom, the United States, Australia and Switzerland. The Bank also raises longer-term funding across a variety of currencies through its Australian Medium Term Note Programme, European Medium Term Note Programme and Singapore Medium Term Note Programme. The Bank's European Medium Term Note Programme is listed with the U.K. Listing Authority, and the Swiss Stock Exchange. The Bank's Singapore Medium Term Note Programme is listed with the Singapore Exchange and the Taiwan Exchange.

The Department of Finance's bail-in regulations under the Canada Deposit Insurance Corporation (CDIC) Act and the Bank Act, became effective September 23, 2018. Senior long-term debt issued by the Bank on or after September 23, 2018, that has an original term greater than 400 days and is marketable, subject to certain exceptions, is subject to the Canadian Bank Recapitalization (Bail-in) regime. Under the Bail-in regime, in circumstances when the Superintendent of Financial Institutions has determined that a bank may no longer be viable, the Governor in Council may, upon a recommendation of the Minister of Finance that they are of the opinion that it is in the public interest to do so, grant an order directing the CDIC to convert all or a portion of certain shares and liabilities of that bank into common shares. As at October 31, 2020, issued and outstanding liabilities of $33 billion (October 31, 2019 – $11 billion) were subject to conversion under the bail-in regime.

Starting from the second quarter of 2020, the Bank accessed programs of central banks launched or amended in response to COVID-19 to supplement its funding. Further details of these programs are outlined as part of the Bank's Impact of COVID-19 disclosures on page 25 of this report.

The table below provides the remaining contractual maturities of funding raised through wholesale funding. In the Consolidated Statement of Financial Position, these liabilities are primarily included in Business & Government Deposits.

T57 Wholesale funding(1)

As at October 31, 2020 ($millions)	Less than 1 month	1-3 months	3-6 months	6-9 months	9-12 months	Sub-Total < 1 Year	1-2 years	2-5 years	>5 years	Total
Deposits from banks(2)	$ 1,084	$ 439	$ 88	$ 36	$ 1	$ 1,648	$ –	$ –	$ –	$ 1,648
Bearer deposit notes, commercial paper and short-term certificate of deposits	5,813	9,539	10,475	6,856	4,567	37,250	953	346	67	38,616
Asset-backed commercial paper(3)	606	2,307	400	–	–	3,313	–	–	–	3,313
Senior notes(4)(5)	144	5,642	4,822	3,843	923	15,374	14,753	12,109	10,337	52,573
Bail-inable notes(5)	–	1,362	–	–	–	1,362	214	21,980	9,397	32,953
Asset-backed securities	–	1,811	12	–	–	1,823	956	542	254	3,575
Covered bonds	–	–	3,330	–	5,804	9,134	3,879	13,396	4,086	30,495
Mortgage securitization(6)	212	1,558	243	2,161	413	4,587	3,700	14,058	5,076	27,421
Subordinated debentures(7)	69	–	–	–	–	69	79	389	8,818	9,355
Total wholesale funding sources	$ 7,928	$ 22,658	$ 19,370	$ 12,896	$ 11,708	$ 74,560	$ 24,534	$ 62,820	$ 38,035	$ 199,949
Of Which:										
Unsecured funding	$ 7,110	$ 16,982	$ 15,385	$ 10,735	$ 5,491	$ 55,703	$ 15,999	$ 34,824	$ 28,619	$ 135,145
Secured funding	818	5,676	3,985	2,161	6,217	18,857	8,535	27,996	9,416	64,804

As at October 31, 2019 ($millions)	Less than 1 month	1-3 months	3-6 months	6-9 months	9-12 months	Sub-Total < 1 Year	1-2 years	2-5 years	>5 years	Total
Deposits from banks(2)	$ 3,284	$ 596	$ 566	$ 198	$ 268	$ 4,912	$ –	$ –	$ –	$ 4,912
Bearer deposit notes, commercial paper and short-term certificate of deposits	6,590	18,923	27,866	24,778	13,497	91,654	2,139	717	62	94,572
Asset-backed commercial paper(3)	1,096	3,069	1,324	–	–	5,489	–	–	–	5,489
Senior notes(4)(5)	1,372	3,842	2,533	5,080	3,520	16,347	14,114	25,609	11,636	67,706
Bail-inable notes(5)	–	–	–	26	–	26	1,314	6,568	2,920	10,828
Asset-backed securities	2	12	1,290	–	791	2,095	2,466	1,176	210	5,947
Covered bonds	–	545	1,844	1,882	–	4,271	8,979	10,171	2,379	25,800
Mortgage securitization(6)	–	601	771	663	353	2,388	4,376	12,675	4,486	23,925
Subordinated debentures(7)	–	–	–	–	–	–	78	156	9,121	9,355
Total wholesale funding sources	$ 12,344	$ 27,588	$ 36,194	$ 32,627	$ 18,429	$ 127,182	$ 33,466	$ 57,072	$ 30,814	$ 248,534
Of Which:										
Unsecured funding	$ 11,246	$ 23,361	$ 30,965	$ 30,082	$ 17,285	$ 112,939	$ 17,645	$ 33,050	$ 23,739	$ 187,373
Secured funding	1,098	4,227	5,229	2,545	1,144	14,243	15,821	24,022	7,075	61,161

(1) Wholesale funding sources exclude repo transactions and bankers acceptances, which are disclosed in the T58 Contractual maturities. Amounts are based on remaining term to maturity.
(2) Only includes commercial bank deposits.
(3) Wholesale funding sources also exclude asset-backed commercial paper issued by certain ABCP conduits that are not consolidated for financial reporting purposes.
(4) Not subject to bail-in.
(5) Includes Structured notes issued to institutional investors.
(6) Represents residential mortgages funded through Canadian Federal Government agency sponsored programs. Funding accessed through such programs does not impact the funding capacity of the Bank in its own name.
(7) Although subordinated debentures are a component of regulatory capital, they are included in this table in accordance with EDTF recommended disclosures.

Wholesale funding generally bears a higher risk of run-off in a stressed environment than other sources of funding. The Bank mitigates this risk through funding diversification, ongoing engagement with investors and by maintaining a large holding of unencumbered liquid assets. Unencumbered liquid assets of $250 billion as at October 31, 2020 (October 31, 2019 – $211 billion) were well in excess of wholesale funding sources that mature in the next twelve months.

Contractual maturities and obligations

The table below provides the maturity of assets and liabilities as well as the off-balance sheet commitments as at October 31, 2020, based on the contractual maturity date.

From a liquidity risk perspective the Bank considers factors other than contractual maturity in the assessment of liquid assets or in determining expected future cash flows. In particular, for securities with a fixed maturity date, the ability and time horizon to raise cash from these securities is more relevant to liquidity management than contractual maturity. For other assets and deposits the Bank uses assumptions about rollover rates to assess liquidity risk for normal course and stress scenarios. Similarly, the Bank uses assumptions to assess the potential drawdown of credit commitments in various scenarios.

The Bank's contractual obligations include contracts and purchase obligations, including agreements to purchase goods and services that are enforceable, legally binding on the Bank and affect the Bank's liquidity and capital resource needs. The Bank leases a large number of its branches, offices and other locations. The majority of these leases are for a term of five years, with options to renew.

T58 Contractual maturities

($ millions)	Less than one month	One to three months	Three to six months	Six to nine months	Nine to twelve months	One to two years	Two to five years	Over five years	No specific maturity	Total
	As at October 31, 2020									
Assets										
Cash and deposits with financial institutions and precious metals	$ 65,983	$ 469	$ 471	$ 225	$ 187	$ 496	$ 904	$ 767	$ 8,139	$ 77,641
Trading assets	2,312	4,412	4,426	1,752	2,135	6,366	21,720	16,856	57,860	117,839
Securities purchased under resale agreement and securities borrowed	83,584	21,620	10,059	2,765	1,719	–	–	–	–	119,747
Derivative financial instruments	2,026	4,140	623	2,156	2,312	8,141	7,242	18,425	–	45,065
Investment securities – FVOCI	2,755	5,041	6,941	3,213	6,374	10,179	34,214	7,948	1,832	78,497
Investment securities – amortized cost	1,196	1,707	4,155	2,787	931	4,337	7,626	8,905	–	31,644
Investment securities – FVTPL	–	–	–	–	–	–	–	–	1,248	1,248
Loans	42,908	28,913	31,072	32,724	31,159	92,194	248,377	42,114	53,802	603,263
Residential mortgages	2,938	5,271	9,009	13,400	13,458	49,948	158,050	30,012	2,598(1)	284,684
Personal loans	2,827	1,605	3,290	3,227	4,358	11,053	23,137	5,279	38,982	93,758
Credit cards	–	–	–	–	–	–	–	–	14,797	14,797
Business and government	37,143	22,037	18,773	16,097	13,343	31,193	67,190	6,823	5,064(2)	217,663
Allowance for credit losses	–	–	–	–	–	–	–	–	(7,639)	(7,639)
Customers' liabilities under acceptances	11,756	1,986	439	30	17	–	–	–	–	14,228
Other assets	–	–	–	–	–	–	–	–	47,294	47,294
Total assets	212,520	68,288	58,186	45,652	44,834	121,713	320,083	95,015	170,175	1,136,466
Liabilities and equity										
Deposits	$ 65,249	$47,997	$53,315	$38,786	$23,698	$ 39,350	$ 73,007	$ 20,614	$ 388,822	$ 750,838
Personal	10,231	13,741	15,088	11,626	6,192	11,691	9,861	216	167,489	246,135
Non-personal	55,018	34,256	38,227	27,160	17,506	27,659	63,146	20,398	221,333	504,703
Financial instruments designated at fair value through profit or loss	195	305	779	1,029	470	4,781	2,332	9,008	–	18,899
Acceptances	11,833	1,986	439	30	17	–	–	–	–	14,305
Obligations related to securities sold short	161	397	611	275	463	1,749	6,236	8,713	13,297	31,902
Derivative financial instruments	2,017	3,916	670	2,188	2,887	8,499	6,338	15,732	–	42,247
Obligations related to securities sold under repurchase agreements and securities lent	107,391	5,496	7,407	8,382	1,593	7,494	–	–	–	137,763
Subordinated debentures	–	–	–	–	–	–	–	7,405	–	7,405
Other liabilities	635	1,391	1,575	1,417	1,572	6,319	10,876	6,424	32,395	62,604
Total equity	–	–	–	–	–	–	–	–	70,503	70,503
Total liabilities and equity	187,481	61,488	64,796	52,107	30,700	68,192	98,789	67,896	505,017	1,136,466
Off-Balance sheet commitments										
Credit commitments(3)	5,374	13,010	22,643	24,764	20,386	34,638	108,929	5,625	–	235,369
Financial guarantees(4)	–	–	–	–	–	–	–	–	35,519	35,519
Outsourcing obligations(5)	16	31	44	43	43	41	–	–	–	218

(1) Includes primarily impaired mortgages.
(2) Includes primarily overdrafts and impaired loans.
(3) Includes the undrawn component of committed credit and liquidity facilities.
(4) Includes outstanding balances of guarantees, standby letters of credit and commercial letters of credit which may expire undrawn.
(5) The Bank relies on outsourcing arrangements for certain support and/or business functions, including, but not limited to, computer operations and cheque and bill payment processing. Outsourcing partners include, among others, IBM Canada and Symcor Inc.

	As at October 31, 2019									
($ millions)	Less than one month	One to three months	Three to six months	Six to nine months	Nine to twelve months	One to two years	Two to five years	Over five years	No specific maturity	Total
Assets										
Cash and deposits with financial institutions and precious metals	$ 35,392	$ 696	$ 462	$ 239	$ 181	$ 426	$ 796	$ 685	$ 11,552	$ 50,429
Trading assets	4,519	6,856	5,349	2,646	2,486	7,280	19,849	16,474	62,029	127,488
Securities purchased under resale agreement and securities borrowed	92,411	26,942	8,859	2,483	483	–	–	–	–	131,178
Derivative financial instruments	2,145	3,363	1,219	1,692	1,748	6,556	5,841	15,555	–	38,119
Investment securities – FVOCI	4,347	4,967	5,157	4,730	1,487	10,887	14,995	11,587	1,561	59,718
Investment securities – amortized cost	298	723	1,512	869	1,159	6,917	3,399	6,968	–	21,845
Investment securities – FVTPL	–	–	–	–	–	–	–	–	796	796
Loans	37,312	31,178	34,801	34,026	31,746	88,939	229,317	44,620	60,544	592,483
Residential mortgages	3,432	5,980	12,031	15,555	13,318	49,618	134,923	30,921	2,391(1)	268,169
Personal loans	4,097	2,652	3,752	3,711	3,525	12,667	23,556	5,737	38,934	98,631
Credit cards	–	–	–	–	–	–	–	–	17,788	17,788
Business and government	29,783	22,546	19,018	14,760	14,903	26,654	70,838	7,962	6,508(2)	212,972
Allowance for credit losses	–	–	–	–	–	–	–	–	(5,077)	(5,077)
Customers' liabilities under acceptances	12,072	1,486	297	27	14	–	–	–	–	13,896
Other assets	–	–	–	–	–	–	–	–	50,209	50,209
Total assets	188,496	76,211	57,656	46,712	39,304	121,005	274,197	95,889	186,691	1,086,161
Liabilities and equity										
Deposits	$ 73,415	$59,827	$60,036	$51,468	$35,723	$ 45,624	$ 69,082	$18,219	$319,996	$ 733,390
Personal	9,486	11,138	14,479	12,287	12,380	11,277	11,257	562	141,934	224,800
Non-personal	63,929	48,689	45,557	39,181	23,343	34,347	57,825	17,657	178,062	508,590
Financial instruments designated at fair value through profit or loss	229	410	398	829	826	4,028	1,844	3,671	–	12,235
Acceptances	12,077	1,486	297	27	14	–	–	–	–	13,901
Obligations related to securities sold short	892	871	704	305	422	1,771	5,626	6,658	13,155	30,404
Derivative financial instruments	2,210	4,374	1,859	1,621	1,956	8,659	6,437	13,106	–	40,222
Obligations related to securities sold under repurchase agreements and securities lent	114,864	5,496	2,930	793	–	–	–	–	–	124,083
Subordinated debentures	–	–	–	–	–	–	–	7,252	–	7,252
Other liabilities	3,410	1,581	1,154	871	964	3,821	6,452	5,952	30,277	54,482
Total equity	–	–	–	–	–	–	–	–	70,192	70,192
Total liabilities and equity	207,097	74,045	67,378	55,914	39,905	63,903	89,441	54,858	433,620	1,086,161
Off-Balance sheet commitments										
Operating leases	$ 38	$ 76	$ 112	$ 109	$ 106	$ 387	$ 894	$ 1,011	$ –	$ 2,733
Credit commitments(3)	4,289	5,264	15,370	16,398	14,745	28,007	119,308	8,493	–	211,874
Financial guarantees(4)	–	–	–	–	–	–	–	–	36,387	36,387
Outsourcing obligations(5)	18	36	52	52	52	173	154	–	1	538

(1) Includes primarily impaired mortgages.
(2) Includes primarily overdrafts and impaired loans.
(3) Includes the undrawn component of committed credit and liquidity facilities.
(4) Includes outstanding balances of guarantees, standby letters of credit and commercial letters of credit which may expire undrawn.
(5) The Bank relies on outsourcing arrangements for certain support and/or business functions, including, but not limited to, computer operations and cheque and bill payment processing. Outsourcing partners include, among others, IBM Canada and Symcor Inc.

Other Risks

Money Laundering, Terrorist Financing and Sanctions Risk

Money Laundering, Terrorist Financing (ML/TF) and Sanctions risk is the susceptibility of Scotiabank to be used by individuals or organizations to launder the proceeds of crime, finance terrorism, or violate economic sanctions. It also includes the risk that Scotiabank does not conform to applicable Anti-Money Laundering ("AML") / Anti-Terrorist Financing ("ATF") or Sanctions legislation, or does not apply adequate controls reasonably designed to deter and detect ML/TF and sanctions violations or to file any required regulatory reports.

Money laundering, terrorist financing, and sanctions risks are managed throughout the Bank via the operation of the Bank's AML/ATF and Sanctions program ("the Program"). The Board appointed Group Chief Anti-Money Laundering Officer is responsible for the design and operation of the Program, including development and application of written policies, procedures, and standards that are kept up to date and approved by senior management, assessing and documenting money laundering, terrorist-financing or sanctions risks, developing and maintaining an ongoing training program, and review of the effectiveness of the Program. The review of effectiveness is supplemented by an independent assessment conducted by the Audit Department. The Group Chief Anti-Money Laundering Officer has unfettered access to, and direct communication with, the Bank's Senior Management and the Board.

The Bank conducts an annual self-assessment of the ML/TF and sanctions risks inherent in its business units, as well as assessment of the control measures in place to manage those risks. The process is led by the Bank's AML Risk unit and the results shared with the Bank's Senior Management. All active employees are provided with mandatory AML/ATF and Sanctions training on an annual basis. The Bank performs Customer Due Diligence sufficient to form a reasonable belief that it knows the true identity of its customers, including in the case of an entity, its material ultimate beneficial owners.

The Bank will not maintain anonymous accounts, nor will it maintain accounts for shell banks. Consistent with a risk-based approach, the Bank assesses the risks of its customers and, where appropriate, conducts enhanced due diligence on those who are considered higher risk. The Bank also conducts ongoing risk tailored monitoring of its customers to detect and report suspicious transactions and activity, and conducts customer and transaction screening against terrorist, sanctions, and other designated watch-lists.

Operational Risk

Operational risk is the risk of loss resulting from people, inadequate or failed processes and systems, or from external events. Operational risk includes third party risk management and legal risk but excludes strategic risk and reputational risk. It also exists in some form in each of the Bank's business and support activities, and third parties to whom activities have been outsourced. It can result in financial loss, regulatory sanctions and damage to the Bank's reputation.

The Bank's Operational Risk Management Framework outlines the Bank's structured approach for effective management of enterprise-wide operational risk in a manner consistent with best practices and regulatory requirements. The Framework consists of the following key components:

Governance

Risk Committee Governance. The Bank recognizes operational risk as a distinct risk management discipline, managed enterprise-wide, in a globally coordinated manner, and in compliance with local regulations. Governance of operational risk is aligned with the Bank's overarching committee governance structure.

Policies, Frameworks, and Methodologies. Operational risk management is governed by various policies, frameworks, and methodologies established for effective identification, measurement and management of operational risks across the Bank.

Risk Appetite

The operational risk appetite articulates the amount and type of risk the Bank is willing to take to achieve its strategic and financial objectives and consists of a mixture of qualitative statements and quantitative measures with limits where appropriate.

Risk Identification and Assessment

Risk identification and assessment is a critical part of effectively managing operational risk. Risks are identified, classified, and assessed, and their potential impact is evaluated and reported to management and the Board. Operational risk management tools and programs are in place to support the identification and assessment of operational risk with each having their defined methodology and/or standards. The key tools include an Operational Risk Dictionary, Risk and Control Self-Assessments (RCSA), Scenario Analysis, and New Initiatives Risk Assessment.

Risk Measurement

Operational Risk Events. The goal of Operational Risk Event reporting is to manage, mitigate and monitor operational risk within the organization. The data captured provides meaningful information for assessing and mitigating operational risk exposure at the Bank as a result of event root cause analysis and evaluation of internal controls. Timely, accurate and complete reporting of Operational Risk Event data assists the Bank in maintaining a strong risk culture and promotes transparency of the financial impact of Operational Risk Events by aggregating losses and monitoring performance to indicate whether the Bank is operating within its risk appetite.

Operational Risk Capital. Operational risk capital refers to regulatory and internal capital which is quantified as a reserve for unexpected losses resulting from operational risk. Operational risk capital is a component of the total amount of risk capital that the Bank holds.

Risk Mitigation

Controls are identified and assessed through the various Operational Risk Management tools. In cases where controls are deemed deficient a remedial action will be required, which in turn will help to mitigate residual risk. Operational risk response decisions include mitigation, transfer, acceptance, and avoidance of operational risks.

Risk Monitoring, Analytics, and Reporting

The Bank has processes in place for the ongoing monitoring of operational risk. These monitoring activities can provide an early warning of emerging issues, triggering timely management response. In addition, these activities allow for review and analysis of the risk profile in relation to

risk appetite or other key indicators to identify when events may be approaching or exceeding thresholds, requiring action and/or escalation. Operational risk data is collected in risk systems and used for reporting. Operational risk reporting facilitates distribution and escalation of operational risk information to the relevant parties and provides stakeholders involved in operational risk management activities access to reliable data in a consistent and timely manner to support risk-based decision making.

Information Technology (IT) & Cyber Security Risk

IT Risk is the risk of financial loss, disruption or damage to reputation from some sort of failure of information technology systems. Cyber Security risks are a subset of unique IT risks faced as a result of using interconnected systems and digital technologies.

IT and Cyber Security risks continue to evolve across the financial industry. The increasing use of online delivery channels and mobile devices to perform financial transactions expose the bank to operational disruptions due to multiple factors such as: human errors, frauds, infrastructure failures, issues with our business partners, among others. Those events may increase costs or may negatively impact the Bank's operational environment, our customers and other third parties.

The Board of Directors approves the IT and Cyber Security Risk Management, Cyber Security and Information Security policies, which along with the respective frameworks are focused on safeguarding the Bank's and its customers' information, ensuring the Bank's IT environment is reliable, secure, resilient and robust in supporting our business objectives.

Significant efforts are directed on risk management activities in line with industry standards and best practices. The Bank continues to expand its cyber security capabilities to defend against potential threats and minimize the impact to the business, including the activities to reinforce the Bank's resilience to events caused by factors out of the Bank's control. The dependency on third parties and the potential risks they bring to the continuity of our business activities is a key area of focus. Increased regulatory oversight of IT and Cyber Security risk management practices is expected going forward.

The Bank continuously monitors metrics and Key Risk Indicators, which are regularly reported to the Board of Directors, its Risk Committee and other management committees who oversee the performance of the associated risk thresholds. Information security awareness campaigns are conducted periodically, including annual mandatory training sessions on information security and operational risk to all our employees, reinforcing our risk culture.

Compliance Risk

Compliance Risk is the risk of an activity not being conducted in conformity with applicable laws, rules, regulations and prescribed practices ("regulatory requirements"), as well as compliance related internal policies and procedures, and ethical standards expected by regulators, customers, investors, employees and other stakeholders.

The Bank conducts business in many jurisdictions around the world and provides a wide variety of financial products and services through its various lines of business and operations. It is subject to, and must comply with, many and changing Regulations by governmental agencies, supervisory authorities and self-regulatory organizations in all the jurisdictions in which the Bank operates. The regulatory bar is constantly rising with Regulations being more vigorously enforced and new Regulations being enacted. The bar of public expectations is also constantly rising. Regulators and customers expect the Bank and its employees will operate its business in compliance with applicable laws and will refrain from unethical practices.

Compliance risk is managed on an enterprise-wide basis throughout the Bank via the operation of the Scotiabank Compliance Program ("the Program") which is led by the Bank's Chief Compliance Officer (CCO) who is responsible for overseeing Compliance Risk Management within the Bank. The CCO is responsible for assessing the adequacy of, adherence to and effectiveness of the Program, as well as for the development and application of written compliance policies and procedures that are kept up to date and approved by senior management, assessing and documenting compliance risks, developing and maintaining a written compliance training program, which in each case is performed either directly or indirectly by other departments within the Bank in coordination with Global Compliance. This program and these ancillary activities are subject to the Audit Department's periodic review to assess the effectiveness of the Program.

The Board-approved Compliance Risk Summary Framework describes the general policies and principles applicable to compliance risk management within Scotiabank and encompasses the Bank's Regulatory Compliance Management Framework (RCMF) as contemplated by OSFI Guideline E-13. The Compliance Risk Summary Framework is an integral part of the enterprise-wide framework, policies and procedures that collectively articulate the Bank's governance and control structure. Other more specifically focused compliance risk management policies and procedures may be developed within the Compliance Risk Summary Framework where necessary or appropriate.

Environmental Risk

Environmental risk refers to the possibility that environmental concerns involving Scotiabank or its customers could affect the Bank's performance. The Bank considers climate change as a type of Environmental Risk.

To safeguard the Bank and the interests of its stakeholders, Scotiabank has an environmental policy, which is approved by the Bank's Board of Directors. The policy guides day-to-day operations, lending practices, supplier agreements, the management of real estate holdings and external reporting practices. It is supplemented by specific policies and practices relating to individual business lines.

Environmental risks associated with the business operations of each borrower and any real property offered as security are considered in the Bank's credit evaluation procedures. This includes an environmental risk assessment where applicable, and commentary on the potential impact of climate change (including physical or transition risk impacts) on the borrower. Global Risk Management has primary responsibility for establishing the related policies, processes and standards associated with mitigating environmental risk in the Bank's lending activities. Decisions are taken in the context of the risk management framework.

In the area of project finance, the Equator Principles have been integrated into the Bank's internal processes and procedures since 2006. The Equator Principles help financial institutions determine, assess, manage and report environmental and social risk. The principles apply to project finance loans and advisory assignments where total capital costs exceed US$10 million, and to certain project-related corporate loans, bridge loans, and project-related refinance and project-related acquisition finance loans. The Equator Principles provide safeguards for sensitive projects to ensure protection of natural habitats and the rights of indigenous peoples, as well as safeguards against the use of child and forced labour. The bank has adopted the fourth version of Equator Principles (EP4), which came into effect on October 1, 2020

The Bank's Environmental Policy plays a prominent role in guiding the reduction of the Bank's environmental footprint. The Real Estate Department adheres to an Environmental Compliance Policy to ensure responsible management of the Bank's real estate holdings from an environmental perspective. In addition, a variety of reduction measures are in place for energy, paper and waste in the Bank's corporate offices and branch networks. Internal tracking systems are in place with respect to energy use, greenhouse gas emissions (GHG) and paper consumption. Since 2012, GHG emissions data for the branch network and corporate offices has been externally verified.

To continue operations in an environmentally responsible manner, the Bank monitors policy and legislative requirements through ongoing dialogue with government, industry and stakeholders in countries where it operates. Scotiabank has been meeting with environmental organizations, industry associations and socially responsible investment organizations with respect to the role that banks can play to help address issues such as climate change, protection of biodiversity, promotion of sustainable forestry practices, implementing the recommendations of the Task Force on Climate-related Financial Disclosure, and other environmental issues important to its customers and communities where it operates. The Bank has an ongoing process of reviewing its practices in these areas.

Scotiabank has a number of environmentally focused products and services, including: an EcoEnergy Financing program designed to support personal and small business customers who wish to install small-scale renewable energy projects; and an auto loan product for hybrid, electric and clean diesel vehicles. As well, Scotiabank has the Commodities Derivatives group, which assists corporate clients by providing liquidity and hedge solutions in the carbon market.

Environmental Reporting

Scotiabank is also a signatory to, and participant in the Carbon Disclosure Project, which provides corporate disclosure to the investment community on greenhouse gas emissions and climate change management. Further information is available in the Bank's annual Environmental, Social and Governance (ESG) Report.

Climate Change Risks – Taskforce on Climate Related Financial Disclosures (TCFD)

In 2018, Scotiabank announced its support of the Financial Stability Board Task Force on Climate-related Financial Disclosures. The implementation of the recommendations across Scotiabank is a multi-year journey.

In 2019, the Board of Directors approved an updated climate change strategy. Scotiabank's Climate Commitments detail the Bank's approach to addressing the risks and opportunities arising from climate change. These five commitments are detailed in an external position statement.

Governance

Board Oversight

As the topic of climate change requires a multidisciplinary approach, the risks and opportunities it poses to the Bank are addressed by the Board of Directors and its committees. The Board of Directors approved the Bank's Climate Change Strategy in October 2019. In addition, the following Board committees provide ongoing oversight.

- *Risk Committee*: Provides oversight of key risks, including those affected by climate change. This includes review (and, where appropriate, recommendation to the Board for approval) of risk appetite limits and policy-oriented documents addressing credit risk, environmental risk, and operational risk as well as reporting on potentially material climate change risks.
- *Corporate Governance Committee*: Provides oversight of the ESG strategy, of which climate change is a key priority, and the annual ESG Report.
- *Audit & Conduct Review Committee*: Provides oversight of climate change-related disclosure in the Bank's financial reporting, including its Annual Report.

Management's Role

The management of climate change risk is ultimately overseen by the Group Head and Chief Risk Officer, who reports directly to the CEO and has unfettered access to the Risk Committee of the Board. This is aided through a Climate Change Steering Committee made up of senior officers across the business lines and control/stewardship functions. The Committee meets monthly and is accountable for monitoring of progress against climate change targets.

Responsibility for implementing Scotiabank's climate change commitments lies with teams across several business lines and functional units across the bank. Climate change considerations are integrated into credit applications and industry reviews, through climate-related risk policies and procedures, specialized tools and training to banking officers and credit adjudicators. A cross-functional working group meets regularly to support the day to day implementation and tracking of the climate change strategy.

Strategy

Scotiabank recognizes that climate change is significantly impacting natural systems and communities across the globe and poses a significant risk to the global economy and society as a whole. Efforts to address climate change will require significant mobilization of capital from public and private sources worldwide.

Through Scotiabank's Climate Commitments the Bank committed to mobilizing $100 billion by 2025 to reduce the impacts of climate change. This includes lending, investing, finance and advisory, as well as investments in the Bank's direct operations and communities where it operates, and will help the Bank capitalize on the financial opportunity of the transition to a low-carbon economy. This commitment is supported by the Scotiabank Green and Transition Taxonomy and includes the creation of new products and services, including the issuance of our Green Bond (USD$500 million 3.5 year senior unsecured) in 2019. It has also led to enhanced integration of climate risk assessments in the credit adjudication process and further commitments to decarbonize the Bank's own operations. In 2020, Scotiabank launched a Sustainable Finance Group within Global Banking and Markets to help further the Climate Commitments. This group works closely with Scotiabank partner teams to provide financial solutions and advice across sustainable finance products to corporate, financial, public sector and institutional clients across our global footprint.

Risk Management

The Bank considers environmental risk (including climate-change risks) as a principal risk type. Climate-change risk refers to the possibility that climate change issues associated with Scotiabank or its customers could ultimately affect Bank performance by giving rise to credit, reputational,

operational or legal risk. Climate-change risks could be in the form of physical or transition risk. Examples of physical risk considerations include severe weather (e.g. floods, hurricanes, extreme cold or heat). Examples of transition risk considerations include policy/regulatory actions such as subsidies, taxes or increased fuel costs, as well as changing market conditions.

The Bank utilizes a comprehensive environmental risk management process where the identification, assessment and management of climate change risk is done through due diligence as part of the overall existing environmental risk assessment and credit adjudication processes. Highlights in 2020 include the following:

- *Integration of new Climate Commitments into existing risk frameworks*
  - The credit due diligence process was enhanced to specifically identify transition and physical risks and opportunities for business lending.
  - Development has begun for a standalone climate change risk framework, risk appetite statement, and metrics.
- *Integration of climate change risk assessment (CCRA) at the sector and borrower-levels*
  - A sector sensitivity methodology was developed that identifies key physical and transition risk drivers to determine potential material risks and opportunities. Environment and climate change risk assessment and mitigation is now a standard part of each annual industry review.
  - The Bank standardized the process of performing CCRAs for all business borrowers, updated internal systems to track CCRAs, and provided training for banking and credit officers.
  - The CCRA process evaluates both the physical (acute and chronic) and transition (reputational, market, technology, legal and compliance) risks a client may face, and their awareness and response (Quality of Management) to such risks. This process will also support data collection to enable the Bank to effectively understand, mitigate and manage climate change risks across sectors and geographies and will support stress testing and scenario planning of our business banking loan book.
- *Knowledge building on climate change risk and scenario-analysis*
  - A module on climate change risk was delivered in the annual mandatory environmental risk training for all banking officers and credit adjudicators.
  - The Bank is developing a methodology for stress testing the Bank's business and retail banking portfolios, leveraging the data collected from the CCRA, at the sectoral and business level according to various internationally recognized climate change scenarios and models.
- *External collaboration with peers*
  - Scotiabank is a participant in industry groups to develop consistent methodologies and metrics for TCFD reporting.
  - Scotiabank supported Waterloo's Intact Centre on Climate Adaptation report *Factoring Climate Risk into Financial Valuation*. The report provides practical guidance to better incorporate climate risk into the commercial real estate and transmission and distribution sectors.
  - Scotiabank is a participant in the United National Environment Program – Finance Initiative (UNEP FI) TCFD pilot to harmonize industry-wide approaches for climate scenario analysis in bank lending portfolios. Scotiabank also provided case study commentary towards the UNEP FI Climate Risk Governance and Applications external publication.
  - Scotiabank is involved in the initiative to create a Canadian Transition Finance set of Principles and Transition Taxonomy.
  - Scotiabank is a member of the Institute of International Finance (IIF) Sustainable Finance Working Group.

Metrics and Targets

Scotiabank sets, monitors and reports on climate change related performance and targets annually in Scotiabank's Environmental, Social and Governance Report. The Bank also reports to CDP. As part of Scotiabank's Climate Commitments, the Bank is tracking the initiatives that underlie its commitment as part of the metrics and targets it has adopted pursuant to these Commitments, including a target to reduce operational GHG emissions and to mobilize $100 billion to reduce the impacts of climate change.

The implementation of CCRA in the Business Banking loan book will provide the Bank with the data necessary to support stress testing and scenario planning. The data obtained has helped the Bank develop sound metric fundamentals as we continue to finalize the process to calculate the Bank's credit exposures to high-carbon sectors.

Data Risk

Data risk is the risk, whether direct or indirect, to data that is used to support the Bank's ability to make informed decisions and develop accurate reporting and analytics for the Bank, including the Board, senior management and regulators, or for customer facing and/or marketing purposes. Risks to which the Bank is exposed include data management, data taxonomy, metadata, breaches or data that is incomplete, inaccurate, invalid, untimely and/or inaccessible.

Data is considered one of the Bank's most strategic assets and the volume, value and type of data found within the Bank has exponentially increased in recent years. Enhanced rigor towards data management is a concentrated focus for the Bank with the increase in regulatory demands. The Data, Cyber and IT Risk Committee approves the Data Risk Framework and Data Management and Governance Policy. The goals of the framework and policy are to ensure oversight and management of critical Bank-wide data, and to provide governance, oversight, control structure and accountabilities to enable greater enterprise coordination and consistency.

The Data and AI Risk (DAIR) team is responsible for oversight of enterprise data risk. In partnership with the Data Office, DAIR oversees and standardizes data management and data governance practices in establishing reliable, reusable and scalable data. As data is produced and consumed by different business lines and geographies across the Bank, an effective, collaborative and holistic approach to data risk management is required to minimize reputational, regulatory and financial risk.

Model Risk

Model risk is the risk of adverse financial (e.g., capital, losses, revenue) and reputational consequences arising from the design, development, implementation and/or use of a model. It can originate from inappropriate specifications; incorrect parameter estimates; flawed hypotheses and/or assumptions; mathematical computation errors; inaccurate, inappropriate or incomplete data; inappropriate, improper or unintended usage; and inadequate monitoring and/or controls.

The Bank's Model Risk Management Policy (MRMP) describes the overarching principles, policies, and procedures that provide the framework for managing model risk. All models, whether developed by the Bank or vendor-supplied, that meet the Bank's model definition are covered by this Policy. The MRMP also clearly defines roles and responsibilities for key stakeholders involved in the model risk management cycle. Organizational units involved in the Model Risk Management Cycle have unit-level procedures, where appropriate, governing those stages of the cycle that they are responsible for. The Enterprise Core Risk Committee provides oversight over the Bank's framework for managing model risk and approves the MRMP.

Reputational Risk

Reputational risk is the risk that negative publicity regarding Scotiabank's conduct, business practices or associations, whether true or not, will adversely affect its revenues, operations or customer base, or require costly litigation or other defensive measures.

Negative publicity about an institution's business practices may involve any aspect of its operations, but usually relates to questions of business ethics and integrity, or quality of products and services. Such negative publicity has an impact on the Bank's brand and reputation.

Negative publicity and related reputational risk frequently arise as a by-product of some other kind of risk management control failure such as compliance and operational risks. In some cases, reputational risk can arise through no direct fault of an institution, but indirectly as a ripple-effect of an association or problems arising within the industry or external environment.

Reputational risk is managed and controlled throughout the Bank by the Scotiabank Code of Conduct (Code), governance practices and risk management programs, policies, procedures and training. Many relevant checks and balances are outlined in greater detail under other risk management sections, particularly Operational Risk, where reference is made to the Bank's well-established compliance program. All directors, officers and employees have a responsibility to conduct their activities in accordance with the Code, and in a manner that minimizes reputational risk and safeguards the Bank's reputation. While all employees, officers and directors are expected to protect the reputation of Scotiabank by complying with the Code, the activities of the Legal, Global Tax, Corporate Secretary, Global Communications, AML Risk, Global Compliance and Global Risk Management departments, and the Reputational Risk Committee, are particularly oriented to the management of reputational risk.

In providing credit, advice, or products to customers, or entering into associations, the Bank considers whether the transaction, relationship or association might give rise to reputational risk. The Bank has a Reputational Risk Policy, as well as policy and procedures for managing reputational and legal risk related to structured finance transactions. Global Risk Management plays a significant role in the identification and management of reputational risk related to credit underwriting. In addition, the Reputational Risk Committee is available to support Global Risk Management, as well as other risk management committees and business units, with their assessment of reputational risk associated with transactions, business initiatives, new products and services and sales practice issues.

The Reputational Risk Committee considers a broad array of factors when assessing transactions, so that the Bank meets, and will be seen to meet, high ethical standards. These factors include the extent, and outcome, of legal and regulatory due diligence pertinent to the transaction; the economic intent of the transaction; the effect of the transaction on the transparency of a customer's financial reporting; the need for customer or public disclosure; conflicts of interest; fairness issues; and public perception. The Reputational Risk Committee also holds quarterly meetings to review activities in the quarter, review metrics and discuss any emerging trends or themes.

The Reputational Risk Committee may impose conditions on customer transactions, including customer disclosure requirements to promote transparency in financial reporting, so that transactions meet Bank standards. In the event the Committee recommends not proceeding with a transaction and the sponsor of the transaction wishes to proceed, the transaction is referred to the Risk Policy Committee.

Strategic Risk

Strategic risk is the risk that the enterprise, business lines or corporate functions will make strategic choices that are ineffective or insufficiently resilient to changes in the business environment, or poorly execute such strategies.

The Board is ultimately responsible for oversight of strategic risk, by adopting a strategic planning process and approving, on an annual basis, a strategic plan for the Bank. Enterprise Strategy manages the strategic planning process.

The execution and evaluation of strategic plans is a fundamental element of the Risk Management Framework.

On an ongoing basis, Heads of Business Lines and Control Functions identify, manage, and assess the internal and external risks that could impede achievement of, or progress of, strategic objectives. The executive management team regularly meets to evaluate the effectiveness of the Bank's strategic plan, and consider what amendments, if any, are required.

Controls and Accounting Policies

Controls and Procedures

Management's responsibility for financial information contained in this annual report is described on page 148.

Disclosure controls and procedures

The Bank's disclosure controls and procedures are designed to provide reasonable assurance that information is accumulated and communicated to the Bank's management, including the President and Chief Executive Officer and the Executive Vice President and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

As of October 31, 2020, the Bank's management, with the participation of the President and Chief Executive Officer and the Executive Vice President and Chief Financial Officer, evaluated the effectiveness of its disclosure controls and procedures, as defined under the rules adopted by the U.S. Securities and Exchange Commission (SEC) and the Canadian securities regulatory authorities, and have concluded that the Bank's disclosure controls and procedures are effective.

Internal control over financial reporting

Management of the Bank is responsible for establishing and maintaining adequate internal control over financial reporting. These controls include policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Bank;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), and that receipts and expenditures are being made only in accordance with authorizations of management and directors of the Bank; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Bank's assets that could have a material effect on the financial statements.

All control systems contain inherent limitations, no matter how well designed. As a result, the Bank's management acknowledges that its internal control over financial reporting will not prevent or detect all misstatements due to error or fraud. In addition, management's evaluation of controls can provide only reasonable, not absolute, assurance that all control issues that may result in material misstatements, if any, have been detected.

Management assessed the effectiveness of internal control over financial reporting, using the Internal Control-Integrated Framework 2013 issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and based on that assessment concluded that internal control over financial reporting was effective as of October 31, 2020.

Changes in internal control over financial reporting

There have been no changes in the Bank's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Bank's internal control over financial reporting.

Critical Accounting Estimates

The Bank's accounting policies are integral to understanding and interpreting the financial results reported in this annual report. Note 3 to the consolidated financial statements, summarizes the significant accounting policies used in preparing the Bank's consolidated financial statements. Certain of these policies require management to make estimates, assumptions and subjective judgements that are difficult, complex, and often relate to matters that are inherently uncertain. The policies discussed below are considered to be particularly important to the presentation of the Bank's financial position and results of operations, because changes in the estimates, assumptions and judgements could have a material impact on the Bank's consolidated financial statements. These estimates, assumptions and judgements are adjusted in the normal course of business to reflect changing underlying circumstances.

Allowance for credit losses

The allowance for credit losses, using an expected credit loss approach as required under IFRS 9, is estimated using complex models and incorporates inputs, assumptions and techniques that involve a high degree of management judgment. Under IFRS 9 expected credit loss methodology, an allowance is recorded for expected credit losses on financial assets regardless of whether there has been an actual loss event. The Bank recognizes an allowance at an amount equal to 12 month expected credit losses, if the credit risk at the reporting date has not increased significantly since initial recognition (Stage 1). When a financial asset experiences a significant increase in credit risk subsequent to origination but is not considered to be in default, it is included in Stage 2 and subject to lifetime expected credit losses. Financial assets that are in default are included in Stage 3. Similar to Stage 2, the allowance for credit losses for Stage 3 financial assets captures the lifetime expected credit losses.

The main drivers in allowance for credit loss changes that are subject to significant judgment include the following:

- Determination of point-in-time parameters such as probability of default (PD), loss given default (LGD) and exposure at default (EAD).
- Forecast of macroeconomic variables for multiple scenarios and probability weighting of the scenarios.
- Assessment of significant increase in credit risk.

In the current economic environment resulting from COVID-19, the models in isolation may not capture all the uncertainty as well as the impact of the public support programs by the governments and central banks. Therefore, management has applied significant expert credit judgment in the determination of the allowance for credit losses.

Measurement of expected credit losses

The probability of default (PD), exposure at default (EAD), and loss given default (LGD) inputs used to estimate expected credit losses are modelled based on macroeconomic variables that are most closely related with credit losses in the relevant portfolio.

Details of these statistical parameters/inputs are as follows:

- PD – The probability of default is an estimate of the likelihood of default over a given time horizon. A default may only happen at a certain time over the remaining estimated life, if the facility has not been previously derecognized and is still in the portfolio.
- EAD – The exposure at default is an estimate of the exposure at a future default date, taking into account expected changes in the exposure after the reporting date, including repayments of principal and interest, whether scheduled by contract or otherwise, expected drawdowns on committed facilities, and accrued interest from missed payments.
- LGD – The loss given default is an estimate of the loss arising in the case where a default occurs at a given time. It is based on the difference between the contractual cash flows due and those that the lender would expect to receive, including from the realization of any collateral. It is usually expressed as a percentage of the EAD.

Forward-looking macroeconomic scenarios
The Bank uses a broad range of forward-looking economic information as inputs to its models of expected credit losses and the related allowance. These include real GDP, unemployment rates, central bank interest rates, and house-price indices. The allowance is determined using four probability-weighted, forward-looking scenarios. The Bank revised its allowance for credit losses (ACL) methodology in Q1, 2020, by adding an additional, more severe pessimistic forward-looking scenario. The Bank considers both internal and external sources of information and data in order to create unbiased projections and forecasts. The Bank prepares the scenarios using forecasts generated by Scotiabank Economics (SE). The forecasts are generated using both internally and externally developed models whose outputs are modified by SE as necessary to formulate a 'base case' view of the most probable future direction of economic developments; SE also develops a representative range of other alternative possible forecast scenarios. More specifically, the process involves the development of three additional economic scenarios to which relative probabilities are assigned. The development of the baseline and alternative scenarios is overseen by a governance committee that consists of internal stakeholders from across the Bank. The final baseline and alternative scenarios reflect significant review and oversight, and may incorporate judgment both in the determination of the scenarios' forecasts and the probability weights that are assigned to them. Qualitative adjustments or overlays may also be made as temporary adjustments using expert credit judgment in circumstances where, in the Bank's view, the existing regulatory guidance, inputs, assumptions, and/or modelling techniques do not capture all relevant risk factors. The use of management overlays may require significant judgment that may impact the amount of allowance recognized.

Significant Increase in credit risk (SIR)
The assessment of SIR since origination of a financial asset considers borrower-specific quantitative and qualitative information without consideration of collateral, and the impact of forward-looking information. Quantitative models may not always be able to capture all reasonable and supportable information that may indicate a significant increase in credit risk. Qualitative factors may be assessed to supplement the gap. Examples of situations include changes in adjudication criteria for a particular group of borrowers; changes in portfolio composition and natural disaster events impacting certain portfolios.

For retail exposures, a significant increase in credit risk cannot be assessed using forward looking information at an individual account level. Therefore, the assessment must be done at the segment level. Segment migration thresholds exist for each PD model by product which considers the proportionate change in PD as well as the absolute change in PD. The thresholds used for PD migration are reviewed and assessed at least annually, unless there is a significant change in credit risk management practices in which case the review is brought forward.

For Non-retail exposures the Bank uses an internal risk rating scale (IG codes) for its non-retail exposures. All non-retail exposures have an IG code assigned that reflects the probability of default of the borrower. Both borrower specific and non-borrower specific (i.e. macroeconomic) forward looking information is considered and reflected in the IG rating. Significant increase in credit risk is evaluated based on the migration of the exposures among IG codes.

Fair value of financial instruments

All financial instruments are measured at fair value on initial recognition. Subsequent measurement of a financial instrument depends on its classification. The contractual cash flow characteristics of a financial instrument and the business model under which it is held determines such classification. Non-trading loans and receivables, certain securities and most financial liabilities are carried at amortized cost unless classified or designated as fair value through profit and loss or fair value through other comprehensive income at inception.

Fair value of a financial asset or liability is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal, or in its absence, the most advantageous market to which the Bank has access at the measurement date.

The best evidence of fair value for a financial instrument is the quoted price in an active market. Unadjusted quoted market prices for identical instruments represent a Level 1 valuation. Quoted prices are not always available for over-the-counter transactions, as well as transactions in inactive or illiquid markets. In these instances, internal models that maximize the use of observable inputs are used to estimate fair value. The chosen valuation technique incorporates all the factors that market participants would take into account in pricing a transaction. When all significant inputs are observable, the valuation is classified as Level 2. Financial instruments traded in a less active market have been valued using indicative market prices, present value of cash flows or other valuation techniques. Fair value estimates normally do not consider forced or liquidation sales. Where financial instruments trade in inactive markets or when using models where observable parameters do not exist, significant management judgement is required for valuation purposes such as multiple of the underlying earnings, pricing by third party providers, discount rates, volatilities and correlations. Valuations that require the significant use of unobservable inputs are considered Level 3. The calculation of estimated fair value is based on market conditions at a specific point in time and therefore may not be reflective of future fair values. The Bank has considered current market conditions due to COVID-19 and assessed the impact of any unobservable inputs and has applied significant judgement in selection of those inputs to determine the fair value of financial instruments.

The Bank has controls and processes in place to ensure that the valuation of financial instruments is appropriately determined. Global Risk Management (GRM) is responsible for the design and application of the Bank's risk management framework. GRM is independent from the Bank's business units and is overseen by Executive Management and the Board of Directors. Senior management committees within GRM oversee and establish standards for risk management processes that are critical in ensuring that appropriate valuation methodologies and policies are in place for determining fair value.

Where possible, valuations are based on quoted prices or observable inputs obtained from active markets. GRM oversees a monthly Independent Price Verification (IPV) process in order to assess the reliability and accuracy of prices and inputs used in the determination of fair value. The IPV process is performed by price verification groups that are independent from the business. The Bank maintains an approved list of pricing sources that are used in the IPV process. These sources include, but are not limited to, brokers, dealers and consensus pricing services. The valuation policies relating to the IPV process require that all pricing or rate sources used be external to the Bank. On a periodic basis, an independent assessment of pricing or rate sources is also performed by GRM to determine market presence or market representative levels.

Where quoted prices are not readily available, such as for transactions in inactive or illiquid markets, internal models that maximize the use of observable inputs are used to estimate fair value. An independent senior management committee within GRM oversees the vetting, approval and ongoing validation of valuation models used in determining fair value. Risk policies associated with model development are approved by Executive Management and/or key risk committees.

In determining fair value for certain instruments or portfolios of instruments, valuation adjustments or reserves may be required to arrive at a more accurate representation of fair value. The Bank's policy of applying valuation reserves to a portfolio of instruments is approved by a senior management committee. These reserves include adjustments for credit risk, bid-offer spreads, unobservable parameters, constraints on prices in inactive or illiquid markets and when applicable funding costs. The methodology for the calculation of valuation reserves are reviewed at least annually by senior management.

Valuation adjustments recorded against the fair value of financial assets and financial liabilities totaled $470 million as at October 31, 2020, (2019 – $175 million), net of any write-offs. Majority of the year-over-year change is due primarily to the widening of counterparty credit spreads during the year and the enhancement of valuation adjustment methodology relating to uncollateralized OTC derivative instruments.

As at October 31, 2020, a net funding valuation adjustment (FVA) representing an excess of funding benefit adjustment over funding cost adjustment of $108 million, pre-tax, was recorded for uncollateralized derivative instruments. In the prior year, a net valuation adjustment (excess of debit valuation adjustment (DVA) over funding cost adjustment) of $177 million, pre-tax, was recorded for uncollateralized derivative instruments.

The Bank discloses the classification of all financial instruments carried at fair value in a hierarchy based on the determination of fair value. The valuation hierarchy is as follows:

- Level 1 – fair value is based on unadjusted quoted prices in active markets for identical instruments,
- Level 2 – fair value is based on models using significant market-observable inputs other than quoted prices for the instruments, or
- Level 3 – fair value is based on models using significant inputs that are not based on observable market data.

The Bank's assets and liabilities which are carried at fair value as classified by the valuation hierarchy are reflected in Note 7. The percentage of each asset and liability category by fair value hierarchy level are outlined as follows:

T59 Fair value hierarchy of financial instruments carried at fair value

	Assets			Liabilities	
Fair value hierarchy As at October 31, 2020	Trading assets (incl. precious metals)	Investment securities	Derivatives	Obligations related to securities sold short	Derivatives
Level 1	69%	38%	1%	80%	1%
Level 2	31%	61%	99%	20%	99%
Level 3	-%	1%	-%	-%	-%
	100%	100%	100%	100%	100%

Employee benefits

The Bank provides pension and other benefit plans for eligible employees in Canada and internationally. Pension benefits are offered in the form of defined benefit pension plans (generally based on an employee's length of service and average earnings at retirement), and in the form of defined contribution pension plans (where the Bank's contribution is fixed and there is no legal or constructive obligation to pay further amounts). Other benefits include post-retirement health care, dental care and life insurance, along with other long-term employee benefits such as long-term disability benefits.

The employee benefit expenses and the related benefit obligation are calculated using actuarial methods and certain actuarial assumptions. These assumptions are based on management's best estimate and are reviewed and approved annually. The most significant assumption is the discount rate used to determine the defined benefit obligation, which is set by reference to the yields on high quality corporate bonds that have durations that match the terms of the Bank's obligations. Separate discount rates are used to determine the annual benefit expense in Canada and the US. These rates are determined with reference to the yields on high quality corporate bonds with durations that match the various components of the annual benefit expense. The discount rate used to determine the annual benefit expense for all other plans is the same as the rate used to determine the defined benefit obligation. If the assumed discount rates were 1% lower, the benefit expense for 2020 would have been $124 million higher. Other key assumptions include future compensation, health care costs, employee turnover, retirement age and mortality. When making these estimates, management considers expectations of future economic trends and business conditions, including inflation rates as well as other factors, such as plan specific experience and best practices.

The Bank uses a measurement date of October 31, and based on this measurement date, the Bank reported a deficit of $1,808 million (2019 – $1,268 million) in its principal pension plans and a deficit of $1,262 million (2019 – $1,264 million) in its principal other benefit plans, which are typically unfunded, as at October 31, 2020, as disclosed in Note 28 to the consolidated financial statements.

Actual experience that differs from assumptions made by management will result in a net actuarial gain or loss recognized immediately in other comprehensive income except for other long-term employee benefits where they are recognized in the Consolidated Statement of Income.

Note 28 contains details of the Bank's employee benefit plans, such as the disclosure of pension and other benefit amounts, management's key assumptions, and a sensitivity analysis of changes in these assumptions on the employee benefit obligation and expense.

Corporate income taxes

Management exercises judgment in determining the provision for income taxes and deferred income tax assets and liabilities. The provision is based on management's expectations regarding the income tax consequences of transactions and events during the period. Management interprets the tax legislation for each jurisdiction in which the Bank operates and makes assumptions about the expected timing of the reversal of deferred income tax assets and liabilities. If management's interpretations of the legislation differ from those of the tax authorities or if the actual timing of the reversals of the deferred income tax assets and liabilities is not as anticipated, the provision for income taxes could increase or decrease in future periods.

Total deferred tax assets related to the Bank's unused income tax losses from operations arising in prior years were $226 million as at October 31, 2020 (2019 – $286 million). The tax related to temporary differences, unused tax losses and unused tax credits for which no deferred tax asset is recognized in the Consolidated Statement of Financial Position amounted to $15 million (2019 – $40 million). The amount related to unrecognized tax losses was $15 million, which will expire as follows: $6 million in 2021, and $9 million in 2023.

The Bank maintains provisions for uncertain tax positions that it believes appropriately reflect the risk of tax positions under discussion, audit, dispute, or appeal with tax authorities, or which are otherwise considered to involve uncertainty. These provisions are made using the Bank's best estimate of the amount expected to be paid based on an assessment of all relevant factors, which are reviewed at the end of each reporting period.

Since 2016, the Bank has received reassessments totalling $808 million of tax and interest as a result of the Canada Revenue Agency denying the tax deductibility of certain Canadian dividends received during the 2011-2014 taxation years. In June 2020, the Bank was reassessed for $217 million of tax and interest in respect of certain Canadian dividends received during the 2015 taxation year. The circumstances of the dividends subject to these reassessments are similar to those prospectively addressed by rules introduced in 2015 and 2018. The Bank is confident that its tax filing position was appropriate and in accordance with the relevant provisions of the Income Tax Act (Canada) and intends to vigourously defend its position.

Note 27 of the 2020 consolidated financial statements contains further details with respect to the Bank's provisions for income taxes.

Structured entities

In the normal course of business, the Bank enters into arrangements with structured entities on behalf of its customers and for its own purposes. These structured entities can be generally categorized as multi-seller commercial paper conduits, Bank funding vehicles and structured finance entities. Further details are provided in the Off-balance sheet arrangements section.

Management is required to exercise judgement to determine whether a structured entity should be consolidated. This evaluation involves understanding the arrangements, determining whether decisions about the relevant activities are made by means of voting rights or other contractual arrangements, and determining whether the Bank controls the structured entity.

The Bank controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The three elements of control are:

- power over the investee;
- exposure, or rights, to variable returns from involvement with the investee; and
- the ability to use power over the investee to affect the amount of the Bank's returns.

This definition of control applies to circumstances:

- when voting rights or similar rights give the Bank power, including situations where the Bank holds less than a majority of voting rights or involving potential voting rights;
- when an investee is designed so that voting rights are not the dominant factor in deciding who controls the investee (i.e., relevant activities are directed by contractual arrangements);
- involving agency relationships; and
- when the Bank has control over specified assets of an investee.

The Bank does not control an investee when it is acting in an agent's capacity. The Bank assesses whether it is an agent by determining whether it is primarily engaged to act on behalf and for the benefit of another party or parties. Factors that the Bank considers in this assessment include the scope of its decision-making authority over the investee, the rights held by other parties, the remuneration to which it is entitled, and the Bank's exposure to variability of returns from other interests that it holds in the investee.

The analysis uses both qualitative and quantitative analytical techniques and involves the use of a number of assumptions about the business environment in which the structured entity operates and the amount and timing of future cash flows.

The Bank reassesses whether it controls an investee if facts and circumstances indicate that one or more of the three elements of control change.

Management is required to exercise judgement to determine if a change in control event has occurred.

During 2020, there were no change in control events that caused the Bank to change its control conclusion of its multi-seller conduits or other structured entities.

As described in Note 15 to the consolidated financial statements and in the discussion of off-balance sheet arrangements, the Bank does not control the two Canadian-based multi-seller conduits that it sponsors and they are not required to be consolidated on the Bank's Consolidated Statement of Financial Position. The Bank controls its U.S.-based multi-seller conduit and consolidates it on the Bank's Consolidated Statement of Financial Position.

Goodwill

For the purpose of impairment testing, goodwill acquired in a business combination is, on the acquisition date, allocated to each of the Bank's group of cash-generating units (CGU) that are expected to benefit from the particular acquisition.

Goodwill is not amortized but tested for impairment annually and when circumstances indicate that the carrying value may be impaired.

Goodwill is reviewed at each reporting date to determine whether there is any indication of impairment. Each CGU to which goodwill is allocated for impairment testing purposes reflects the lowest level at which goodwill is monitored for internal management purposes.

The Bank determines the carrying value of the CGU using a regulatory capital approach based on credit, market, and operational risks, and leverage, consistent with the Bank's capital attribution for business line performance measurement. An impairment loss is recognized if the carrying amount of a CGU exceeds its recoverable amount. The recoverable amount is the greater of fair value less costs of disposal and value in use. If either fair value less costs of disposal or value in use exceeds the carrying amount, there is no need to determine the other. The recoverable amount for the CGU has been determined using the fair value less costs of disposal method. In arriving at such value an appropriate valuation model is used which considers various factors including normalized net income, price earnings multiples and control premium. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded subsidiaries or other available fair value indicators. An impairment loss, in respect of goodwill, is not reversed.

Significant judgement is applied in determining the recoverable amounts of the CGU and assessing whether certain events or circumstances constitute objective evidence of impairment. The goodwill recoverability assessment required a higher degree of judgement in order to take the uncertainty of the economic environment created by the COVID-19 pandemic into consideration.

Goodwill was assessed for annual impairment based on the methodology as at July 31, 2020, and no impairment was determined to exist. Additionally, there were no impairment indicators noted as of October 31, 2020.

Indefinite life intangible assets

Intangible assets with indefinite useful lives are not amortized but tested for impairment annually and when circumstances indicate that the carrying value may be impaired. Intangible assets are reviewed at each reporting date to determine whether there is any indication of impairment.

The recoverable amount is the greater of fair value less costs of disposal and value in use. If either fair value less costs of disposal or value in use exceeds the carrying amount, there is no need to determine the other. Value in use method is used by the Bank to determine the recoverable amount of the intangible asset. In determining value in use, an appropriate valuation model is used which considers factors such as management-approved cash flow projections, discount rate and terminal growth rate. An impairment loss is recognized if the carrying amount of the intangible asset exceeds its recoverable amount. Impairment losses recognized in prior periods are reassessed at each reporting period for any indication that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the intangible asset's carrying amount does not exceed the carrying amount that would have been determined if no impairment loss had been recognized.

The recoverable amount is significantly impacted by the discount rate and the terminal value. Significant judgement is applied in determining the intangible asset's recoverable amount and assessing whether certain events or circumstances constitute objective evidence of impairment. The indefinite life intangible asset recoverability assessment required a higher degree of judgement in order to take the uncertainty of the economic environment created by the COVID-19 pandemic into consideration.

Intangible assets were assessed for annual impairment based on the methodology as at July 31, 2020, and no impairment was determined to exist. Additionally, there were no impairment indicators noted as of October 31, 2020.

Derecognition of financial assets

Financial assets are derecognized when the contractual rights to the cash flows from the asset have expired, which occurs with repayment by the borrower or upon substantial modification of the asset terms. Assets are also derecognized when the Bank transfers the contractual rights to receive the cash flows from the financial asset, or has assumed an obligation to pay those cash flows to an independent third-party, and the Bank has transferred substantially all the risks and rewards of ownership of that asset to an independent third-party.

Management must apply judgement in determining whether a modification of the terms of the financial asset is considered to be substantial. For loans, this includes the nature of the modification and the extent of changes to terms including interest rate, authorized amount, term or type of underlying collateral.

Management must also apply judgement in determining, based on specific facts and circumstances, whether the Bank has retained or transferred substantially all the risks and rewards of ownership of the financial asset. Where substantially all the risks and rewards of ownership of the financial asset are neither retained nor transferred, the Bank derecognizes the transferred asset only if it has lost control over that asset. If the Bank retains control over the asset, it will continue to recognize the asset to the extent of its continuing involvement.

The majority of assets transferred under repurchase agreements, securities lending agreements, securitizations of fully insured Canadian residential mortgages, and securitizations of personal lines of credit, credit cards and auto loans do not qualify for derecognition. The Bank continues to record the transferred assets on the Consolidated Statement of Financial Position as secured financings.

In relation to the Bank's participation in the Government of Canada's Emergency Business Account (CEBA) and Business Credit Availability Program (BCAP), the Bank used judgment to determine if the derecognition requirements for financial assets under IFRS 9 are met.

Further information on derecognition of financial assets can be found in Note 14 of the consolidated financial statements.

Provisions

The Bank recognizes a provision if, as a result of a past event, the Bank has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Probable in this context means more likely than not. Significant judgement is required in determining whether a present obligation exists and in estimating the probability, timing, and amount of any future outflows.

In the ordinary course of business, the Bank and its subsidiaries are routinely defendants in, or parties to a number of pending and threatened legal actions and regulatory proceedings, including actions brought on behalf of various classes of claimants. In view of the inherent difficulty of predicting the outcome of such matters, the Bank cannot state what the eventual outcome of such matters will be.

Legal provisions are established when it becomes probable that the Bank will incur an expense related to a legal action and the amount can be reliably estimated. Such provisions are recorded at the best estimate of the amount required to settle any obligation related to these legal actions as at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation. Management and internal and external experts are involved in estimating any amounts that may be required. The actual costs of resolving these claims may vary significantly from the amount of the legal provisions. The Bank's estimate involves significant judgement, given the varying stages of the proceedings, the fact that the

Bank's liability, if any, has yet to be determined and the fact that the underlying matters will change from time to time. As such, there is a possibility that the ultimate resolution of those legal actions may be material to the Bank's consolidated results of operations for any particular reporting period.

Leases

IFRS 16 requires the Bank to make judgments that affect the calculation of the lease liabilities and right-of-use assets. The key judgements include: determining the lease term based on the terms in the contract and determining the interest rate used for discounting of future cash flows.

Determining lease term

The Bank's expectation of exercising the option to renew a lease is determined by assessing if the Bank is "reasonably certain" to exercise that option. The Bank will be reasonably certain to exercise an option when factors create a significant economic incentive to do so. This assessment requires a significant level of judgement as it is based on current expectations of future decisions.

The Bank considers the following criteria when determining whether it has an economic incentive that makes it reasonably certain to exercise an option: key locations for its branch network, locations on which the Bank has spent significant capital on renovation work, contribution to profit, value of locations based on current economic environment and the remaining term of existing leases.

The lease term begins at the commencement date i.e. the starting date on which Bank has the right to use the asset. The lease term may differ from the natural expiration date when renewal/termination options are available. The Bank must exclude from the lease term periods covered by termination options where it is reasonably certain that the Bank will exercise the termination option. Similarly, the Bank must include renewal periods in the lease term when the Bank is reasonably certain to exercise the renewal option.

The lease term has an impact on the calculation of the right-of-use ("ROU") asset and the lease liability; the longer the lease term, the higher the ROU asset and the related lease liability. Changes in the economic environment may impact the Bank's assessment of lease term, and any changes in the estimate of lease terms may have a material impact on the Bank's ROU assets and lease liabilities.

Discount rate

At commencement date, the Bank measures the lease liability at the present value of the future lease payments, discounted using the Bank's incremental borrowing rate. The Bank considers a broad range of factors to determine the appropriate discount rate. These include the Bank's credit risk, term of the lease, and the economic environment in which the lease is entered into. The Bank's incremental borrowing rate considers cost of funding raised through wholesale debt issuances including senior unsecured notes. For the leases entered into by the Bank's subsidiaries in international countries, the discount rates are specific to the countries that the leases are entered into. The Bank considers both internal and external sources of information, data and estimates in order to create the discount rate curve. The use of estimates result in significant judgement applied in determining the appropriate discount rate.

Future Accounting Developments

The Bank actively monitors developments and changes in accounting standards from the IASB, as well as requirements from the other regulatory bodies, including OSFI. The Bank is currently assessing the measurement impact of the adoption of new standards issued by the IASB will have on its consolidated financial statements and also evaluating the alternative elections available on transition.

Effective November 1, 2020

Definition of business

On October 22, 2018, the IASB issued a narrow-scope amendment to IFRS 3 Business Combination. The amendments will help companies determine whether an acquisition is of a business or a group of assets. Distinguishing between a business and a group of assets is important because an acquirer recognizes goodwill only when acquiring a business. The amendments apply to transactions for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020. Earlier adoption is permitted. The amendments will apply prospectively to new transactions occurring after November 1, 2020.

Effective November 1, 2021

Interest rate benchmark reform

On August 27, 2020, the IASB issued Interest Rate Benchmark Reform – Phase 2, Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 (the "amendments"). The amendments introduce a practical expedient to account for a change in the basis for determining the contractual cash flows of financial instruments that are impacted by interest rate benchmark reform ("IBOR reform"). Under the practical expedient, the Bank will not derecognize or adjust the carrying amount of financial instruments for modifications required by IBOR reform, but will instead update the effective interest rate to reflect the change in the interest rate benchmark. The practical expedient will be applied when the modification is required as a direct consequence of IBOR reform, and the new basis for determining the contractual cash flows is economically equivalent to the previous basis. A similar practical expedient will be applied for lessees when accounting for lease modifications is impacted by IBOR reform. In conjunction, the amendments also provide relief from specific hedge accounting requirements, such that existing hedge relationships directly impacted by IBOR reform will not be subject to discontinuation, and new hedging relationships that do not qualify under the current standards will be permitted, if changes to the hedge relationships are within the scope of the amendments.

Under the amendments, additional disclosures are required in the financial statements to outline the effect of the reform on the financial instruments and risk management strategy. The amendments are effective for the Bank from November 1, 2021, with earlier application permitted. The amendments apply retrospectively, but the Bank is not required to restate comparative information. The Bank is currently assessing the impact and disclosure requirements from the amendments.

Effective November 1, 2023

Insurance contracts

On May 18, 2017, the IASB issued IFRS 17 Insurance Contracts, which provides a comprehensive principle-based framework for the measurement and presentation of all insurance contracts. The new standard will replace IFRS 4 Insurance Contracts and requires insurance contracts to be measured using current fulfillment cash flows and for revenue to be recognized as the service is provided over the coverage period. The standard is required to be adopted retrospectively; if this is impractical, the modified retrospective or fair value method may be used.

On June 25, 2020, the IASB issued amendments to IFRS 17 Insurance Contracts. The amendments are designed to make it easier for companies to explain their financial performance, reduce costs due to simplification of some requirements in the standard and ease transition by deferring the effective date of the standard by two years. The standard will be effective as of November 1, 2023 for the Bank. As part of its ongoing implementation project for the standard, the Bank will consider the amendments on the scope, recognition, measurement and presentation of insurance contracts. The Bank continues to monitor developments related to the standard and industry discussions on the application of the standard.

The implementation of IFRS 17 is a multi-year project consisting of technology upgrades and policy and process changes. The project structure and governance has been established along with a Project Management Office to assist the Executive Steering and Project Operations Committees. The committees are comprised of representatives from Global Finance, Global Insurance Actuarial Services, Information Technology and the Insurance Business Operation. The Bank will require new technology to manage the insurance business and prepare additional disclosures, for the separate insurance legal entity financial statements, under the new standard. The Bank continues to assess and formulate the accounting policies under IFRS 17 in order to quantify the impact of the new standard.

Regulatory Developments

The Bank continues to monitor and respond to global regulatory developments relating to a broad spectrum of topics, in order to ensure that control functions and business lines are responsive on a timely basis and business impacts, if any, are minimized. A high-level summary of some of the key regulatory developments that have the potential of impacting the Bank's operations is included in the Legal and compliance risk section of the Bank's 2020 Annual Report and below, as may be updated by quarterly reports.

Regulatory Response to COVID-19

In March 2020, the Government of Canada and financial institution regulators introduced many new measures and economic relief initiatives to keep the financial system resilient and well capitalized in response to COVID-19. The Bank is actively monitoring these measures and initiatives and participating in certain government and regulatory programs. For more detail on such programs and initiatives and the impact on the Bank's operations, see page 25.

Regulators across the Bank's geographic footprint continue to focus on ensuring operational resilience of regulated firms and that consumers are protected. Regulatory environment experienced increased focus from some regulators with respect to trade reporting, market conduct and cyber security.

Regulatory Initiatives Impacting Financial Services in Canada

Changes to the Canada Deposit Insurance Corporation Act will strengthen and modernize deposit protection. Some of the changes include extending CDIC coverage to foreign currency deposits and deposits with terms greater than 5 years, eliminating coverage for travellers' cheques and introducing new requirements for deposits held in trust. The changes occur in two phases. The Bank implemented phase 1 by April 2020. The Ministry of Finance delayed implementation of Phase 2 from April 30, 2021 to April 30, 2022 due to the impact of COVID-19. The Bank is on track to implement.

The Canadian Securities Administrators published what they refer to as Client Focused Reforms in 2019 seeking to enhance the client-registrant relationship, with key areas of focus related to Know Your Client (KYC), Know Your Product (KYP), suitability, conflicts of interest and relationship disclosure. A new "Plain Language" Rulebook (PLR) published by Investment Industry Regulatory Organization of Canada is intended to make the rules easier to understand as well as introducing a number of substantive changes. The Bank's Wealth Management businesses will have to enhance processes and documentation to address the changes. As a result of COVID-19 challenges, the in-force date is now December 31, 2021 for all elements other than the conflict of interest provisions, which are in force June 30, 2021.

The Federal Consumer Protection Framework (Bill C86), introduced in 2018, applies to federally regulated financial institutions and focuses on strengthening consumer protection provisions and includes requirements intended to encourage responsible business conduct and fair treatment of consumers. A Canadian Banking program project is underway to address the new requirements.

The Canadian Securities Authorities ban on trailing commissions for order-execution-only dealers will take effect on June 1, 2022. This is the same time that rules will take effect in all provinces and territories except Ontario which implement a ban on deferred sales charges on mutual funds. Operational impacts on mutual fund manager and order-execution-only firms are significant and will require collaboration among industry participants.

The Commodity Futures Trading Commission (CFTC) Position Limit and Cross-Border Rules

The CFTC has adopted final rules addressing the cross-border application of certain swap dealer provisions of the Commodity Exchange Act. The cross-border application of U.S. swap provisions is a critical component of the Bank's compliance program. The Bank is on track of implementing changes effective September 14, 2021.

The CFTC has approved final position limit rules for twenty-five commodity derivatives and their linked cash-settled futures, options on futures, and economically equivalent swaps. The compliance dates are tiered between January 2022 and January 2023. The Bank is assessing the scope and impact.

United Kingdom and European Regulatory Reform

The UK formally left the EU on January 31, 2020. Political agreement has been reached on a transition period, which will extend until December 31, 2020. All EU legislation will continue to apply in the UK during such transition period.

The UK's exit from the EU may result in significant changes in law(s), which may impact the Bank's business, financial condition and/or results of operations and could adversely impact the Bank's cost of funding in Europe. The Bank continually monitors developments to prepare for changes that have the potential to impact its operations in the UK and elsewhere in Europe and is developing and revising its contingency plans accordingly.

Basel Committee on Banking Supervision – Finalized Basel III reforms

In December 2017, the Group of Governors and Heads of Supervision (GHOS), the oversight body of the Basel Committee on Banking Supervision (BCBS), announced that they have agreed on an output floor of 72.5% and have finalized the remaining Basel III reforms.

The final Basel III reform package includes: a revised standardized approach for credit risk; revisions to the internal ratings-based approach for credit risk; revisions to the credit valuation adjustment (CVA) framework, including the removal of the internally modelled approach and the introduction of a revised standardized approach; a revised standardized approach for operational risk, which will replace the existing standardized approaches and the advanced measurement approaches; revisions to the measurement of the leverage ratio and a leverage ratio buffer for global systemically important banks (G-SIBs), which will take the form of a Tier 1 capital buffer set at 50% of a G-SIB's risk-weighted capital buffer; and an aggregate output floor, which will ensure that banks' risk-weighted assets (RWAs) generated by internal models are no lower than 72.5% of RWAs as calculated by the Basel III framework's standardized approaches. Banks will also be required to disclose their RWAs based on these standardized approaches. Implementation of the new Basel III standards will be required in 2022. This includes the Fundamental Review of the Trading Book (FRTB) rules, which represents a delay from 2020. There is a phase-in period for the 72.5% output floor from January 1, 2022 until January 2027.

In March 2020, the GHOS announced a delay in the international implementation of the Basel III reform package. The delay was introduced to provide additional operational capacity for banks and supervisors to respond to immediate financial stability priorities resulting from COVID-19 on the global banking system. In line with that extension, OSFI is deferring the implementation date for the final set of Basel III reforms published by the BCBS in December 2017 to Q1, 2023. This includes revisions to the Standardized Approach and Internal Ratings-Based Approach to credit risk, the operational risk framework, and the leverage ratio framework, as well as the introduction of the new capital floor. Consistent with this delay, OSFI's implementation date of the revised Pillar 3 disclosure requirements as finalized by the BCBS in December 2018, which include the second and third phases of the BCBS' Pillar 3 disclosure project, will be delayed until Q1, 2023 at the earliest. In addition, OSFI's implementation date of the final set of revisions to the BCBS market risk framework (FRTB) published in January 2019 is being delayed until Q1, 2024. This extended timeline recognizes the complexity of the FRTB framework and the required infrastructure enhancements needed to adhere to it. OSFI's implementation date of revised credit valuation adjustment risk framework is also being delayed to Q1, 2024.

The Bank will continue to monitor and prepare for developments impacting regulatory capital requirements.

Regulatory developments relating to liquidity

The Net Stable Funding Ratio (NSFR) is aimed at reducing structural funding risk by requiring banks to fund their activities with sufficiently stable sources of funding. As part of OSFI's liquidity framework, a minimum NSFR requirement of 100% was implemented for January 2020. Public disclosure of this ratio is required commencing the first quarter of 2021.

Interest Rate Benchmark Reform

In July 2017, the UK Financial Conduct Authority (FCA), which began regulating the London Interbank Offered Rate (LIBOR) in 2013, announced that after December 31, 2021, it would stop making efforts to sustain the rate. As the administrator of LIBOR, the FCA, and regulators in other jurisdictions, have urged markets to transition away from the use of LIBOR and other interbank offered rates (IBORs) in favour of alternative risk-free rates (RFRs). RFRs differ inherently from LIBOR and other interbank offered rates, lacking both a term structure and a credit component. These differences add complexity to the transition, resulting in the fact that some markets, such as those based on new rates like the Secured Overnight Funding Rate, have been slower to develop.

The Bank has established an enterprise-wide program (the Transition Program), aimed at ensuring a smooth transition from LIBOR and other IBORs to RFRs. The Transition Program has been focused on identifying and quantifying our exposures to various interest rate benchmarks, providing the capability to trade products referencing alternative RFRs and evaluating our existing contract amendment language in the event LIBOR ceases to exist. The Transition Program is also reviewing contracts that reference LIBOR and other IBORs, with due consideration for those extending beyond the end of 2021 and is assessing its technology to ensure that it is fit for use in connection with RFRs. In summary, the Bank's approach contemplates transition risks as part of a comprehensive program of change to ensure that systems, processes and strategy provide for a smooth transition from the use of legacy rates and supports trading in alternative reference rates.

In developing these transition strategies, the Transition Program has integrated into its plans recommendations from industry groups and regulatory bodies, such as the Alternative Reference Rate Committee in the US and the FCA regarding timing of key transition activities, such as ceasing to issue certain LIBOR-based products, and incorporating fallback language in specific instruments. In light of COVID-19, the FCA granted firms more time to meet certain targets, particularly in the lending sector, providing that LIBOR-based lending was acceptable (in certain limited circumstances) until the end of Q1, 2021. The FCA did also state, however, that despite COVID-19, firms should continue to work from the presumption that LIBOR – in its current form – would not be available after the end of 2021. The Bank is keeping apprised of recent developments involving the ICE Benchmark Administrator, the FCA and the Federal Reserve Board regarding the future of certain LIBOR tenors and currencies, and in particular for USD LIBOR, as well as any guidance from relevant regulatory agencies to cease issuance of LIBOR products in 2021. The Bank's transition efforts reflect these revised regulatory recommendations, including technological readiness to issue and trade RFR-based products, preparing to amend and transition legacy contracts and transactions, and supporting clients through active engagement on the subject of rate reform. The Bank adhered to the ISDA IBOR Fallbacks Protocol on October 22, 2020, lending its support to this important industry tool in the transition of legacy derivatives products.

The International Accounting Standards Board (IASB) has approached the impact of Interest Rate Benchmark Reform on financial reporting in two phases. Phase one addresses issues affecting financial reporting in the period before the replacement of an existing interest rate benchmark with an alternative RFR; and phase two focuses on issues that might affect financial reporting when an existing interest rate benchmark is replaced with an RFR. The IASB issued the phase one amendments in September 2019 and the Bank adopted it effective November 1, 2019. The IASB issued the phase two amendments in August 2020, which will be effective for the Bank on November 1, 2021, with early application permitted.

Use of the Advance Measurement Approach for Operational Risk Capital

In January 2020, OSFI revised its capital requirements for operational risk in consideration of the final Basel III revisions published by the BCBS in December 2017. Effective Q1 2023, institutions will be required to use the revised Basel III Standardized Approach for operational risk. OSFI has plans for further consultation related to the 2023 domestic implementation of the final Basel III reforms.

In the interim, for fiscal years 2020, 2021 and 2022, institutions previously approved for the Basel II Advanced Measurement Approach (AMA) for operational risk capital are to report using the existing Basel II Standardized Approach (TSA).

Regulatory Developments Relating to Interest Rate Risk

In May 2019, OSFI updated its guidelines on Interest Rate Risk in the Banking Book (IRRBB), a risk control framework to identify, assess and manage interest rate risk. The Bank has implemented in 2020, consistent with OSFI's requirement.

Volcker Rule Amendments

The proposed Volcker rule amendments have now been approved by each of the five U.S. regulators responsible for this legislation (i.e. FDIC, OCC, Federal Reserve, CFTC & SEC). As anticipated, the final amendments will reduce the regulatory burden on certain financial institutions, including foreign banking organizations such as the Bank. The amendments take effect on January 1, 2020, with full compliance required by January 1, 2021.

Canadian Anti-Money Laundering (AML) Regulations

In July 2019, amendments to Canada's Proceeds of Crime (Money Laundering) and Terrorist Financing Act regulations were released following extensive industry consultation. Amendments will take effect in a phased approach, with the majority coming into effect by June 2021. These changes aim to improve the effectiveness of Canada's anti-money laundering and counter-terrorism financing regime, and to improve compliance with international standards. New regulations will require the Bank to implement changes to processes, technology and data, to satisfy Financial Transactions and Reports Analysis Centre of Canada (FINTRAC) reporting requirements. The Bank is proactively working to implement the new regime with the aim to protect the Canadian financial system and our communities.

Metals Investigations

Scotiabank has entered into a Deferred Prosecution Agreement ("DPA") with the U.S. Department of Justice (the "DOJ"). Additionally, the Commodity Futures Trading Commission (the "CFTC") issued three separate orders against Scotiabank (collectively, the "Orders"). The DPA and the Orders (together, the "Resolutions") resolve the DOJ's and CFTC's previously disclosed investigations into Scotiabank's activities and trading practices in the metals markets and related conduct as well as pre-trade mid-market marks and related swap dealer compliance issues.

Under the terms of the Resolutions, the Bank made aggregate payments to the DOJ and CFTC of approximately $127.5 million (USD) and has agreed to retain an independent compliance monitor. Under one of the orders, the CFTC will defer proceedings to suspend or revoke the Bank's provisional registration as a swap dealer subject to the Bank's implementation of a remediation plan, among other conditions.

Related Party Transactions

Compensation of key management personnel

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Bank, directly or indirectly, and comprise the directors of the Bank, the President and Chief Executive Officer, certain direct reports of the President and Chief Executive Officer and Group Heads.

T60 Compensation of the Bank key management personnel

For the year ended October 31 ($ millions)	2020	2019
Salaries and cash incentives (1)	**$ 19**	$ 17
Equity-based payment (2)	**30**	25
Pension and other benefits (1)	**6**	5
Total	**$ 55**	$ 47

(1) Expensed during the year.
(2) Awarded during the year.

Directors can use some or all of their director fees earned to buy common shares of the Bank at market rates through the Director's Share Purchase Plan.Non-officer directors may elect to receive all or a portion of their fees in the form of deferred stock units which vest immediately. Refer to Note 26 – Share-based payments for further details of these plans.

T61 Loans and deposits of key management personnel

Loans are currently granted to key management personnel at market terms and conditions.

As at October 31 ($ millions)	2020	2019
Loans	**$ 15**	$ 14
Deposits	**$ 11**	$ 9

The Bank's committed credit exposure to companies controlled by directors totaled $177.6 million as at October 31, 2020 (October 31, 2019 – $18.9 million) while actual utilized accounts were $115.9 million (October 31, 2019 – $3.3 million).

Transactions with associates and joint ventures

In the ordinary course of business, the Bank provides normal banking services and enters into transactions with its associated and other related corporations on terms similar to those offered to non-related parties. If these transactions are eliminated on consolidation, they are not disclosed as related party transactions. Transactions between the Bank and its associated companies and joint ventures also qualify as related party transactions and are as follows:

T62 Transactions with associates and joint ventures

As at and for the year ended October 31 ($ millions)	2020	2019
Net income / (loss)	**$ (75)**	$ (68)
Loans	**203**	327
Deposits	**159**	194
Guarantees and commitments	**$ 23**	$ 16

Scotiabank principal pension plan

The Bank manages assets of $4.1 billion (October 31, 2019 – $4.1 billion) which is a portion of the Scotiabank principal pension plan assets and earned $7.2 million (October 31, 2019 – $7.2 million) in fees.

Oversight and governance

The oversight responsibilities of the Audit and Conduct Review Committee (ACRC) with respect to related party transactions include reviewing policies and practices for identifying transactions with related parties that may materially affect the Bank, and reviewing the procedures for ensuring compliance with the Bank Act for related party transactions. The Bank Act requirements encompass a broader definition of related party transactions than is set out in IFRS. The Bank has various procedures in place to ensure that related party information is identified and reported to the ACRC on a semi-annual basis. The ACRC is provided with detailed reports that reflect the Bank's compliance with its established procedures.

The Bank's Internal Audit department carries out audit procedures as necessary to provide the ACRC with reasonable assurance that the Bank's policies and procedures to identify, authorize and report related party transactions are appropriately designed and operating effectively.

Supplementary Data

Geographic Information

T63 Net income by geographic segment

For the fiscal years ($ millions)	2020 Canada	U.S.	Mexico	Peru	Chile	Colombia	Caribbean and Central America	Other Inter-national	Total	2019(1) Canada	U.S.	Mexico	Peru	Chile	Colombia	Caribbean and Central America	Other Inter-national	Total	2018(1) Canada	U.S.	Mexico	Peru	Chile	Colombia	Caribbean and Central America	Other Inter-national
Net interest income	$ 8,515	$ 763	$ 1,661	$1,705	$1,415	$ 812	$ 1,734	$ 715	$17,320	$ 7,630	$ 720	$1,684	$1,576	$1,613	$ 1,017	$ 2,143	$ 794	$17,177	$ 7,780	$691	$1,561	$1,378	$1,117	$ 839	$ 2,028	$ 797
Non-interest income	8,085	1,375	724	605	677	449	753	1,348	14,016	7,304	1,189	671	790	806	567	1,048	1,482	13,857	6,805	843	613	662	565	484	968	1,644
Provision for credit losses	2,271	128	644	971	639	666	570	195	6,084	981	(16)	335	523	436	362	352	54	3,027	802	(34)	239	351	498	511	211	33
Non-interest expenses	8,952	1,080	1,298	827	973	813	1,589	1,324	16,856	8,275	870	1,306	846	1,166	920	1,933	1,421	16,737	7,683	701	1,196	770	837	723	1,795	1,353
Income tax expense	967	192	98	116	78	(74)	45	121	1,543	1,082	267	121	248	185	117	324	128	2,472	1,310	220	76	235	51	39	175	276
Subtotal	4,410	738	345	396	402	(144)	283	423	6,853	4,596	788	593	749	632	185	582	673	8,798	4,790	647	663	684	296	50	815	779
Net income attributable to non-controlling interests in subsidiaries	(28)	0	7	16	91	(87)	76	0	75	1	–	14	(11)	179	124	101	–	408	–	–	17	12	28	16	102	1
Net income attributable to equity holders of the Bank	$ 4,438	$ 738	$ 338	$ 380	$ 311	$ (57)	$ 207	$ 423	$ 6,778	$ 4,595	$ 788	$ 579	$ 760	$ 453	$ 61	$ 481	$ 673	$ 8,390	$ 4,790	$647	$ 646	$ 672	$ 268	$ 34	$ 713	$ 778
Adjustments	(76)	0	7	8	48	22	28	11	48	58	–	–	50	72	79	296	6	561	52	–	–	4	172	63	3	4
Adjusted net income (loss) attributable to equity holders of the Bank	$ 4,362	$ 738	$ 345	$ 388	$ 359	$ (35)	$ 235	$ 434	$ 6,826	$ 4,653	$ 788	$ 579	$ 810	$ 525	$ 140	$ 777	$ 679	$ 8,951	$ 4,842	$647	$ 646	$ 676	$ 440	$ 97	$ 716	$ 782

(1) Prior period amounts have been restated to conform with current period presentation.

T64 Loans and acceptances by geography

As at October 31 ($ billions)	2020	2019	2018
Canada			
Atlantic provinces	$ 21.5	$ 22.1	$ 21.9
Quebec	31.7	30.6	29.3
Ontario	217.7	203.0	185.7
Manitoba and Saskatchewan	18.2	17.9	17.3
Alberta	53.7	53.5	52.8
British Columbia	71.3	66.5	60.5
	414.1	393.6	367.5
U.S.	44.0	44.3	41.8
Mexico	31.3	31.9	27.5
Peru	22.1	21.7	20.1
Chile	46.9	45.6	43.8
Colombia	10.9	11.7	11.6
Other International			
Latin America	11.3	10.2	8.8
Europe	9.5	9.1	9.4
Caribbean and Central America	23.3	30.2	31.1
Asia and Other	11.7	13.2	11.6
	55.8	62.7	60.9
	$ 625.1	$ 611.5	$ 573.2
Total allowance for credit losses	(7.7)	(5.1)	(5.1)
Total loans and acceptances net of allowance for credit losses	$ 617.4	$ 606.4	$ 568.1

T65 Gross impaired loans by geographic segment

As at October 31 ($ millions)	2020	2019	2018
Canada	**$ 1,127**	$ 1,133	$ 999
U.S.	**116**	94	80
Mexico	**570**	485	359
Peru	**824**	642	581
Chile	**775**	844	753
Colombia	**459**	505	619
Other International	**1,182**	1,432	1,739
Total	**$ 5,053**	$ 5,135	$ 5,130

T66 Provision against impaired financial instruments by geographic segment

For the fiscal years ($ millions)	2020	2019	2018
Canada	**$ 1,198**	$ 984	$ 785
U.S.	**6**	(1)	(6)
Mexico	**400**	291	239
Peru	**484**	446	349
Chile	**582**	403	275
Colombia	**322**	422	358
Other International	**476**	354	355
Total	**$ 3,468**	$ 2,899	$ 2,355

T67 Cross-border exposure to select countries(1)

As at October 31 ($ millions)	Loans	Trade	Interbank deposits	Government and other securities	Investment in subsidiaries and affiliates	Other	2020 Total	2019 Total
Asia								
China	$ 1,134	$ 1,750	$ 491	$ 1,015	$ 65	$ 25	**$ 4,480**	$ 5,184
India	1,293	59	–	–	–	8	**1,360**	1,812
Thailand	200	4	–	–	182	3	**389**	3,919
Singapore	2,784	1	13	–	–	98	**2,896**	2,049
Hong Kong	1,765	22	53	40	–	12	**1,892**	1,787
Japan	360	54	39	4,494	–	14	**4,961**	5,424
Others(2)	650	–	61	–	332	19	**1,062**	1,684
Total	$ 8,186	$ 1,890	$ 657	$ 5,549	$ 579	$ 179	**$ 17,040**	$ 21,859
Latin America								
Chile	$ 4,481	$ 1,173	$ 2,687	$ 295	$ 5,270	$ 586	**$ 14,492**	$ 13,395
Mexico	4,193	191	–	610	4,320	491	**9,805**	9,696
Brazil	7,787	1,492	6	11	282	241	**9,819**	9,025
Peru	3,587	80	–	165	5,615	105	**9,552**	9,121
Colombia	2,065	220	–	164	1,051	7	**3,507**	2,953
Others(3)	126	16	–	–	504	–	**646**	670
Total	$ 22,239	$ 3,172	$ 2,693	$ 1,245	$ 17,042	$ 1,430	**$ 47,821**	$ 44,860
Caribbean and Central America								
Panama	$ 4,267	$ 31	$ 58	$ 90	$ 284	$ 1	**$ 4,731**	$ 5,040
Costa Rica	1,560	43	–	–	1,062	23	**2,688**	3,142
Dominican Republic	937	4	316	–	808	24	**2,089**	1,753
Others(4)	1,206	155	3	–	1,404	1	**2,769**	3,779
Total	$ 7,970	$ 233	$ 377	$ 90	$ 3,558	$ 49	**$ 12,277**	$ 13,714
As at October 31, 2020	**$ 38,395**	**$ 5,295**	**$ 3,727**	**$ 6,884**	**$ 21,179**	**$ 1,658**	**$ 77,138**	
As at October 31, 2019	$ 37,039	$ 6,250	$ 3,249	$ 6,944	$ 25,056	$ 1,895	$ 80,433	

(1) Cross-border exposure represents a claim, denominated in a currency other than the local one, against a borrower in a foreign country on the basis of ultimate risk.
(2) Includes Indonesia, Macau, Malaysia, South Korea, and Taiwan.
(3) Includes Venezuela and Uruguay.
(4) Includes other English and Spanish Caribbean countries, such as Bahamas, Barbados, Jamaica, Trinidad & Tobago, and Turks & Caicos.

Credit Risk

T68 Loans and acceptances by type of borrower

As at October 31 ($ billions)	2020	2019	2018
Residential mortgages	**$ 284.7**	$ 268.2	$ 253.4
Personal loans	**93.7**	98.6	96.0
Credit cards	**14.8**	17.8	16.5
Personal	**$ 393.2**	$ 384.6	$ 365.9
Financial services			
Non-bank	**$ 25.7**	$ 28.8	$ 24.6
Bank(1)	**4.2**	5.2	4.5
Wholesale and retail	**26.1**	27.6	25.1
Real estate and construction	**37.7**	32.4	29.2
Energy(2)	**16.4**	16.6	14.8
Transportation	**10.4**	9.5	9.3
Automotive	**12.6**	14.0	14.7
Agriculture	**14.6**	13.3	11.5
Hospitality and leisure	**5.1**	4.4	4.0
Mining	**6.3**	6.8	5.5
Metals	**2.2**	2.9	3.0
Utilities	**12.6**	10.8	9.7
Health care	**6.0**	6.1	5.4
Technology and media	**16.7**	13.4	12.3
Chemicals(2)	**1.7**	2.4	1.9
Food and beverage	**8.5**	8.5	7.9
Forest products	**2.4**	3.1	1.9
Other(3)	**17.6**	16.0	16.9
Sovereign(4)	**5.1**	5.1	5.1
Business and government	**$ 231.9**	$ 226.9	$ 207.3
	$ 625.1	$ 611.5	$ 573.2
Total allowance for credit losses	**(7.7)**	(5.1)	(5.1)
Total loans and acceptances net of allowance for credit losses	**$ 617.4**	$ 606.4	$ 568.1

(1) Deposit taking institutions and securities firms.
(2) Prior periods have been restated to conform to the current presentation.
(3) Other related to $1.7 in financing products, $2.8 in services and $4.5 in wealth management (2019 – $1.1, $2.8, and $3.4 respectively).
(4) Includes central banks, regional and local governments, and supranational agencies.

T69 Off-balance sheet credit instruments

As at October 31 ($ billions)	2020	2019	2018
Commitments to extend credit (1)	**$ 235.4**	$ 211.9	$ 197.4
Standby letters of credit and letters of guarantee	**34.8**	35.6	35.4
Securities lending, securities purchase commitments and other	**54.9**	52.2	53.7
Total	**$ 325.1**	$ 299.7	$ 286.5

(1) Excludes commitments which are unconditionally cancellable at the Bank's discretion at any time.

T70 Changes in net impaired loans(1)

For the fiscal years ($ millions)	2020	2019	2018
Gross impaired loans			
Balance at beginning of year	**$ 5,135**	$ 5,130	$ 5,070
Net additions			
New additions	**4,362**	4,213	3,871
Acquisition-related	**–**	18	233
Declassifications	**(96)**	(45)	(168)
Payments	**(435)**	(469)	(722)
Sales	**(10)**	(58)	(72)
	3,821	3,659	3,142
Write-offs			
Residential mortgages	**(97)**	(99)	(219)
Personal loans	**(1,611)**	(1,818)	(1,441)
Credit cards	**(1,163)**	(1,325)	(1,104)
Business and government	**(534)**	(274)	(276)
	(3,405)	(3,516)	(3,040)
Foreign exchange and other	**(498)**	(138)	(42)
Balance at end of year	**$ 5,053**	$ 5,135	$ 5,130
Allowance for credit losses on financial instruments			
Balance at beginning of year	**$ 1,595**	$ 1,677	$ 1,756
Provision for credit losses	**3,468**	2,899	2,355
Write-offs	**(3,405)**	(3,516)	(3,040)
Recoveries			
Residential mortgages	**18**	26	96
Personal loans	**230**	285	275
Credit cards	**188**	218	250
Business and government	**28**	45	68
	464	574	689
Foreign exchange and other	**(165)**	(39)	(83)
Balance at end of year	**$ 1,957**	$ 1,595	$ 1,677
Net impaired loans			
Balance at beginning of year	**$ 3,540**	$ 3,453	$ 3,314
Net change in gross impaired loans	**(82)**	5	60
Net change in allowance for credit losses on impaired financial instruments	**(362)**	82	79
Balance at end of year	**$ 3,096**	$ 3,540	$ 3,453

(1) Excludes loans acquired under the Federal Deposit Insurance Corporation (FDIC) guarantee related to the acquisition of R-G Premier Bank of Puerto Rico, prior to 2018.

T71 Provision for credit losses

For the fiscal years ($ millions)	2020	2019	2018
New provisions	**$ 4,031**	$ 3,599	$ 3,267
Reversals	**(99)**	(126)	(223)
Recoveries	**(464)**	(574)	(689)
Provision for credit losses on impaired financial instruments (Stage 3)	**3,468**	2,899	2,355
Provision for credit losses – performing (Stage 1 and 2)	**2,616**	128	256
Total Provision for credit losses	**$ 6,084**	$ 3,027	$ 2,611

T72 Provision for credit losses against impaired financial instruments by type of borrower

For the fiscal years ($ millions)	2020	2019	2018
Residential mortgages	$ 192	$ 59	$ 91
Personal loans	1,651	1,480	1,198
Credit cards	968	1,078	833
Personal	2,811	2,617	2,122
Financial services			
Non-bank	5	–	1
Bank	–	–	–
Wholesale and retail	137	85	92
Real estate and construction	72	48	48
Energy	104	–	(33)
Transportation	64	8	8
Automotive	17	13	9
Agriculture	48	20	15
Hospitality and leisure	1	–	(5)
Mining	1	1	(1)
Metals	29	7	(7)
Utilities	15	14	20
Health care	49	24	12
Technology and media	23	16	7
Chemicals	1	–	1
Food and beverage	25	25	17
Forest products	12	5	5
Other	52	19	(6)
Sovereign	2	(3)	50
Business and government	657	282	233
Provision for credit losses on impaired financial instruments	$ 3,468	$ 2,899	$ 2,355

T73 Impaired loans by type of borrower

	2020			2019		
As at October 31 ($ millions)	Gross	Allowance for credit losses	Net	Gross	Allowance for credit losses	Net
Residential mortgages	$ 1,490	$ 392	$ 1,098	$ 1,830	$ 325	$ 1,505
Personal loans	1,032	820	212	1,094	591	503
Credit cards	–	–	–	–	–	–
Personal	$ 2,522	$ 1,212	$ 1,310	$ 2,924	$ 916	$ 2,008
Financial services						
Non-bank	44	9	35	42	11	31
Bank	2	2	–	2	2	–
Wholesale and retail	516	229	287	370	182	188
Real estate and construction	268	62	206	344	84	260
Energy	279	49	230	155	13	142
Transportation	183	53	130	150	45	105
Automotive	47	25	22	49	25	24
Agriculture	263	98	165	250	69	181
Hospitality and leisure	20	2	18	2	1	1
Mining	30	3	27	39	7	32
Metals	120	39	81	56	28	28
Utilities	110	4	106	35	21	14
Health care	68	22	46	92	22	70
Technology and media	34	10	24	33	11	22
Chemicals	6	2	4	14	5	9
Food and beverage	112	45	67	154	63	91
Forest products	28	11	17	47	11	36
Other	162	75	87	137	75	62
Sovereign	239	5	234	240	4	236
Business and government	$ 2,531	$ 745	$ 1,786	$ 2,211	$ 679	$ 1,532
Total	$ 5,053	$ 1,957	$ 3,096	$ 5,135	$ 1,595	$ 3,540

T74 Total credit risk exposures by geography (1)(2)

	2020					2019
	Non-Retail					
As at October 31 ($ millions)	Drawn	Undrawn	Other exposures(3)	Retail	Total	Total
Canada	$ 155,326	$ 52,851	$ 37,653	$ 375,579	$ 621,409	$ 549,233
U.S.	103,091	40,036	45,083	–	188,210	176,036
Chile	26,441	1,418	4,202	24,677	56,738	53,521
Mexico	22,800	1,175	3,005	12,207	39,187	37,969
Peru	20,233	949	3,459	9,290	33,931	32,954
Colombia	5,615	348	981	6,179	13,123	13,673
Other International						
Europe	22,871	11,200	17,699	–	51,770	45,885
Caribbean and Central America	15,924	1,720	1,160	12,616	31,420	38,636
Latin America (other)	11,588	1,077	392	590	13,647	12,402
Other	22,835	4,646	7,269	39	34,789	33,215
Total	$ 406,724	$ 115,420	$ 120,903	$ 441,177	$ 1,084,224	$ 993,524
As at October 31, 2019	$ 352,244	$ 100,161	$ 110,492	$ 430,627	$ 993,524	

(1) Geographic segmentation is based upon the location of the ultimate risk of the credit exposure. Includes all credit risk portfolios and excludes equities and other assets.
(2) Amounts represent exposure at default.
(3) Includes off-balance sheet lending instruments such as letters of credit, letters of guarantee, derivatives, securitization and repo-style transactions after collateral.

T75 AIRB credit risk exposures by maturity (1)(2)

	2020				2019
Residual maturity as at October 31 ($ millions)	Drawn	Undrawn	Other exposures(3)	Total	Total
Non-retail					
Less than 1 year	$ 175,335	$ 42,177	$ 77,660	$ 295,172	$ 240,217
One to 5 years	145,976	67,858	24,237	238,071	212,909
Over 5 years	21,580	1,825	8,939	32,344	34,307
Total non-retail	$ 342,891	$ 111,860	$ 110,836	$ 565,587	$ 487,433
Retail					
Less than 1 year	$ 33,067	$ 21,571	$ –	$ 54,638	$ 61,736
One to 5 years	215,271	–	–	215,271	192,344
Over 5 years	14,892	–	–	14,892	15,488
Revolving credits(4)	37,714	31,264	–	68,978	68,923
Total retail	$ 300,944	$ 52,835	$ –	$ 353,779	$ 338,491
Total	$ 643,835	$ 164,695	$ 110,836	$ 919,366	$ 825,924
As at October 31, 2019	$ 578,331	$ 147,134	$ 100,459	$ 825,924	

(1) Remaining term to maturity of the credit exposure. Includes all credit risk portfolios and excludes equity securities and other assets.
(2) Exposure at default, before credit risk mitigation.
(3) Off-balance sheet lending instruments, such as letters of credit, letters of guarantee, securitization, derivatives and repo-style transactions after collateral.
(4) Credit cards and lines of credit with unspecified maturity.

T76 Total credit risk exposures and risk-weighted assets

As at October 31 ($ millions)	2020 AIRB Exposure at Default(2)	2020 AIRB Risk-weighted assets	2020 Standardized(1) Exposure at Default(2)	2020 Standardized(1) Risk-weighted assets	2020 Total Exposure at Default(2)	2020 Total Risk-weighted assets	2019 Total Exposure at Default(2)	2019 Total Risk-weighted assets
Non-retail								
Corporate								
Drawn	$ 169,334	$ 83,795	$ 53,013	$ 48,614	$ 222,347	$ 132,409	$ 225,411	$ 133,725
Undrawn	102,141	35,033	3,482	3,399	105,623	38,432	96,710	37,299
Other(3)	53,085	12,248	2,743	2,722	55,828	14,970	50,261	14,287
	324,560	131,076	59,238	54,735	383,798	185,811	372,382	185,311
Bank								
Drawn	18,472	3,294	2,505	1,905	20,977	5,199	21,786	5,311
Undrawn	8,714	1,083	71	71	8,785	1,154	2,607	559
Other(3)	10,989	1,343	62	62	11,051	1,405	9,844	1,210
	38,175	5,720	2,638	2,038	40,813	7,758	34,237	7,080
Sovereign								
Drawn	155,085	5,297	8,315	877	163,400	6,174	105,047	4,499
Undrawn	1,005	97	7	6	1,012	103	844	122
Other(3)	4,550	52	–	–	4,550	52	2,992	65
	160,640	5,446	8,322	883	168,962	6,329	108,883	4,686
Total Non-retail								
Drawn	342,891	92,386	63,833	51,396	406,724	143,782	352,244	143,535
Undrawn	111,860	36,213	3,560	3,476	115,420	39,689	100,161	37,980
Other(3)	68,624	13,643	2,805	2,784	71,429	16,427	63,097	15,562
	$ 523,375	$ 142,242	$ 70,198	$ 57,656	$ 593,573	$ 199,898	$ 515,502	$ 197,077
Retail								
Retail residential mortgages								
Drawn	$ 233,647	$ 20,023	$ 47,715	$ 18,632	$ 281,362	$ 38,655	$ 265,100	$ 40,483
	233,647	20,023	47,715	18,632	281,362	38,655	265,100	40,483
Secured lines of credit								
Drawn	20,922	3,834	–	–	20,922	3,834	21,130	3,846
Undrawn	18,292	1,002	–	–	18,292	1,002	18,524	1,102
	39,214	4,836	–	–	39,214	4,836	39,654	4,948
Qualifying retail revolving exposures								
Drawn	14,598	8,330	–	–	14,598	8,330	16,046	9,198
Undrawn	31,264	3,530	–	–	31,264	3,530	29,839	3,806
	45,862	11,860	–	–	45,862	11,860	45,885	13,004
Other retail								
Drawn	31,777	15,593	39,683	29,015	71,460	44,608	77,508	49,327
Undrawn	3,279	1,043	–	–	3,279	1,043	2,480	776
	35,056	16,636	39,683	29,015	74,739	45,651	79,988	50,103
Total retail								
Drawn	300,944	47,780	87,398	47,647	388,342	95,427	379,784	102,854
Undrawn	52,835	5,575	–	–	52,835	5,575	50,843	5,684
	$ 353,779	$ 53,355	$ 87,398	$ 47,647	$ 441,177	$ 101,002	$ 430,627	$ 108,538
Securitization exposures	19,318	3,497	5,882	2,058	25,200	5,555	23,305	1,967
Trading derivatives	22,894	5,506	1,380	1,380	24,274	6,886	24,090	8,040
CVA derivatives	–	5,330	–	–	–	5,330	–	6,537
Subtotal	$ 919,366	$ 209,930	$ 164,858	$ 108,741	$ 1,084,224	$ 318,671	$ 993,524	$ 322,159
Equities	3,109	2,931	–	–	3,109	2,931	2,279	2,136
Other assets(4)	–	–	56,401	28,160	56,401	28,160	61,320	29,033
Total credit risk, before scaling factor	$ 922,475	$ 212,861	$ 221,259	$ 136,901	$ 1,143,734	$ 349,762	$ 1,057,123	$ 353,328
Add-on for 6% scaling factor(5)	–	12,242	–	–	–	12,242	–	12,103
Total credit risk	$ 922,475	$ 225,103	$ 221,259	$ 136,901	$ 1,143,734	$ 362,004	$ 1,057,123	$ 365,431

(1) Net of specific allowances for credit losses.
(2) Outstanding amount for on-balance sheet exposures and loan equivalent amount for off-balance sheet exposures, before credit risk mitigation.
(3) Other exposures include off-balance sheet lending instruments, such as letters of credit, letters of guarantee, non-trading derivatives and repo-style exposures, after collateral.
(4) Other assets include amounts related to central counterparties.
(5) Basel Committee imposed a scaling factor (6%) on risk-weighted assets for Internal Ratings-Based credit risk portfolios.

Revenues and Expenses

T77 Volume/rate analysis of change(1) in net interest income

($ millions)	Increase (decrease) due to change in: 2020 versus 2019			Increase (decrease) due to change in: 2019 versus 2018		
	Average volume	Average rate	Net change	Average volume	Average rate	Net change
Net interest income						
Total earning assets	$ 1,957	$ (5,029)	$ (3,072)	$ 2,938	$ 1,779	$ 4,717
Total interest-bearing liabilities	1,300	(4,515)	(3,215)	1,191	2,539	3,730
Change in net interest income	$ 657	$ (514)	$ 143	$ 1,747	$ (760)	$ 987
Assets						
Deposits with banks	$ 307	$ (821)	$ (514)	$ (73)	$ 142	$ 69
Trading assets	28	140	168	25	96	121
Securities purchased under resale agreements	30	(246)	(216)	126	(70)	56
Investment securities	390	(761)	(371)	155	191	346
Loans:						
Residential mortgages	426	(634)	(208)	586	510	1,096
Personal loans	(108)	(607)	(715)	373	420	793
Credit cards	(212)	90	(122)	443	55	498
Business and government	1,096	(2,190)	(1,094)	1,303	435	1,738
Total loans	1,202	(3,341)	(2,139)	2,705	1,420	4,125
Total earning assets	$ 1,957	$ (5,029)	$ (3,072)	$ 2,938	$ 1,779	$ 4,717
Liabilities						
Deposits:						
Personal	$ 176	$ (721)	$ (545)	$ 261	$ 243	$ 504
Business and government	791	(2,952)	(2,161)	797	1,746	2,543
Banks	186	(620)	(434)	(36)	316	280
Total deposits	1,153	(4,293)	(3,140)	1,022	2,305	3,327
Obligations related to securities sold under repurchase agreements	58	(152)	(94)	47	41	88
Subordinated debentures	(8)	(46)	(54)	66	15	81
Other interest-bearing liabilities	97	(24)	73	56	178	234
Total interest-bearing liabilities	$ 1,300	$ (4,515)	$ (3,215)	$ 1,191	$ 2,539	$ 3,730

(1) Prior year amounts have been restated to adjust for financial instruments designated at fair value through profit or loss, previously reported under deposits.

T78 Provision for income taxes

For the fiscal years ($ millions)	2020	2019	2018	2020 versus 2019
Income taxes				
Income tax expense	$ 1,543	$ 2,472	$ 2,382	(37.6)%
Other taxes				
Payroll taxes	437	439	390	(0.5)
Business and capital taxes	517	515	464	0.4
Harmonized sales tax and other	388	386	437	0.5
Total other taxes	1,342	1,340	1,291	0.1
Total income and other taxes (1)	$ 2,885	$ 3,812	$ 3,673	(24.3)%
Net income before income taxes	$ 8,396	$ 11,270	$ 11,106	(25.5)%
Effective income tax rate (%)	18.4	21.9	21.5	(3.5)
Total tax rate (%) (2)	29.6	30.2	29.6	(0.6)

(1) Comprising $1,658 of Canadian taxes (2019 – $1,998; 2018 – $2,218) and $1,227 of foreign taxes (2019 – $1,814; 2018 – $1,455).
(2) Total income and other taxes as a percentage of net income before income and other taxes.

T79 Assets under administration and management

($ billions)	2020	2019	2018
Assets under administration			
Personal			
Retail brokerage	**$ 154.3**	$ 153.6	$ 146.5
Investment management and trust	**130.6**	121.6	113.9
	284.9	275.2	260.4
Mutual funds	**195.5**	205.3	187.5
Institutional	**78.2**	77.9	69.7
Total	**$ 558.6**	$ 558.4	$ 517.6
Assets under management			
Personal	**$ 60.8**	$ 57.7	$ 54.7
Mutual funds	**179.3**	188.6	173.0
Institutional	**51.6**	55.3	52.9
Total	**$ 291.7**	$ 301.6	$ 280.6

T80 Changes in assets under administration and management

As at October 31 ($ billions)	2020	2019	2018
Assets under administration			
Balance at beginning of year	**$ 558.4**	$ 517.6	$ 470.2
Net inflows (outflows) (1)	**5.0**	6.9	53.1
Impact of market changes, including foreign currency translation	**(4.8)**	33.9	(5.7)
Balance at end of year (2)	**$ 558.6**	$ 558.4	$ 517.6

(1) Includes impact of business acquisitions/dispositions of $(13.9) (2019 – $(3.1); 2018 – $49.2).
(2) Prior period amounts have been restated to conform with current period presentation.

As at October 31 ($ billions)	2020	2019	2018
Assets under management			
Balance at beginning of year	**$ 301.6**	$ 280.6	$ 206.7
Net inflows (outflows) (1)	**(10.5)**	13.8	72.8
Impact of market changes, including foreign currency translation	**0.6**	7.2	1.1
Balance at end of year (2)	**$ 291.7**	$ 301.6	$ 280.6

(1) Includes impact of business acquisitions/dispositions of $(13.9) (2019 – nil; 2018 – $76.0).
(2) Prior period amounts have been restated to conform with current period presentation.

T81 Fees paid to the shareholders' auditors

For the fiscal years ($ millions)	2020	2019	2018
Audit services	**$ 25.6**	$ 32.6	$ 28.7
Audit-related services	**2.9**	1.3	1.0
Tax services outside of the audit scope	**–**	–	–
Other non-audit services	**0.3**	0.5	0.4
Total	**$ 28.8**	$ 34.4	$ 30.1

Selected Quarterly Information

T82 Selected quarterly information

	2020				2019			
As at and for the quarter ended	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Operating results ($ millions)								
Net interest income	**4,258**	**4,253**	**4,417**	**4,392**	4,336	4,374	4,193	4,274
Non-interest income	**3,247**	**3,481**	**3,539**	**3,749**	3,632	3,285	3,610	3,330
Total revenue	**7,505**	**7,734**	**7,956**	**8,141**	7,968	7,659	7,803	7,604
Provision for credit losses	**1,131**	**2,181**	**1,846**	**926**	753	713	873	688
Non-interest expenses	**4,057**	**4,018**	**4,363**	**4,418**	4,311	4,209	4,046	4,171
Income tax expense	**418**	**231**	**423**	**471**	596	753	625	498
Net income	**1,899**	**1,304**	**1,324**	**2,326**	2,308	1,984	2,259	2,247
Net income attributable to common shareholders	**1,745**	**1,332**	**1,243**	**2,262**	2,137	1,839	2,125	2,107
Operating performance								
Basic earnings per share ($)	**1.44**	**1.10**	**1.03**	**1.86**	1.76	1.51	1.74	1.72
Diluted earnings per share ($)	**1.42**	**1.04**	**1.00**	**1.84**	1.73	1.50	1.73	1.71
Return on equity (%)	**11.0**	**8.3**	**7.9**	**14.2**	13.3	11.5	13.8	13.5
Productivity ratio (%)	**54.1**	**52.0**	**54.8**	**54.3**	54.1	55.0	51.8	54.9
Core banking margin (%)(1)	**2.22**	**2.10**	**2.35**	**2.45**	2.40	2.45	2.45	2.45
Financial position information ($ billions)								
Cash and deposits with financial institutions	**76.5**	**59.0**	**103.9**	**69.3**	46.7	45.3	50.1	52.9
Trading assets	**117.8**	**123.8**	**121.5**	**144.7**	127.5	131.1	117.1	107.0
Loans	**603.3**	**613.4**	**625.2**	**592.3**	592.5	589.2	583.8	566.1
Total assets	**1,136.5**	**1,169.9**	**1,247.1**	**1,154.0**	1,086.2	1,066.7	1,058.2	1,034.3
Deposits	**750.8**	**768.0**	**797.7**	**763.9**	733.4	722.3	712.3	690.9
Common equity	**62.8**	**62.9**	**64.3**	**63.5**	63.6	63.5	63.6	62.5
Preferred shares and other equity instruments	**5.3**	**5.3**	**3.6**	**3.9**	3.9	3.9	3.9	3.9
Assets under administration	**558.6**	**558.4**	**530.9**	**553.9**	558.4	547.9	549.8	521.9
Assets under management	**291.7**	**293.4**	**278.0**	**297.1**	301.6	297.1	297.2	281.5
Capital and liquidity measures								
Common Equity Tier 1 (CET1) capital ratio (%)	**11.8**	**11.3**	**10.9**	**11.4**	11.1	11.2	11.1	11.1
Tier 1 capital ratio (%)	**13.3**	**12.8**	**11.9**	**12.5**	12.2	12.3	12.5	12.5
Total capital ratio (%)	**15.5**	**14.9**	**14.0**	**14.6**	14.2	14.8	14.7	14.6
Leverage ratio (%)	**4.7**	**4.6**	**4.4**	**4.0**	4.2	4.2	4.3	4.4
Risk-weighted assets ($ billions)	**417.1**	**430.5**	**446.2**	**420.7**	421.2	417.1	415.2	408.6
Liquidity coverage ratio (LCR) (%)	**138**	**141**	**132**	**127**	125	123	125	128
Credit quality								
Net impaired loans ($ millions)	**3,096**	**3,361**	**3,473**	**3,233**	3,540	3,559	3,695	3,607
Allowance for credit losses ($ millions) (2)	**7,820**	**7,403**	**6,079**	**5,095**	5,145	5,273	5,376	5,199
Gross impaired loans as a % of loans and acceptances	**0.81**	**0.81**	**0.78**	**0.77**	0.84	0.86	0.89	0.90
Net impaired loans as a % of loans and acceptances	**0.50**	**0.53**	**0.53**	**0.52**	0.58	0.58	0.61	0.61
Provision for credit losses as a % of average net loans and acceptances (annualized)(3)	**0.73**	**1.36**	**1.19**	**0.61**	0.50	0.48	0.61	0.47
Provision for credit losses on impaired loans as a % of average net loans and acceptances (annualized)(3)	**0.54**	**0.58**	**0.56**	**0.55**	0.49	0.52	0.49	0.47
Net write-offs as a % of average net loans and acceptances (annualized)	**0.41**	**0.47**	**0.47**	**0.54**	0.49	0.50	0.50	0.50
Adjusted results(1)								
Adjusted net income ($ millions)	**1,938**	**1,308**	**1,371**	**2,344**	2,400	2,455	2,263	2,291
Adjusted diluted earnings per share ($)	**1.45**	**1.04**	**1.04**	**1.83**	1.82	1.88	1.70	1.75
Adjusted return on equity (%)	**11.3**	**8.3**	**8.2**	**13.9**	13.8	14.3	13.6	13.7
Adjusted productivity ratio (%)	**53.3**	**51.4**	**54.0**	**53.4**	52.7	51.7	52.3	54.1
Adjusted provision for credit losses as a % of average net loans and acceptances(3)	**0.73**	**1.36**	**1.19**	**0.51**	0.50	0.48	0.51	0.47
Common share information								
Closing share price ($) (TSX)	**55.35**	**55.01**	**55.80**	**72.28**	75.54	70.46	73.78	74.80
Shares outstanding (millions)								
Average – Basic	**1,211**	**1,211**	**1,212**	**1,214**	1,218	1,221	1,224	1,226
Average – Diluted	**1,246**	**1,245**	**1,222**	**1,247**	1,260	1,251	1,252	1,255
End of period	**1,211**	**1,211**	**1,211**	**1,213**	1,216	1,220	1,222	1,226
Dividends paid per share ($)	**0.90**	**0.90**	**0.90**	**0.90**	0.90	0.87	0.87	0.85
Dividend yield (%)(4)	**6.4**	**6.5**	**5.9**	**4.9**	5.0	4.9	4.8	4.8
Market capitalization ($ billions) (TSX)	**67.1**	**66.6**	**67.6**	**87.7**	91.9	86.0	90.2	91.7
Book value per common share ($)	**51.85**	**51.91**	**53.05**	**52.33**	52.33	52.06	52.01	51.01
Market value to book value multiple	**1.1**	**1.1**	**1.1**	**1.4**	1.4	1.4	1.4	1.5
Price to earnings multiple (trailing 4 quarters)	**10.2**	**9.6**	**9.1**	**10.5**	11.2	10.5	10.9	11.1

(1) Refer to page 17 for a discussion of non-GAAP measures.
(2) Includes allowance for credit losses on all financial assets – loans, acceptances, off-balance sheet exposures, debt securities, and deposits with financial institutions.
(3) Includes provision for credit losses on certain financial assets – loans, acceptances and off-balance sheet exposures.
(4) Based on the average of the high and low common share price for the period.

Ten-Year Statistical Review

T83 Consolidated Statement of Financial Position

As at October 31 ($ millions)	2020(1)	2019(1)	2018(1)	2017	2016	2015	2014	2013	2012	2011
Assets										
Cash and deposits with financial institutions	**$ 76,460**	$ 46,720	$ 62,269	$ 59,663	$ 46,344	$ 73,927	$ 56,730	$ 53,338	$ 47,337	$ 38,723
Precious metals	**1,181**	3,709	3,191	5,717	8,442	10,550	7,286	8,880	12,387	9,249
Trading assets										
Securities	**108,331**	112,664	85,474	78,652	87,287	78,380	95,363	84,196	74,639	62,192
Loans	**8,352**	13,829	14,334	17,312	19,421	18,341	14,508	11,225	12,857	13,607
Other	**1,156**	995	454	2,500	1,853	2,419	3,377	1,068	100	–
	117,839	127,488	100,262	98,464	108,561	99,140	113,248	96,489	87,596	75,799
Financial instruments designated at fair value through profit or loss	**–**	–	12	13	221	320	111	106	197	375
Securities purchased under resale agreements and securities borrowed	**119,747**	131,178	104,018	95,319	92,129	87,312	93,866	82,533	66,189	47,181
Derivative financial instruments	**45,065**	38,119	37,558	35,364	41,657	41,003	33,439	24,503	30,338	37,322
Investment securities	**111,389**	82,359	78,396	69,269	72,919	43,216	38,662	34,319	33,376	30,176
Loans										
Residential mortgages	**284,684**	268,169	253,357	236,916	222,888	217,498	212,648	209,865	175,630	161,685
Personal loans	**93,758**	98,631	96,019	89,227	86,110	–	–	–	–	–
Credit cards	**14,797**	17,788	16,485	14,104	13,392	–	–	–	–	–
Personal and credit cards	**–**	–	–	–	–	91,477	84,204	76,008	68,277	63,317
Business and government	**217,663**	212,972	191,038	168,449	162,400	153,850	131,098	119,615	111,648	96,743
	610,902	597,560	556,899	508,696	484,790	462,825	427,950	405,488	355,555	321,745
Allowance for credit losses	**7,639**	5,077	5,065	4,327	4,626	4,197	3,641	3,273	2,977	2,689
	603,263	592,483	551,834	504,369	480,164	458,628	424,309	402,215	352,578	319,056
Other										
Customers' liability under acceptances, net of allowance	**14,228**	13,896	16,329	13,560	11,978	10,296	9,876	10,556	8,932	8,172
Property and equipment(2)	**5,897**	2,669	2,684	2,381	2,520	2,286	2,272	2,214	2,218	2,504
Investments in associates	**2,475**	5,614	4,850	4,586	4,299	4,033	3,461	5,326	4,791	4,434
Goodwill and other intangible assets	**17,015**	17,465	17,719	12,106	12,141	11,449	10,884	10,704	8,692	7,639
Deferred tax assets	**2,185**	1,570	1,938	1,713	2,021	2,034	1,763	1,938	2,273	2,214
Other assets	**19,722**	22,891	17,433	12,749	12,870	12,303	9,759	10,523	11,321	11,579
	61,522	64,105	60,953	47,095	45,829	42,401	38,015	41,261	38,227	36,542
	$ 1,136,466	$ 1,086,161	$ 998,493	$ 915,273	$ 896,266	$ 856,497	$ 805,666	$ 743,644	$ 668,225	$ 594,423
Liabilities										
Deposits										
Personal	**$ 246,135**	$ 224,800	$ 214,545	$ 200,030	$ 199,302	$ 190,044	$ 175,163	$ 171,048	$ 138,051	$ 133,025
Business and government	**464,619**	461,851	422,002	384,988	372,303	375,144	342,367	313,820	293,460	262,833
Financial institutions	**40,084**	46,739	39,987	40,349	40,272	35,731	36,487	33,019	34,178	25,376
	750,838	733,390	676,534	625,367	611,877	600,919	554,017	517,887	465,689	421,234
Financial instruments designated at fair value through profit or loss	**18,899**	12,235	8,188	4,663	1,459	1,486	465	174	157	101
Other										
Acceptances	**14,305**	13,901	16,338	13,560	11,978	10,296	9,876	10,556	8,932	8,172
Obligations related to securities sold short	**31,902**	30,404	32,087	30,766	23,312	20,212	27,050	24,977	18,622	15,450
Derivative financial instruments	**42,247**	40,222	37,967	34,200	42,387	45,270	36,438	29,267	35,323	40,236
Obligations related to securities sold under repurchase agreements and securities lent	**137,763**	124,083	101,257	95,843	97,083	77,015	88,953	77,508	56,968	38,216
Subordinated debentures	**7,405**	7,252	5,698	5,935	7,633	6,182	4,871	5,841	10,143	6,923
Capital instruments	**–**	–	–	–	–	–	–	–	–	2,003
Other liabilities(2)	**62,604**	54,482	52,744	43,314	42,716	41,638	34,785	32,047	32,726	29,848
	296,226	270,344	246,091	223,618	225,109	200,613	201,973	180,196	162,714	140,848
	1,065,963	1,015,969	930,813	853,648	838,445	803,018	756,455	698,257	628,560	562,183
Equity										
Common equity										
Common shares	**18,239**	18,264	18,234	15,644	15,513	15,141	15,231	14,516	13,139	8,336
Retained earnings	**46,345**	44,439	41,414	38,117	34,752	31,316	28,609	25,068	21,775	18,421
Accumulated other comprehensive income (loss)	**(2,125)**	570	992	1,577	2,240	2,455	949	388	(745)	(497)
Other reserves	**360**	365	404	116	152	173	176	193	166	96
Total common equity	**62,819**	63,638	61,044	55,454	52,657	49,085	44,965	40,165	34,335	26,356
Preferred shares and other equity instruments	**5,308**	3,884	4,184	4,579	3,594	2,934	2,934	4,084	4,384	4,384
Total equity attributable to equity holders of the Bank	**68,127**	67,522	65,228	60,033	56,251	52,019	47,899	44,249	38,719	30,740
Non-controlling interests										
Non-controlling interests in subsidiaries	**2,376**	2,670	2,452	1,592	1,570	1,460	1,312	1,138	946	626
Capital instrument equity holders	**–**	–	–	–	–	–	–	–	–	874
Total equity	**70,503**	70,192	67,680	61,625	57,821	53,479	49,211	45,387	39,665	32,240
	$ 1,136,466	$ 1,086,161	$ 998,493	$ 915,273	$ 896,266	$ 856,497	$ 805,666	$ 743,644	$ 668,225	$ 594,423

(1) The amounts for the years ended October 31, 2020, October 31, 2019 and October 31, 2018 have been prepared in accordance with IFRS 9; prior period amounts have not been restated.
(2) The amounts for the year ended October 31, 2020 have been prepared in accordance with IFRS 16; prior year amounts have not been restated (refer to Notes 3 and 4).

T84 Consolidated Statement of Income

For the year ended October 31 ($ millions)	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Revenue										
Interest income(1)										
Loans	**$ 26,977**	$ 29,116	$ 24,991	$ 21,719	$ 20,419	$ 18,912	$ 18,176	$ 17,359	$ 15,606	$ 14,373
Securities	**2,035**	2,238	1,771	1,403	1,237	922	921	1,000	1,045	986
Securities purchased under resale agreements and securities borrowed	**286**	502	446	283	158	161	180	190	221	221
Deposits with financial institutions	**414**	928	859	522	394	292	263	279	287	275
	29,712	32,784	28,067	23,927	22,208	20,287	19,540	18,828	17,159	15,855
Interest expense										
Deposits	**10,731**	13,871	10,544	7,878	6,793	6,070	6,173	6,397	6,117	5,589
Subordinated debentures	**240**	294	214	226	232	187	204	339	381	369
Capital instruments	**–**	–	–	–	–	–	–	–	–	138
Other(2)	**1,421**	1,442	1,118	788	891	938	858	742	691	745
	12,392	15,607	11,876	8,892	7,916	7,195	7,235	7,478	7,189	6,841
Net interest income	**17,320**	17,177	16,191	15,035	14,292	13,092	12,305	11,350	9,970	9,014
Non-interest income(1)(3)	**14,016**	13,857	12,584	12,120	12,058	10,957	11,299	9,949	9,676	8,296
Total revenue	**31,336**	31,034	28,775	27,155	26,350	24,049	23,604	21,299	19,646	17,310
Provision for credit losses(1)	**6,084**	3,027	2,611	2,249	2,412	1,942	1,703	1,288	1,252	1,076
Non-interest expenses(2)(3)	**16,856**	16,737	15,058	14,630	14,540	13,041	12,601	11,664	10,436	9,481
Income before taxes	**8,396**	11,270	11,106	10,276	9,398	9,066	9,300	8,347	7,958	6,753
Income tax expense	**1,543**	2,472	2,382	2,033	2,030	1,853	2,002	1,737	1,568	1,423
Net income	**$ 6,853**	$ 8,798	$ 8,724	$ 8,243	$ 7,368	$ 7,213	$ 7,298	$ 6,610	$ 6,390	$ 5,330
Net income attributable to non-controlling interests	**$ 75**	$ 408	$ 176	$ 238	$ 251	$ 199	$ 227	$ 231	$ 196	$ 149
Non-controlling interests in subsidiaries	**75**	408	176	238	251	199	227	231	196	91
Capital instrument equity holders	**–**	–	–	–	–	–	–	–	–	58
Net income attributable to equity holders of the Bank	**$ 6,778**	$ 8,390	$ 8,548	$ 8,005	$ 7,117	$ 7,014	$ 7,071	$ 6,379	$ 6,194	$ 5,181
Preferred shareholders and other equity instrument holders	**196**	182	187	129	130	117	155	217	220	216
Common shareholders	**$ 6,582**	$ 8,208	$ 8,361	$ 7,876	$ 6,987	$ 6,897	$ 6,916	$ 6,162	$ 5,974	$ 4,965
Earnings per common share (in dollars)										
Basic	**$ 5.43**	$ 6.72	$ 6.90	$ 6.55	$ 5.80	$ 5.70	$ 5.69	$ 5.15	$ 5.27	$ 4.63
Diluted	**$ 5.30**	$ 6.68	$ 6.82	$ 6.49	$ 5.77	$ 5.67	$ 5.66	$ 5.11	$ 5.18	$ 4.53
Dividends per common share (in dollars)	**$ 3.60**	$ 3.49	$ 3.28	$ 3.05	$ 2.88	$ 2.72	$ 2.56	$ 2.39	$ 2.19	$ 2.05

(1) The amounts for the years ended October 31, 2020, October 31, 2019 and October 31, 2018 have been prepared in accordance with IFRS 9; prior year amounts have not been restated.
(2) The amounts for the year ended October 31, 2020 have been prepared in accordance with IFRS 16; prior year amounts have not been restated (refer to Notes 3 and 4 in the consolidated financial statements).
(3) The amounts for the years ended October 31, 2020 and October 31, 2019 have been prepared in accordance with IFRS 15; prior year amounts have not been restated (refer to Notes 3 and 4 in the consolidated financial statements).

T85 Consolidated Statement of Changes in Equity

For the year ended October 31 ($ millions)	2020	2019	2018	2017	2016	2015	2014
Common shares							
Balance at beginning of year	**$ 18,264**	$ 18,234	$ 15,644	$ 15,513	$ 15,141	$ 15,231	$ 14,516
Issued	**59**	255	2,708	313	391	104	771
Purchased for cancellation	**(84)**	(225)	(118)	(182)	(19)	(194)	(56)
Balance at end of year	**$ 18,239**	$ 18,264	$ 18,234	$ 15,644	$ 15,513	$ 15,141	$ 15,231
Retained earnings							
Balance at beginning of year	**44,439**	41,414	38,117	34,752	31,316	28,609	25,315
IFRS adjustment	**–**	(58)(1)	(564)	–	–	–	(247)
Restated balances	**44,439**	41,356	37,553	34,752	31,316	28,609	25,068
Net income attributable to common shareholders of the Bank	**6,582**	8,208	8,361	7,876	6,987	6,897	6,916
Common dividends	**(4,363)**	(4,260)	(3,985)	(3,668)	(3,468)	(3,289)	(3,110)
Purchase of shares for cancellation and premium on redemption	**(330)**	(850)	(514)	(827)	(61)	(761)	(264)
Other	**17**	(15)	(1)	(16)	(22)	(140)(2)	(1)
Balance at end of year	**$ 46,345**	$ 44,439	$ 41,414	$ 38,117	$ 34,752	$ 31,316	$ 28,609
Accumulated other comprehensive income (loss)							
Balance at beginning of year	**570**	992	1,577	2,240	2,455	949	545
IFRS adjustment	**–**	–	51	–	–	–	(157)
Restated balances	**570**	992	1,628	2,240	2,455	949	388
Cumulative effect of adopting new accounting policies	**–**	–	–	–	–	(5)(3)	–
Other comprehensive income (loss)	**(2,668)**	(422)	(693)	(663)	(215)	1,511	561
Other	**(27)**	–	57	–	–	–	–
Balance at end of year	**$ (2,125)**	$ 570	$ 992	$ 1,577	$ 2,240	$ 2,455	$ 949
Other reserves							
Balance at beginning of year	**365**	404	116	152	173	176	193
Share-based payments(4)	**5**	7	6	8	7	14	30
Other	**(10)**	(46)	282	(44)	(28)	(17)	(47)
Balance at end of year	**$ 360**	$ 365	$ 404	$ 116	$ 152	$ 173	$ 176
Total common equity	**$ 62,819**	$ 63,638	$ 61,044	$ 55,454	$ 52,657	$ 49,085	$ 44,965
Preferred shares and other equity instruments							
Balance at beginning of year	**3,884**	4,184	4,579	3,594	2,934	2,934	4,084
Net income attributable to preferred shareholders and other equity instrument holders of the Bank	**196**	182	187	129	130	117	155
Preferred and other equity instrument dividends	**(196)**	(182)	(187)	(129)	(130)	(117)	(155)
Issued	**1,689**	–	300	1,560	1,350	–	–
Redeemed	**(265)**	(300)	(695)	(575)	(690)	–	(1,150)
Balance at end of year	**$ 5,308**	$ 3,884	$ 4,184	$ 4,579	$ 3,594	$ 2,934	$ 2,934
Non-controlling interests							
Balance at beginning of year	**2,670**	2,452	1,592	1,570	1,460	1,312	1,155
IFRS adjustment	**–**	–	(97)	–	–	–	(17)
Restated balances	**2,670**	2,452	1,495	1,570	1,460	1,312	1,138
Net income attributable to non-controlling interests	**75**	408	176	238	251	199	227
Distributions to non-controlling interests	**(148)**	(150)	(199)	(133)	(116)	(86)	(76)
Effect of foreign exchange and others	**(221)**	(40)	980	(83)	(25)	35	23
Balance at end of year	**$ 2,376**	$ 2,670	$ 2,452	$ 1,592	$ 1,570	$ 1,460	$ 1,312
Total equity at end of year	**$ 70,503**	$ 70,192	$ 67,680	$ 61,625	$ 57,821	$ 53,479	$ 49,211

(1) Refer to Note 4 in the consolidated financial statements.
(2) Includes retrospective adjustments primarily related to foreign currency translation on Allowance for Credit Losses with respect to periods prior to 2013 ($152).
(3) To reflect the adoption of the own credit risk provisions of IFRS 9 pertaining to financial liabilities designated at fair value through profit or loss.
(4) Represents amounts on account of share-based payments (refer to Note 26 in the consolidated financial statements).

T86 Consolidated Statement of Comprehensive Income

For the year ended October 31 ($ millions)	2020	2019	2018	2017	2016	2015	2014
Net income	**$ 6,853**	$ 8,798	$ 8,724	$ 8,243	$ 7,368	$ 7,213	$ 7,298
Other comprehensive income (loss), net of income taxes:							
Items that will be reclassified subsequently to net income							
Net change in unrealized foreign currency translation gains (losses)	**(2,239)**	(819)	(606)	(1,259)	396	1,855	889
Net change in unrealized gains (losses) on available-for-sale securities (debt and equity)(1)	**n/a**	n/a	n/a	(55)	(172)	(480)	(38)
Net change in fair value due to change in debt instruments measured at fair value through other comprehensive income(1)	**293**	105	(252)	n/a	n/a	n/a	n/a
Net change in gains (losses) on derivative instruments designated as cash flow hedges	**(32)**	708	(361)	(28)	258	55	(6)
Other comprehensive income (loss) from investments in associates	**(2)**	103	66	56	31	(9)	60
Items that will not be reclassified subsequently to net income							
Net change in remeasurement of employee benefit plan asset and liability	**(465)**	(815)	318	592	(716)	(1)	(320)
Net change in fair value due to change in equity instruments designated at fair value through other comprehensive income(1)	**(85)**	95	60	n/a	n/a	n/a	n/a
Net change in fair value due to change in own credit risk on financial liabilities designated under the fair value option(2)	**(298)**	8	(22)	(21)	(16)	15	n/a
Other comprehensive income (loss) from investments in associates	**(8)**	(10)	(7)	6	(10)	1	(2)
Other comprehensive income (loss)	**(2,836)**	(625)	(804)	(709)	(229)	1,436	583
Comprehensive income	**$ 4,017**	$ 8,173	$ 7,920	$ 7,534	$ 7,139	$ 8,649	$ 7,881
Comprehensive income (loss) attributable to:							
Common shareholders of the Bank	**$ 3,914**	$ 7,786	$ 7,668	$ 7,213	$ 6,772	$ 8,408	$ 7,477
Preferred shareholders and other equity instrument holders of the Bank	**196**	182	187	129	130	117	155
Non-controlling interests in subsidiaries	**(93)**	205	65	192	237	124	249
Capital instrument equity holders	**–**	–	–	–	–	–	–
	$ 4,017	$ 8,173	$ 7,920	$ 7,534	$ 7,139	$ 8,649	$ 7,881

(1) The amounts for the years ended October 31, 2020, October 31, 2019 and October 31, 2018 have been prepared in accordance with IFRS 9; prior period amounts have not been restated.
(2) In accordance with the transition requirements for the own credit risk provisions of IFRS 9, prior year comparatives have not been restated for the adoption of this standard in 2015.

2013	2012	2011
$13,139	$ 8,336	$ 5,750
1,377	4,803	2,586
–	–	–
$14,516	$13,139	$ 8,336
21,978	18,421	21,932
(203)	(144)	(6,248)
21,775	18,277	15,684
6,162	5,974	4,965
(2,858)	(2,493)	(2,200)
–	–	–
(11)	17	(28)
$25,068	$21,775	$18,421
(31)	(497)	(4,051)
(714)	32	4,320
(745)	(465)	269
–	–	–
1,133	(280)	(766)
–	–	–
$ 388	$ (745)	$ (497)
166	96	25
36	38	46
(9)	32	25
$ 193	$ 166	$ 96
$40,165	$34,335	$26,356
4,384	4,384	3,975
217	220	216
(217)	(220)	(216)
–	–	409
(300)	–	–
$ 4,084	$ 4,384	$ 4,384
1,743	1,500	579
(797)	(891)	936
946	609	1,515
231	196	149
(80)	(44)	(181)
41	185	17
$ 1,138	$ 946	$ 1,500
$45,387	$39,665	$32,240

2013	2012	2011
$6,610	$6,390	$5,330
346	149	(697)
110	151	(169)
n/a	n/a	n/a
93	116	105
20	25	–
563	(747)	–
n/a	n/a	n/a
n/a	n/a	n/a
–	–	–
1,132	(306)	(761)
$7,742	$6,084	$4,569
$7,298	$5,694	$4,199
217	220	216
227	170	96
–	–	58
$7,742	$6,084	$4,569

T87 Other statistics

For the year ended October 31	2020	2019	2018	2017	2016	2015	2014
Operating performance							
Basic earnings per share ($)	**5.43**	6.72	6.90	6.55	5.80	5.70	5.69
Diluted earnings per share ($)	**5.30**	6.68	6.82	6.49	5.77	5.67	5.66
Return on equity (%)	**10.4**	13.1	14.5	14.6	13.8	14.6	16.1
Productivity ratio (%)	**53.8**	53.9	52.3	53.9	55.2	54.2	53.4
Return on assets (%)	**0.59**	0.83	0.92	0.90	0.81	0.84	0.92
Core banking margin (%)(1)	**2.27**	2.44	2.46	2.46	2.38	2.39	2.39
Capital measures(2)							
Common Equity Tier 1 (CET1) capital ratio (%)	**11.8**	11.1	11.1	11.5	11.0	10.3	10.8
Tier 1 capital ratio (%)	**13.3**	12.2	12.5	13.1	12.4	11.5	12.2
Total capital ratio (%)	**15.5**	14.2	14.3	14.9	14.6	13.4	13.9
Leverage ratio (%)	**4.7**	4.2	4.5	4.7	4.5	4.2	n/a
Common share information							
Closing share price ($) (TSX)	**55.35**	75.54	70.65	83.28	72.08	61.49	69.02
Number of shares outstanding (millions)	**1,211**	1,216	1,227	1,199	1,208	1,203	1,217
Dividends paid per share ($)	**3.60**	3.49	3.28	3.05	2.88	2.72	2.56
Dividend yield (%)(3)	**5.8**	4.9	4.2	4.0	4.7	4.4	3.8
Price to earnings multiple (trailing 4 quarters)	**10.2**	11.2	10.2	12.7	12.4	10.8	12.1
Book value per common share ($)	**51.85**	52.33	49.75	46.24	43.59	40.80	36.96
Other information							
Average total assets ($ millions)	**1,160,584**	1,056,063	945,683	912,619	913,844	860,607	795,641
Number of branches and offices	**2,618**	3,109	3,095	3,003	3,113	3,177	3,288
Number of employees	**92,001**	101,813	97,021(4)	87,761(4)	88,901	89,214	86,932
Number of automated banking machines	**8,791**	9,391	9,029	8,140	8,144	8,191	8,732

(1) Refer to page 17 for a discussion of non-GAAP measures.
(2) Effective November 1, 2012, regulatory capital ratios are determined in accordance with Basel III rules. Comparative amounts for 2012 and 2011 were determined in accordance with Basel II rules.
(3) Based on the average of the high and low common share price for the year.
(4) Amounts have been restated to conform with current period presentation.

2013	2012	2011
5.15	5.27	4.63
5.11	5.18	4.53
16.6	19.9	20.3
54.8	53.1	54.8
0.88	0.97	0.91
2.31	2.31	2.32
9.1	n/a	n/a
11.1	13.6	12.2
13.5	16.7	13.9
n/a	n/a	n/a
63.39	54.25	52.53
1,209	1,184	1,089
2.39	2.19	2.05
4.1	4.2	3.7
12.3	10.3	11.3
33.23	28.99	24.20
748,901	659,538	586,101
3,330	3,123	2,926
86,690	81,497	75,362
8,471	7,341	6,260

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MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL INFORMATION

The management of The Bank of Nova Scotia (the Bank) is responsible for the integrity and fair presentation of the financial information contained in this Annual Report. The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board. The consolidated financial statements also comply with the accounting requirements of the Bank Act.

The consolidated financial statements, where necessary, include amounts which are based on the best estimates and judgment of management. Financial information presented elsewhere in this Annual Report is consistent with that shown in the consolidated financial statements.

Management has always recognized the importance of the Bank maintaining and reinforcing the highest possible standards of conduct in all of its actions, including the preparation and dissemination of statements fairly presenting the financial condition of the Bank. In this regard, management has developed and maintains a system of accounting and reporting which provides for the necessary internal controls to ensure that transactions are properly authorized and recorded, assets are safeguarded against unauthorized use or disposition, and liabilities are recognized. The system is augmented by written policies and procedures, the careful selection and training of qualified staff, the establishment of organizational structures providing an appropriate and well-defined division of responsibilities, and the communication of policies and guidelines of Scotiabank's Code of Conduct throughout the Bank.

Management, under the supervision of and the participation of the President and Chief Executive Officer and the Group Head and Chief Financial Officer, have a process in place to evaluate disclosure controls and procedures and internal control over financial reporting in line with Canadian and U.S. securities regulations.

The system of internal controls is further supported by a professional staff of internal auditors who conduct periodic audits of all aspects of the Bank's operations. As well, the Bank's Chief Auditor has full and free access to, and meets periodically with the Audit and Conduct Review Committee of the Board of Directors. In addition, the Bank's compliance function maintains policies, procedures and programs directed at ensuring compliance with regulatory requirements, including conflict of interest rules.

The Office of the Superintendent of Financial Institutions Canada, which is mandated to protect the rights and interests of the depositors and creditors of the Bank, examines and enquires into the business and affairs of the Bank, as deemed necessary, to determine whether the provisions of the Bank Act are being complied with, and that the Bank is in a sound financial condition.

The Audit and Conduct Review Committee, composed entirely of outside directors, reviews the consolidated financial statements with both management and the independent auditors before such statements are approved by the Board of Directors and submitted to the shareholders of the Bank.

The Audit and Conduct Review Committee reviews and reports its findings to the Board of Directors on all related party transactions that may have a material impact on the Bank.

KPMG LLP, the independent auditors appointed by the shareholders of the Bank, have audited the consolidated financial position of the Bank as at October 31, 2020 and October 31, 2019 and its consolidated financial performance and its consolidated cash flows for each of the years in the three-year period ended October 31, 2020 prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board in accordance with Canadian Generally Accepted Auditing Standards and the standards of the Public Company Accounting Oversight Board (United States) and the effectiveness of internal control over financial reporting and have expressed their opinions upon completion of such audits in the reports to the shareholders. The Shareholders' Auditors have full and free access to, and meet periodically with, the Audit and Conduct Review Committee to discuss their audits, including any findings as to the integrity of the Bank's accounting, financial reporting and related matters.

Brian J. Porter
President and Chief Executive Officer

Raj Viswanathan
Group Head and Chief Financial Officer

Toronto, Canada
December 1, 2020

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders of The Bank of Nova Scotia

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statements of financial position of The Bank of Nova Scotia (the Bank) as at October 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the years in the three-year period ended October 31, 2020, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Bank as at October 31, 2020 and 2019, and its financial performance and its cash flows for each of the years in the three-year period ended October 31, 2020 in conformity with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Bank's internal control over financial reporting as of October 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated December 1, 2020 expressed an unqualified opinion on the effectiveness of the Bank's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Bank's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Bank in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the Audit and Conduct Review Committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

(i) Assessment of Allowance for Credit Losses on Financial Assets (ACL)

Refer to Notes 3 and 13 to the consolidated financial statements.

The Bank's ACL was $7,639 million as at October 31, 2020. The Bank applies a three-stage approach to measure the ACL, using an expected credit loss (ECL) approach as required under IFRS 9 Financial Instruments. The Bank's ACL calculations are outputs of complex models. The ACL calculation reflects a probability-weighted outcome that considers multiple scenarios based on the Bank's view of forecasts of future events and economic conditions (assumptions). The probability of default (PD), loss given default (LGD) and exposure at default (EAD) inputs used to estimate ACL are modeled based on macroeconomic variables that are most closely related with credit losses in the relevant portfolio. The Bank assesses when there has been a significant increase in credit risk subsequent to origination or where the financial asset is in default. If there has been a significant increase in credit risk or the financial asset is in default, lifetime ACL is recorded; otherwise, ACL equal to 12 month expected credit losses is recorded. The estimation of ECL for each stage and the assessment of significant increases in credit risk consider information about past events and current conditions as well as forecasts of future events and economic conditions. The estimation and application of forward-looking information requires significant judgment. Qualitative adjustments or overlays may also be recorded by the Bank using expert credit judgment where the inputs and models do not capture all relevant risk factors.

We identified the assessment of the ACL as a critical audit matter. Significant auditor judgment was required because of the use of complex models and there is a high degree of measurement uncertainty due to the significant judgments inherent in the Bank's methodology
such as judgments about forward-looking information, including the impact of the COVID-19 pandemic. These judgments impact certain inputs, assumptions, qualitative adjustments or overlays, and when there has been a significant increase in credit risk. Assessment of the ACL also required significant auditor attention and complex auditor judgment to apply and evaluate the results of audit procedures. This required specialized skills, industry knowledge, and relevant experience.

The following are the primary procedures we performed to address this critical audit matter. With the involvement of our credit risk, economics, and information technology professionals with specialized skills, industry knowledge and relevant experience, we evaluated the design and tested the operating effectiveness of certain internal controls related to the Bank's ACL process. This included internal controls related to: (1) periodic validation and performance monitoring of models used to derive key modeled inputs into the ACL calculation being PD, LGD and EAD; (2) the review of the macroeconomic variables and probability weighting of scenarios used in the ACL models; (3) the assessment to identify whether there has been a significant increase in credit risk; (4) the assessment of qualitative adjustments or overlays; (5) information technology controls over the inputs (PD, LGD, EAD) into the ACL models driving the ACL calculation; and (6) the Bank's monitoring over the ACL calculation whereby senior credit executives review and challenge (1) to (4) above using expert credit judgment. Additionally for non-retail loans, we tested certain internal controls related to loan reviews, including the determination of loan risk grades and write-offs. We involved credit risk, economics, and information technology professionals with specialized skills, industry knowledge and relevant experience who assisted in: (1) evaluating the methodology and macroeconomic variables used in certain inputs into the models including the determination of significant increases in credit risk by assessing compliance with IFRS 9 and recalculating model monitoring tests in respect of certain inputs and thresholds used for significant

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increases in credit risk; (2) recalculating a sample of ECL models and related inputs; (3) evaluating scenarios and probability-weighted outcome assumptions used in the ACL calculation by assessing the appropriateness of the underlying macroeconomic variables including consideration of alternative inputs for certain variables; and (4) assessing the qualitative adjustments or overlays by applying our knowledge of the industry and credit judgment to evaluate the appropriateness of the Bank's underlying considerations. Additionally for a selection of non-retail loans, we evaluated the Bank's assigned credit risk ratings to loans against the Bank's borrower risk rating scale, and the Bank's judgment on whether there was a significant increase in credit risk by comparing the credit risk rating assigned versus at origination, consistent with the Bank's policy.

(ii) Assessment of the Measurement of Fair Value of Certain Financial Instruments
Refer to Notes 3 and 7 to the consolidated financial statements.

The Bank measures $243,830 million of financial assets and $93,121 million of financial liabilities as at October 31, 2020 at fair value on a recurring basis. Where financial instruments trade in inactive markets or when using internal models where observable parameters do not exist, significant management judgment is required for valuation purposes. The valuation techniques used in determining the fair value of financial instruments include internal models and net asset valuations (NAVs). The significant unobservable inputs used in the Bank's valuation techniques include General Partner valuations per financial statements (NAVs), interest rate and equity volatility (volatility) and single stock correlation (correlation).

We identified the assessment of the measurement of fair value for certain financial instruments as a critical audit matter. Significant auditor judgment was required due to the high degree of estimation uncertainty associated with the fair value of certain financial assets and financial liabilities. Significant and subjective auditor judgment was required to evaluate the results of audit procedures related to the valuation techniques, including significant unobservable inputs and the methodology used to develop the internal models.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Bank's processes to determine the fair value of certain financial instruments with the involvement of valuation and information technology professionals with specialized skills, industry knowledge and relevant experience. This included internal controls related to: (1) model validation at inception and periodically; (2) review of significant unobservable model inputs; (3) independent price verification, including assessment of rate sources; and (4) segregation of duties and access controls. With the involvement of valuation professionals with specialized skills, industry knowledge and relevant experience, we tested the fair value of a sample of certain financial instruments. Depending on the nature of the financial instruments, we did this by comparing the significant unobservable inputs to external information or by developing an independent estimate of fair value and comparing it to the fair value determined by the Bank.

(iii) Assessment of Uncertain Tax Provisions
Refer to Notes 3 and 27 to the consolidated financial statements.

The Bank maintains provisions for uncertain tax positions that it believes appropriately reflect the risk of tax positions under discussion, audit, dispute, or appeal with tax authorities, or which are otherwise considered to involve uncertainty. These provisions are made using the Bank's best estimate.

We identified the assessment of uncertain tax provisions as a critical audit matter because there is a high degree of subjectivity and complex auditor judgment required in assessing the Bank's interpretation of tax law and its best estimate of the ultimate resolution of tax positions. This required specialized skills, industry knowledge and relevant experience, to apply audit procedures and evaluate the results of those audit procedures.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Bank's income tax uncertainties process with the involvement of taxation professionals with specialized skills, industry knowledge and relevant experience. This included internal controls related to the (1) identification of tax uncertainties, including the interpretation of tax law and (2) determination of the best estimate of the provision required to settle these tax uncertainties. We involved tax professionals with specialized skills and knowledge, who assisted in (1) evaluating the Bank's interpretations of tax laws by developing an independent assessment based on our understanding and interpretation of tax laws and considering its impact on the measurement, if applicable, of the uncertain tax provisions; (2) reading and evaluating advice obtained by the Bank from external specialists, and considering its impact on the measurement, if applicable, of the uncertain tax provisions; and (3) inspecting correspondence and settlement documents with applicable taxation authorities, including assessment of the impact of the expiration of statutes of limitations.

KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants

We have served as the Bank's auditor since 2006 and as joint auditor for 14 years prior to that.

Toronto, Canada
December 1, 2020

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Consolidated Statement of Financial Position

As at October 31 ($ millions)	Note	2020	2019
Assets			
Cash and deposits with financial institutions	6	**$ 76,460**	$ 46,720
Precious metals		**1,181**	3,709
Trading assets			
Securities	8(a)	**108,331**	112,664
Loans	8(b)	**8,352**	13,829
Other		**1,156**	995
		117,839	127,488
Securities purchased under resale agreements and securities borrowed		**119,747**	131,178
Derivative financial instruments	10	**45,065**	38,119
Investment securities	12	**111,389**	82,359
Loans			
Residential mortgages	13	**284,684**	268,169
Personal loans	13	**93,758**	98,631
Credit cards	13	**14,797**	17,788
Business and government	13	**217,663**	212,972
		610,902	597,560
Allowance for credit losses	13(e)	**7,639**	5,077
		603,263	592,483
Other			
Customers' liability under acceptances, net of allowance		**14,228**	13,896
Property and equipment(1)	16	**5,897**	2,669
Investments in associates	17	**2,475**	5,614
Goodwill and other intangible assets	18	**17,015**	17,465
Deferred tax assets	27(c)	**2,185**	1,570
Other assets	19	**19,722**	22,891
		61,522	64,105
		$ 1,136,466	$ 1,086,161
Liabilities			
Deposits			
Personal	20	**$ 246,135**	$ 224,800
Business and government	20	**464,619**	461,851
Financial institutions	20	**40,084**	46,739
		750,838	733,390
Financial instruments designated at fair value through profit or loss	9	**18,899**	12,235
Other			
Acceptances		**14,305**	13,901
Obligations related to securities sold short		**31,902**	30,404
Derivative financial instruments	10	**42,247**	40,222
Obligations related to securities sold under repurchase agreements and securities lent		**137,763**	124,083
Subordinated debentures	21	**7,405**	7,252
Other liabilities(1)	22	**62,604**	54,482
		296,226	270,344
		1,065,963	1,015,969
Equity			
Common equity			
Common shares	24(a)	**18,239**	18,264
Retained earnings		**46,345**	44,439
Accumulated other comprehensive income (loss)		**(2,125)**	570
Other reserves		**360**	365
Total common equity		**62,819**	63,638
Preferred shares and other equity instruments	24(b)	**5,308**	3,884
Total equity attributable to equity holders of the Bank		**68,127**	67,522
Non-controlling interests in subsidiaries	31(b)	**2,376**	2,670
		70,503	70,192
		$ 1,136,466	$ 1,086,161

(1) The amounts for the year ended October 31, 2020 have been prepared in accordance with IFRS 16; prior year amounts have not been restated (refer to Notes 3 and 4).

Aaron W. Regent
Chairman of the Board

Brian J. Porter
President and Chief Executive Officer

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Financial Statements

Consolidated Statement of Income

For the year ended October 31 ($ millions)	Note	2020	2019	2018
Revenue				
Interest income[1]	32			
Loans		**$ 26,977**	$ 29,116	$ 24,991
Securities		**2,035**	2,238	1,771
Securities purchased under resale agreements and securities borrowed		**286**	502	446
Deposits with financial institutions		**414**	928	859
		29,712	32,784	28,067
Interest expense	32			
Deposits		**10,731**	13,871	10,544
Subordinated debentures		**240**	294	214
Other[2]		**1,421**	1,442	1,118
		12,392	15,607	11,876
Net interest income		**17,320**	17,177	16,191
Non-interest income				
Card revenues[3]		**789**	977	1,105
Banking services fees		**1,540**	1,812	1,705
Credit fees		**1,348**	1,316	1,191
Mutual funds		**1,945**	1,849	1,714
Brokerage fees		**902**	876	895
Investment management and trust		**946**	1,050	732
Underwriting and other advisory		**690**	497	514
Non-trading foreign exchange		**708**	667	622
Trading revenues	33	**2,411**	1,488	1,420
Net gain on sale of investment securities	12(e)	**607**	351	146
Net income from investments in associated corporations	17	**242**	650	559
Insurance underwriting income, net of claims		**497**	676	686
Other fees and commissions		**688**	949	841
Other		**703**	699	454
		14,016	13,857	12,584
Total revenue		**31,336**	31,034	28,775
Provision for credit losses	13(e)	**6,084**	3,027	2,611
		25,252	28,007	26,164
Non-interest expenses				
Salaries and employee benefits		**8,624**	8,443	7,455
Premises and technology[2]		**2,408**	2,807	2,577
Depreciation and amortization[2]		**1,546**	1,053	848
Communications		**418**	459	447
Advertising and business development		**445**	625	581
Professional		**753**	861	881
Business and capital taxes		**517**	515	464
Other[3]		**2,145**	1,974	1,805
		16,856	16,737	15,058
Income before taxes		**8,396**	11,270	11,106
Income tax expense	27	**1,543**	2,472	2,382
Net income		**$ 6,853**	$ 8,798	$ 8,724
Net income attributable to non-controlling interests in subsidiaries	31(b)	**75**	408	176
Net income attributable to equity holders of the Bank		**$ 6,778**	$ 8,390	$ 8,548
Preferred shareholders and other equity instrument holders		**196**	182	187
Common shareholders		**$ 6,582**	$ 8,208	$ 8,361
Earnings per common share (in dollars)				
Basic	34	**$ 5.43**	$ 6.72	$ 6.90
Diluted	34	**5.30**	6.68	6.82
Dividends paid per common share (in dollars)	24(a)	**3.60**	3.49	3.28

(1) Includes interest income on financial assets measured at amortized cost and FVOCI, calculated using the effective interest method, of $29,173 for the year ended October 31, 2020 (October 31, 2019 – $32,436; October 31, 2018 – $27,854).
(2) The amounts for the year ended October 31, 2020 have been prepared in accordance with IFRS 16; prior year amounts have not been restated (refer to Notes 3 and 4).
(3) The amounts for the years ended October 31, 2020 and October 31, 2019 have been prepared in accordance with IFRS 15; prior year amounts have not been restated (refer to Notes 3 and 4).

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statement of Comprehensive Income

For the year ended October 31 ($ millions)	2020	2019	2018
Net income	**$ 6,853**	$ 8,798	$ 8,724
Other comprehensive income (loss)			
Items that will be reclassified subsequently to net income			
Net change in unrealized foreign currency translation gains (losses):			
Net unrealized foreign currency translation gains (losses)	**(2,433)**	(626)	(406)
Net gains (losses) on hedges of net investments in foreign operations	**347**	(232)	(281)
Income tax expense (benefit):			
Net unrealized foreign currency translation gains (losses)	**62**	21	(7)
Net gains (losses) on hedges of net investments in foreign operations	**91**	(60)	(74)
	(2,239)	(819)	(606)
Net change in fair value due to change in debt instruments measured at fair value through other comprehensive income:			
Net gains (losses) in fair value	**1,495**	1,265	(605)
Reclassification of net (gains) losses to net income	**(1,091)**	(1,150)	281
Income tax expense (benefit):			
Net gains (losses) in fair value	**387**	308	(145)
Reclassification of net (gains) losses to net income	**(276)**	(298)	73
	293	105	(252)
Net change in gains (losses) on derivative instruments designated as cash flow hedges:			
Net gains (losses) on derivative instruments designated as cash flow hedges	**2,543**	361	(1,181)
Reclassification of net (gains) losses to net income	**(2,604)**	596	695
Income tax expense (benefit):			
Net gains (losses) on derivative instruments designated as cash flow hedges	**689**	86	(307)
Reclassification of net (gains) losses to net income	**(718)**	163	182
	(32)	708	(361)
Other comprehensive income (loss) from investments in associates	**(2)**	103	66
Items that will not be reclassified subsequently to net income			
Net change in remeasurement of employee benefit plan asset and liability:			
Actuarial gains (losses) on employee benefit plans	**(620)**	(1,096)	444
Income tax expense (benefit)	**(155)**	(281)	126
	(465)	(815)	318
Net change in fair value due to change in equity instruments designated at fair value through other comprehensive income:			
Net gains (losses) in fair value	**(122)**	121	75
Income tax expense (benefit)	**(37)**	26	15
	(85)	95	60
Net change in fair value due to change in own credit risk on financial liabilities designated under the fair value option:			
Change in fair value due to change in own credit risk on financial liabilities designated under the fair value option	**(404)**	11	(30)
Income tax expense (benefit)	**(106)**	3	(8)
	(298)	8	(22)
Other comprehensive income (loss) from investments in associates	**(8)**	(10)	(7)
Other comprehensive income (loss)	**(2,836)**	(625)	(804)
Comprehensive income	**$ 4,017**	$ 8,173	$ 7,920
Comprehensive income (loss) attributable to non-controlling interests	**(93)**	205	65
Comprehensive income attributable to equity holders of the Bank	**$ 4,110**	$ 7,968	$ 7,855
Preferred shareholders and other equity instrument holders	**196**	182	187
Common shareholders	**$ 3,914**	$ 7,786	$ 7,668

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Financial Statements

Consolidated Statement of Changes in Equity

($ millions)	Common shares (Note 24)	Retained earnings(1)	Accumulated other comprehensive income (loss): Foreign currency translation	Available-for-sale securities	Debt instruments FVOCI	Equity instruments FVOCI	Cash flow hedges	Other(2)	Other reserves	Total common equity	Preferred shares and other equity instruments (Note 24)	Total attributable to equity holders	Non-controlling interests in subsidiaries (Note 31(b))	Total
Balance as at October 31, 2019	**$ 18,264**	**$ 44,439**	**$ 800**	**$ –**	**$ 37**	**$ (55)**	**$ 650**	**$ (862)**	**$ 365**	**$ 63,638**	**$ 3,884**	**$ 67,522**	**$ 2,670**	**$ 70,192**
Net income	**–**	**6,582**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**6,582**	**196**	**6,778**	**75**	**6,853**
Other comprehensive income (loss)	**–**	**–**	**(2,128)**	**–**	**293**	**(81)**	**(11)**	**(741)**	**–**	**(2,668)**	**–**	**(2,668)**	**(168)**	**(2,836)**
Total comprehensive income	**$ –**	**$ 6,582**	**$ (2,128)**	**$ –**	**$ 293**	**$ (81)**	**$ (11)**	**$ (741)**	**$ –**	**$ 3,914**	**$ 196**	**$ 4,110**	**$ (93)**	**$ 4,017**
Shares/instruments issued	**59**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**(9)**	**50**	**1,689**	**1,739**	**–**	**1,739**
Shares repurchased/redeemed	**(84)**	**(330)**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**(414)**	**(265)**	**(679)**	**–**	**(679)**
Dividends and distributions paid to equity holders	**–**	**(4,363)**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**(4,363)**	**(196)**	**(4,559)**	**(148)**	**(4,707)**
Share-based payments(3)	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**5**	**5**	**–**	**5**	**–**	**5**
Other	**–**	**17**	**–**	**–**	**–**	**(27)**	**–**	**–**	**(1)**	**(11)**	**–**	**(11)**	**(53)(4)**	**(64)**
Balance as at October 31, 2020	**$ 18,239**	**$ 46,345**	**$ (1,328)**	**$ –**	**$ 330**	**$ (163)**	**$ 639**	**$ (1,603)**	**$ 360**	**$ 62,819**	**$ 5,308**	**$ 68,127**	**$ 2,376**	**$ 70,503**
Balance as at October 31, 2018	$ 18,234	$ 41,414	$ 1,441	$ –	$ (68)	$ (126)	$ (121)	$ (134)	$ 404	$ 61,044	$ 4,184	$ 65,228	$ 2,452	$ 67,680
Cumulative effect of adopting IFRS 15(5)	–	(58)	–	–	–	–	–	–	–	(58)	–	(58)	–	(58)
Balance as at November 1, 2018	18,234	41,356	1,441	–	(68)	(126)	(121)	(134)	404	60,986	4,184	65,170	2,452	67,622
Net income	–	8,208	–	–	–	–	–	–	–	8,208	182	8,390	408	8,798
Other comprehensive income (loss)	–	–	(641)	–	105	71	771	(728)	–	(422)	–	(422)	(203)	(625)
Total comprehensive income	$ –	$ 8,208	$ (641)	$ –	$ 105	$ 71	$ 771	$ (728)	$ –	$ 7,786	$ 182	$ 7,968	$ 205	$ 8,173
Shares issued	255	–	–	–	–	–	–	–	(37)	218	–	218	–	218
Shares repurchased/redeemed	(225)	(850)	–	–	–	–	–	–	–	(1,075)	(300)	(1,375)	–	(1,375)
Dividends and distributions paid to equity holders	–	(4,260)	–	–	–	–	–	–	–	(4,260)	(182)	(4,442)	(150)	(4,592)
Share-based payments(3)	–	–	–	–	–	–	–	–	7	7	–	7	–	7
Other	–	(15)	–	–	–	–	–	–	(9)	(24)	–	(24)	163(4)	139
Balance as at October 31, 2019	$ 18,264	$ 44,439	$ 800	$ –	$ 37	$ (55)	$ 650	$ (862)	$ 365	$ 63,638	$ 3,884	$ 67,522	$ 2,670	$ 70,192
Balance as at October 31, 2017	$ 15,644	$ 38,117	$ 1,861	$ (46)	$ –	$ –	$ 235	$ (473)	$ 116	$ 55,454	$ 4,579	$ 60,033	$ 1,592	$ 61,625
Cumulative effect of adopting IFRS 9	–	(564)	–	46	184	(179)	–	–	–	(513)	–	(513)	(97)	(610)
Balance as at November 1, 2017	15,644	37,553	1,861	–	184	(179)	235	(473)	116	54,941	4,579	59,520	1,495	61,015
Net income	–	8,361	–	–	–	–	–	–	–	8,361	187	8,548	176	8,724
Other comprehensive income (loss)	–	–	(477)	–	(252)	53	(356)	339	–	(693)	–	(693)	(111)	(804)
Total comprehensive income	$ –	$ 8,361	$ (477)	$ –	$ (252)	$ 53	$ (356)	$ 339	$ –	$ 7,668	$ 187	$ 7,855	$ 65	$ 7,920
Shares issued	2,708	–	–	–	–	–	–	–	(19)	2,689	300	2,989	–	2,989
Shares repurchased/redeemed	(118)	(514)	–	–	–	–	–	–	–	(632)	(695)	(1,327)	–	(1,327)
Dividends and distributions paid to equity holders	–	(3,985)	–	–	–	–	–	–	–	(3,985)	(187)	(4,172)	(199)	(4,371)
Share-based payments(3)	–	–	–	–	–	–	–	–	6	6	–	6	–	6
Other	–	(1)	57	–	–	–	–	–	301(4)	357	–	357	1,091(4)	1,448
Balance as at October 31, 2018	$ 18,234	$ 41,414	$ 1,441	$ –	$ (68)	$ (126)	$ (121)	$ (134)	$ 404	$ 61,044	$ 4,184	$ 65,228	$ 2,452	$ 67,680

(1) Includes undistributed retained earnings of $64 (2019—$61; 2018—$62) related to a foreign associated corporation, which is subject to local regulatory restriction.
(2) Includes Share from associates, Employee benefits and Own credit risk.
(3) Represents amounts on account of share-based payments (refer to Note 26).
(4) Includes changes to non-controlling interests arising from business combinations and related transactions.
(5) Refer to Note 4 for a summary of the adjustments on initial application of IFRS 15.

The accompanying notes are an integral part of these consolidated financial statements

Consolidated Financial Statements

Consolidated Statement of Cash Flows

Sources (uses) of cash flows for the year ended October 31 ($ millions)	2020(1)	2019	2018
Cash flows from operating activities			
Net income	**$ 6,853**	$ 8,798	$ 8,724
Adjustment for:			
Net interest income	**(17,320)**	(17,177)	(16,191)
Depreciation and amortization	**1,546**	1,053	848
Provision for credit losses	**6,084**	3,027	2,611
Equity-settled share-based payment expense	**5**	7	6
Net gain on sale of investment securities	**(607)**	(351)	(146)
Net (gain)/loss on divestitures	**(307)**	125	–
Net income from investments in associated corporations	**(242)**	(650)	(559)
Income tax expense	**1,543**	2,472	2,382
Changes in operating assets and liabilities:			
Trading assets	**9,945**	(27,514)	111
Securities purchased under resale agreements and securities borrowed	**12,781**	(27,235)	(7,721)
Loans	**(25,486)**	(44,337)	(31,848)
Deposits	**27,982**	60,705	40,338
Obligations related to securities sold short	**1,195**	(1,694)	239
Obligations related to securities sold under repurchase agreements and securities lent	**11,722**	22,727	4,387
Net derivative financial instruments	**(1,949)**	1,964	440
Other, net	**7,527**	(8,881)	(188)
Dividends received	**824**	520	332
Interest received	**29,572**	32,696	27,384
Interest paid	**(13,042)**	(15,322)	(11,400)
Income tax paid	**(1,962)**	(2,958)	(1,938)
Net cash from/(used in) operating activities	**56,664**	(12,025)	17,811
Cash flows from investing activities			
Interest-bearing deposits with financial institutions	**(30,346)**	18,014	(704)
Purchase of investment securities	**(147,629)**	(89,018)	(91,896)
Proceeds from sale and maturity of investment securities	**119,033**	86,956	84,336
Acquisition/divestiture of subsidiaries, associated corporations or business units, net of cash acquired	**3,938**	20	(3,862)
Property and equipment, net of disposals	**(771)**	(186)	(416)
Other, net	**(684)**	(568)	(1,183)
Net cash from/(used in) investing activities	**(56,459)**	15,218	(13,725)
Cash flows from financing activities			
Proceeds from issue of subordinated debentures	**–**	3,250	–
Redemption/repurchase of subordinated debentures	**(9)**	(1,771)	(233)
Proceeds from preferred shares and other equity instruments issued	**1,689**	–	300
Redemption of preferred shares	**(265)**	(300)	(695)
Proceeds from common shares issued	**59**	255	1,830
Common shares purchased for cancellation	**(414)**	(1,075)	(632)
Cash dividends and distributions paid	**(4,559)**	(4,442)	(4,172)
Distributions to non-controlling interests	**(148)**	(150)	(199)
Payment of lease liabilities	**(345)**	–	–
Other, net	**4,135**	2,945	931
Net cash from/(used in) financing activities	**143**	(1,288)	(2,870)
Effect of exchange rate changes on cash and cash equivalents	**(129)**	2	(44)
Net change in cash and cash equivalents	**219**	1,907	1,172
Cash and cash equivalents at beginning of year(2)	**10,904**	8,997	7,825
Cash and cash equivalents at end of year(2)	**$ 11,123**	$ 10,904	$ 8,997

(1) The amounts for the year ended October 31, 2020 have been prepared in accordance with IFRS 16; prior year amounts have not been restated (refer to Notes 3 and 4).
(2) Represents cash and non-interest bearing deposits with financial institutions (refer to Note 6).

The accompanying notes are an integral part of these consolidated financial statements.

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Consolidated Financial Statements

1 Reporting Entity

The Bank of Nova Scotia (the Bank) is a chartered Schedule I bank under the Bank Act (Canada) (the Bank Act) and is regulated by the Office of the Superintendent of Financial Institutions (OSFI). The Bank is a global financial services provider offering a diverse range of products and services, including personal, commercial, corporate and investment banking. The head office of the Bank is located at 1709 Hollis Street, Halifax, Nova Scotia, Canada and its executive offices are at Scotia Plaza, 44 King Street West, Toronto, Ontario, Canada. The common shares of the Bank are listed on the Toronto Stock Exchange and the New York Stock Exchange.

2 Basis of Preparation

Statement of compliance

These consolidated financial statements were prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and accounting requirements of OSFI in accordance with Section 308 of the Bank Act. Section 308 states that, except as otherwise specified by OSFI, the financial statements are to be prepared in accordance with IFRS.

The consolidated financial statements for the year ended October 31, 2020 have been approved by the Board of Directors for issue on December 1, 2020.

Certain comparative amounts have been restated to conform with the basis of presentation in the current year.

Basis of measurement

The consolidated financial statements have been prepared on the historical cost basis except for the following material items that are measured at fair value in the Consolidated Statement of Financial Position:

- Financial assets and liabilities measured at fair value through profit or loss
- Financial assets and liabilities designated at fair value through profit or loss
- Derivative financial instruments
- Equity instruments designated at fair value through other comprehensive income
- Debt instruments measured at fair value through other comprehensive income

Functional and presentation currency

These consolidated financial statements are presented in Canadian dollars, which is the Bank's functional currency. All financial information presented in Canadian dollars has been rounded to the nearest million unless otherwise stated.

Management's use of estimates, assumptions and judgments

The Bank's accounting policies require estimates, assumptions and judgments that relate to matters that are inherently uncertain. The Bank has established procedures to ensure that accounting policies are applied consistently. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the year in which the estimates are revised.

Use of estimates and assumptions

The preparation of these consolidated financial statements, in conformity with IFRS, requires management to make estimates and assumptions that affect the reported amount of assets and liabilities at the date of the consolidated financial statements, and other comprehensive income and income and expenses during the reporting period. Estimates made by management are based on historical experience and other assumptions that are believed to be reasonable. Key areas of estimation uncertainty include those relating to the allowance for credit losses, the fair value of financial instruments (including derivatives), corporate income taxes, employee benefits, goodwill and intangible assets, the fair value of all identifiable assets and liabilities as a result of business combinations, impairment of non-financial assets, derecognition of financial assets and liabilities and provisions. COVID-19, a global pandemic, has materially impacted and continues to materially impact the markets in which the Bank operates. Governments around the world imposed a number of measures designed to contain the outbreak, including business closures, travel restrictions, quarantines and cancellations of gatherings and events. These measures have caused increased volatility and uncertainty in financial markets. This has given rise to heightened uncertainty as it relates to the key areas of estimation uncertainty. The Bank has utilized estimates, assumptions and judgments that reflect this uncertainty. While management makes its best estimates and assumptions, actual results could differ from these and other estimates.

Significant judgments

In the preparation of these consolidated financial statements, management is required to make significant judgments in the classification and presentation of transactions and instruments and accounting for involvement with other entities.

Consolidated Financial Statements

Significant estimates, assumptions and judgments have been made in the following areas and are discussed as noted in the consolidated financial statements:

Allowance for credit losses	Note 3 Note 13(d)
Fair value of financial instruments	Note 3 Note 7
Corporate income taxes	Note 3 Note 27
Employee benefits	Note 3 Note 28
Goodwill and intangible assets	Note 3 Note 18
Fair value of all identifiable assets and liabilities as a result of business combinations	Note 3 Note 37
Impairment of investment securities	Note 3 Note 12
Impairment of non-financial assets	Note 3 Note 16
Structured entities	Note 3 Note 15
De facto control of other entities	Note 3 Note 31
Derecognition of financial assets and liabilities	Note 3 Note 14
Provisions	Note 3 Note 23

3 Significant Accounting Policies

The significant accounting policies used in the preparation of these consolidated financial statements, including any additional accounting requirements of OSFI, as set out below, have been applied consistently to all periods presented in these consolidated financial statements, with the exception of the adoption of IFRS 16, effective November 1, 2019 and IFRS 15, effective November 1, 2018 (refer to Note 4).

Basis of consolidation

The consolidated financial statements include the assets, liabilities, financial performance and cash flows of the Bank and all of its subsidiaries, after elimination of intercompany transactions and balances. Subsidiaries are defined as entities controlled by the Bank and exclude associates and joint arrangements. The Bank's subsidiaries can be classified as entities controlled through voting interests or structured entities. The Bank consolidates a subsidiary from the date it obtains control. The Bank controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. For the Bank to control an entity, all of the three elements of control should be in existence:

- power over the investee;
- exposure, or rights, to variable returns from involvement with the investee; and
- the ability to use power over the investee to affect the amount of the Bank's returns.

The Bank does not control an investee when it is acting as an agent. The Bank assesses whether it is an agent by determining whether it is primarily engaged to act on behalf of and for the benefit of another party or parties. The Bank reassesses whether it controls an investee if facts and circumstances indicate that one or more of the elements of control has changed.

Voting-interest subsidiaries

Control is presumed with an ownership interest of more than 50% of the voting rights in an entity unless there are other factors that indicate that the Bank does not control the entity despite having more than 50% of voting rights.

The Bank may consolidate an entity when it owns less than 50% of the voting rights when it has one or more other attributes of power:

- by virtue of an agreement, over more than half of the voting rights;
- to govern the financial and operating policies of the entity under a statute or an agreement;
- to appoint or remove the majority of the members of the board of directors or equivalent governing body and control of the entity is by that board or body; or
- to govern the financial and operating policies of the entity through the size of its holding of voting rights relative to the size and dispersion of holding of the other vote holders and voting patterns at shareholder meetings (i.e., de facto control).

Non-controlling interests are presented within equity in the Consolidated Statement of Financial Position separate from equity attributable to equity holders of the Bank. Partial sales and incremental purchases of interests in subsidiaries that do not result in a change of control are accounted for as equity transactions with non-controlling interest holders. Any difference between the carrying amount of the interest and the transaction amount is recorded as an adjustment to retained earnings.

Structured entities

Structured entities are designed to accomplish certain well-defined objectives and for which voting or similar rights are not the dominant factor in deciding who controls the entity. The Bank may become involved with structured entities either at the formation stage or at a later date. The Bank controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

The Bank consolidates all structured entities that it controls.

Investments in associates
An associate is an entity in which the Bank has significant influence, but not control, over the operating and financial policies of the entity. Significant influence is ordinarily presumed to exist when the Bank holds between 20% and 50% of the voting rights. The Bank may also be able to exercise significant influence through board representation. The effects of potential voting rights that are currently exercisable or convertible are considered in assessing whether the Bank has significant influence.

Investments in associates are recognized initially at cost, which includes the purchase price and other costs directly attributable to the purchase. Associates are accounted for using the equity method which reflects the Bank's share of the increase or decrease of the post-acquisition earnings and other movements in the associate's equity.

If there is a loss of significant influence and the investment ceases to be an associate, equity accounting is discontinued from the date of loss of significant influence. If the retained interest on the date of loss of significant influence is a financial asset, it is measured at fair value and the difference between the fair value and the carrying value is recorded as an unrealized gain or loss in the Consolidated Statement of Income.

Investments in associates are evaluated for impairment at the end of each financial reporting period, or more frequently if events or changes in circumstances indicate the existence of objective evidence of impairment.

For purposes of applying the equity method for an investment that has a different reporting period from the Bank, adjustments are made for the effects of any significant events or transactions that occur between the reporting date of the investment and the reporting date of the Bank.

Joint arrangements
A joint arrangement is an arrangement over which two or more parties have joint control. Joint control exists only when decisions about the relevant activities (i.e., those that significantly affect the returns of the arrangement) require the unanimous consent of the parties sharing the control of the arrangement. Investments in joint arrangements are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangement.

Similar to accounting for investment in associates, for joint ventures, investments are recognized initially at cost and accounted for using the equity method which reflects the Bank's share of the increase or decrease of the post-acquisition earnings and other movements in the joint venture's equity. Investments in joint ventures are evaluated for impairment at the end of each financial reporting period, or more frequently if events or changes in circumstances indicate the existence of objective evidence of impairment.

If there is a loss of joint control and it does not result in the Bank having significant influence over the joint venture, equity accounting is discontinued from the date of loss of joint control. If the retained interest in the former joint venture on the date of loss of joint control is a financial asset, it is measured at fair value and the difference between the fair value and the carrying value is recorded as an unrealized gain or loss in the Consolidated Statement of Income.

For joint operations, the Bank recognizes its direct rights to, and its share of jointly held assets, liabilities, revenues and expenses of joint operations. These have been incorporated in the consolidated financial statements under the appropriate headings

Translation of foreign currencies
The financial statements of each of the Bank's foreign operations are measured using its functional currency, being the currency of the primary economic environment of the foreign operation.

Translation gains and losses related to the Bank's monetary items are recognized in non-interest income in the Consolidated Statement of Income. Revenues and expenses denominated in foreign currencies are translated using average exchange rates. Foreign currency non-monetary items that are measured at historical cost are translated into the functional currency at historical rates. Foreign currency non-monetary items measured at fair value are translated into functional currency using the rate of exchange at the date the fair value was determined. Foreign currency gains and losses on non-monetary items are recognized in the Consolidated Statement of Income or Consolidated Statement of Comprehensive Income consistent with the gain or loss on the non-monetary item.

Unrealized gains and losses arising upon translation of foreign operations, together with any gains or losses arising from hedges of those net investment positions to the extent effective, are credited or charged to net change in unrealized foreign currency translation gains/losses in other comprehensive income in the Consolidated Statement of Comprehensive Income. On disposal or meeting the definition of partial disposal of a foreign operation, an appropriate portion of the translation differences previously recognized in other comprehensive income are recognized in the Consolidated Statement of Income.

Financial assets and liabilities

Recognition and initial measurement
The Bank, on the date of origination or purchase, recognizes loans, debt and equity securities, deposits and subordinated debentures at the fair value of consideration paid. Regular-way purchases and sales of financial assets are recognized on the settlement date. All other financial assets and liabilities, including derivatives, are initially recognized on the trade date at which the Bank becomes a party to the contractual provisions of the instrument.

The initial measurement of a financial asset or liability is at fair value plus transaction costs that are directly attributable to its purchase or issuance. For instruments measured at fair value through profit or loss, transaction costs are recognized immediately in profit or loss.

Classification and measurement, derecognition, and impairment of financial instruments

Classification and measurement

Classification and measurement of financial assets
Financial assets are classified into one of the following measurement categories:

- Amortized cost;
- Fair value through other comprehensive income (FVOCI);
- Fair value through profit or loss (FVTPL);
- Elected at fair value through other comprehensive income (Equities only); or
- Designated at FVTPL

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Financial assets include both debt and equity instruments.

Debt instruments
Debt instruments, including loans and debt securities, are classified into one of the following measurement categories:

- Amortized cost;
- Fair value through other comprehensive income (FVOCI);
- Fair value through profit or loss (FVTPL); or
- Designated at FVTPL

Classification of debt instruments is determined based on:

(i) The business model under which the asset is held; and
(ii) The contractual cash flow characteristics of the instrument.

Business model assessment
Business model assessment involves determining how financial assets are managed in order to generate cash flows. The Bank's business model assessment is based on the following categories:

- Held to collect: The objective of the business model is to hold assets and collect contractual cash flows. Any sales of the asset are incidental to the objective of the model.
- Held to collect and for sale: Both collecting contractual cash flows and sales are integral to achieving the objectives of the business model.
- Other business model: The business model is neither held-to-collect nor held-to-collect and for sale.

The Bank assesses business model at a portfolio level reflective of how groups of assets are managed together to achieve a particular business objective. For the assessment of a business model, the Bank takes into consideration the following factors:

- How the performance of assets in a portfolio is evaluated and reported to group heads and other key decision makers within the Bank's business lines;
- How compensation is determined for the Bank's business lines' management that manages the assets;
- Whether the assets are held for trading purposes i.e., assets that the Bank acquires or incurs principally for the purpose of selling or repurchasing in the near term, or holds as part of a portfolio that is managed together for short-term profit or position taking;
- The risks that affect the performance of assets held within a business model and how those risks are managed; and
- The frequency and volume of sales in prior periods and expectations about future sales activity.

Contractual cash flow characteristics assessment
The contractual cash flow characteristics assessment involves assessing the contractual features of an instrument to determine if they give rise to cash flows that are consistent with a basic lending arrangement. Contractual cash flows are consistent with a basic lending arrangement if they represent cash flows that are solely payments of principal and interest on the principal amount outstanding (SPPI).

Principal is defined as the fair value of the instrument at initial recognition. Principal may change over the life of the instrument due to repayments or amortization of premium/discount.

Interest is defined as the consideration for the time value of money and the credit risk associated with the principal amount outstanding and for other basic lending risks and costs (liquidity risk and administrative costs), and a profit margin.

If the Bank identifies any contractual features that could significantly modify the cash flows of the instrument such that they are no longer consistent with a basic lending arrangement, the related financial asset is classified and measured at FVTPL.

Debt instruments measured at amortized cost
Debt instruments are measured at amortized cost if they are held within a business model whose objective is to hold for collection of contractual cash flows where those cash flows represent solely payments of principal and interest. After initial measurement, debt instruments in this category are carried at amortized cost. Interest income on these instruments is recognized in interest income using the effective interest rate method. The effective interest rate is the rate that discounts estimated future cash payments or receipts through the expected life of the financial asset to the gross carrying amount of a financial asset. Amortized cost is calculated by taking into account any discount or premium on acquisition, transaction costs and fees that are an integral part of the effective interest rate.

Impairment on debt instruments measured at amortized cost is calculated using the expected credit loss approach. Loans and debt securities measured at amortized cost are presented net of the allowance for credit losses (ACL) in the statement of financial position.

Debt instruments measured at FVOCI
Debt instruments are measured at FVOCI if they are held within a business model whose objective is to hold for collection of contractual cash flows and for selling financial assets, where the assets' cash flows represent payments that are solely payments of principal and interest. Subsequent to initial recognition, unrealized gains and losses on debt instruments measured at FVOCI are recorded in other comprehensive income (OCI), unless the instrument is designated in a fair value hedge relationship. When designated in a fair value hedge relationship, any changes in fair value due to changes in the hedged risk are recognized in Non-interest income in the Consolidated Statement of Income, along with changes in fair value of the hedging instrument. Upon derecognition, realized gains and losses are reclassified from OCI and recorded in Non-interest income in the Consolidated Statement of Income. Foreign exchange gains and losses that relate to the amortized cost of the debt instrument are recognized in the Consolidated Statement of Income. Premiums, discounts and related transaction costs are amortized over the expected life of the instrument to Interest income in the Consolidated Statement of Income using the effective interest rate method.

Impairment on debt instruments measured at FVOCI is determined using the expected credit loss approach. The ACL on debt instruments measured at FVOCI does not reduce the carrying amount of the asset in the Consolidated Statement of Financial Position, which remains at its fair value. Instead, an amount equal to the allowance that would arise if the assets were measured at amortised cost is recognised in OCI with a corresponding charge to Provision for credit losses in the Consolidated Statement of Income. The accumulated allowance recognised in OCI is recycled to the Consolidated Statement of Income upon derecognition of the debt instrument.

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Debt instruments measured at FVTPL
Debt instruments are measured at FVTPL if assets:

(i) Are held for trading purposes;
(ii) Are held as part of a portfolio managed on a fair value basis; or
(iii) Whose cash flows do not represent payments that are solely payments of principal and interest.

These instruments are measured at fair value in the Consolidated Statement of Financial Position, with transaction costs recognized immediately in the Consolidated Statement of Income as part of Non-interest income. Realized and unrealized gains and losses are recognized as part of Non-interest income in the Consolidated Statement of Income.

Debt instruments designated at FVTPL
Financial assets classified in this category are those that have been designated by the Bank upon initial recognition, and once designated, the designation is irrevocable. The FVTPL designation is available only for those financial assets for which a reliable estimate of fair value can be obtained. Financial assets are designated at FVTPL if doing so eliminates or significantly reduces an accounting mismatch which would otherwise arise.

Financial assets designated at FVTPL are recorded in the Consolidated Statement of Financial Position at fair value. Changes in fair value are recognized in Non-interest income in the Consolidated Statement of Income.

Equity instruments
Equity instruments are classified into one of the following measurement categories:

- Fair value through profit or loss (FVTPL); or
- Elected at fair value through other comprehensive income (FVOCI).

Equity instruments measured at FVTPL
Equity instruments are measured at FVTPL, unless an election is made to designate them at FVOCI upon purchase, with transaction costs recognized immediately in the Consolidated Statement of Income as part of Non-interest income. Subsequent to initial recognition, the changes in fair value and dividends received are recognized as part of Non-interest income in the Consolidated Statement of Income.

Equity instruments measured at FVOCI
At initial recognition, there is an irrevocable option for the Bank to classify non-trading equity instruments at FVOCI. This election is used for certain equity investments for strategic or longer-term investment purposes. This election is made on an instrument-by-instrument basis and is not available to equity instruments that are held for trading purposes.

Gains and losses on these instruments including when derecognized/sold are recorded in OCI and are not subsequently reclassified to the Consolidated Statement of Income. As such, there is no specific impairment requirement. Dividends received are recorded in Interest income in the Consolidated Statement of Income. Any transaction costs incurred upon purchase of the security are added to the cost basis of the security and are not reclassified to the Consolidated Statement of Income on sale of the security.

Classification and measurement of financial liabilities
Financial liabilities are classified into one of the following measurement categories:

- Fair value through profit or loss (FVTPL);
- Amortized cost; or
- Designated at FVTPL.

Financial liabilities measured at FVTPL
Financial liabilities measured at FVTPL are held principally for the purpose of repurchasing in the near term, or form part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short term profit-taking. Financial liabilities are recognized on a trade date basis and are accounted for at fair value, with changes in fair value and any gains or losses recognized in the Consolidated Statement of Income as part of the non-interest income. Transaction costs are expensed as incurred.

Financial liabilities measured at amortized cost
Deposits, subordinated notes and debentures are accounted for at amortized cost. Interest on deposits, calculated using the effective interest rate method, is recognized as interest expense. Interest on subordinated notes and debentures, including capitalized transaction costs, is recognized using the effective interest rate method as interest expense.

Financial liabilities designated at FVTPL
Financial liabilities classified in this category are those that have been designated by the Bank upon initial recognition, and once designated, the designation is irrevocable. The FVTPL designation is available only for those financial liabilities for which a reliable estimate of fair value can be obtained.

Financial liabilities are designated at FVTPL when one of the following criteria is met:

- The designation eliminates or significantly reduces an accounting mismatch which would otherwise arise; or
- A group of financial liabilities are managed and their performance is evaluated on a fair value basis, in accordance with a documented risk management strategy; or
- The financial liability contains one or more embedded derivatives which significantly modify the cash flows otherwise required.

Financial liabilities designated at FVTPL are recorded in the Consolidated Statement of Financial Position at fair value. Any changes in fair value are recognized in Non-interest income in the Consolidated Statement of Income, except for changes in fair value arising from changes in the Bank's own credit risk which are recognized in OCI. Changes in fair value due to changes in the Bank's own credit risk are not subsequently reclassified to Consolidated Statement of Income upon derecognition/extinguishment of the liabilities.

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Determination of fair value
Fair value of a financial asset or liability is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal, or in its absence, the most advantageous market to which the Bank has access at the measurement date.

The Bank values instruments carried at fair value using quoted market prices, where available. Unadjusted quoted market prices for identical instruments represent a Level 1 valuation. When quoted market prices are not available, the Bank maximizes the use of observable inputs within valuation models. When all significant inputs are observable, the valuation is classified as Level 2. Valuations that require the significant use of unobservable inputs are considered Level 3.

Inception gains and losses are only recognized where the valuation is dependent on observable market data; otherwise, they are deferred and amortized over the life of the related contract or until the valuation inputs become observable.

IFRS 13, *Fair Value Measurement* permits a measurement exception that allows an entity to determine the fair value of a group of financial assets and liabilities with offsetting risks based on the sale or transfer of its net exposure to a particular risk (or risks). The Bank has adopted this exception through an accounting policy choice. Consequently, the fair values of certain portfolios of financial instruments are determined based on the net exposure of those instruments to particular market, credit or funding risk.

In determining fair value for certain instruments or portfolios of instruments, valuation adjustments or reserves may be required to arrive at a more accurate representation of fair value. These adjustments include those made for credit risk, bid-offer spreads, unobservable parameters, constraints on prices in inactive or illiquid markets and when applicable funding costs.

Derecognition of financial assets and liabilities

Derecognition of financial assets
A financial asset is derecognized when the contractual rights to the cash flows from the asset has expired; or the Bank transfers the contractual rights to receive the cash flows from the financial asset; or has assumed an obligation to pay those cash flows to an independent third-party; or the Bank has transferred substantially all the risks and rewards of ownership of that asset to an independent third-party. Management determines whether substantially all the risk and rewards of ownership have been transferred by quantitatively comparing the variability in cash flows before and after the transfer. If the variability in cash flows remains significantly similar subsequent to the transfer, the Bank has retained substantially all of the risks and rewards of ownership.

Where substantially all the risks and rewards of ownership of the financial asset are neither retained nor transferred, the Bank derecognizes the transferred asset only if it has lost control over that asset. Control over the asset is represented by the practical ability to sell the transferred asset. If the Bank retains control over the asset, it will continue to recognize the asset to the extent of its continuing involvement. At times such continuing involvement may be in the form of investment in senior or subordinated tranches of notes issued by non-consolidated structured entities.

On derecognition of a financial asset, the difference between the carrying amount and the sum of (i) the consideration received (including any new asset obtained less any new liability assumed) and (ii) any cumulative gain or loss that had been recognized in other comprehensive income is recognized in the Consolidated Statement of Income.

Transfers of financial assets that do not qualify for derecognition are reported as secured financings in the Consolidated Statement of Financial Position.

The derecognition criteria are applied to the transfer of part of an asset, rather than the asset as a whole, only if such part comprises specifically identified cash flows from the asset, a fully proportionate share of the cash flows from the asset, or a fully proportionate share of specifically identified cash flows from the asset.

Derecognition of financial liabilities
A financial liability is derecognized when the obligation under the liability is discharged, canceled or expires. If an existing financial liability is replaced by another from the same counterparty on substantially different terms, or the terms of the existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability at fair value. The difference in the respective carrying amount of the existing liability and the new liability is recognized as a gain/loss in the Consolidated Statement of Income.

Impairment

Scope
The Bank applies a three-stage approach to measure allowance for credit losses, using an expected credit loss approach as required under IFRS 9, for the following categories of financial instruments that are not measured at fair value through profit or loss:

- Amortized cost financial assets;
- Debt securities classified as at FVOCI;
- Off-balance sheet loan commitments; and
- Financial guarantee contracts.

Expected credit loss impairment model
The Bank's allowance for credit losses calculations are outputs of models with a number of underlying assumptions regarding the choice of variable inputs and their interdependencies. The expected credit loss impairment model reflects the present value of all cash shortfalls related to default events either (i) over the following twelve months or (ii) over the expected life of a financial instrument depending on credit deterioration from inception. The allowance for credit losses reflects an unbiased, probability-weighted outcome which considers multiple scenarios based on reasonable and supportable forecasts.

This impairment model measures credit loss allowances using a three-stage approach based on the extent of credit deterioration since origination:

- Stage 1 – Where there has not been a significant increase in credit risk (SIR) since initial recognition of a financial instrument, an amount equal to 12 months expected credit loss is recorded. The expected credit loss is computed using a probability of default occurring over the next 12 months. For those instruments with a remaining maturity of less than 12 months, a probability of default corresponding to remaining term to maturity is used.

- Stage 2 – When a financial instrument experiences a SIR subsequent to origination but is not considered to be in default, it is included in Stage 2. This requires the computation of expected credit loss based on the probability of default over the remaining estimated life of the financial instrument.
- Stage 3 – Financial instruments that are considered to be in default are included in this stage. Similar to Stage 2, the allowance for credit losses captures the lifetime expected credit losses.

Measurement of expected credit loss
The probability of default (PD), exposure at default (EAD), and loss given default (LGD) inputs used to estimate expected credit losses are modelled based on macroeconomic variables that are most closely related with credit losses in the relevant portfolio.

Details of these statistical parameters/inputs are as follows:

- PD – The probability of default is an estimate of the likelihood of default over a given time horizon. A default may only happen at a certain time over the remaining estimated life, if the facility has not been previously derecognized and is still in the portfolio.
- EAD – The exposure at default is an estimate of the exposure at a future default date, taking into account expected changes in the exposure after the reporting date, including repayments of principal and interest, whether scheduled by contract or otherwise, expected drawdowns on committed facilities, and accrued interest from missed payments.
- LGD – The loss given default is an estimate of the loss arising in the case where a default occurs at a given time. It is based on the difference between the contractual cash flows due and those that the lender would expect to receive, including from the realization of any collateral. It is usually expressed as a percentage of the EAD.

Forward-looking information
The estimation of expected credit losses for each stage and the assessment of significant increases in credit risk consider information about past events and current conditions as well as reasonable and supportable forecasts of future events and economic conditions. The estimation and application of forward-looking information may require significant judgment.

Macroeconomic factors
In its models, the Bank relies on a broad range of forward-looking economic information as inputs, such as: GDP growth, unemployment rates, central bank interest rates, and house-price indices. The inputs and models used for calculating expected credit losses may not always capture all characteristics of the market at the date of the financial statements. Qualitative adjustments or overlays may be made as temporary adjustments using expert credit judgment.

Multiple forward-looking scenarios
The Bank determines its allowance for credit losses using four probability-weighted forward-looking scenarios. The Bank considers both internal and external sources of information and data in order to achieve an unbiased projections and forecasts. The Bank prepares the scenarios using forecasts generated by Scotiabank Economics (SE). The forecasts are created using internal and external models which are modified by SE as necessary to formulate a 'base case' view of the most probable future direction of relevant economic variables as well as a representative range of other possible forecast scenarios. The process involves the development of two additional economic scenarios and consideration of the relative probabilities of each outcome.

The 'base case' represents the most likely outcome and is aligned with information used by the Bank for other purposes such as strategic planning and budgeting. The other scenarios represent more optimistic and more pessimistic outcomes. The Bank has identified and documented key drivers of credit risk and credit losses for each portfolio of financial instruments and, using an analysis of historical data, has estimated relationships between macroeconomic variables, credit risk, and credit losses.

Assessment of significant increase in credit risk (SIR)
At each reporting date, the Bank assesses whether there has been a significant increase in credit risk for exposures since initial recognition by comparing the risk of default occurring over the remaining expected life from the reporting date and the date of initial recognition. The assessment considers borrower-specific quantitative and qualitative information without consideration of collateral, and the impact of forward-looking macroeconomic factors.

The common assessments for SIR on retail and non-retail portfolios include macroeconomic outlook, management judgement, and delinquency and monitoring. Forward-looking macroeconomic factors are a key component of the macroeconomic outlook. The importance and relevance of each specific macroeconomic factor depends on the type of product, characteristics of the financial instruments and the borrower and the geographical region. Quantitative models may not always be able to capture all reasonable and supportable information that may indicate a significant increase in credit risk. Qualitative factors may be assessed to supplement the gap. Examples of situations include changes in adjudication criteria for a particular group of borrowers; changes in portfolio composition; and natural disasters impacting certain portfolios. With regards to delinquency and monitoring, there is a rebuttable presumption that the credit risk of the financial instrument has increased since initial recognition when contractual payments are more than 30 days overdue.

Retail portfolio – For retail exposures, a significant increase in credit risk cannot be assessed using forward looking information at an individual account level. Therefore, the assessment must be done at the segment level. Segment migration thresholds exist for each PD model by product which considers the proportionate change in PD as well as the absolute change in PD. The thresholds used for PD migration are reviewed and assessed at least annually, unless there is a significant change in credit risk management practices in which case the review is brought forward.

Non-retail portfolio – The Bank uses a risk rating scale (IG codes) for its non-retail exposures. All non-retail exposures have an IG code assigned that reflects the probability of default of the borrower. Both borrower specific and non-borrower specific (i.e. macroeconomic) forward looking information is considered and reflected in the IG rating. Significant increase in credit risk is evaluated based on the migration of the exposures among IG codes.

Expected life
When measuring expected credit loss, the Bank considers the maximum contractual period over which the Bank is exposed to credit risk. All contractual terms are considered when determining the expected life, including prepayment, and extension and rollover options. For certain revolving credit facilities, such as credit cards, the expected life is estimated based on the period over which the Bank is exposed to credit risk and how the credit losses are mitigated by management actions.

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Presentation of allowance for credit losses in the Statement of Financial Position

- Financial assets measured at amortized cost: as a deduction from the gross carrying amount of the financial assets;
- Debt instruments measured at fair value through other comprehensive income: no allowance is recognized in the Statement of Financial Position because the carrying value of these assets is their fair value. However, the allowance determined is presented in the accumulated other comprehensive income;
- Off-balance sheet credit risks include undrawn lending commitments, letters of credit and letters of guarantee: as a provision in other liabilities.

Modified financial assets
If the terms of a financial asset are modified or an existing financial asset is replaced with a new one, an assessment is made to determine if the existing financial asset should be derecognized. Where a modification does not result in derecognition, the date of origination continues to be used to determine SIR. Where a modification results in derecognition, the new financial asset is recognized at its fair value on the modification date. The modification date is also the date of origination for this new asset.

The Bank may modify the contractual terms of loans for either commercial or credit reasons. The terms of a loan in good standing may be modified for commercial reasons to provide competitive pricing to borrowers. Loans are also modified for credit reasons where the contractual terms are modified to grant a concession to a borrower that may be experiencing financial difficulty.

For all financial assets modifications of the contractual terms may result in derecognition of the original asset when the changes to the terms of the loans are considered substantial. These terms include interest rate, authorized amount, term, or type of underlying collateral. The original loan is derecognized and the new loan is recognized at its fair value. The difference between the carrying value of the derecognized asset and the fair value of the new asset is recognized in the Income Statement.

For all loans, performing and credit-impaired, where the modification of terms did not result in the derecognition of the loan, the gross carrying amount of the modified loan is recalculated based on the present value of the modified cash flows discounted at the original effective interest rate and any gain or loss from the modification is recorded in the provision for credit losses line in the income statement.

Definition of default
The Bank considers a financial instrument to be in default as a result of one or more loss events that occurred after the date of initial recognition of the instrument and the loss event has a negative impact on the estimated future cash flows of the instrument that can be reliably estimated. This includes events that indicate:

- significant financial difficulty of the borrower;
- default or delinquency in interest or principal payments;
- high probability of the borrower entering a phase of bankruptcy or a financial reorganization;
- measurable decrease in the estimated future cash flows from the loan or the underlying assets that back the loan.

The Bank considers that default has occurred and classifies the financial asset as impaired when it is more than 90 days past due, with the exception of credit card receivables that are treated as defaulted when 180 days past due, unless reasonable and supportable information demonstrates that a more lagging default criterion is appropriate.

Write-off policy
The Bank writes off an impaired financial asset (and the related impairment allowance), either partially or in full, when there is no realistic prospect of recovery. Where financial assets are secured, write-off is generally after receipt of any proceeds from the realization of security. In circumstances where the net realizable value of any collateral has been determined and there is no reasonable expectation of further recovery, write-off may be earlier. Credit card receivables 180 days past due are written-off. In subsequent periods, any recoveries of amounts previously written off are credited to the provision for credit losses in the Consolidated Statement of Income.

Purchased loans
All purchased loans are initially measured at fair value on the date of acquisition. As a result no allowance for credit losses would be recorded in the Consolidated Statement of Financial Position on the date of acquisition. Purchased loans may fit into either of the two categories: Performing loans or Purchased Credit Impaired (PCI) loans.

Purchased performing loans follow the same accounting as originated performing loans and are reflected in Stage 1 on the date of the acquisition. They will be subject to a 12-month allowance for credit losses which is recorded as a provision for credit losses in the Consolidated Statement of Income. The fair value adjustment set up for these loans on the date of acquisition is amortized into interest income over the life of these loans.

PCI loans are reflected in Stage 3 and are always subject to lifetime allowance for credit losses. Any changes in the expected cash flows since the date of acquisition are recorded as a charge/recovery in the provision for credit losses in the Consolidated Statement of Income at the end of all reporting periods subsequent to the date of acquisition.

Offsetting of financial instruments
Financial assets and financial liabilities with the same counterparty are offset, with the net amount reported in the Consolidated Statement of Financial Position, only if there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the assets and settle the liabilities simultaneously. When financial assets and financial liabilities are offset in the Consolidated Statement of Financial Position, the related income and expense items will also be offset in the Consolidated Statement of Income, unless specifically prohibited by an applicable accounting standard.

Cash and deposits with financial institutions
Cash and deposits with financial institutions comprises cash, cash equivalents, demand deposits with banks and other financial institutions, highly liquid investments that are readily convertible to cash, subject to insignificant risk of changes in value. These investments are those with less than three months maturity from the date of acquisition.

Precious metals
Precious metals are carried at fair value less costs to sell, and any changes in value are credited or charged to non-interest income – trading revenues in the Consolidated Statement of Income.

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Securities purchased and sold under resale agreements

Securities purchased under resale agreements (reverse repurchase agreements) involve the Bank to purchase securities from a counterparty with an agreement entered to resell the securities at a fixed price at a future date. Since the Bank is reselling the securities at a fixed price at a future date, the risks and rewards have not been transferred to the Bank. The Bank has the right to liquidate the securities purchased in the event of counterparty default.

Whereas, securities sold under agreements to repurchase (repurchase agreements) involve the Bank to sell securities to a counterparty with an agreement entered simultaneously to purchase the securities back at a fixed price at a future date. Since the Bank is purchasing the securities back at a fixed price at a future date, the risks and rewards have not been transferred from the Bank. The counterparty has the right to use the collateral pledged by the Bank in the event of default.

These agreements are treated as collateralized financing arrangements and are initially recognized at amortized cost. The party disbursing the cash takes possession of the securities serving as collateral for the financing and having a market value equal to, or in excess of, the principal amount loaned. The securities received under reverse repurchase agreements and securities delivered under repurchase agreements are not recognized on, or derecognized from, the Consolidated Statement of Financial Position, unless the risks and rewards of ownership are obtained or relinquished. The related interest income and interest expense are recorded on an accrual basis using the effective interest rate method in interest income on the Consolidated Statement of Income.

Obligations related to securities sold short

Obligations related to securities sold short arise in dealing and market-making activities where debt securities and equity shares are sold without possessing such securities.

Similarly, if securities purchased under an agreement to resell are subsequently sold to third parties, the obligation to return the securities is recorded as a short sale within obligations related to securities sold short in the Consolidated Statement of Financial Position. These trading liabilities are measured at fair value with any gains or losses included in non-interest income – trading revenues in the Consolidated Statement of Income. Interest expense accruing on debt securities sold short is recorded in interest expense – other, in the Consolidated Statement of Income.

Securities lending and borrowing

Securities lending and borrowing transactions are usually collateralized by securities or cash. The transfer of the securities to counterparties is only reflected on the Consolidated Statement of Financial Position if the risks and rewards of ownership are also transferred. For cash collateral advanced or received, the Bank presents these transactions as securities sold under repurchase agreement or securities purchased under reverse repurchase agreement, respectively. Interest on cash collateral advanced or received is presented in interest income – securities purchased under resale agreements and securities borrowed or interest expense – other, respectively. Fees received and paid are reported as fee and commission revenues and expenses in the Consolidated Statement of Income, respectively.

Securities borrowed are not recognized on the Consolidated Statement of Financial Position, unless they are then sold to third parties, in which case the obligation to return the securities is recorded as a trading liability and measured at fair value with any gains or losses included in non-interest income – trading revenues, in the Consolidated Statement of Income.

Derivative instruments

Derivative instruments are contracts whose value is derived from interest rates, foreign exchange rates, commodities, equity prices or other financial variables. Most derivative instruments can be characterized as interest rate contracts, foreign exchange and gold contracts, commodity contracts, equity contracts or credit contracts. Derivative instruments are either exchange-traded contracts or negotiated over-the-counter contracts. Negotiated over-the-counter contracts include swaps, forwards and options.

The Bank enters into these derivative contracts for trading purposes, as well as to manage its risk exposures (i.e., to manage the Bank's non-trading interest rate, foreign currency and other exposures). Trading activities are undertaken to meet the needs of the Bank's customers, as well as for the Bank's own account to generate income from trading operations.

Derivatives embedded in other financial liabilities or host contracts are treated as separate derivatives when the following conditions are met:

- their economic characteristics and risks are not closely related to those of the host contract;
- a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and
- the combined contract is not held for trading or designated at fair value through profit or loss.

Where an embedded derivative is separable from the host contract but the fair value, as at the acquisition or reporting date, cannot be reliably measured separately, the entire combined contract is measured at fair value. All embedded derivatives are presented on a combined basis with the host contracts although they are separated for measurement purposes when conditions requiring separation are met. Subsequent changes in fair value of embedded derivatives are recognized in non-interest income in the Consolidated Statement of Income.

All derivatives, including embedded derivatives that must be separately accounted for, are recorded at fair value in the Consolidated Statement of Financial Position. The determination of the fair value of derivatives includes consideration of credit risk, estimated funding costs and ongoing direct costs over the life of the instruments. Inception gains or losses on derivatives are only recognized where the valuation is dependent only on observable market data, otherwise, they are deferred and amortized over the life of the related contract, or until the valuation inputs become observable.

The gains and losses resulting from changes in fair values of trading derivatives are included in non-interest income – trading revenues in the Consolidated Statement of Income.

Changes in the fair value of non-trading derivatives that do not qualify for hedge accounting are recorded in the Consolidated Statement of Income in non-interest income – other. Where derivative instruments are used to manage the volatility of share-based payment expense, these derivatives are carried at fair value with changes in the fair value in relation to units hedged included in non-interest expenses – salaries and employee benefits in the Consolidated Statement of Income.

Changes in the fair value of derivatives that qualify for hedge accounting are recorded as non-interest income – other in the Consolidated Statement of Income for fair value hedges and other comprehensive income in the Consolidated Statement of Comprehensive Income for cash flow hedges and net investment hedges.

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Hedge accounting

The Bank has elected to continue to apply the hedge accounting requirements of IAS 39. Also, the Bank has implemented the additional hedge accounting disclosures that are required by the IFRS 9 related amendments to IFRS 7 "Financial Instruments: Disclosures". In addition, the Bank also early adopted the Phase 1 amendments to IAS 39 and IFRS 7 (the "Amendments") effective November 1, 2019. The Amendments were issued by the IASB on September 26, 2019 for hedging relationships that are directly impacted by the Interest Rate Benchmark Reform (the "Reform") during the period prior to replacement of benchmark interest rates.

The Bank formally documents all hedging relationships and its risk management objective and strategy for undertaking these hedge transactions at inception. The hedge documentation includes identification of the asset, liability, firm commitment or highly probable forecasted transaction being hedged, the nature of the risk being hedged, the hedging instrument used and the method used to assess the effectiveness of the hedge. The Bank also formally assesses, both at each hedge's inception and on an ongoing basis, whether the hedging instruments are highly effective in offsetting changes in fair value or cash flows of the hedged items within an 80-125% range. This assessment incorporates a comparison of critical terms of the hedged and hedging item, and regression analysis, in order to determine (i) whether the hedge relationship is expected to be highly effective going forward (i.e. prospective effectiveness assessment) and (ii) whether the hedge was actually highly effective for the designated period (i.e. retrospective effectiveness assessment). In assessing prospective hedge effectiveness for a hedge relationship directly impacted by the Reform, the Bank will assume that the benchmark interest rate is not altered as a result of the Reform. In instances of assessing retrospective hedge effectiveness where a hedge relationship directly impacted by the Reform falls outside of the 80-125% range solely as a result of the Reform, the Bank will continue hedge accounting as long as other hedge accounting requirements are met. Hedge ineffectiveness is measured and recorded in non-interest income – other in the Consolidated Statement of Income.

There are three types of hedges: (i) fair value hedges, (ii) cash flow hedges and (iii) net investment hedges.

Fair value hedges

For fair value hedges, the change in fair value of the hedging instrument is offset in the Consolidated Statement of Income by the change in fair value of the hedged item attributable to the hedged risk. For hedges that are discontinued, the hedged item is no longer adjusted for changes in fair value. The cumulative fair value adjustment of the hedged item is amortized to interest income over its remaining term to maturity or written off to interest income directly if the hedged item ceases to exist. The Bank utilizes fair value hedges primarily to convert fixed rate financial instruments to floating rate financial instruments. Hedged items include debt securities, loans, deposit liabilities and subordinated debentures. Hedging instruments include single-currency interest rate swaps and cross-currency interest rate swaps.

Cash flow hedges

For cash flow hedges, the change in fair value of the hedging instrument, to the extent effective, is recorded in other comprehensive income until the corresponding gains and losses on the hedged item is recognized in income. For hedges that are discontinued, the cumulative unrealized gain or loss recognized in other comprehensive income is reclassified to interest income and/or salaries and employee benefits as the variability in the cash flows of hedged item affects income. However, if the hedged item is derecognized or the forecasted transaction is no longer expected to occur, the unrealized gain or loss is reclassified immediately to interest income and/or salaries and employee benefits. The Bank utilizes cash flow hedges primarily to hedge the variability in cash flows relating to floating rate financial instruments and highly probable forecasted revenues and expenses. Hedged items include debt securities, loans, deposit liabilities, subordinated debentures and highly probable forecasted transactions. Hedging instruments include single-currency interest rate swaps, cross-currency interest rate swaps, total return swaps, foreign currency forwards and foreign currency assets or liabilities.

For the Bank's cash flow hedges of forecasted transactions that are directly affected by the Reform, it is assumed that the benchmark interest rate will not be altered as a result of the Reform for purposes of assessing whether the transactions are highly probable or whether the transactions are still expected to occur.

Net investment hedges

For net investment hedges, the change in fair value of the hedging instrument, to the extent effective, is recorded in other comprehensive income until the corresponding cumulative translation adjustments on the hedged net investment are recognized in income. The Bank designates foreign currency liabilities and foreign currency forwards as hedging instruments to manage the foreign currency exposure and impact on capital ratios arising from foreign operations.

Property and equipment

Land, buildings and equipment

Land is carried at cost. Buildings (including building fittings), equipment, and leasehold improvements are carried at cost less accumulated depreciation and accumulated impairment losses, if any. Cost includes expenditures that are directly attributable to the acquisition of the asset. Depreciation is calculated using the straight-line method over the estimated useful life of the related asset less any residual value as follows: buildings – 40 years, building fittings – 15 years, equipment 3 to 10 years, and leasehold improvements – lease term determined by the Bank. Depreciation expense is included in the Consolidated Statement of Income under non-interest expenses – depreciation and amortization. Depreciation methods, useful lives and residual values are reassessed at each financial year-end and adjusted as appropriate.

When major components of building and equipment have different useful lives, they are accounted for separately and depreciated over each component's estimated useful life.

Net gains and losses on disposal are included in non-interest income – other in the Consolidated Statement of Income in the year of disposal.

Investment property

Investment property is property held either for rental income or for capital appreciation or for both. The Bank holds certain investment properties which are presented in property and equipment on the Consolidated Statement of Financial Position.

Investment property is carried at cost less accumulated depreciation and any accumulated impairment losses. Depreciation is calculated using the straight-line method over the estimated useful life of 40 years. Depreciation methods, useful lives and residual values are reassessed at each financial year-end and adjusted as appropriate.

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Assets held-for-sale

Non-current non-financial assets (and disposal groups) are classified as held-for-sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. These assets meet the criteria for classification as held-for-sale if they are available for immediate sale in their present condition and their sale is considered highly probable to occur within one year.

Non-current non-financial assets classified as held-for-sale are measured at the lower of their carrying amount and fair value (less costs to sell) and are presented within other assets in the Consolidated Statement of Financial Position. Any subsequent write-down to fair value less costs to sell is recognized in the Consolidated Statement of Income, in non-interest income. Any subsequent increase in the fair value less costs to sell, to the extent this does not exceed the cumulative write-down, is also recognized in non-interest income, together with any realized gains or losses on disposal.

Non-financial assets acquired in exchange for loans as part of an orderly realization are recorded as assets held-for-sale or assets held-for-use. If the acquired asset does not meet the requirement to be considered held-for-sale, the asset is considered held-for-use, measured initially at cost which equals the carrying value of the loan and accounted for in the same manner as a similar asset acquired in the normal course of business.

Business combinations and goodwill

The Bank follows the acquisition method of accounting for the acquisition of subsidiaries. The Bank considers the date on which control is obtained and it legally transfers the consideration for the acquired assets and assumed liabilities of the subsidiary to be the date of acquisition. The cost of an acquisition is measured at the fair value of the consideration paid. The fair value of the consideration transferred by the Bank in a business combination is calculated as the sum of the acquisition date fair value of the assets transferred by the Bank, the liabilities incurred by the Bank to former owners of the acquiree, and the equity interests, including any options, issued by the Bank. The Bank recognizes the acquisition date fair values of any previously held investment in the subsidiary and contingent consideration as part of the consideration transferred in exchange for the acquisition. A gain or loss on any previously held investments of an acquiree is recognized in non-interest income – other in the Consolidated Statement of Income.

In general, all identifiable assets acquired (including intangible assets) and liabilities assumed (including any contingent liabilities) are measured at the acquisition date fair value. The Bank records identifiable intangible assets irrespective of whether the assets have been recognized by the acquiree before the business combination. Non-controlling interests, if any, are recognized at their proportionate share of the fair value of identifiable assets and liabilities, unless otherwise indicated. Where the Bank has an obligation to purchase a non-controlling interest for cash or another financial asset, a portion of the non-controlling interest is recognized as a financial liability based on management's best estimate of the present value of the redemption amount. Where the Bank has a corresponding option to settle the purchase of a non-controlling interest by issuing its own common shares, no financial liability is recorded.

Any excess of the cost of acquisition over the Bank's share of the net fair value of the identifiable assets acquired and liabilities assumed is recorded as goodwill. If the cost of acquisition is less than the fair value of the Bank's share of the identifiable assets acquired and liabilities assumed, the resulting gain is recognized immediately in non-interest income – other in the Consolidated Statement of Income.

During the measurement period (which is within one year from the acquisition date), the Bank may, on a retrospective basis, adjust the amounts recognized at the acquisition date to reflect new information obtained about facts and circumstances that existed as of the acquisition date.

The Bank accounts for acquisition-related costs as expenses in the periods in which the costs are incurred and the services are received.

Subsequent to acquisition, the Bank accounts for the following assets and liabilities recognized in a business combination as described below:

- Contingent liabilities, until resolved, are measured at the higher of the amount that would be recognized as a provision or the amount initially recognized, with any change recognized in the Consolidated Statement of Income.
- Indemnification assets are measured on the same basis as the item to which the indemnification relates.
- Contingent consideration classified as a liability is measured at fair value, with any change recognized in the Consolidated Statement of Income.
- Liabilities to non-controlling interest holders when remeasured at the end of each reporting period, a corresponding change is recorded in equity.

After initial recognition of goodwill in a business combination, goodwill in aggregate is measured at cost less any accumulated impairment losses. Goodwill is not amortized but tested for impairment annually and when circumstances indicate that the carrying value may be impaired.

Goodwill is reviewed at each reporting date to determine whether there is any indication of impairment. For the purpose of impairment testing, goodwill acquired in a business combination is, on the acquisition date, allocated to each of the Bank's group of cash-generating units (CGUs) that is expected to benefit from the combination. CGUs to which goodwill has been allocated are aggregated so that the level at which impairment is tested reflects the lowest level at which goodwill is monitored for internal management purposes. Goodwill impairment, at a standalone subsidiary level, may not in itself result in an impairment at the consolidated Bank level.

The Bank determines the carrying value of the CGU using a regulatory capital approach based on credit, market, and operational risks, and leverage, consistent with the Bank's capital attribution for business line performance measurement. The recoverable amount is the greater of fair value less costs of disposal and value in use. If either fair value less costs of disposal or value in use exceeds the carrying amount, there is no need to determine the other. The recoverable amount of the CGU has been determined using the fair value less costs of disposal method. The estimation of fair value less costs of disposal involves significant judgment in the determination of inputs. In determining fair value less costs of disposal, an appropriate valuation model is used which considers various factors including normalized net income, control premiums and price earnings multiples. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded subsidiaries or other available fair value indicators. An impairment loss is recognized if the carrying amount of the CGU exceeds the recoverable amount. An impairment loss, in respect of goodwill, is not reversed.

Intangible assets

Intangible assets represent identifiable non-monetary assets and are acquired either separately or through a business combination or generated internally. The Bank's intangible assets are mainly comprised of computer software, customer relationships, contract intangibles, core deposit intangibles and fund management contracts.

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The cost of a separately acquired intangible asset includes its purchase price and directly attributable costs of preparing the asset for its intended use. Intangibles acquired as part of a business combination are initially recognized at fair value.

In respect of internally generated intangible assets, cost includes all directly attributable costs necessary to create, produce, and prepare the asset to be capable of operating in the manner intended by management.

After initial recognition, an intangible asset is carried at its cost less any accumulated amortization and accumulated impairment losses.

Intangible assets that have finite useful lives are initially measured at cost and are amortized on a straight-line basis over their useful lives as follows: computer software – 5 to 10 years; and other intangible assets – 5 to 20 years. Amortization expense is included in the Consolidated Statement of Income under operating expenses – depreciation and amortization. As intangible assets are considered to be non-financial assets, the impairment model for non-financial assets is applied. Intangible assets with indefinite useful lives are not amortized but are tested for impairment annually and when circumstances indicate that the carrying value may be impaired.

Impairment of non-financial assets

The carrying amount of the Bank's non-financial assets, other than goodwill and indefinite life intangible assets and deferred tax assets which are separately addressed, is reviewed at each reporting date to determine whether there is any indication of impairment. For the purpose of impairment testing, non-financial assets that cannot be tested individually are grouped together into the smallest group of assets that generate cash inflows from continuing use that are largely independent from the cash inflows of other assets or groups of assets.

If any indication of impairment exists then the asset's recoverable amount is estimated. The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs of disposal. The Bank's corporate assets do not generate separate cash inflows. If there is an indication that a corporate asset may be impaired, then the recoverable amount is determined for the CGU to which the corporate asset belongs.

An impairment loss is recognized if the carrying amount of an asset or a CGU exceeds its recoverable amount. Impairment losses of continuing operations are recognized in the Consolidated Statement of Income in those expense categories consistent with the nature of the impaired asset. Impairment losses recognized in prior periods are reassessed at each reporting date for any indication that the loss had decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized. Such reversal is recognized in the Consolidated Statement of Income.

Significant judgment is applied in determining the non-financial asset's recoverable amount and assessing whether certain events or circumstances constitute objective evidence of impairment.

Corporate income taxes

The Bank follows the balance sheet liability method for corporate income taxes. Under this method, deferred tax assets and liabilities represent the cumulative amount of tax applicable to temporary differences which are the differences between the carrying amount of the assets and liabilities, and their values for tax purposes. Deferred tax assets are recognized only to the extent it is probable that sufficient taxable profits will be available against which the benefit of these deferred tax assets can be utilized.

Deferred tax assets and liabilities are measured using enacted or substantively enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled.

Deferred and current tax assets and liabilities are only offset when they arise in the same tax reporting group and where the Bank has both the legal right and the intention to settle on a net basis or to realize the asset and settle the liability simultaneously.

The Bank maintains provisions for uncertain tax positions that it believes appropriately reflect the risk of tax positions under discussion, audit, dispute, or appeal with tax authorities, or which are otherwise considered to involve uncertainty. These provisions are made using the Bank's best estimate of the amount expected to be paid based on an assessment of all relevant factors, which are reviewed at the end of each reporting period.

Income tax is recognized in the Consolidated Statement of Income except where it relates to items recognized in other comprehensive income or directly in equity, in which case income tax is recognized in the same line as the related item.

Leases

Effective November 1, 2019

At inception of a contract, the Bank assesses whether a contract is, or contains, a lease. A contract is a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

As a lessee

The Bank recognizes a right-of-use ("ROU") asset and a lease liability at the lease commencement date.

Asset

A ROU is an asset that represents a lessee's right to use an underlying asset for the lease term. The ROU asset is initially measured at cost, which is based on the initial amount of the lease liability, and any direct costs incurred, any lease payments made at or before the commencement date net of lease incentives received, and estimated decommissioning costs.

The ROU asset is subsequently measured at cost less accumulated depreciation and accumulated impairment losses, if any. The ROU asset is depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the ROU asset or the end of the lease term. The depreciation is recorded in Depreciation and amortization in the Consolidated Statement of Income. In addition, the ROU asset is adjusted for certain remeasurements of the lease liability.

Liability

At commencement date, the Bank initially measures the lease liability at the present value of the future lease payments, discounted using the Bank's incremental borrowing rate. The Bank's discount rate is based on the borrowing rate on its debt of different maturities that match the term of the lease. The discount rate is also dependent on the Bank's credit risk and economic environment in which the lease is entered. The lease liability is subsequently measured at amortized cost using the effective interest method. It is re-measured if the Bank changes its assessment of

whether it will exercise a purchase, extension or termination option. Interest expense is recorded in “Interest expense – Other” in the consolidated statement of income.

When the lease liability is re-measured in this way, a corresponding adjustment is made to the carrying amount of the ROU asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

Presentation
The Bank presents ROU assets in “Property and equipment” and lease liabilities in “Other liabilities” in the Consolidated Statement of Financial Position.

Sale and lease back transactions
Where the Bank enters into a sale-and-leaseback transaction (as the seller-lessee) which is deemed a sale, the Bank derecognizes the asset, applies the lessee accounting model to the leaseback and measures the ROU asset at cost. The gain/loss recognized on this transaction is recorded in other non-interest income in the Consolidated Statement of Income. Where the transfer is not deemed a sale, the Bank continues to recognize the underlying asset and recognizes a financial liability for any amount received from the buyer-lessor.

Short-term leases and leases of low-value assets
The Bank has elected not to recognize ROU assets and lease liabilities for short-term leases of assets that have a lease term of 12 months or less and leases of low-value assets. The Bank recognizes the lease payment associated with these leases as an expense on a straight-line basis over the lease term.

Determining lease term
The Bank’s expectation of exercising the option to renew a lease is determined by assessing if the Bank is “reasonably certain” to exercise that option. The Bank will be reasonably certain to exercise an option when factors create a significant economic incentive to do so. This assessment requires a significant level of judgement as it is based on current expectations of future decisions.

The Bank considers the following criteria when determining whether it has an economic incentive that makes it reasonably certain to exercise an option: key locations for its branch network, locations on which the Bank has spent significant capital on renovation work, contribution to profit, value of locations based on current economic environment and the remaining term of existing leases.

Effective prior to November 1, 2019

Bank as a lessor
Assets leased to customers under agreements which transfer substantially all the risks and rewards of ownership, with or without ultimate legal title, are classified as finance leases and presented within loans in the Consolidated Statement of Financial Position. When assets held are subject to a finance lease, the leased assets are derecognized and a receivable is recognized which is equal to the present value of the minimum lease payments, discounted at the interest rate implicit in the lease. Initial direct costs incurred in negotiating and arranging a finance lease are incorporated into the receivable through the discount rate applied to the lease. Finance lease income is recognized over the lease term based on a pattern reflecting a constant periodic rate of return on the net investment in the finance lease. Finance lease income is included in the Consolidated Statement of Income under interest income from loans.

Assets leased to customers under agreements which do not transfer substantially all the risks and rewards of ownership are classified as operating leases. The leased assets are included within property and equipment on the Bank’s Consolidated Statement of Financial Position. Rental income is recognized on a straight-line basis over the period of the lease in non-interest income – other in the Consolidated Statement of Income. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized as an expense on a straight-line basis over the lease term.

Bank as a lessee
Assets held under finance leases are initially recognized as property and equipment in the Consolidated Statement of Financial Position at an amount equal to the fair value of the leased asset or, if lower, the present value of the minimum lease payments. The corresponding finance lease obligation is included in other liabilities in the Consolidated Statement of Financial Position. The discount rate used in calculating the present value of the minimum lease payments is the interest rate implicit in the lease. Contingent rentals are recognized as expense in the periods in which they are incurred.

Operating lease rentals payable are recognized as an expense on a straight-line basis over the lease term, which commences when the lessee controls the physical use of the asset. Lease incentives are treated as a reduction of rental expense and are also recognized over the lease term on a straight-line basis. Contingent rentals arising under operating leases are recognized as an expense in the period in which they are incurred.

Sale and lease-back
Where the Bank enters into a sale lease-back transaction for a non-financial asset at fair market value that results in the Bank retaining an operating lease (where the buyer/lessor retains substantially all risks and rewards of ownership), any gains and losses are recognized immediately in net income. Where the sale lease-back transaction results in a finance lease, any gain on sale is deferred and recognized in net income over the remaining term of the lease.

Leasehold improvements
Leasehold improvements are investments made to customize buildings and offices occupied under operating lease contracts to make them suitable for their intended purpose. The present value of estimated reinstatement costs to bring a leased property into its original condition at the end of the lease, if required, is capitalized as part of the total leasehold improvements costs. At the same time, a corresponding liability is recognized to reflect the obligation incurred. Reinstatement costs are recognized in net income through depreciation of the capitalized leasehold improvements over their estimated useful life.

Provisions
A provision, including for restructuring, is recognized if, as a result of a past event, the Bank has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation.

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The amount recognized as a provision is the Bank's best estimate of the consideration required to settle the present obligation, taking into account the risks and uncertainties surrounding the obligation. If the effect of the time value of money is considered material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. The increase in the provision due to the passage of time is recorded as interest expense – other in the Consolidated Statement of Income.

Insurance contracts

Gross premiums for life insurance contracts are recognized as income when due. Gross premiums for non-life insurance business, primarily property and casualty, are recognized as income over the term of the insurance contracts. Unearned premiums represent the portion of premiums written in the current year that relate to the period of risk after the reporting date. Insurance claims recoveries are accounted as income in the same period as the related claims.

Gross insurance claims for life insurance contracts reflect the cost of all claims arising during the year. Gross insurance claims for property and casualty insurance contracts include paid claims and movements in outstanding claim liabilities. Insurance premiums ceded to reinsurers are accounted as an expense in the same period as the premiums for the direct insurance contracts to which they relate.

Guarantees

A guarantee is a contract that contingently requires the Bank to make specified payments to reimburse the holder for a loss it incurs because a specified debtor failed to make payment when due in accordance with the original or modified terms of a debt instrument. Guarantees include standby letters of credit, letters of guarantee, indemnifications, credit enhancements and other similar contracts. Guarantees that qualify as a derivative are accounted for in accordance with the policy for derivative instruments. For guarantees that do not qualify as a derivative, a liability is recorded for the fair value of the obligation assumed at inception. The fair value of the obligation at inception is generally based on the discounted cash flow of the premium to be received for the guarantee, resulting in a corresponding asset. Subsequent to initial recognition, such guarantees are measured at the higher of the initial amount, less amortization to recognize any fee income earned over the period, and the best estimate of the amount required to settle any financial obligation arising as a result of the guarantee. Any increase in the liability is reported in the Consolidated Statement of Income.

Employee benefits

The Bank provides pension and other benefit plans for eligible employees in Canada and internationally. Pension benefits are offered in the form of defined benefit pension plans (generally based on an employee's length of service and average earnings at retirement), and in the form of defined contribution pension plans (where the Bank's contribution is fixed and there is no legal or constructive obligation to pay further amounts). Other benefits provided include post-retirement health care, dental care and life insurance, along with other long-term employee benefits such as long-term disability benefits.

Defined benefit pension plans and other post-retirement benefit plans

The cost of these employee benefits is actuarially determined each year using the projected unit credit method. The calculation uses management's best estimate of a number of assumptions – including the discount rate, future compensation, health care costs, mortality, as well as the retirement age of employees. The most significant assumption is the discount rate used to determine the defined benefit obligation, which is set by reference to the yields on high quality corporate bonds that have durations that match the terms of the Bank's obligations. Separate discount rates are used to determine the annual benefit expense in Canada and the US. These rates are determined with reference to the yields on high quality corporate bonds with durations that match the various components of the annual benefit expense. The discount rate used to determine the annual benefit expense for all other plans is the same as the rate used to determine the defined benefit obligation.

The Bank's net asset or liability in respect of employee benefit plans is calculated separately for each plan as the difference between the present value of future benefits earned in respect of service for prior periods and the fair value of plan assets. The net asset or liability is included in other assets and other liabilities, as appropriate, in the Consolidated Statement of Financial Position. When the net amount in the Consolidated Statement of Financial Position is an asset, the recognized asset is limited to the present value of any economic benefits available in the form of refunds from the plan or reductions in future contributions to the plan.

The current service cost, net interest expense (income), past service cost (credit), settlement gain (loss) and administrative expense are recognized in net income. Net interest expense (income) is calculated by applying the discount rate to the net defined benefit asset or liability. When the benefits of a plan are improved (reduced), a past service cost (credit) is recognized immediately in net income.

Remeasurements comprising of actuarial gains and losses, the effect of the asset ceiling and the return on plan assets in excess of the interest income on the fair value of assets are recognized immediately in the Consolidated Statement of Financial Position with a charge or credit to the Statement of Other Comprehensive Income (OCI) in the period in which they occur. Amounts recorded in OCI are not recycled to the Consolidated Statement of Income.

Other long-term employee benefits

Other long-term employee benefits are accounted for similarly to defined benefit pension plans and other post-retirement benefit plans described above, except that remeasurements are recognized in the Consolidated Statement of Income in the period in which they arise.

Defined contribution plans

The costs of such plans are equal to contributions payable by the Bank to employees' accounts for service rendered during the period and expensed.

Short-term employee benefits

Short-term employee benefits are expensed as the related service is provided and a liability is measured on an undiscounted basis net of payments made.

Interest and similar income and expenses

For all non-trading interest-bearing financial instruments, interest income or expense is recorded in net interest income using the effective interest rate. This is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or a shorter period, where appropriate, to the gross carrying amount of the financial asset or financial liability. The calculation takes into account all the

contractual terms of the financial instrument (for example, prepayment options) and includes any fees or incremental costs that are directly attributable to the instrument and are an integral part of the effective interest rate, but not future credit losses.

For trading financial instruments, mark-to-market changes including related interest income or expense are recorded in non-interest income – trading revenues.

The carrying amount of interest-bearing financial instruments, measured at amortized cost or classified as FVOCI, is adjusted if the Bank revises its estimates of payments or receipts. The adjusted carrying amount is calculated based on the original effective interest rate and the change in carrying amount is recorded as non-interest income in the Consolidated Statement of Income.

Once the carrying value of a financial asset or a group of similar financial assets has been reduced due to an impairment loss, interest income continues to be recognized based on net effective interest rate inherent in the investment.

Loan origination costs are deferred and amortized into interest income using the effective interest method over the expected term of the loan. Loan fees are recognized in interest income over the appropriate lending or commitment period. Mortgage prepayment fees are recognized in interest income when received, unless they relate to a minor modification to the terms of the mortgage, in which case the fees are deferred and amortized using the effective interest method over the remaining period of the original mortgage.

Loan syndication fees are deferred and amortized in interest income over the term of the loan where the yield the Bank retains is less than that of the comparable lenders in the syndicate.

Loan commitment fees for loans that are likely to be drawn down and other credit related fees are deferred (together with any incremental costs) and recognized as part of the interest income on the loan. When it is unlikely that a loan will be drawn down, the loan commitment fees are recognized in non-interest income.

Fee and commission revenues

Revenue is recognized once the Bank's customer has obtained control of the service. The transfer of control occurs when the Bank's customer has the ability to direct the use of and obtain the benefits of the banking services and the contractual performance obligation to the customer has been satisfied. The Bank records revenue gross of expenses where it is the principal in performing a service to the customer and net of expenses where the Bank it is an agent for these services. The assessment of principal or agent requires judgement on the basis of whether the Bank controls the services before they are transferred to the customer. From time to time, the Bank may receive variable consideration such as performance fees. These fees are only recognized when it is highly probable that the Bank will not need to reverse a significant amount of revenue once the uncertainty relating to the actual consideration received is resolved. Judgement is required to estimate these fees.

Card revenues include interchange fees, annual fees and other card related fees. Interchange fees are recognized in connection with the customer's purchase of goods and services and are calculated as a percentage of the transaction amount as established by the payment network. Interchange fees are recognized on the transaction date. The Bank presents interchange fees net of network association costs incurred and reward costs for associated cards. Annual fees are recognized in income over 12 months. Other card fees are transaction-based and are recognized on the transaction date.

The Bank operates various loyalty points programs, which allow customers to accumulate points when they use the Bank's products and services. The points to be redeemed require management judgement to estimate the liability. The liability is reduced by the cost of points redeemed and subject to remeasurement to reflect the expected cost of redemption. Where the customer has the option to redeem points for statement credits, the cost of the loyalty program is presented net of card fees. Where points can only be redeemed for goods or services, a portion of the interchange revenue is allocated to the loyalty rewards recognized when rewards are redeemed. The associated cost of these points is recorded in non-interest expense.

The following accounting policy was applicable to customer loyalty programs prior to November 1, 2018: Customers redeemed loyalty points for free or discounted products or services, subject to certain conditions. Consideration received was allocated between the products sold or services rendered and points issued, with the consideration allocated to points equal to their fair value. The fair value of points was generally based on equivalent retail prices for the mix of awards expected to be redeemed. The fair value of the points issued was deferred in other liabilities and recognized as banking revenues when the points redeemed or lapsed. Management judgment was involved in determining the redemption rate used in the estimate of points to be redeemed.

Banking services fees consist of fees earned on personal, business and government deposit activities. Personal deposit-related fees consist of account maintenance and various transaction-based services. Business and government deposit-related fees consist of commercial deposit and treasury management services and other cash management services. These fees are recognized on the transaction date or over time as services are provided to the customer.

Credit fees include fees earned for providing letters of credit and guarantee, loan commitments, bankers' acceptances, and for arranging loan syndications. These fees are recognized on the transaction date or over time as services are provided based on contractual agreements with the customer.

Mutual funds fees include management and administration fees which are earned in the Bank's wealth management business. These fees are calculated as a percentage of the fund's net asset value and recognized as the service is provided. From time to time, the Bank may also recognize performance fees from some funds. These fees are only recognized to the extent that it is highly probable that a significant reversal of revenue will not occur.

Brokerage fees relate to fees earned for providing full-service and discount brokerage services to clients. These fees are contractually agreed and can be asset-based or linked to individual transactions. Such fees are recognized as the service is provided to clients or on the trade date.

Investment management and trust fees include administration, trust services and other investment services provided to clients. These fees are contractually agreed upon and can be linked to portfolio values or individual transactions. Such fees are recognized as the service is provided to clients to the extent that it is highly probable that a significant reversal of revenue will not occur.

Underwriting and other advisory fees relate to fees earned for services provided to clients in relation to the placement of debt and equities. Such fees also include services to clients for mergers, acquisitions, financial restructurings and other corporate finance activities. These fees are recognized when the service has been performed and/or contractual milestones are completed. Performance and completion fees are variable consideration and generally contingent on the successful completion of a transaction.

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Other fees and commissions include commissions earned on the sale of third party insurance products to the Bank's customers. Such fees and commissions are recognized when the performance obligation is completed.

Fee and commission expenses
Fee and commission expenses relate to transaction and service fees which are expensed as the services are received.

Dividend income
Dividend income on equity securities is recognized when the Bank's right to receive payment is established, which is on theex-dividend date for listed equity securities.

Share-based payments
Share-based payments awarded to employees are recognized as compensation expense in the Consolidated Statement of Income over the vesting period based on the number of awards expected to vest including the impact of expected forfeitures. For awards that are delivered in tranches, each tranche is considered a separate award and accounted for separately.

Stock appreciation rights and other awards that must be settled for cash are classified as liabilities. Liability-classified awards arere-measured to fair value at each reporting date while they remain outstanding, with any changes in fair value recognized in compensation expense in the period. The liability is expensed over the vesting period which incorporates the re-measurement of the fair value and a revised forfeiture rate that anticipates units expected to vest.

Employee stock options with tandem stock appreciation rights give the employee the right to exercise for shares or settle in cash. These options are classified as liabilities and are re-measured to fair value at each reporting date while they remain outstanding. If an option is exercised, thereby cancelling the tandem stock appreciation right, both the exercise price proceeds together with the accrued liability and associated taxes are credited to equity – common shares in the Consolidated Statement of Financial Position.

Plain vanilla options and other awards that must be settled for shares are classified as equity awards. Equity-classified awards are expensed based on the grant date fair value with a corresponding increase to equity – other reserves in the Consolidated Statement of Financial Position. If an option is exercised, both the exercise price proceeds together with the amount recorded in other reserves is credited to equity – common shares in the Consolidated Statement of Financial Position.

For tandem stock appreciation rights, stock appreciation rights and plain vanilla options, the Bank estimates fair value using an option pricing model. The option pricing model requires inputs such as the exercise price of the option, the current share price, the risk free interest rate, expected dividends, expected volatility (calculated using an equal weighting of implied and historical volatility) and specific employee exercise behaviour patterns based on statistical data. For other awards, fair value is the quoted market price of the Bank's common shares at the reporting date.

Where derivatives are used to economically hedge share-based payment expense, related mark-to-market gains and losses are included in non-interest expenses – salaries and employee benefits in the Consolidated Statement of Income.

A voluntary renouncement of a tandem stock appreciation right where an employee retains the corresponding option for shares with no change in the overall fair value of the award, results in a reclassification of the accrued liability and associated tax to equity – other reserves in the Consolidated Statement of Financial Position. This reclassification is measured at the fair value of the renounced awards as of the renouncement date. Subsequent to the voluntary renouncement, these awards are accounted for as plain vanilla options, based on the fair value as of the renouncement date.

Dividends on shares
Dividends on common and preferred shares and other equity instruments are recognized as a liability and deducted from equity when they are declared and no longer at the discretion of the Bank.

Segment reporting
Management's internal view is the basis for the determination of operating segments. The operating segments are those whose operating results are regularly reviewed by the Bank's chief operating decision-maker to make decisions about resources to be allocated to the segment and assess its performance. The Bank has four operating segments: Canadian Banking, International Banking, Global Wealth Management and Global Banking and Markets. The Other category represents smaller operating segments, including Group Treasury and other corporate items, which are not allocated to an operating segment. These segments offer different products and services and are managed separately based on the Bank's management and internal reporting structure.

The results of these business segments are based upon the internal financial reporting systems of the Bank. The accounting policies used in these segments are generally consistent with those followed in the preparation of the consolidated financial statements by the Bank. The only notable accounting measurement difference is the grossing up of revenues which are tax-exempt and income from associate corporations to an equivalentbefore-tax basis for those affected segments. This change in measurement enables comparison of income arising from taxable and tax-exempt sources.

Because of the complexity of the Bank, various estimates and allocation methodologies are used in the preparation of the business segment financial information. The funding value of assets and liabilities is transfer-priced at wholesale market rates, and corporate expenses are allocated to each segment on an equitable basis using various parameters. As well, capital is apportioned to the business segments on a risk-based methodology. Transactions between segments are recorded within segment results as if conducted with a third-party and are eliminated on consolidation.

Earnings per share (EPS)
Basic EPS is computed by dividing net income for the period attributable to the Bank's common shareholders by the weighted-average number of common shares outstanding during the period.

Diluted EPS is calculated by dividing adjusted net income for the period attributable to common shareholders by the weighted-average number of diluted common shares outstanding for the period. In the calculation of diluted earnings per share, earnings are adjusted for changes in income or expenses that would result from the issuance of dilutive shares. The weighted-average number of diluted common shares outstanding for the

period reflects the potential dilution that would occur if options, securities or other contracts that entitle their holders to obtain common shares had been outstanding from the beginning of the period (or a later date) to the end of the period (or an earlier date). Instruments determined to have an antidilutive impact for the period are excluded from the calculation of diluted EPS.

Earnings are adjusted by the after-tax amount of distributions related to dilutive capital instruments recognized in the period. For tandem stock appreciation rights that are carried as liabilities, the after-tax re-measurement included in salaries and employee benefits expense, net of related hedges, is adjusted to reflect the expense had these rights been equity-classified.

The number of additional shares for inclusion in diluted EPS for share-based payment options is determined using the treasury share method. Under this method, the net number of incremental common shares is determined by assuming that in-the-money stock options are exercised and the proceeds are used to purchase common shares at the average market price during the period.

The number of additional shares associated with capital instruments that potentially result in the issuance of common shares is based on the terms of the contract. On occurrence of contingencies as specified in the Non-Viability Contingent Capital (NVCC) Instruments, the number of additional common shares associated with the NVCC subordinated debentures, NVCC subordinated additional Tier 1 capital securities and NVCC preferred shares is based on an automatic conversion formula as set out in the respective prospectus supplements.

4 Transition to IFRS 16 and IFRS 15

IFRS 16

On November 1, 2019, the Bank adopted IFRS 16 *Leases*. The new standard replaces the previous standard IAS 17 *Leases*. IFRS 16 results in lessees accounting for most leases within the scope of the standard in a manner similar to the way in which finance leases were accounted for under IAS 17. Lessor accounting remains largely unchanged under IFRS 16.

IFRS 16 applies to all leases with the exception of assets within the scope of IAS 38 *Intangible assets*. IFRS 16 requires lessees to recognize a right-of-use ("ROU") asset and a corresponding financial liability on the balance sheet. The ROU asset will be amortized over the length of the lease, and the financial liability measured at amortized cost.

Transition Adjustment

The Bank applied IFRS 16 on a modified retrospective approach and took advantage of the option not to restate comparative periods.

The Bank applied the following transition options available under the modified retrospective approach:

- Measure the ROU asset at the date of initial application as equal to lease liability adjusted by any prepaid or accrued lease payments.
- Not apply IFRS 16 to operating leases with a remaining lease term of less than 12 months (short-term leases) or low value assets.
- Not apply IFRS 16 to leases of intangible assets.

On adoption of IFRS 16 on November 1, 2019, the Bank recorded an increase to "Property and Equipment" of $3,620 million (being the net increase in ROU assets) and "Other liabilities" of $3,648 million from recognized lease liabilities. The difference between the increase in ROU assets and lease liabilities was due primarily to tenant inducements for properties rented by the Bank. There was no impact on opening shareholders' equity. The amount of the lease liabilities above differed from the amount of operating lease commitments disclosed in Note 35(c) to the Consolidated Financial Statements in the 2019 Annual Report due mainly to an increase related to renewal options reasonably certain to be exercised partially offset by operating lease commitments for contracts not yet commenced and the effects of discounting the lease liabilities. The Bank used its incremental borrowing rate as of November 1, 2019 to measure lease liabilities. The weighted average incremental borrowing rate used is 3.5%.

IFRS 15

On November 1, 2018, the Bank adopted IFRS 15 *Revenue from Contracts with Customers*, which specifies how and when revenue is recognized, but does not impact income recognition related to financial instruments in scope of IFRS 9. The new standard replaced the previous standard IAS 18 *Revenue* and provides a single, principles-based five-step model to be applied to all contracts with customers and to determine whether the performance obligation is to provide the service itself (i.e. act as a principal) or to arrange another party to provide the service (i.e. act as an agent). The Bank adopted IFRS 15 using the modified retrospective approach and accordingly, comparative periods were not restated. The Bank recorded a cumulative-effect adjustment to decrease opening retained earnings on November 1, 2018 of $58 million (net of tax). This adjustment primarily related to certain costs that were no longer eligible for deferral under the new standard and the remeasurement of certain liabilities at fulfilment cost. For the year ended October 31, 2019, the impact of IFRS 15 was a decrease in non-interest income and non-interest expenses of approximately $209 million, primarily representing certain loyalty rewards previously recorded in non-interest expenses and now being recorded as a reduction to non-interest income.

5 Future Accounting Developments

The Bank actively monitors developments and changes in accounting standards from the IASB, as well as requirements from the other regulatory bodies, including OSFI. The Bank is currently assessing the measurement impact of the adoption of new standards issued by the IASB will have on its consolidated financial statements and also evaluating the alternative elections available on transition.

Effective November 1, 2020

Definition of business

On October 22, 2018, the IASB issued a narrow-scope amendment to IFRS 3 Business Combination. The amendments will help companies determine whether an acquisition is of a business or a group of assets. Distinguishing between a business and a group of assets is important because an acquirer recognizes goodwill only when acquiring a business. The amendments apply to transactions for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020. Earlier adoption is permitted. The amendments will apply prospectively to new transactions occurring after November 1, 2020.

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Effective November 1, 2021

Interest rate benchmark reform

On August 27, 2020, the IASB issued Interest Rate Benchmark Reform – Phase 2, Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 (the "amendments"). The amendments introduce a practical expedient to account for a change in the basis for determining the contractual cash flows of financial instruments that are impacted by interest rate benchmark reform ("IBOR reform"). Under the practical expedient, the Bank will not derecognize or adjust the carrying amount of financial instruments for modifications required by IBOR reform, but will instead update the effective interest rate to reflect the change in the interest rate benchmark. The practical expedient will be applied when the modification is required as a direct consequence of IBOR reform, and the new basis for determining the contractual cash flows is economically equivalent to the previous basis. A similar practical expedient will be applied for lessees when accounting for lease modifications is impacted by IBOR reform. In conjunction, the amendments also provide relief from specific hedge accounting requirements, such that existing hedge relationships directly impacted by IBOR reform will not be subject to discontinuation, and new hedging relationships that do not qualify under the current standards will be permitted, if changes to the hedge relationships are within the scope of the amendments.

Under the amendments, additional disclosures are required in the financial statements to outline the effect of the reform on the financial instruments and risk management strategy. The amendments are effective for the Bank from November 1, 2021, with earlier application permitted. The amendments apply retrospectively, but the Bank is not required to restate comparative information. The Bank has established an enterprise wide program to ensure the smooth transition from IBORs to alternative benchmark rates, focusing on quantifying exposures, providing trade capabilities, evaluating existing contracts and assessing technologies. The Bank is reviewing contracts that reference IBORs with considerations to those extending past 2021. The transition plan integrates guidance from industry groups as well as regulatory bodies. The Bank is currently assessing the impact and disclosure requirements from the amendments.

Effective November 1, 2023

Insurance Contracts

On May 18, 2017, the IASB issued IFRS 17 Insurance Contracts, which provides a comprehensive principle-based framework for the measurement and presentation of all insurance contracts. The new standard will replace IFRS 4 Insurance Contracts and requires insurance contracts to be measured using current fulfillment cash flows and for revenue to be recognized as the service is provided over the coverage period. The standard is required to be adopted retrospectively; if this is impractical, the modified retrospective or fair value method may be used.

On June 25, 2020, the IASB issued amendments to IFRS 17 Insurance Contracts. The amendments are designed to make it easier for companies to explain their financial performance, reduce costs due to simplification of some requirements in the standard and ease transition by deferring the effective date of the standard by two years. The standard will be effective as of November 1, 2023 for the Bank. As part of its ongoing implementation project for the standard, the Bank will consider the amendments on the scope, recognition, measurement and presentation of insurance contracts. The Bank continues to monitor developments related to the standard and industry discussions on the application of the standard.

The implementation of IFRS 17 is a multi-year project consisting of technology upgrades and policy and process changes. The project structure and governance has been established along with a Project Management Office to assist the Executive Steering and Project Operations Committees. The committees comprise of representatives from Global Finance, Global Insurance Actuarial Services, Information Technology and the Insurance Business Operation. The Bank will require new technology to manage the insurance business and prepare additional disclosures, for the separate insurance legal entity financial statements, under the new standard. The Bank continues to assess and formulate the accounting policies under IFRS 17 in order to quantify the impact of the new standard.

6 Cash and Deposits with Financial Institutions

As at October 31 ($ millions)	2020	2019
Cash and non-interest-bearing deposits with financial institutions	**$11,123**	$ 10,904
Interest-bearing deposits with financial institutions	**65,337**	35,816
Total	**$76,460(1)**	$ 46,720(1)

(1) Net of allowances of $1 (2019 – $3).

The Bank is required to maintain balances with central banks, other regulatory authorities and certain counterparties and these amounted to $7,121 million (2019 – $9,401 million) and are included above.

7 Fair Value of Financial Instruments

Determination of fair value

The calculation of fair value is based on market conditions at a specific point in time and therefore may not be reflective of future fair values. The Bank has controls and processes in place to ensure that the valuation of financial instruments is appropriately determined.

The best evidence of fair value for a financial instrument is the quoted price in an active market. Unadjusted quoted market prices for identical instruments represent a Level 1 valuation. Where possible, valuations are based on quoted prices or observable inputs obtained from active markets. Independent Price Verification (IPV) is undertaken to assess the reliability and accuracy of prices and inputs used in the determination of fair value. The IPV process is performed by price verification groups that are independent from the business. The Bank maintains a list of pricing sources that are used in the IPV process. These sources include, but are not limited to, brokers, dealers and consensus pricing services. The valuation policies relating to the IPV process require that all pricing or rate sources used be external to the Bank. On a periodic basis, an independent assessment of pricing or rate sources is performed to determine market presence or market representative levels.

Quoted prices are not always available for over-the-counter transactions, as well as transactions in inactive or illiquid markets. In these instances, internal models that maximize the use of observable inputs are used to estimate fair value. The chosen valuation technique incorporates all the factors that market participants would take into account in pricing a transaction. When all significant inputs to models are observable, the valuation is classified as Level 2. Financial instruments traded in a less active market are valued using indicative market prices, present value of cash-flows or other valuation techniques. Fair value estimates normally do not consider forced or liquidation sales.

Where financial instruments trade in inactive markets or when using models where observable parameters do not exist, significant management judgment is required for valuation purposes. Valuations that require the significant use of unobservable inputs are considered Level 3.

The specific inputs and valuation techniques used in determining the fair value of financial instruments are noted below. For Level 3 instruments, additional information is disclosed in the Level 3 sensitivity analysis on page 182.

The fair values of cash and deposits with banks, securities purchased under resale agreements and securities borrowed, customers' liability under acceptances, obligations related to securities sold under repurchase agreements and securities lent, acceptances, and obligations related to securities sold short are assumed to approximate their carrying values, either due to their short-term nature or because they are frequently repriced to current market rates.

Trading loans

Trading loans as they relate to precious metals (primarily gold and silver) are valued using a discounted cash flow model incorporating market-observable inputs, including precious metals spot and forward prices and interest rate curves (Level 2). Other trading loans that serve as hedges to loan-based credit total return swaps are valued using consensus prices from Bank approved independent pricing services (Level 2).

Government issued or guaranteed securities

The fair values of government issued or guaranteed debt securities are primarily based on unadjusted quoted prices in active markets, where available (Level 1). Where quoted prices are not available, the fair value is determined by utilizing recent transaction prices, broker quotes, or pricing services (Level 2).

For securities that are not actively traded, the Bank uses a discounted cash flow method, using the effective yield of a similar instrument adjusted for instrument-specific risk factors such as credit spread and contracted features (Level 2).

Corporate and other debt

Corporate and other debt securities are valued using unadjusted quoted prices from independent market data providers or third-party broker quotes (Level 1). Where prices are not available consistently, the last available data is used and verified with a yield-based valuation approach (Level 2). In some instances, interpolated yields of similar bonds are used to price securities (Level 2). The Bank uses pricing models with observable inputs from market sources such as credit spread, interest rate curves, and recovery rates (Level 2). These inputs are verified through an IPV process on a monthly basis.

For certain securities where there is no active market, no consensus market pricing and no indicative or executable independent third-party quotes, the Bank uses pricing by third-party providers or internal pricing models and cannot readily observe the market inputs used to price such instruments (Level 3).

Mortgage-backed securities

The fair value of residential mortgage-backed securities is primarily determined using third-party broker quotes and independent market data providers, where the market is more active (Level 2). Where the market is inactive, an internal price-based model is used (Level 3).

Equity securities

The fair value of equity securities is based on unadjusted quoted prices in active markets, where available (Level 1). Where equity securities are less frequently traded, the most recent exchange-quoted pricing is used to determine fair value. Where there is a wide bid-offer spread, fair value is determined based on quoted market prices for similar securities (Level 2).

Where quoted prices in active markets are not readily available, such as for private equity securities, the fair value is determined as a multiple of the underlying earnings or percentage of underlying assets obtained from third-party general partner statements (Level 3).

Income funds

The fair value of income funds is based on observable unadjusted quoted prices where available (Level 1). Where quoted or active market prices are unavailable, the last available Net Asset Value, fund statements and other financial information available from third-party fund managers at the fund level are used in arriving at the fair value (Level 2).

Derivatives

Fair values of exchange-traded derivatives are based on unadjusted quoted market prices (Level 1). Fair values of over-the-counter (OTC) derivatives or inactive exchange-traded derivatives are determined using pricing models, which take into account input factors such as current market and contractual prices of the underlying instruments, as well as time value and yield curve or volatility factors underlying the positions (Level 2). The determination of the fair value of derivatives includes consideration of credit risk, estimated funding costs and ongoing direct costs over the life of the instruments.

Derivative products valued using a valuation technique with market-observable inputs mainly include interest rate swaps and options, currency swaps and forward foreign exchange contracts. The most frequently applied valuation techniques include forward pricing and swap models, using present value calculations. The models incorporate various inputs including foreign exchange spot and forward rates and interest rate curves (Level 2).

Derivative products valued using a valuation technique with significant unobservable inputs are long dated contracts (interest rate swaps, currency swaps, forward foreign exchange contracts, option contracts and certain credit default swaps) and other derivative products that reference a basket of assets, commodities or currencies. These models incorporate certain significant non-observable inputs such as volatility and correlation (Level 3).

Loans

The estimated fair value of loans carried at amortized cost reflects changes in the general level of interest rates and credit worthiness of borrowers that have occurred since the loans were originated or purchased. The particular valuation methods used are as follows:

- Canadian fixed rate residential mortgages are fair valued by discounting the expected future contractual cash flows, taking into account expected prepayments and using management's best estimate of average market interest rates currently offered for mortgages with similar remaining terms (Level 3).
- For fixed rate business and government loans, fair value is determined by discounting the expected future contractual cash flows of these loans at interest rates estimated by using the appropriate currency swap curves for the remaining term, adjusted for a credit mark of the expected losses in the portfolio (Level 3).

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- For all other fixed rate loans, fair value is determined by discounting the expected future contractual cash flows of these loans at interest rates estimated by using the appropriate currency swap curves for the remaining term (Level 3).
- For all floating rate loans fair value is assumed to equal book value.

The fair value of loans is not adjusted for the value of any credit protection the Bank has purchased to mitigate credit risk.

Deposits

The fair values of deposits payable on demand or after notice or floating rate deposits payable on a fixed date is assumed to equal book value.

The estimated fair values of Canadian personal fixed rate deposits payable on a fixed date are fair valued by discounting the expected future contractual cash outflows, using management's best estimate of average market interest rates currently offered for deposits with similar remaining terms (Level 2).

Deposits under the Canada Mortgage Bond (CMB) program are fair valued by discounting expected future contractual cash flows using market observable inputs (Level 2).

For all other fixed rate deposits, fair value is determined by discounting the expected future contractual cash flows of these deposits at interest rates estimated by using the appropriate currency swap curves for the remaining term (Level 2).

For structured notes containing embedded features that are bifurcated from the Plain Vanilla notes, the fair value of the embedded derivatives is determined using option pricing models with inputs similar to other interest rate or equity derivative contracts (Level 2). The fair value of certain embedded derivatives is determined using net asset values (Level 3).

Subordinated debentures and other liabilities

The fair values of subordinated debentures, including debentures issued by subsidiaries which are included in other liabilities, are determined by reference to quoted market prices where available or market prices for debt with similar terms and risks (Level 2). The fair values of other liabilities are determined by the discounted contractual cash flow method with appropriate currency swap curves for the remaining term (Level 2).

Fair value of financial instruments

The following table sets out the fair values of financial instruments of the Bank using the valuation methods and assumptions described above. The fair values disclosed do not include non-financial assets, such as property and equipment, investments in associates, precious metals, goodwill and other intangible assets.

	2020		2019	
As at October 31 ($ millions)	**Total fair value**	**Total carrying value**	Total fair value	Total carrying value
Assets:				
Cash and deposits with financial institutions	**$ 76,460**	**$ 76,460**	$ 46,720	$ 46,720
Trading assets	**117,839**	**117,839**	127,488	127,488
Securities purchased under resale agreements and securities borrowed	**119,747**	**119,747**	131,178	131,178
Derivative financial instruments	**45,065**	**45,065**	38,119	38,119
Investment securities – FVOCI and FVTPL	**79,745**	**79,745**	60,514	60,514
Investment securities – amortized cost	**32,129**	**31,644**	22,000	21,845
Loans	**612,368**	**603,263**	600,155	592,483
Customers' liability under acceptances	**14,228**	**14,228**	13,896	13,896
Other financial assets	**12,700**	**12,700**	15,142	15,142
Liabilities:				
Deposits	**755,395**	**750,838**	735,270	733,390
Financial instruments designated at fair value through profit or loss	**18,899**	**18,899**	12,235	12,235
Acceptances	**14,305**	**14,305**	13,901	13,901
Obligations related to securities sold short	**31,902**	**31,902**	30,404	30,404
Derivative financial instruments	**42,247**	**42,247**	40,222	40,222
Obligations related to securities sold under repurchase agreements and securities lent	**137,763**	**137,763**	124,083	124,083
Subordinated debentures	**7,827**	**7,405**	7,553	7,252
Other financial liabilities	**43,776**	**42,660**	38,338	37,713

Changes in interest rates, credit spreads and liquidity costs are the main cause of changes in the fair value of the Bank's financial instruments resulting in a favourable or unfavourable variance compared to carrying value. For the Bank's financial instruments carried at cost or amortized cost, the carrying value is not adjusted to reflect increases or decreases in fair value due to market fluctuations, including those due to interest rate changes. For FVOCI investment securities, derivatives and financial instruments measured at FVTPL or designated as fair value through profit or loss, the carrying value is adjusted regularly to reflect the fair value.

Fair value hierarchy

The following table outlines the fair value hierarchy of instruments carried at fair value on a recurring basis and of instruments not carried at fair value.

	2020				2019			
As at October 31 ($ millions)	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Instruments carried at fair value on a recurring basis:								
Assets:								
Precious metals(1)	$ –	$ 1,181	$ –	$ 1,181	$ –	$ 3,709	$ –	$ 3,709
Trading assets								
Loans	–	8,352	–	8,352	–	13,829	–	13,829
Canadian federal government and government guaranteed debt	9,154	3,882	–	13,036	9,345	1,828	–	11,173
Canadian provincial and municipal debt	–	9,320	–	9,320	–	7,615	–	7,615
US treasury and other US agencies' debt	5,182	–	–	5,182	8,604	–	–	8,604
Other foreign governments' debt	9,230	3,415	–	12,645	6,058	3,224	–	9,282
Corporate and other debt	–	10,570	18	10,588	–	10,523	17	10,540
Income funds	121	–	–	121	73	–	–	73
Equity securities	57,078	361	–	57,439	65,215	161	1	65,377
Other(2)	1,156	–	–	1,156	995	–	–	995
	$ 81,921	$ 37,081	$ 18	$ 119,020	$ 90,290	$ 40,889	$ 18	$131,197
Investment securities(3)								
Canadian federal government and government guaranteed debt	$ 1,728	$ 15,100	$ –	$ 16,828	$ 8,464	$ 3,917	$ –	$ 12,381
Canadian provincial and municipal debt	93	17,454	–	17,547	197	3,044	–	3,241
US treasury and other US agencies' debt	11,930	1,299	–	13,229	16,117	3,772	–	19,889
Other foreign governments' debt	14,101	13,798	23	27,922	10,973	9,608	30	20,611
Corporate and other debt	265	850	23	1,138	230	1,784	21	2,035
Equity securities	1,954	263	864	3,081	1,204	284	869	2,357
	$ 30,071	$ 48,764	$ 910	$ 79,745	$ 37,185	$ 22,409	$ 920	$ 60,514
Derivative financial instruments								
Interest rate contracts	$ –	$ 21,013	$ 4	$ 21,017	$ –	$ 16,621	$ 15	$ 16,636
Foreign exchange and gold contracts	–	17,943	–	17,943	8	17,309	–	17,317
Equity contracts	290	2,655	3	2,948	599	1,394	2	1,995
Credit contracts	–	480	–	480	–	406	–	406
Commodity contracts	–	2,677	–	2,677	6	1,759	–	1,765
	$ 290	$ 44,768	$ 7	$ 45,065	$ 613	$ 37,489	$ 17	$ 38,119
Liabilities:								
Deposits(4)	$ –	$ 73	$ –	$ 73	$ –	$ 144	$ –	$ 144
Financial liabilities designated at fair value through profit or loss	–	18,899	–	18,899	–	12,235	–	12,235
Obligations related to securities sold short	25,584	6,318	–	31,902	26,669	3,735	–	30,404
Derivative financial instruments								
Interest rate contracts	–	16,937	17	16,954	–	13,867	71	13,938
Foreign exchange and gold contracts	–	19,511	–	19,511	–	20,350	–	20,350
Equity contracts	599	2,133	2	2,734	530	2,557	6	3,093
Credit contracts	–	53	–	53	–	38	–	38
Commodity contracts	–	2,995	–	2,995	–	2,803	–	2,803
	$ 599	$ 41,629	$ 19	$ 42,247	$ 530	$ 39,615	$ 77	$ 40,222
Instruments not carried at fair value (5):								
Assets:								
Investment securities – amortized cost	$ 4,946	$ 26,864	$ 319	$ 32,129	$ 5,495	$ 16,377	$ 128	$ 22,000
Loans(6)	–	–	374,767	374,767	–	–	351,832	351,832
Liabilities:								
Deposits(6)	–	307,457	–	307,457	–	318,091	–	318,091
Subordinated debentures	–	7,827	–	7,827	–	7,553	–	7,553
Other liabilities	–	26,831	–	26,831	–	23,141	–	23,141

(1) The fair value of precious metals is determined based on quoted market prices and forward spot prices, where applicable.
(2) Represents energy related assets.
(3) Excludes debt investment securities measured at amortized cost of $31,644 (October 31, 2019 – $21,845).
(4) These amounts represent embedded derivatives bifurcated from structured notes.
(5) Represents the fair value of financial assets and liabilities where the carrying amount is not a reasonable approximation of fair value.
(6) Represents fixed rate instruments.

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Level 3 instrument fair value changes

Financial instruments categorized as Level 3 as at October 31, 2020, in the fair value hierarchy comprise certain foreign government bonds, structured corporate bonds, investments in private equity securities, and complex derivatives.

The following table summarizes the changes in Level 3 instruments carried at fair value for the year ended October 31, 2020.

All positive balances represent assets and negative balances represent liabilities. Consequently, positive amounts indicate purchases of assets or settlements of liabilities and negative amounts indicate sales of assets or issuances of liabilities.

	As at October 31, 2020							
($ millions)	Fair value November 1 2019	Gains/(losses) recorded in income	Gains/(losses) recorded in OCI	Purchases/ Issuances	Sales/ Settlements	Transfers into/out of Level 3	Fair value October 31 2020	Change in unrealized gains/(losses) recorded in income for instruments still held(1)
Precious metals	$ –	**$ 1**	**$ –**	**$ 23**	**$ (24)**	**$ –**	**$ –**	**$ –**
	–	**1**	**–**	**23**	**(24)**	**–**	**–**	**–**
Trading assets								
Loans	–	**1**	**–**	**22**	**(23)**	**–**	**–**	**–**
Corporate and other debt	17	**5**	**–**	**–**	**(4)**	**–**	**18**	**5**
Equity securities	1	**–**	**–**	**–**	**(1)**	**–**	**–**	**–**
	18	**6**	**–**	**22**	**(28)**	**–**	**18**	**5**
Investment securities								
Other foreign governments' debt	30	**–**	**(2)**	**–**	**(5)**	**–**	**23**	**n/a**
Corporate and other debt	21	**–**	**(2)**	**4**	**–**	**–**	**23**	**–**
Equity securities	869	**13**	**11**	**253**	**(254)**	**(28)**	**864**	**13**
	920	**13**	**7**	**257**	**(259)**	**(28)**	**910**	**13**
Derivative financial instruments – assets								
Interest rate contracts	15	**(1)**	**–**	**14**	**(1)**	**(23)**	**4**	**(1)**
Equity contracts	2	**2**	**–**	**1**	**–**	**(2)**	**3**	**2(2)**
Derivative financial instruments – liabilities								
Interest rate contracts	(71)	**8**	**–**	**(30)**	**31**	**45**	**(17)**	**8(3)**
Equity contracts	(6)	**5**	**–**	**(6)**	**2**	**3**	**(2)**	**5(2)**
	(60)	**14**	**–**	**(21)**	**32**	**23**	**(12)**	**14**
Total	$ 878	**$ 34**	**$ 7**	**$ 281**	**$ (279)**	**$ (5)**	**$ 916**	**$ 32**

(1) These amounts represent the gains and losses from fair value changes of Level 3 instruments still held at the end of the period that are recorded in the Consolidated Statement of Income.
(2) Certain unrealized gains and losses on derivative assets and liabilities are largely offset by mark-to-market changes on other instruments included in trading revenues in the Consolidated Statement of Income, since these instruments act as an economic hedge to certain derivative assets and liabilities.
(3) Certain unrealized losses on interest rate derivative contracts are largely offset by mark-to-market changes on embedded derivatives on certain deposit liabilities in the Consolidated Statement of Income.

The following table summarizes the changes in Level 3 instruments carried at fair value for the year ended October 31, 2019.

	As at October 31, 2019						
($ millions)	Fair value November 1 2018	Gains/(losses) recorded in income(1)	Gains/(losses) recorded in OCI	Purchases/ Issuances	Sales/ Settlements	Transfers into/out of Level 3	Fair value October 31 2019
Precious metals	$ 16	$ –	$ –	$ 25	$ (41)	$ –	$ –
Trading assets	18	2	–	2	(8)	4	18
Investment securities	770	43	38	277	(174)	(34)	920
Derivative financial instruments	41	(61)	–	(35)	(1)	(4)	(60)

(1) Gains or losses for items in Level 3 may be offset with losses or gains on related hedges in Level 1 or Level 2.

Significant transfers

Significant transfers can occur between the fair value hierarchy levels when additional or new information regarding valuation inputs and their refinement and observability become available. The Bank recognizes transfers between levels of the fair value hierarchy as of the end of the reporting period during which the change has occurred. Transfers into and out of Level 3 occur mainly due to changes in the observability, valuation technique and/or significance of unobservable valuation inputs.

There were no significant transfers into and out of Level 3 for the years ended October 31, 2020 and October 31, 2019.

Level 3 sensitivity analysis

The table below sets out information about significant unobservable inputs used in measuring financial instruments categorized as Level 3 in the fair value hierarchy.

	Valuation technique	Significant unobservable inputs	Range of estimates for unobservable inputs(1)	Changes in fair value from reasonably possible alternatives ($ millions)
Investment securities				
Private equity securities(2)	Market comparable	General Partner valuations per financial statements Capitalization rate	97% 3%	(36)/36
Derivative financial instruments				
Interest rate contracts	Option pricing model	Interest rate volatility	36% - 146%	(2)/2
Equity contracts	Option pricing model	Equity volatility Single stock correlation	2% - 188% (65)% - 98%	(7)/7

(1) The range of estimates represents the actual lowest and highest level inputs used to fair value financial instruments within each financial statement category.
(2) The valuation of private equity securities utilizes net asset values as reported by fund managers. Net asset values are not considered observable as the Bank cannot redeem these instruments at such values. The range for net asset values per unit or price per share has not been disclosed for these instruments since the valuations are not model-based.

The Bank applies judgment in determining unobservable inputs used to calculate the fair value of Level 3 instruments.

The following section discusses the significant unobservable inputs for Level 3 instruments.

General Partner (GP) Valuations per Statements

Asset values provided by GPs represent the fair value of investments in private equity securities.

Correlation

Correlation in a credit derivative or debt instrument refers to the likelihood of a single default causing a succession of defaults. It affects the distribution of the defaults throughout the portfolio and therefore affects the valuation of instruments such as collateralized debt obligation tranches. A higher correlation may increase or decrease fair value depending on the seniority of the instrument.

Correlation becomes an input into equity derivative pricing when the relationship between price movements of two or more of the underlying assets is relevant.

Volatility

Volatility is a measure of security price fluctuation. Historic volatility is often calculated as the annualized standard deviation of daily price variation for a given time period. Implied volatility is volatility, when input into an option pricing model, that returns a value equal to the current market value of the option.

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8 Trading Assets

(a) Trading securities

An analysis of the carrying value of trading securities is as follows:

As at October 31, 2020 ($ millions)	Remaining term to maturity						
	Within three months	Three to twelve months	One to five years	Five to ten years	Over ten years	No specific maturity	**Carrying value**
Trading securities:							
Canadian federal government issued or guaranteed debt	**$ 938**	**$ 1,180**	**$ 5,708**	**$ 1,915**	**$ 3,295**	**$ –**	**$ 13,036**
Canadian provincial and municipal debt	**562**	**818**	**2,026**	**1,107**	**4,807**	**–**	**9,320**
U.S. treasury and other U.S. agency debt	**461**	**93**	**3,846**	**644**	**138**	**–**	**5,182**
Other foreign government debt	**3,708**	**3,864**	**3,715**	**1,039**	**319**	**–**	**12,645**
Common shares	**–**	**–**	**–**	**–**	**–**	**57,178**	**57,178**
Other	**261**	**1,968**	**6,013**	**1,458**	**887**	**383**	**10,970**
Total	**$ 5,930**	**$ 7,923**	**$ 21,308**	**$ 6,163**	**$ 9,446**	**$ 57,561**	**$ 108,331**
Total by currency (in Canadian equivalent):							
Canadian dollar	**$ 1,640**	**$ 2,362**	**$ 7,402**	**$ 3,577**	**$ 8,406**	**$ 20,637**	**$ 44,024**
U.S. dollar	**1,249**	**1,340**	**10,150**	**1,212**	**707**	**25,600**	**40,258**
Mexican peso	**1,188**	**1,074**	**1,727**	**77**	**54**	**282**	**4,402**
Other currencies	**1,853**	**3,147**	**2,029**	**1,297**	**279**	**11,042**	**19,647**
Total trading securities	**$ 5,930**	**$ 7,923**	**$ 21,308**	**$ 6,163**	**$ 9,446**	**$ 57,561**	**$ 108,331**

As at October 31, 2019 ($ millions)	Remaining term to maturity						
	Within three months	Three to twelve months	One to five years	Five to ten years	Over ten years	No specific maturity	**Carrying value**
Trading securities:							
Canadian federal government issued or guaranteed debt	$ 1,338	$ 1,097	$ 4,990	$ 1,363	$ 2,385	$ –	$ 11,173
Canadian provincial and municipal debt	810	944	1,257	687	3,917	–	7,615
U.S. treasury and other U.S. agency debt	455	306	6,013	1,627	203	–	8,604
Other foreign government debt	3,237	2,047	2,655	1,084	259	–	9,282
Common shares	–	–	–	–	–	65,450	65,450
Other	734	1,527	6,309	1,398	560	12	10,540
Total	$ 6,574	$ 5,921	$ 21,224	$ 6,159	$ 7,324	$ 65,462	$ 112,664
Total by currency (in Canadian equivalent):							
Canadian dollar	$ 1,246	$ 2,429	$ 8,042	$ 2,595	$ 6,602	$ 18,990	$ 39,904
U.S. dollar	606	1,085	8,802	2,462	465	27,952	41,372
Mexican peso	378	458	1,494	96	60	507	2,993
Other currencies	4,344	1,949	2,886	1,006	197	18,013	28,395
Total trading securities	$ 6,574	$ 5,921	$ 21,224	$ 6,159	$ 7,324	$ 65,462	$ 112,664

(b) Trading loans

The following table provides the geographic breakdown of trading loans:

As at October 31 ($ millions)	**2020**	2019
Trading loans[1][2]		
U.S.[3]	**$ 6,227**	$ 8,112
Europe[4]	**1,075**	3,414
Asia Pacific[4]	**141**	1,339
Canada[4]	**266**	434
Other[4]	**643**	530
Total	**$ 8,352**	$ 13,829

(1) Geographic segmentation of trading loans is based upon the location of the ultimate risk of the underlying asset.
(2) Loans are denominated in U.S. dollars.
(3) Includes trading loans that serve as a hedge to loan-based credit total return swaps of $5,396 (2019 – $5,559), while the remaining relates to short-term precious metals trading and lending activities.
(4) These loans are primarily related to short-term precious metals trading and lending activities.

9 Financial Instruments Designated at Fair Value Through Profit or Loss

In accordance with its risk management strategy, the Bank has elected to designate certain senior note liabilities at fair value through profit or loss to reduce an accounting mismatch between fair value changes in these instruments and fair value changes in related derivatives, and where a hybrid financial liability contains one or more embedded derivatives that are not closely related to the host contract. Changes in fair value of financial liabilities arising from the Bank's own credit risk are recognized in other comprehensive income, without subsequent reclassification to net income.

The cumulative fair value adjustment due to own credit risk is determined at a point in time by comparing the present value of expected future cash flows over the term of these liabilities discounted at the Bank's effective funding rate, and the present value of expected future cash flows discounted under a benchmark rate.

The following table presents the fair value of financial liabilities designated at fair value through profit or loss and their changes in fair value.

	Fair value		Change in fair value		Cumulative change in FV(1)	
	As at		For the year ended			
October 31 ($ millions)	**2020**	2019	**2020**	2019	**2020**	2019
Liabilities						
Senior note liabilities(2)	**$ 18,899**	$ 12,235	**$ 651**	$(1,230)	**$ 199**	$ (452)

(1) The cumulative change in fair value is measured from the instruments' date of initial recognition.
(2) Changes in fair value attributable to changes in the Bank's own credit risk are recorded in other comprehensive income. Other changes in fair value are recorded in non-interest income – trading revenues. The offsetting fair value changes from associated derivatives is also recorded in non-interest income – trading revenues.

The following tables present the changes in fair value attributable to changes in the Bank's own credit risk for financial liabilities designated at fair value through profit or loss as well as their contractual maturity and carrying amounts.

	Senior Note Liabilities				
($ millions)	Contractual maturity amount(1)	Carrying Value	Difference between carrying value and contractual maturity amount	Changes in fair value for the period attributable to changes in own credit risk recorded in other comprehensive income	Cumulative changes in fair value attributable to changes in own credit risk(1)
As at October 31, 2020	**$ 19,098**	**$ 18,899**	**$ 199**	**$ (404)**	**$(459)**
As at October 31, 2019	$ 11,783	$ 12,235	$ (452)	$ 11	$ (55)

(1) The cumulative change in fair value is measured from the instruments' date of initial recognition.

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10 Derivative Financial Instruments

(a) Notional amounts(1)

The following table provides the aggregate notional amounts of derivative financial instruments outstanding by type and segregated between those used by the Bank in its dealer capacity (Trading) and those derivatives designated in hedging relationships. The notional amounts of these contracts represent the derivatives volume outstanding and do not represent the potential gain or loss associated with the market risk or credit risk of such instruments. Credit derivatives within other derivative contracts are comprised primarily of purchased and sold credit default swap transactions. To a lesser extent, this category also includes total return swaps referenced to loans and debt securities. Other derivative contracts – other includes precious metals other than gold, and other commodities including energy and base metal derivatives.

	2020			2019		
As at October 31 ($ millions)	Trading	Hedging	Total	Trading	Hedging	Total
Interest rate contracts						
Exchange-traded:						
Futures	**$ 111,065**	**$ –**	**$ 111,065**	$ 130,310	$ –	$ 130,310
Options purchased	**2,047**	**–**	**2,047**	11,287	–	11,287
Options written	**–**	**–**	**–**	3,699	–	3,699
	113,112	**–**	**113,112**	145,296	–	145,296
Over-the-counter:						
Forward rate agreements	**7,573**	**–**	**7,573**	8,184	–	8,184
Swaps	**380,118**	**27,987**	**408,105**	413,261	34,718	447,979
Options purchased	**26,167**	**–**	**26,167**	27,356	–	27,356
Options written	**29,343**	**–**	**29,343**	29,617	–	29,617
	443,201	**27,987**	**471,188**	478,418	34,718	513,136
Over-the-counter (settled through central counterparties):						
Forward rate agreements	**598,653**	**–**	**598,653**	529,893	–	529,893
Swaps	**2,960,778**	**236,603**	**3,197,381**	3,154,442	249,610	3,404,052
Options purchased	**–**	**–**	**–**	–	–	–
Options written	**–**	**–**	**–**	–	–	–
	3,559,431	**236,603**	**3,796,034**	3,684,335	249,610	3,933,945
Total	**$ 4,115,744**	**$ 264,590**	**$ 4,380,334**	$ 4,308,049	$ 284,328	$ 4,592,377
Foreign exchange and gold contracts						
Exchange-traded:						
Futures	**$ 9,548**	**$ –**	**$ 9,548**	$ 8,368	$ –	$ 8,368
Options purchased	**258**	**–**	**258**	686	–	686
Options written	**187**	**–**	**187**	417	–	417
	9,993	**–**	**9,993**	9,471	–	9,471
Over-the-counter:						
Spot and forwards	**354,235**	**19,114**	**373,349**	431,547	37,582	469,129
Swaps	**457,942**	**78,433**	**536,375**	383,708	68,793	452,501
Options purchased	**33,754**	**–**	**33,754**	44,890	–	44,890
Options written	**32,613**	**–**	**32,613**	44,936	–	44,936
	878,544	**97,547**	**976,091**	905,081	106,375	1,011,456
Over-the-counter (settled through central counterparties):						
Spot and forwards	**27,579**	**–**	**27,579**	25,724	–	25,724
Swaps	**–**	**–**	**–**	–	–	–
Options purchased	**–**	**–**	**–**	–	–	–
Options written	**–**	**–**	**–**	–	–	–
	27,579	**–**	**27,579**	25,724	–	25,724
Total	**$ 916,116**	**$ 97,547**	**$ 1,013,663**	$ 940,276	$ 106,375	$ 1,046,651
Other derivative contracts						
Exchange-traded:						
Equity	**$ 45,099**	**$ –**	**$ 45,099**	$ 40,095	$ –	$ 40,095
Credit	**–**	**–**	**–**	–	–	–
Commodity and other contracts	**27,083**	**–**	**27,083**	69,416	–	69,416
	72,182	**–**	**72,182**	109,511	–	109,511
Over-the-counter:						
Equity	**82,343**	**582**	**82,925**	91,869	726	92,595
Credit	**23,666**	**–**	**23,666**	18,678	–	18,678
Commodity and other contracts	**37,887**	**–**	**37,887**	61,257	–	61,257
	143,896	**582**	**144,478**	171,804	726	172,530
Over-the-counter (settled through central counterparties):						
Equity	**–**	**–**	**–**	–	–	–
Credit	**10,485**	**–**	**10,485**	8,053	–	8,053
Commodity and other contracts	**234**	**–**	**234**	411	–	411
	10,719	**–**	**10,719**	8,464	–	8,464
Total	**$ 226,797**	**$ 582**	**$ 227,379**	$ 289,779	$ 726	$ 290,505
Total notional amounts outstanding	**$ 5,258,657**	**$ 362,719**	**$ 5,621,376**	$ 5,538,104	$ 391,429	$ 5,929,533

(1) The notional amounts represent the amount to which a rate or price is applied to determine the amount of cash flows to be exchanged.

(b) Remaining term to maturity

The following table summarizes the remaining term to maturity of the notional amounts of the Bank's derivative financial instruments by type:

As at October 31, 2020 ($ millions)	Within one year	One to five years	Over five years	Total
Interest rate contracts				
Futures	**$ 63,381**	**$ 47,648**	**$ 36**	**$ 111,065**
Forward rate agreements	**493,676**	**105,747**	**6,803**	**606,226**
Swaps	**1,204,974**	**1,617,615**	**782,897**	**3,605,486**
Options purchased	**9,596**	**17,011**	**1,607**	**28,214**
Options written	**5,784**	**15,919**	**7,640**	**29,343**
	1,777,411	**1,803,940**	**798,983**	**4,380,334**
Foreign exchange and gold contracts				
Futures	**7,144**	**2,404**	**–**	**9,548**
Spot and forwards	**373,511**	**22,353**	**5,064**	**400,928**
Swaps	**111,610**	**256,789**	**167,976**	**536,375**
Options purchased	**28,329**	**5,615**	**68**	**34,012**
Options written	**29,989**	**2,811**	**–**	**32,800**
	550,583	**289,972**	**173,108**	**1,013,663**
Other derivative contracts				
Equity	**81,897**	**45,083**	**1,044**	**128,024**
Credit	**19,910**	**8,965**	**5,276**	**34,151**
Commodity and other contracts	**48,970**	**15,896**	**338**	**65,204**
	150,777	**69,944**	**6,658**	**227,379**
Total	**$ 2,478,771**	**$ 2,163,856**	**$ 978,749**	**$ 5,621,376**

As at October 31, 2019 ($ millions)	Within one year	One to five years	Over five years	Total
Interest rate contracts				
Futures	$ 81,584	$ 48,087	$ 639	$ 130,310
Forward rate agreements	414,294	117,694	6,089	538,077
Swaps	1,182,231	1,781,124	888,676	3,852,031
Options purchased	19,633	16,813	2,197	38,643
Options written	8,408	19,148	5,760	33,316
	1,706,150	1,982,866	903,361	4,592,377
Foreign exchange and gold contracts				
Futures	6,574	1,762	32	8,368
Spot and forwards	465,712	25,605	3,536	494,853
Swaps	104,706	206,695	141,100	452,501
Options purchased	39,105	6,218	253	45,576
Options written	40,628	4,493	232	45,353
	656,725	244,773	145,153	1,046,651
Other derivative contracts				
Equity	75,388	54,045	3,257	132,690
Credit	13,562	11,418	1,751	26,731
Commodity and other contracts	93,950	36,603	531	131,084
	182,900	102,066	5,539	290,505
Total	$ 2,545,775	$ 2,329,705	$ 1,054,053	$ 5,929,533

(c) Credit risk

As with other financial assets, derivative instruments are subject to credit risk. Credit risk arises from the possibility that counterparties may default on their obligations to the Bank. However, whereas the credit risk of other financial assets is represented by the principal amount net of any applicable allowance for credit losses, the credit risk associated with derivatives is normally a small fraction of the notional amount of the derivative instrument.

Derivative contracts generally expose the Bank to credit loss if changes in market rates affect a counterparty's position unfavourably and the counterparty defaults on payment. Accordingly, exposure to credit risk of derivatives is represented by the positive fair value of the instrument.

Negotiated over-the-counter derivatives generally present greater credit exposure than exchange-traded contracts. The net change in the exchange-traded contracts is normally settled daily in cash with the exchange. Holders of these contracts look to the exchange for performance under the contract.

The Bank strives to limit credit risk by dealing with counterparties that it believes are creditworthy, and investment grade counterparties account for a significant portion of the credit risk exposure arising from the Bank's derivative transactions as at October 31, 2020. To control credit risk associated with derivatives, the Bank uses similar credit risk management activities and procedures to the approaches used in the lending business in assessing and adjudicating exposure. The Bank utilizes a risk metric, potential future exposure (PFE) for derivatives, to measure utilization

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against established credit limits to the counterparty. PFE measures the effect that changes in the market have on derivative exposures throughout the lifetime of the counterparties' trades. Additionally, PFE considers risk mitigants such as netting and collateralization. PFE limits and utilization for derivatives counterparties are authorized and monitored by the Bank's risk management unit.

The Bank obtains the benefit of netting by entering into master netting arrangements with counterparties (typically industry standard International Swaps and Derivatives Association (ISDA) agreements), which allow for a single net settlement of all transactions covered by that agreement in the event of a default or early termination of the transactions. In this manner, the credit risk associated with favourable contracts is eliminated by the master netting arrangement to the extent that unfavourable contracts with the same counterparty are not settled before favourable contracts.

Collateralization is typically documented by way of an ISDA Credit Support Annex (CSA), the terms of which may vary according to each party's view of the other party's creditworthiness. CSAs can require one party to post initial margin at the onset of each transaction. CSAs also allow for variation margin to be called if total uncollateralized mark-to-market exposure exceeds an agreed upon threshold. Such variation margin provisions can be one way (only one party will ever post collateral) or bi-lateral (either party may post collateral depending upon which party is in-the-money). The CSA will also detail the types of collateral that are acceptable to each party, and the adjustments that will be applied against each collateral type. The terms of the ISDA master netting agreements and CSAs are taken into consideration in the calculation of counterparty credit risk exposure (see also page 94 of the 2020 Annual Report).

Derivative instruments used by the Bank include credit derivatives in its investment and loan portfolios: credit protection is sold as an alternative to acquiring exposure to bond or loan assets, and bought to manage or mitigate credit exposures.

The following table summarizes the credit exposure of the Bank's derivative financial instruments. The credit risk amount (CRA) represents the estimated replacement cost, or positive fair value, for all contracts. CRA takes into account master netting or collateral arrangements that have been made[1]. CRA does not reflect actual or expected losses.

The credit equivalent amount (CEA) is the exposure at default (EAD) prescribed in the Capital Adequacy Requirements (CAR) Guidelines of the Office of the Superintendent of Financial Institutions (OSFI). The risk-weighted asset is calculated by multiplying the CEA by the capital requirement (K) times 12.5, where K is a function of the probability of default (PD), loss given default (LGD), maturity and prescribed correlation factors. Other derivative contracts – other includes precious metals other than gold, and other commodities, including energy and base metal derivatives.

	2020				2019			
As at October 31 ($ millions)	Notional amount	Credit risk amount (CRA)(1)	Credit equivalent amount (CEA)(1)	Risk-Weighted Assets	Notional amount	Credit risk amount (CRA)(1)	Credit equivalent amount (CEA)(1)	Risk-Weighted Assets
Interest rate contracts								
Futures	**$ 111,065**	**$ –**	**$ 46**	**$ –**	$ 130,310	$ –	$ 39	$ –
Forward rate agreements	**606,226**	**52**	**129**	**45**	538,077	49	249	127
Swaps	**3,605,486**	**7,418**	**8,343**	**2,610**	3,852,031	5,345	6,369	2,145
Options purchased	**28,214**	**78**	**46**	**13**	38,643	42	43	19
Options written	**29,343**	**–**	**21**	**6**	33,316	–	26	10
	4,380,334	**7,548**	**8,585**	**2,674**	4,592,377	5,436	6,726	2,301
Foreign exchange and gold contracts								
Futures	**9,548**	**–**	**42**	**–**	8,368	–	39	–
Spot and forwards	**400,928**	**1,492**	**3,821**	**1,170**	494,853	3,594	4,990	1,797
Swaps	**536,375**	**775**	**6,313**	**1,680**	452,501	2,188	7,015	2,678
Options purchased	**34,012**	**933**	**467**	**242**	45,576	755	284	157
Options written	**32,800**	**–**	**18**	**2**	45,353	–	35	8
	1,013,663	**3,200**	**10,661**	**3,094**	1,046,651	6,537	12,363	4,640
Other derivative contracts								
Equity	**128,024**	**1,098**	**7,091**	**1,004**	132,690	698	7,882	1,166
Credit	**34,151**	**270**	**458**	**116**	26,731	167	295	98
Commodity and other contracts	**65,204**	**868**	**3,629**	**592**	131,084	693	4,775	513
	227,379	**2,236**	**11,178**	**1,712**	290,505	1,558	12,952	1,777
Credit Valuation Adjustment	**–**	**–**	**–**	**5,330**	–	–	–	6,537
Total derivatives	**$ 5,621,376**	**$ 12,984**	**$ 30,424**	**$ 12,810**	$ 5,929,533	$ 13,531	$ 32,041	$ 15,255
Amount settled through central counterparties(2)								
Exchange-traded	**195,287**	**–**	**4,194**	**95**	264,278	–	5,811	128
Over-the-counter	**3,834,332**	**–**	**872**	**17**	3,968,133	–	1,084	22
	$ 4,029,619	**$ –**	**$ 5,066**	**$ 112**	$ 4,232,411	$ –	$ 6,895	$ 150

(1) The amounts presented are net of collateral and master netting agreements at the product level. The total amounts relating to netting and collateral were $32,081 (2019 – $24,588) for CRA, and $66,686 (2019 – $62,521) for CEA.

(2) Amounts are included under total derivatives above. Amounts include exposures settled directly through central counterparties and exposures settled through clearing members of central counterparties.

1 Regulatory haircuts prescribed by the OSFI CAR Guidelines are applied to the collateral balances of the CRA measure.

(d) Fair value

The following table summarizes the fair value of derivatives segregated by type and segregated between trading and those derivatives designated in hedging relationships.

As at October 31 ($ millions)	2020 Average fair value		2020 Year-end fair value		2019 Year-end fair value(1)	
	Favourable	Unfavourable	Favourable	Unfavourable	Favourable	Unfavourable
Trading						
Interest rate contracts						
Forward rate agreements	**$ 168**	**$ 8**	**$ 138**	**$ –**	$ 108	$ 9
Swaps	**16,301**	**13,004**	**18,007**	**13,044**	14,719	11,617
Options	**83**	**135**	**89**	**80**	47	173
	16,552	**13,147**	**18,234**	**13,124**	14,874	11,799
Foreign exchange and gold contracts						
Forwards	**8,187**	**7,441**	**4,048**	**3,448**	5,790	5,592
Swaps	**11,630**	**14,574**	**9,931**	**12,934**	8,932	10,781
Options	**1,090**	**934**	**984**	**752**	761	714
	20,907	**22,949**	**14,963**	**17,134**	15,483	17,087
Other derivative contracts						
Equity	**2,987**	**3,546**	**2,940**	**2,732**	1,961	3,093
Credit	**618**	**37**	**480**	**53**	406	38
Commodity and other contracts	**3,878**	**4,653**	**2,677**	**2,995**	1,765	2,803
	7,483	**8,236**	**6,097**	**5,780**	4,132	5,934
Trading derivatives' market valuation	**$ 44,942**	**$ 44,332**	**$ 39,294**	**$ 36,038**	$ 34,489	$ 34,820
Hedging						
Interest rate contracts						
Swaps			**$ 2,783**	**$ 3,830**	$ 1,762	$ 2,139
Foreign exchange and gold contracts						
Forwards			**198**	**220**	214	269
Swaps			**2,782**	**2,157**	1,620	2,994
			$ 2,980	**$ 2,377**	$ 1,834	$ 3,263
Other derivative contracts						
Equity			**$ 8**	**$ 2**	$ 34	$ –
Hedging derivatives' market valuation			**$ 5,771**	**$ 6,209**	$ 3,630	$ 5,402
Total derivative financial instruments as per Statement of Financial Position			**$ 45,065**	**$ 42,247**	$ 38,119	$ 40,222
Less: impact of master netting and collateral(2)			**32,081**	**32,081**	24,588	24,588
Net derivative financial instruments(2)			**$ 12,984**	**$ 10,166**	$ 13,531	$ 15,634

(1) The average fair value of trading derivatives' market valuation for the year ended October 31, 2019 was: favourable $32,559 and unfavourable $33,300. Average fair value amounts are based on the latest 13 month-end balances.

(2) Master netting agreement amounts are based on the capital adequacy criteria of the Basel Committee on Banking Supervision (BCBS) and OSFI. These criteria allow netting where there are legally enforceable contracts which enable net settlement in the event of a default, bankruptcy, liquidation or similar circumstances.

(e) Hedging activities

The Bank manages interest rate risk, foreign currency risk and equity risk through hedge accounting transactions.

Interest rate risk

Single-currency interest rate swaps are used to hedge interest rate risk exposure. In fair value hedges of interest rate risk, the interest rate exposure from fixed rate assets and liabilities is converted from fixed to floating rate exposure. In cash flow hedges of interest rate risk, the interest rate exposure from floating rate assets and liabilities is converted from floating to fixed rate exposure. The Bank generally hedges interest rate risk only to the extent of benchmark interest rates. The total interest cash flows usually comprise a spread in addition to the benchmark rate.

Foreign currency risk

In fair value hedges, cross-currency interest rate swaps and single-currency interest rate swaps are used to manage foreign currency exposure in conjunction with interest rate exposure. Cross-currency interest rate swaps or a combination of cross-currency and single-currency interest rate swaps are mainly used to convert a foreign currency fixed rate exposure to a functional currency floating rate exposure In hedges of both foreign currency and interest rate exposure, the interest rate risk is generally hedged only to the extent of the benchmark interest rate.

In cash flow hedges, cross-currency interest rate swaps, single-currency interest rate swaps, foreign currency forwards and foreign currency assets or liabilities are used to manage foreign currency exposure, or a combined foreign currency and interest rate exposure. Cross-currency interest rate swaps are used to offset the foreign currency exposure by exchanging the interest cash flows in one currency for interest cash flows in another currency. Single-currency interest rate swaps may be used in conjunction with cross-currency interest rate swaps to convert the foreign currency exposure or resulting functional currency exposure from floating to fixed. Foreign currency forwards and foreign currency denominated assets and liabilities are used to offset the exposure arising from highly probable future cash flows, including purchase considerations for business acquisitions and sale proceeds for business divestitures that are denominated in a foreign currency. In hedges of both foreign currency and interest rate exposure, the interest rate risk is generally hedged only to the extent of the benchmark interest rate.

In net investment hedges, the Bank designates foreign currency liabilities and foreign currency forwards as hedging instruments to manage foreign currency exposure. The designated non-derivative liabilities are denominated in the functional currency of the net investment, such that the foreign currency translation impact from the net investment will be offset by the foreign currency impact from the designated liabilities. The foreign currency forward contracts are structured to sell the functional currency of the net investment in return for the Bank's functional currency.

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Equity risk

Equity risk is created by the Bank's share-based compensation plans awarded to employees. In cash flow hedges, total return swaps are mainly used to offset the equity exposure by exchanging interest payments for payments based on the returns on the underlying shares.

For all of the risks identified above, the economic relationship and hedge ratio are determined using a qualitative and quantitative assessment. This assessment incorporates comparison of critical terms of the hedged and hedging item, and regression analysis. For regression analysis, a hedging relationship is considered highly effective when all of the following criteria are met: correlation between the variables in the regression is at least 0.8 or greater; slope of the regression is within a 0.8-1.25 range; and confidence level of the slope is at least 95%.The main sources of hedge ineffectiveness include the following:

- The use of different discount curves to value the hedged item and the hedging derivative in fair value hedges, in order to reflect the reduced credit risk of collateralized derivatives;
- Differences in the underlying reference interest rate tenor, reset/settlement frequency and floating spread between the hedging instruments and the hedged item.

The Bank has elected to continue to apply the hedge accounting requirements of IAS 39. However, the Bank has implemented the additional hedge accounting disclosures that are required by the IFRS 9 related amendments to IFRS 7 "*Financial Instruments: Disclosures*".

The following table summarizes the notional amounts of derivatives and carrying amounts of cash and deposit liabilities designated as hedging instruments.

	2020				2019			
	Notional amounts(1)				Notional amounts(1)			
	Remaining term to maturity				Remaining term to maturity			
As at October 31 ($ millions)	Within one year	One to five years	Over five years	Total	Within one year	One to five years	Over five years	Total
Fair value hedges								
Interest rate risk – swaps	**$ 41,972**	**$ 115,479**	**$ 14,873**	**$ 172,324**	$ 26,742	$ 111,077	$ 13,546	$ 151,365
Foreign currency/interest rate risk – swaps	**–**	**116**	**107**	**223**	689	66	–	755
Cash flow hedges								
Interest rate risk – swaps	**11,990**	**33,580**	**11,920**	**57,490**	14,952	71,785	16,646	103,383
Foreign currency/interest rate risk – swaps	**17,082**	**33,516**	**5,720**	**56,318**	2,630	26,325	4,000	32,955
Foreign currency risk								
Swaps	**25,787**	**61,137**	**15,166**	**102,090**	35,982	62,381	12,015	110,378
Foreign currency forwards	**3,000**	**–**	**–**	**3,000**	13,129	–	–	13,129
Cash	**71**	**–**	**–**	**71**	70	–	–	70
Equity risk – total return swaps	**171**	**411**	**–**	**582**	216	510	–	726
Net investment hedges								
Foreign currency risk								
Foreign currency forwards	**16,114**	**–**	**–**	**16,114**	24,453	–	–	24,453
Deposit liabilities	**6,150**	**–**	**–**	**6,150**	6,080	–	–	6,080
Total	**$ 122,337**	**$ 244,239**	**$ 47,786**	**$ 414,362**	$ 124,943	$ 272,144	$ 46,207	$ 443,294

(1) Notional amounts relating to derivatives that are hedging multiple risks in both assets and liabilities are included in more than one category.

The following table shows the average rate or price of significant hedging instruments.

As at October 31	2020 Average rate or price(1) Fixed interest rate	2020 Average rate or price(1) FX rate	2020 Average rate or price(1) Price	2019 Average rate or price(1) Fixed interest rate	2019 Average rate or price(1) FX rate	2019 Average rate or price(1) Price
Fair value hedges						
Interest rate risk – swaps	**1.71%**	**n/a**	**n/a**	2.11%	n/a	n/a
Foreign currency/interest rate risk – swaps						
CAD-USD	**–%**	**–**	**n/a**	2.22%	1.29	n/a
CAD-EUR	**–%**	**–**	**n/a**	3.02%	1.33	n/a
Cash flow hedges						
Interest rate risk – swaps	**2.10%**	**n/a**	**n/a**	2.22%	n/a	n/a
Foreign currency/interest rate risk – swaps						
CAD-USD	**1.30%**	**1.32**	**n/a**	1.85%	1.28	n/a
Foreign currency risk						
Swaps						
CAD-USD	**n/a**	**1.31**	**n/a**	n/a	1.31	n/a
CAD-EUR	**n/a**	**1.49**	**n/a**	n/a	1.48	n/a
CAD-GBP	**n/a**	**1.72**	**n/a**	n/a	1.71	n/a
Foreign currency forwards						
CAD-USD	**n/a**	**1.33**	**n/a**	n/a	1.32	n/a
Equity price risk – total return swaps	**n/a**	**n/a**	**$75.40**	n/a	n/a	$76.35
Net investment hedges						
Foreign currency risk – foreign currency forwards						
CAD-USD	**n/a**	**1.34**	**n/a**	n/a	1.33	n/a
MXN-CAD	**n/a**	**16.60**	**n/a**	n/a	15.58	n/a
PEN-CAD	**n/a**	**2.64**	**n/a**	n/a	2.56	n/a
THB-CAD	**n/a**	**22.86**	**n/a**	n/a	23.56	n/a

(1) The average rate or price is calculated in aggregate for all of the Bank's hedge relationships, including hedges of assets and liabilities. The majority of the Bank's hedges have a remaining term to maturity of less than 5 years.

For fair value hedges, the following table contains information related to items designated as hedging instruments, hedged items and ineffectiveness.

For the year ended October 31, 2020 ($ millions)	Carrying amount of the hedging instruments(1) Assets	Carrying amount of the hedging instruments(1) Liabilities	Hedge Ineffectiveness(2) Gains/(losses) on hedging instrument used to calculate hedge ineffectiveness	Hedge Ineffectiveness(2) Gains/(losses) on hedged item used to calculate hedge ineffectiveness	Hedge Ineffectiveness(2) Ineffectiveness recorded in non-interest income – other	Carrying amount of the hedged item(3)	Accumulated amount of fair value hedge adjustment gains/(losses) on the hedged item(4) Active hedges	Accumulated amount of fair value hedge adjustment gains/(losses) on the hedged item(4) Discontinued hedges
Fair value hedges								
Interest rate risk – swaps	**$ 1,742**	**$ (2,456)**	**$ (392)**	**$ 377**	**$ (15)**			
Investment securities			**(622)**	**610**	**(12)**	**$ 40,785**	**$ 1,049**	**$ 249**
Loans			**(913)**	**898**	**(15)**	**71,081**	**994**	**48**
Deposit liabilities			**996**	**(985)**	**11**	**(59,084)**	**(846)**	**(545)**
Subordinated debentures			**147**	**(146)**	**1**	**(5,638)**	**(93)**	**(77)**
Foreign currency/interest rate risk – swaps	**22**	**(1)**	**(1)**	**–**	**(1)**			
Investment securities			**(1)**	**–**	**(1)**	**221**	**1**	**–**
Total	**$ 1,764**	**$ (2,457)**	**$ (393)**	**$ 377**	**$ (16)**	**$ 47,365**	**$ 1,105**	**$ (325)**

(1) Comprises unrealized gains/losses and are recorded within derivative financial instruments in assets and liabilities, respectively in the Consolidated Statement of Financial Position.
(2) Includes ineffectiveness related to hedges discontinued during the year ended October 31, 2020.
(3) This represents the carrying value on the Consolidated Statement of Financial Position and comprises amortized cost before allowance for credit losses, plus fair value hedge adjustment, except for investment securities which are carried at fair value.
(4) This represents the accumulated fair value hedge adjustment and is a component of the carrying amount of the hedged item.

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For the year ended October 31, 2019 ($ millions)	Carrying amount of the hedging instruments(1)		Hedge Ineffectiveness(2)				Accumulated amount of fair value hedge adjustment gains/ (losses) on the hedged item(4)	
	Assets	Liabilities	Gains/(losses) on hedging instrument used to calculate hedge ineffectiveness	Gains/ (losses) on hedged item used to calculate hedge ineffectiveness	Ineffectiveness recorded in non-interest income – other	Carrying amount of the hedged item(3)	Active hedges	Discontinued hedges
Fair value hedges								
Interest rate risk – swaps	$ 760	$ (1,296)	$ 582	$ (562)	$ 20			
Investment securities			(879)	892	13	$ 25,576	$ 682	$ 112
Loans			(491)	491	–	57,711	294	(112)
Deposit liabilities			1,872	(1,865)	7	(54,727)	(324)	(252)
Subordinated debentures			80	(80)	–	(5,500)	(48)	27
Foreign currency/interest rate risk – swaps	8	(23)	5	(5)	–			
Investment securities			2	(2)	–	247	4	–
Deposit liabilities			3	(3)	–	(267)	–	–
Total	$ 768	$ (1,319)	$ 587	$ (567)	$ 20	$ 23,040	$ 608	$ (225)

(1) Comprises unrealized gains/losses and are recorded within derivative financial instruments in assets and liabilities, respectively in the Consolidated Statement of Financial Position.
(2) Includes ineffectiveness related to hedges discontinued during the year ended October 31, 2019.
(3) This represents the carrying value on the Consolidated Statement of Financial Position and comprises amortized cost before allowance for credit losses, plus fair value hedge adjustment, except for investment securities which are carried at fair value.
(4) This represents the accumulated fair value hedge adjustment and is a component of the carrying amount of the hedged item.

For cash flow hedges and net investment hedges, the following table contains information related to items designated as hedging instruments, hedged items and ineffectiveness.

For the year ended October 31, 2020 ($ millions)	Carrying amount of the hedging instruments(1)		Hedge Ineffectiveness(2)		
	Assets	Liabilities	Gains/(losses) on hedging instrument used to calculate hedge ineffectiveness	Gains/(losses) on hypothetical derivative used to calculate hedge ineffectiveness(3)	Ineffectiveness recorded in non-interest income – other(4)
Cash flow hedges					
Interest rate risk – swaps	**$ 684**	**$ (1,575)**	**$ 62**	**$ 58**	**$ (2)**
Foreign currency/interest rate risk – swaps	**1,347**	**(570)**	**896**	**908**	**13**
Foreign currency risk					
Swaps	**1,770**	**(1,385)**	**1,298**	**1,276**	**(2)**
Foreign currency forwards	**17**	**(12)**	**464**	**464**	**(1)**
Cash	**71**	**–**	**4**	**4**	**–**
Equity risk – total return swaps	**8**	**(2)**	**(173)**	**(173)**	**–**
	3,897	**(3,544)**	**2,551**	**2,537**	**8**
Net investment hedges					
Foreign currency risk					
Foreign currency forwards	**181**	**(208)**	**(77)**	**(77)**	**–**
Deposit liabilities	**n/a**	**(6,150)**	**(70)**	**(70)**	**–**
	181	**(6,358)**	**(147)**	**(147)**	**–**
Total	**$ 4,078**	**$ (9,902)**	**$ 2,404**	**$ 2,390**	**$ 8**

(1) Comprises unrealized gains/losses for derivative instruments and are recorded within derivative financial instruments in assets and liabilities, respectively in the Consolidated Statement of Financial Position.
(2) Includes ineffectiveness related to hedges discontinued during the year ended October 31, 2020.
(3) For cash flow hedges, hypothetical derivatives having critical terms which match those of the underlying hedged item are used to assess hedge ineffectiveness.
(4) For cash flow hedges, ineffectiveness is only recognized in the Consolidated Statement of Income when the life-to-date cumulative change in the hedging instrument exceeds the cumulative change in the hypothetical derivative.

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For the year ended October 31, 2019 ($ millions)	Carrying amount of the hedging instruments(1) Assets	Carrying amount of the hedging instruments(1) Liabilities	Hedge Ineffectiveness(2) Gains/(losses) on hedging instrument used to calculate hedge ineffectiveness	Hedge Ineffectiveness(2) Gains/(losses) on hypothetical derivative used to calculate hedge ineffectiveness(3)	Hedge Ineffectiveness(2) Ineffectiveness recorded in non-interest income – other(4)
Cash flow hedges					
Interest rate risk – swaps	$ 897	$ (1,208)	$ 525	$ 518	$ (7)
Foreign currency/interest rate risk – swaps	380	(524)	756	759	7
Foreign currency risk					
Swaps	1,337	(2,082)	(1,050)	(1,055)	(1)
Foreign currency forwards	38	(57)	49	44	3
Cash	70	–	–	–	–
Equity risk – total return swaps	34	–	83	83	–
	2,756	(3,871)	363	349	2
Net investment hedges					
Foreign currency risk					
Foreign currency forwards	176	(212)	(388)	(388)	–
Deposit liabilities	n/a	(6,080)	(2)	(2)	–
	176	(6,292)	(390)	(390)	–
Total	$ 2,932	$ (10,163)	$ (27)	$ (41)	$ 2

(1) Comprises unrealized gains/losses for derivative instruments and are recorded within derivative financial instruments in assets and liabilities, respectively in the Consolidated Statement of Financial Position.
(2) Includes ineffectiveness related to hedges discontinued during the year ended October 31, 2019.
(3) For cash flow hedges, hypothetical derivatives having critical terms which match those of the underlying hedged item are used to assess hedge ineffectiveness.
(4) For cash flow hedges, ineffectiveness is only recognized in the Consolidated Statement of Income when the life-to-date cumulative change in the hedging instrument exceeds the cumulative change in the hypothetical derivative.

For cash flow hedges and net investment hedges, the following table contains information regarding the impacts on the Consolidated Statement of Other Comprehensive Income on a pre-tax basis.

For the year ended October 31, 2020 ($ millions)	AOCI as at November 1, 2019	Net gains/ (losses) recognized in OCI	Amount reclassified to net income as the hedged item affects net income(1)	Amount reclassified to net income for hedges of forecasted transactions that are no longer expected to occur(1)	Net gains/ (losses) included in non-financial asset/liability as a result of a hedged forecasted transaction	AOCI as at October 31, 2020	Balance in cash flow hedge reserve/unrealized foreign currency translation account as at October 31, 2020 Active hedges	Balance in cash flow hedge reserve/unrealized foreign currency translation account as at October 31, 2020 Discontinued hedges
Cash flow hedges								
Interest rate risk	**$ 463**	**$ 64**	**$ (115)**	**$ –**	**$ –**	**$ 412**	**$ (457)**	**$ 869**
Foreign currency/interest rate risk	**208**	**883**	**(37)**	**–**	**–**	**1,054**	**875**	**179**
Foreign currency risk	**99**	**1,769**	**(2,574)**	**–**	**–**	**(706)**	**(708)**	**2**
Equity risk	**21**	**(173)**	**122**	**–**	**–**	**(30)**	**(30)**	**–**
	791	**2,543**	**(2,604)**	**–**	**–**	**730**	**(320)**	**1,050**
Net investment hedges								
Foreign currency risk	**(3,483)**	**(147)**	**494**	**–**	**–**	**(3,136)**	**(3,067)**	**(69)**
Total	**$ (2,692)**	**$ 2,396**	**$ (2,110)**	**$ –**	**$ –**	**$ (2,406)**	**$ (3,387)**	**$ 981**

(1) Amounts reclassified from the cash flow hedge and net investment hedge reserves to net income are recorded in non-interest income-other except for amortization, which is recorded in interest income.

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For the year ended October 31, 2019 ($ millions)	AOCI as at November 1, 2018	Net gains/ (losses) recognized in OCI	Amount reclassified to net income as the hedged item affects net income(1)	Amount reclassified to net income for hedges of forecasted transactions that are no longer expected to occur(1)	Net gains/ (losses) included in non-financial asset/liability as a result of a hedged forecasted transaction	AOCI as at October 31, 2019	Balance in cash flow hedge reserve/unrealized foreign currency translation account as at October 31, 2019	
							Active hedges	Discontinued hedges
Cash flow hedges								
Interest rate risk	$ (154)	$ 532	$ 85	$ –	$ –	$ 463	$ (148)	$ 611
Foreign currency/interest rate risk	(450)	749	(91)	–	–	208	260	(52)
Foreign currency risk	445	(1,003)	672	(4)	(11)	99	91	8
Equity risk	(7)	83	(55)	–	–	21	21	–
	(166)	361	611	(4)	(11)	791	224	567
Net investment hedges								
Foreign currency risk	(3,251)	(390)	158	–	–	(3,483)	(3,408)	(75)
Total	$ (3,417)	$ (29)	$ 769	$ (4)	$ (11)	$ (2,692)	$ (3,184)	$ 492

(1) Amounts reclassified from the cash flow hedge and net investment hedge reserves to net income are recorded in non-interest income-other.

Currently, the Bank's hedge relationships referencing USD LIBOR and GBP LIBOR, and extending beyond December 31, 2021 are viewed to be directly impacted by the Interest Rate Benchmark Reform and thus subject to the requirements of the Amendments. The following table summarizes the Bank's hedging derivatives as at October 31, 2020 relating to hedges directly impacted by the Reform:

Interest Rate Benchmark Index(2)	Notional amounts of Hedging Derivatives Maturing after December 2021 ($Billions)(1)	
	October 31, 2020	October 31, 2019
USD LIBOR	**105.2**	81.4
GBP LIBOR	**4.9**	3.3
Total	**110.1**	84.7

(1) For cross currency swaps where both legs are referencing rates directly impacted by the Interest Rate Benchmark Reform, and a CAD leg is inserted to create two separate hedging relationships, the relevant notional amount for both legs are included in this table.
(2) EURIBOR is excluded from the table as of Q4 2020 as the benchmark index is no longer expected to discontinue.

The specific interest rate benchmarks affected by the Reform, as well as the pace and timing at which markets transition away from the existing IBOR benchmark rate to an alternative benchmark rate, will vary across different rates, jurisdictions and product types. As such, the Bank is applying its best judgement to analyze market expectations, in order to identify the interest rate benchmarks and related hedges impacted by the Reform.

11 Offsetting Financial Assets and Financial Liabilities

The Bank is eligible to present certain financial assets and financial liabilities as listed in the table below on a net basis on the Consolidated Statement of Financial Position pursuant to criteria described in Note 3 – Significant accounting policies.

The following tables provide information on the impact of offsetting on the Bank's Consolidated Statement of Financial Position, as well as the financial impact of netting for instruments that are subject to enforceable master netting arrangements or similar agreements, but do not qualify for offsetting in the Consolidated Statement of Financial Position, as well as available cash and financial instrument collateral.

As at October 31, 2020 ($ millions)

Types of financial assets	Gross amounts of recognized financial instruments	Gross amounts of recognized financial instruments offset in the consolidated statement of financial position	Net amounts of financial instruments presented in the consolidated statement of financial position	Related amounts not offset in the consolidated statement of financial position		Net amount(3)
				Impact of master netting arrangements or similar agreements(1)	Collateral(2)	
Derivative financial instruments	**$ 45,333**	**$ (268)**	**$ 45,065**	**$ (27,003)**	**$ (5,328)**	**$ 12,734**
Securities purchased under resale agreements and securities borrowed	**141,861**	**(22,114)(4)**	**119,747**	**(9,690)**	**(107,241)**	**2,816**
Total	**$ 187,194**	**$ (22,382)**	**$ 164,812**	**$ (36,693)**	**$ (112,569)**	**$ 15,550**
Types of financial liabilities						
Derivative financial instruments	**$ 42,515**	**$ (268)**	**$ 42,247**	**$ (27,003)**	**$ (9,058)**	**$ 6,186**
Obligations related to securities sold under repurchase agreements and securities lent	**159,877**	**(22,114)(4)**	**137,763**	**(9,690)**	**(122,440)**	**5,633**
Total	**$ 202,392**	**$ (22,382)**	**$ 180,010**	**$ (36,693)**	**$ (131,498)**	**$ 11,819**

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As at October 31, 2019 ($ millions)

Types of financial assets	Gross amounts of recognized financial instruments	Gross amounts of recognized financial instruments offset in the consolidated statement of financial position	Net amounts of financial instruments presented in the consolidated statement of financial position	Related amounts not offset in the consolidated statement of financial position: Impact of master netting arrangements or similar agreements(1)	Related amounts not offset in the consolidated statement of financial position: Collateral(2)	Net amount(3)
Derivative financial instruments	$ 38,448	$ (329)	$ 38,119	$ (21,395)	$ (3,474)	$ 13,250
Securities purchased under resale agreements and securities borrowed	139,571	(8,393)	131,178	(8,709)	(120,199)	2,270
Total	$ 178,019	$ (8,722)	$ 169,297	$ (30,104)	$ (123,673)	$ 15,520
Types of financial liabilities						
Derivative financial instruments	$ 40,551	$ (329)	$ 40,222	$ (21,395)	$ (8,986)	$ 9,841
Obligations related to securities sold under repurchase agreements and securities lent	132,476	(8,393)	124,083	(8,709)	(107,732)	7,642
Total	$ 173,027	$ (8,722)	$ 164,305	$ (30,104)	$ (116,718)	$ 17,483

(1) Amounts that are subject to master netting arrangements or similar agreements but were not offset in the Consolidated Statement of Financial Position because they did not meet the net settlement/simultaneous settlement criteria; or because the rights of set off are conditional upon the default of the counterparty only.
(2) Cash and financial instrument collateral amounts received or pledged in relation to the total amounts of financial assets and financial liabilities, including those that were not offset in the Consolidated Statement of Financial Position. These amounts are disclosed at fair value and the rights of set off are conditional upon the default of the counterparty.
(3) Not intended to represent the Bank's actual exposure to credit risk, as a variety of credit mitigation strategies are employed in addition to offsetting and collateral arrangements.
(4) Certain reverse repurchase and repurchase agreements have become eligible for netting in the current period with the same counterparty to be offset in normal course of business, as well as in the event of default, insolvency and bankruptcy.

12 Investment Securities

The following table presents the carrying amounts of the Bank's investment securities per measurement category.

As at October 31 ($ millions)	2020	2019
Debt investment securities measured at FVOCI	**$ 76,638**	$ 58,157
Debt investment securities measured at amortized cost	**31,644**	21,845
Equity investment securities designated at FVOCI	**1,859**	1,561
Equity investment securities measured at FVTPL	**1,222**	796
Debt investment securities measured at FVTPL	**26**	–
Total investment securities	**$ 111,389**	$ 82,359

(a) Debt investment securities measured at fair value through other comprehensive income (FVOCI)

As at October 31 ($ millions)	2020 Cost	2020 Gross unrealized gains	2020 Gross unrealized losses	2020 Fair value	2019 Cost	2019 Gross unrealized gains	2019 Gross unrealized losses	2019 Fair value
Canadian federal government issued or guaranteed debt	**$ 16,374**	**$ 454**	**$ –**	**$ 16,828**	$ 12,176	$ 216	$ 11	$ 12,381
Canadian provincial and municipal debt	**17,295**	**253**	**1**	**17,547**	3,203	42	4	3,241
U.S. treasury and other U.S. agency debt	**12,634**	**595**	**–**	**13,229**	19,527	384	22	19,889
Other foreign government debt	**27,643**	**274**	**17**	**27,900**	20,543	87	19	20,611
Other debt	**1,115**	**19**	**–**	**1,134**	2,012	24	1	2,035
Total	**$ 75,061**	**$ 1,595**	**$ 18**	**$ 76,638**	$ 57,461	$ 753	$ 57	$ 58,157

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(b) Debt investment securities measured at amortized cost

As at October 31 ($ millions)	2020 Fair Value	2020 Carrying value(1)	2019 Fair Value	2019 Carrying value(1)
Canadian federal and provincial government issued or guaranteed debt	**$ 17,955**	**$ 17,819**	$ 7,575	$ 7,580
U.S. treasury and other U.S. agency debt	**11,048**	**10,726**	9,419	9,279
Other foreign government debt	**1,766**	**1,744**	1,979	1,970
Corporate debt	**1,360**	**1,355**	3,027	3,016
Total	**$ 32,129**	**$ 31,644**	$ 22,000	$ 21,845

(1) Balances are net of allowances, which are not significant.

(c) Equity investment securities designated at fair value through other comprehensive income (FVOCI)

The Bank has designated certain equity securities at FVOCI shown in the following table as these investments are held for strategic purposes.

As at October 31, 2020 ($ millions)	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
Preferred equity instruments	**$ 11**	**$ –**	**$ 3**	**$ 8**
Common shares	**1,735**	**228**	**112**	**1,851**
Total	**$ 1,746**	**$ 228**	**$ 115**	**$ 1,859**

As at October 31, 2019 ($ millions)	Cost	Gross unrealized gains	Gross unrealized losses	Fair value
Preferred equity instruments	$ 146	$ –	$ 53	$ 93
Common shares	1,262	223	17	1,468
Total	$ 1,408	$ 223	$ 70	$ 1,561

Dividend income on equity securities designated at FVOCI of $66 million for the year ended October 31, 2020 (2019 – $56 million) has been recognized in interest income.

During the year ended October 31, 2020, the Bank has disposed of certain equity securities designated at FVOCI with a fair value of $646 million (2019 – $314 million). These dispositions have resulted in a cumulative loss of $101 million (2019 – $36 million) that remains in OCI.

(d) An analysis of the carrying value of investment securities is as follows:

As at October 31, 2020 ($ millions)	Remaining term to maturity: Within three months	Three to twelve months	One to five years	Five to ten years	Over ten years	No specific maturity	Carrying value
Fair value through other comprehensive income							
Debt instruments							
Canadian federal government issued or guaranteed debt	$ 113	$ 2,363	$ 12,158	$ 941	$ 1,253	$ –	$ 16,828
Yield(1)%	*1.0*	*1.3*	*1.0*	*1.5*	*3.5*	*–*	*1.2*
Canadian provincial and municipal debt	349	1,521	13,966	1,711	–	–	17,547
Yield(1)%	*1.1*	*0.6*	*1.0*	*1.5*	*–*	*–*	*1.0*
U.S. treasury and other U.S. agency debt	1,878	3,469	6,144	849	889	–	13,229
Yield(1)%	*1.7*	*2.4*	*2.2*	*0.4*	*1.2*	*–*	*2.0*
Other foreign government debt	5,196	8,933	11,525	2,048	198	–	27,900
Yield(1)%	*0.8*	*1.0*	*1.6*	*1.9*	*2.5*	*–*	*1.3*
Other debt	261	244	572	38	19	–	1,134
Yield(1)%	*(0.7)*	*1.4*	*1.3*	*(0.3)*	*5.9*	*–*	*0.8*
	7,797	16,530	44,365	5,587	2,359	–	76,638
Equity instruments							
Preferred equity instruments	–	–	–	–	–	8	8
Common shares	–	–	–	–	–	1,851	1,851
						1,859	1,859
Total FVOCI	7,797	16,530	44,365	5,587	2,359	1,859	78,497
Amortized cost							
Canadian federal and provincial government issued or guaranteed debt	1,048	5,452	10,553	761	5	–	17,819
U.S. treasury and other U.S. agency debt	1,199	929	822	10	7,766	–	10,726
Other foreign government debt	164	870	367	268	75	–	1,744
Corporate debt	487	621	243	4	–	–	1,355
	2,898	7,872	11,985	1,043	7,846	–	31,644
Fair value through profit or loss							
Equity instruments	–	–	–	–	–	1,222	1,222
Debt instruments	–	–	26	–	–	–	26
Total investment securities	$ 10,695	$ 24,402	$ 56,376	$ 6,630	$ 10,205	$ 3,081	$ 111,389
Total by currency (in Canadian equivalent):							
Canadian dollar	$ 1,151	$ 8,466	$ 32,302	$ 2,955	$ 1,277	$ 1,101	$ 47,252
U.S. dollar	4,088	7,157	18,171	2,258	8,655	1,463	41,792
Mexican peso	267	850	1,459	198	–	17	2,791
Other currencies	5,189	7,929	4,444	1,219	273	500	19,554
Total investment securities	$ 10,695	$ 24,402	$ 56,376	$ 6,630	$ 10,205	$ 3,081	$ 111,389

(1) Represents the weighted-average yield of fixed income securities.

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As at October 31, 2019 ($ millions)	Remaining term to maturity: Within three months	Three to twelve months	One to five years	Five to ten years	Over ten years	No specific maturity	Carrying value
Fair value through other comprehensive income							
Debt instruments							
Canadian federal government issued or guaranteed debt	$ 2,018	$ 766	$ 7,097	$ 1,153	$ 1,347	$ –	$ 12,381
Yield(1)%	*1.7*	*1.9*	*1.8*	*1.8*	*3.3*	–	*1.9*
Canadian provincial and municipal debt	255	379	2,300	307	–	–	3,241
Yield(1)%	*1.4*	*1.8*	*2.2*	*2.3*	–	–	*2.1*
U.S. treasury and other U.S. agency debt	645	2,885	9,634	3,377	3,348	–	19,889
Yield(1)%	2.0	*2.1*	*2.2*	*2.3*	*2.4*	–	*2.2*
Other foreign government debt	6,176	6,958	5,444	1,830	203	–	20,611
Yield(1)%	*1.4*	*1.3*	*3.8*	*3.8*	*3.4*	–	*2.2*
Other debt	221	385	1,408	–	21	–	2,035
Yield(1)%	*1.9*	*2.2*	*2.2*	–	*5.9*	–	*2.2*
	9,315	11,373	25,883	6,667	4,919	–	58,157
Equity instruments							
Preferred equity instruments	–	–	–	–	–	93	93
Common shares	–	–	–	–	–	1,468	1,468
						1,561	1,561
Total FVOCI	9,315	11,373	25,883	6,667	4,919	1,561	59,718
Amortized cost							
Canadian federal and provincial government issued or guaranteed debt	321	1,407	5,580	267	5	–	7,580
U.S. treasury and other U.S. agency debt	395	656	2,231	7	5,990	–	9,279
Other foreign government debt	189	384	811	490	96	–	1,970
Corporate debt	114	1,088	1,710	66	38	–	3,016
	1,019	3,535	10,332	830	6,129	–	21,845
Fair value through profit or loss							
Equity instruments	–	–	–	–	–	796	796
Debt instruments	–	–	–	–	–	–	–
Total investment securities	$ 10,334	$ 14,908	$ 36,215	$ 7,497	$ 11,048	$ 2,357	$ 82,359
Total by currency (in Canadian equivalent):							
Canadian dollar	$ 2,117	$ 1,095	$ 13,029	$ 1,482	$ 1,208	$ 1,183	$ 20,114
U.S. dollar	1,716	7,271	19,520	3,977	9,513	675	42,672
Mexican peso	97	187	964	305	–	16	1,569
Other currencies	6,404	6,355	2,702	1,733	327	483	18,004
Total investment securities	$ 10,334	$ 14,908	$ 36,215	$ 7,497	$ 11,048	$ 2,357	$ 82,359

(1) Represents the weighted-average yield of fixed income securities.

(e) Net gain on sale of investment securities

The following table presents the net gain on sale of investment securities:

For the year ended October 31 ($ millions)	2020	2019	2018
Debt investment securities measured at amortized cost	**$ 13**	$ 34	$ –
Debt investment securities measured at FVOCI	**594**	317	146
Net gain on sale of investment securities	**$ 607**	$ 351	$ 146

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13 Loans, Impaired Loans and Allowance for Credit Losses

(a) Loans at amortized cost

As at October 31 ($ millions)	2020 Gross loans	2020 Allowance for credit losses	2020 Net carrying amount	2019 Gross loans	2019 Allowance for credit losses	2019 Net carrying amount
Residential mortgages	**$ 284,684**	**$ 884**	**$ 283,800**	$ 268,169	$ 680	$ 267,489
Personal loans	**93,758**	**3,155**	**90,603**	98,631	2,065	96,566
Credit cards	**14,797**	**1,886**	**12,911**	17,788	1,255	16,533
Business and government	**217,663**	**1,714**	**215,949**	212,972	1,077	211,895
Total	**$ 610,902**	**$ 7,639**	**$ 603,263**	$ 597,560	$ 5,077	$ 592,483

(b) Loans and acceptances outstanding by geography(1)

As at October 31 ($ millions)	2020	2019
Canada:		
Residential mortgages	**$ 245,044**	$ 226,609
Personal loans	**73,919**	75,478
Credit cards	**6,399**	7,758
Business and government	**74,590**	69,933
	399,952	379,778
United States:		
Personal loans	**823**	715
Business and government	**43,126**	43,615
	43,949	44,330
Mexico:		
Residential mortgages	**9,160**	8,915
Personal loans	**3,038**	3,741
Credit cards	**659**	815
Business and government	**18,356**	18,326
	31,213	31,797
Chile:		
Residential mortgages	**17,231**	16,105
Personal loans	**5,187**	5,833
Credit cards	**2,307**	2,737
Business and government	**22,135**	20,955
	46,860	45,630
Peru:		
Residential mortgages	**2,935**	2,863
Personal loans	**4,773**	4,847
Credit cards	**1,823**	2,192
Business and government	**12,587**	11,804
	22,118	21,706
Colombia:		
Residential mortgages	**2,114**	2,322
Personal loans	**2,201**	2,800
Credit cards	**1,923**	2,213
Business and government	**4,654**	4,338
	10,892	11,673
Other International:		
Residential mortgages	**8,200**	11,355
Personal loans	**3,817**	5,217
Credit cards	**1,686**	2,073
Business and government	**42,215**	44,001
	55,918	62,646
Total loans	**610,902**	597,560
Acceptances(2)	**14,228**	13,896
Total loans and acceptances(3)	**625,130**	611,456
Allowance for credit losses	**(7,716)**	(5,083)
Total loans and acceptances net of allowance for credit losses	**$ 617,414**	$ 606,373

(1) Geographic segmentation is based on the location of the property for residential mortgages; otherwise, the residence of the borrower.
(2) 0.5% of borrowers reside outside Canada.
(3) Loans and acceptances denominated in US dollars were $114,788 (2019 – $117,099), in Chilean pesos $36,812 (2019 – $35,721), Mexican pesos $23,654 (2019 – $25,060), and in other foreign currencies $49,652 (2019 – $52,741).

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(c) Loan maturities

As at October 31, 2020	Remaining term to maturity						Rate sensitivity			
($ millions)	Within one year	One to five years	Five to ten years	Over ten years	No specific maturity	Total	Floating	Fixed rate	Non-rate sensitive	Total
Residential mortgages	**$ 44,076**	**$ 207,998**	**$ 13,216**	**$ 16,796**	**$ 2,598**	**$ 284,684**	**$ 51,462**	**$ 230,590**	**$ 2,632**	**$ 284,684**
Personal loans	**15,307**	**34,190**	**4,406**	**873**	**38,982**	**93,758**	**42,284**	**49,088**	**2,386**	**93,758**
Credit cards	**–**	**–**	**–**	**–**	**14,797**	**14,797**	**–**	**14,797**	**–**	**14,797**
Business and government	**107,393**	**98,383**	**4,854**	**1,969**	**5,064**	**217,663**	**143,895**	**71,187**	**2,581**	**217,663**
Total	**$ 166,776**	**$ 340,571**	**$ 22,476**	**$ 19,638**	**$ 61,441**	**$ 610,902**	**$ 237,641**	**$ 365,662**	**$ 7,599**	**$ 610,902**
Allowance for credit losses	**–**	**–**	**–**	**–**	**(7,639)**	**(7,639)**	**–**	**–**	**(7,639)**	**(7,639)**
Total loans net of allowance for credit losses	**$ 166,776**	**$ 340,571**	**$ 22,476**	**$ 19,638**	**$ 53,802**	**$ 603,263**	**$ 237,641**	**$ 365,662**	**$ (40)**	**$ 603,263**

As at October 31, 2019	Remaining term to maturity						Rate sensitivity			
($ millions)	Within one year	One to five years	Five to ten years	Over ten years	No specific maturity	Total	Floating	Fixed rate	Non-rate sensitive	Total
Residential mortgages	$ 50,316	$ 184,541	$ 11,141	$ 19,780	$ 2,391	$ 268,169	$ 49,676	$ 216,036	$ 2,457	$ 268,169
Personal loans	17,737	36,223	4,975	762	38,934	98,631	42,373	55,169	1,089	98,631
Credit cards	–	–	–	–	17,788	17,788	–	17,788	–	17,788
Business and government	101,010	97,492	7,235	727	6,508	212,972	155,627	55,167	2,178	212,972
Total	$ 169,063	$ 318,256	$ 23,351	$ 21,269	$ 65,621	$ 597,560	$ 247,676	$ 344,160	$ 5,724	$ 597,560
Allowance for credit losses	–	–	–	–	(5,077)	(5,077)	–	–	(5,077)	(5,077)
Total loans net of allowance for credit losses	$ 169,063	$ 318,256	$ 23,351	$ 21,269	$ 60,544	$ 592,483	$ 247,676	$ 344,160	$ 647	$ 592,483

(d) Impaired loans(1)(2)

	2020			2019		
As at October 31 ($ millions)	Gross impaired loans(1)	Allowance for credit losses	Net	Gross impaired loans(1)	Allowance for credit losses	Net
Residential mortgages	**$ 1,490**	**$ 392**	**$ 1,098**	$ 1,830	$ 325	$1,505
Personal loans	**1,032**	**820**	**212**	1,094	591	503
Credit cards	**–**	**–**	**–**	–	–	–
Business and government	**2,531**	**745**	**1,786**	2,211	679	1,532
Total	**$ 5,053**	**$ 1,957**	**$ 3,096**	$ 5,135	$ 1,595	$3,540
By geography:						
Canada	**$ 1,127**	**487**	**640**	$ 1,133	375	758
United States	**116**	**4**	**112**	94	5	89
Mexico	**570**	**222**	**348**	485	178	307
Peru	**824**	**498**	**326**	642	332	310
Chile	**775**	**233**	**542**	844	180	664
Colombia	**459**	**102**	**357**	505	151	354
Other International	**1,182**	**411**	**771**	1,432	374	1,058
Total	**$ 5,053**	**1,957**	**3,096**	$ 5,135	1,595	3,540

(1) Interest income recognized on impaired loans during the year ended October 31, 2020 was $47 (2019 – $51).
(2) Additional interest income of approximately $310 would have been recorded if the above loans had not been classified as impaired (2019 – $384).

(e) Allowance for credit losses

(i) Key inputs and assumptions

The Bank's allowance for credit losses is measured using a three-stage approach based on the extent of credit deterioration since origination. The calculation of the Bank's allowance for credit losses is an output of complex models with a number of underlying assumptions regarding the choice of variable inputs and their interdependencies. Some of the key drivers include the following:

- Changes in risk ratings of the borrower or instrument reflecting changes in their credit quality;
- Changes in the volumes of transactions;
- Changes in the forward-looking macroeconomic environment reflected in the variables used in the models such as GDP growth, unemployment rates, commodity prices, and house price indices, which are most closely related with credit losses in the relevant portfolio;
- Changes in macroeconomic scenarios and the probability weights assigned to each scenario; and
- Borrower migration between the three stages

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The Bank determines its allowance for credit losses using four probability-weighted forward-looking scenarios (base case, optimistic, pessimistic and pessimistic front loaded). The Bank considers both internal and external sources of information and data to achieve unbiased projections and forecasts in determining the allowance for credit losses. The Bank prepares the scenarios using forecasts generated by Scotiabank Economics (SE). The forecasts are generated using models whose outputs are modified by SE as necessary to formulate a 'base case' view of the most probable future direction of economic developments. The development of the baseline and alternative scenarios is overseen by a governance committee that consists of internal stakeholders from across the Bank. The final baseline and alternative scenarios reflect significant review and oversight, and incorporate judgment both in the determination of the scenarios' forecasts and the probability weights that are assigned to them.

(ii) Key macroeconomic variables

The inputs and models used for calculating expected credit losses may not always capture all characteristics of the market at the date of the financial statements. Qualitative adjustments or overlays may be made for certain portfolios or geographies as temporary adjustments in circumstances where, in the Bank's view, the inputs, assumptions, and/or modelling techniques do not capture all relevant risk factors, including the emergence of economic or political events.

In considering the assumptions used to measure expected credit losses this year, the Bank contemplated both the unprecedented impact and significant uncertainty COVID-19 has had to current conditions and outlook, including the timing of economic recovery combined with the continued shut-down of economies around the world and associated uncertainty regarding re-opening.

The Bank has applied expert credit judgement, including consideration of the significant government assistance programs, both domestically and internationally, in the assessment of underlying credit deterioration and migration of balances to progressive stages. The Bank considered both quantitative and qualitative information in the assessment of significant increase in credit risk. Utilization of a payment deferral program was not necessarily considered an immediate trigger, in keeping with IASB and regulatory guidance, for an account to migrate to a progressive stage. Early observations of payment behaviour of expiries for this year were considered in the assessment of the changes in the risk of default occurring over the expected life of a financial instrument when determining staging and is a key input in determining migration.

The Bank's models are calibrated to consider past performance and macroeconomic forward-looking variables as inputs. The Bank has generated a forward-looking base case scenario and three alternate forward-looking scenarios. In these scenarios the Bank considered recovery time periods ranging from more immediate (V shape), mid-term (W shape) to longer-term (L shape) periods. This year, the Bank increased the weight of the pessimistic scenarios in calculating the allowance for credit losses.

The base case scenario expects the overall economy to trace a gradual V shape recovery, even though growth and employment in individual industries are expected to show considerable heterogeneity. While some industries are expected to fully recover over the course of the next few quarters, others are expected to languish below the pre-pandemic levels. This industry-level pattern of activity is referred to as a K-shaped recovery, and while not explicitly simulated in the base case scenario, it is incorporated through the consideration of significant increase in risk through expert credit judgement.

The following table shows certain key macroeconomic variables used to estimate the allowance for credit losses. For the base case, optimistic and pessimistic scenarios, the projections are provided for the next 12 months and for the remaining forecast period, which represents a medium-term view.

	Base Case Scenario		Alternative Scenario – Optimistic		Alternative Scenario – Pessimistic		Alternative Scenario – Pessimistic Front Loaded(1)	
October 31, 2020	**Next 12 Months**	Remaining Forecast Period	Next 12 Months	Remaining Forecast Period	Next 12 Months	Remaining Forecast Period	Next 12 Months	Remaining Forecast Period
Canada								
Real GDP growth, y/y % change	**3.1**	**2.2**	**4.7**	**2.7**	**-2.0**	**3.8**	**-10.8**	**6.4**
Unemployment rate, average %	**7.3**	**5.5**	**6.7**	**4.7**	**9.9**	**5.8**	**14.1**	**7.1**
Bank of Canada overnight rate target, average %	**0.3**	**0.8**	**0.5**	**1.2**	**0.3**	**0.4**	**0.3**	**0.3**
HPI – Housing Price Index, y/y % change	**0.4**	**2.8**	**1.9**	**3.3**	**-6.3**	**4.6**	**-15.2**	**6.8**
USDCAD exchange rate, average	**1.30**	**1.25**	**1.30**	**1.25**	**1.37**	**1.27**	**1.40**	**1.33**
US								
Real GDP growth, y/y % change	**2.5**	**2.2**	**3.6**	**2.4**	**-0.5**	**3.1**	**-7.4**	**5.2**
Unemployment rate, average %	**6.3**	**3.5**	**6.1**	**3.3**	**8.1**	**4.1**	**10.5**	**7.0**
Mexico								
Real GDP growth, y/y % change	**1.0**	**2.3**	**2.5**	**2.6**	**-1.8**	**3.1**	**-8.7**	**5.3**
Unemployment rate, average %	**7.3**	**4.5**	**6.8**	**3.9**	**9.9**	**4.9**	**14.1**	**6.2**
Chile								
Real GDP growth, y/y % change	**3.8**	**2.6**	**5.6**	**3.2**	**0.8**	**3.4**	**-6.2**	**5.6**
Unemployment rate, average %	**12.1**	**7.3**	**11.6**	**6.9**	**14.7**	**7.7**	**18.9**	**8.9**
Peru								
Real GDP growth, y/y % change	**3.7**	**3.8**	**5.0**	**4.4**	**2.9**	**4.4**	**-3.5**	**6.3**
Unemployment rate, average %	**12.4**	**8.1**	**11.3**	**6.3**	**14.2**	**8.5**	**18.5**	**9.7**
Colombia								
Real GDP growth, y/y % change	**1.9**	**3.5**	**3.0**	**4.0**	**1.1**	**4.0**	**-5.2**	**6.0**
Unemployment rate, average %	**14.4**	**8.2**	**13.6**	**6.8**	**16.2**	**8.7**	**20.5**	**9.8**
Caribbean								
Real GDP growth, y/y % change	**2.2**	**4.1**	**3.3**	**4.4**	**1.0**	**4.7**	**-6.6**	**5.9**
Global								
WTI oil price, average USD/bbl	**48**	**58**	**52**	**68**	**42**	**54**	**37**	**38**
Copper price, average USD/lb	**3.00**	**3.19**	**3.09**	**3.42**	**2.79**	**3.06**	**2.66**	**2.64**
Global GDP, y/y % change	**4.44**	**3.28**	**5.63**	**3.72**	**2.36**	**3.91**	**-2.67**	**5.34**

(1) Allowance for credit losses as of October 31, 2019, were determined using three probability-weighted scenarios (base case, optimistic and pessimistic). Starting Q1, 2020, the Bank added an additional pessimistic front loaded scenario to its measurement methodology.

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October 31, 2019(1)	Base Case Scenario		Alternative Scenario – Optimistic		Alternative Scenario – Pessimistic	
	Next 12 Months	Remaining Forecast Period	Next 12 Months	Remaining Forecast Period	Next 12 Months	Remaining Forecast Period
Canada						
Real GDP growth, y/y % change	1.9	1.8	2.4	2.5	1.3	1.2
Unemployment rate, average %	5.8	5.8	5.6	4.6	6.1	7.0
Bank of Canada overnight rate target, average %	1.4	2.3	1.6	3.5	1.2	1.2
HPI – Housing Price Index, y/y % change	2.3	4.3	2.7	5.2	2.0	3.4
USDCAD exchange rate, average	1.29	1.22	1.28	1.19	1.30	1.26
US						
Real GDP growth, y/y % change	1.8	1.8	2.3	2.5	1.4	1.2
Unemployment rate, average %	3.9	4.1	3.7	3.6	4.0	4.6
Mexico						
Real GDP growth, y/y % change	0.5	1.8	1.0	2.7	0.0	0.9
Unemployment rate, average %	3.9	4.4	3.7	3.6	4.0	5.2
Chile						
Real GDP growth, y/y % change	3.3	3.0	4.5	4.9	2.2	1.2
Unemployment rate, average %	6.4	5.8	6.0	3.1	6.9	8.4
Peru						
Real GDP growth, y/y % change	3.4	3.6	4.3	4.7	2.5	2.6
Unemployment rate, average %	6.5	6.7	6.0	5.1	7.0	8.3
Colombia						
Real GDP growth, y/y % change	3.4	3.4	4.5	4.5	2.3	2.4
Unemployment rate, average %	9.4	8.3	8.7	6.5	10.0	10.1
Caribbean						
Real GDP growth, y/y % change	3.9	4.1	5.1	5.3	2.8	2.8
Global						
WTI oil price, average USD/bbl	54	59	56	73	53	48
Copper price, average USD/lb	2.74	3.14	2.78	3.49	2.70	2.85
Global GDP, PPP-weighted, y/y % change	3.03	3.51	3.91	4.63	2.14	2.41

(1) Allowance for credit losses as of October 31, 2019, were determined using three probability-weighted scenarios (base case, optimistic and pessimistic). Starting Q1, 2020, the Bank added an additional pessimistic front loaded scenario to its measurement methodology.

(iii) Sensitivity

The weighting of these multiple scenarios increased our reported allowance for credit losses for financial assets in Stage 1 and Stage 2, relative to our base case scenario, to $5,863 million (2019 – $3,551 million) from $5,407 million (2019 – $3,534 million). If we were to only use our pessimistic front loaded scenario for the measurement of allowance for credit losses for such assets, our allowance for credit losses on performing financial instruments would be $1,944 million higher than the reported allowance for credit losses as at October 31, 2020 (2019 – $164 million). Actual results will differ as this does not consider the migration of exposures or incorporate changes that would occur in the portfolio due to risk mitigation actions and other factors.

Under our current probability-weighted scenarios, if all of our performing financial assets were in Stage 1, reflecting a 12 month expected loss period, the allowance for credit losses would be $495 million (2019 – $450 million) lower than the reported allowance for credit losses on performing financial assets.

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(iv) Allowance for credit losses

($ millions)	Balance as at November 1, 2019	Provision for credit losses	Net write-offs	Other, including foreign currency adjustment	Balance as at October 31, 2020
Residential mortgages	**$ 680**	**$ 418**	**$ (79)**	**$ (135)**	**$ 884**
Personal loans	**2,065**	**2,632**	**(1,381)**	**(161)**	**3,155**
Credit cards	**1,255**	**1,672**	**(975)**	**(66)**	**1,886**
Business and government	**1,139**	**1,362**	**(506)**	**(103)**	**1,892**
	$ 5,139	**$ 6,084**	**$ (2,941)**	**$ (465)**	**$ 7,817**
Presented as:					
Allowance for credit losses on loans	**$ 5,077**				**$ 7,639**
Allowance for credit losses on acceptances	**6**				**77**
Allowance for credit losses on off-balance sheet exposures	**56**				**101**

($ millions)	Balance as at November 1, 2018	Provision for credit losses	Net write-offs	Other, including foreign currency adjustment	Balance as at October 31, 2019
Residential mortgages	$ 678	$ 104	$ (74)	$ (28)	$ 680
Personal loans	2,109	1,489	(1,534)	1	2,065
Credit cards	1,213	1,161	(1,105)	(14)	1,255
Business and government	1,147	274	(229)	(53)	1,139
	$ 5,147	$ 3,028	$ (2,942)	$ (94)	$ 5,139
Presented as:					
Allowance for credit losses on loans	$ 5,065				$ 5,077
Allowance for credit losses on acceptances	8				6
Allowance for credit losses on off-balance sheet exposures	74				56

Allowancefor credit losses on loans

As at October 31, 2020 ($ millions)	Stage 1	Stage 2	Stage 3	Total
Residential mortgages	**$ 190**	**$ 302**	**$ 392**	**$ 884**
Personal loans	**864**	**1,471**	**820**	**3,155**
Credit cards	**501**	**1,385**	**–**	**1,886**
Business and government	**409**	**560**	**745**	**1,714**
Total[1]	**$ 1,964**	**$ 3,718**	**$ 1,957**	**$ 7,639**

(1) Excludes allowance for credit losses for other financial assets including acceptances, investment securities, deposits with banks and off-balance sheet credit risks which amounted to $181.

As at October 31, 2019 ($ millions)	Stage 1	Stage 2	Stage 3	Total
Residential mortgages	$ 126	$ 229	$ 325	$ 680
Personal loans	609	865	591	2,065
Credit cards	424	831	–	1,255
Business and government	153	245	679	1,077
Total[1]	$ 1,312	$ 2,170	$ 1,595	$ 5,077

(1) Excludes allowance for credit losses for other financial assets including acceptances, investment securities, deposits with banks and off-balance sheet credit risks which amounted to $68.

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The following table presents the changes to the allowance for credit losses on loans.

($ millions)	As at October 31, 2020 Stage 1	Stage 2	Stage 3	Total	As at October 31, 2019 Stage 1	Stage 2	Stage 3	Total
Residential mortgages								
Balance at beginning of the year	**$ 126**	**$ 229**	**$ 325**	**$ 680**	$ 112	$ 206	$ 360	$ 678
Provision for credit losses								
Remeasurement(1)	**(20)**	**150**	**237**	**367**	(88)	27	117	56
Newly originated or purchased financial assets	**39**	**–**	**–**	**39**	58	–	–	58
Derecognition of financial assets and maturities	**(4)**	**(14)**	**–**	**(18)**	(1)	(9)	–	(10)
Changes in models and methodologies	**7**	**6**	**17**	**30**	–	–	–	–
Transfer to (from):								
Stage 1	**111**	**(90)**	**(21)**	**–**	61	(52)	(9)	–
Stage 2	**(18)**	**101**	**(83)**	**–**	(15)	108	(93)	–
Stage 3	**–**	**(42)**	**42**	**–**	–	(44)	44	–
Gross write-offs	**–**	**–**	**(97)**	**(97)**	–	–	(100)	(100)
Recoveries	**–**	**–**	**18**	**18**	–	–	26	26
Foreign exchange and other movements(6)	**(51)**	**(38)**	**(46)**	**(135)**	(1)	(7)	(20)	(28)
Balance at end of year(2)	**$ 190**	**$ 302**	**$ 392**	**$ 884**	$ 126	$ 229	$ 325	$ 680
Personal loans								
Balance at beginning of the year	**$ 609**	**$ 865**	**$ 591**	**$ 2,065**	$ 578	$ 887	$ 644	$ 2,109
Provision for credit losses								
Remeasurement(1)	**(559)**	**1,582**	**1,373**	**2,396**	(597)	561	1,246	1,210
Newly originated or purchased financial assets	**424**	**–**	**–**	**424**	460	–	–	460
Derecognition of financial assets and maturities	**(92)**	**(161)**	**–**	**(253)**	(81)	(100)	–	(181)
Changes in models and methodologies	**16**	**33**	**16**	**65**	–	–	–	–
Transfer to (from):								
Stage 1	**832**	**(821)**	**(11)**	**–**	458	(450)	(8)	–
Stage 2	**(282)**	**358**	**(76)**	**–**	(198)	281	(83)	–
Stage 3	**(6)**	**(343)**	**349**	**–**	(4)	(321)	325	–
Gross write-offs	**–**	**–**	**(1,611)**	**(1,611)**	–	–	(1,818)	(1,818)
Recoveries	**–**	**–**	**230**	**230**	–	–	284	284
Foreign exchange and other movements(6)	**(78)**	**(42)**	**(41)**	**(161)**	(7)	7	1	1
Balance at end of year(2)	**$ 864**	**$ 1,471**	**$ 820**	**$ 3,155**	$ 609	$ 865	$ 591	$ 2,065
Credit cards								
Balance at beginning of the year	**$ 424**	**$ 831**	**$ –**	**$ 1,255**	$ 401	$ 812	$ –	$ 1,213
Provision for credit losses								
Remeasurement(1)	**(213)**	**1,174**	**661**	**1,622**	(356)	543	785	972
Newly originated or purchased financial assets	**155**	**–**	**–**	**155**	312	–	–	312
Derecognition of financial assets and maturities	**(72)**	**(68)**	**–**	**(140)**	(59)	(64)	–	(123)
Changes in models and methodologies	**6**	**29**	**–**	**35**	–	–	–	–
Transfer to (from):								
Stage 1	**365**	**(365)**	**–**	**–**	263	(263)	–	–
Stage 2	**(146)**	**146**	**–**	**–**	(131)	131	–	–
Stage 3	**–**	**(307)**	**307**	**–**	–	(293)	293	–
Gross write-offs	**–**	**–**	**(1,163)**	**(1,163)**	–	–	(1,324)	(1,324)
Recoveries	**–**	**–**	**188**	**188**	–	–	219	219
Foreign exchange and other movements(6)	**(18)**	**(55)**	**7**	**(66)**	(6)	(35)	27	(14)
Balance at end of year(2)	**$ 501**	**$ 1,385**	**$ –**	**$ 1,886**	$ 424	$ 831	$ –	$ 1,255
Business and government								
Balance at beginning of the year	**$ 191**	**$ 263**	**$ 679**	**$ 1,133**	$ 173	$ 291	$ 675	$ 1,139
Provision for credit losses								
Remeasurement(1)	**146**	**467**	**647**	**1,260**	(47)	50	305	308
Newly originated or purchased financial assets	**315**	**–**	**–**	**315**	178	–	–	178
Derecognition of financial assets and maturities	**(200)**	**(72)**	**(16)**	**(288)**	(141)	(27)	(27)	(195)
Changes in models and methodologies	**11**	**2**	**–**	**13**	(9)	(5)	–	(14)
Transfer to (from):								
Stage 1	**48**	**(48)**	**–**	**–**	55	(55)	–	–
Stage 2	**(28)**	**31**	**(3)**	**–**	(15)	18	(3)	–
Stage 3	**(2)**	**(27)**	**29**	**–**	–	(7)	7	–
Gross write-offs	**–**	**–**	**(534)**	**(534)**	–	–	(274)	(274)
Recoveries	**–**	**–**	**28**	**28**	–	–	45	45
Foreign exchange and other movements	**(3)**	**(24)**	**(85)**	**(112)**	(3)	(2)	(49)	(54)
Balance at end of period including off-balance sheet exposures(2)	**$ 478**	**$ 592**	**$ 745**	**$ 1,815**	$ 191	$ 263	$ 679	$ 1,133
Less: Allowance for credits losses on off-balance sheet exposures(2)(3)	**69**	**32**	**–**	**101**	38	18	–	56
Balance at end of year(2)	**$ 409**	**$ 560**	**$ 745**	**$ 1,714**	$ 153	$ 245	$ 679	$ 1,077

(1) Includes credit risk changes as a result of significant increases in credit risk, changes in credit risk that did not result in a transfer between stages, changes in model inputs and assumptions and changes due to drawdowns of undrawn commitments.
(2) Interest income on impaired loans for residential mortgages, personal loans, credit cards, and business and government loans totaled $310 (2019 – $384).
(3) Allowance for credit losses on off-balance sheet exposures is recorded in other liabilities in the Consolidated Statement of Financial Position.
(4) Allowance for credit losses on acceptances are recorded against the financial asset in the Consolidated Statement of Financial Position.
(5) During the year ended October 31, 2020, the contractual terms of certain financial assets were modified where the modification did not result in derecognition. The carrying value of such loans that were modified in Stage 2 and Stage 3 was $7,539 and $463 respectively, before the modification.
(6) Divestitures are included in the foreign exchange and other movements.

(f) Carrying value of exposures by risk rating

Residential mortgages	As at October 31, 2020				As at October 31, 2019			
Category of PD grades ($ millions)	Stage 1	Stage 2	Stage 3(1)	Total	Stage 1	Stage 2	Stage 3(1)	Total
Very low	**$ 167,233**	**$ 1,892**	**$ –**	**$ 169,125**	$ 151,824	$ 405	$ –	$ 152,229
Low	**61,988**	**1,495**	**–**	**63,483**	61,317	489	–	61,806
Medium	**10,914**	**2,071**	**–**	**12,985**	14,476	1,059	–	15,535
High	**1,197**	**3,435**	**–**	**4,632**	1,404	3,309	–	4,713
Very high	**13**	**596**	**–**	**609**	11	1,728	–	1,739
Loans not graded(2)	**28,787**	**3,573**	**–**	**32,360**	26,497	3,820	–	30,317
Default	**–**	**–**	**1,490**	**1,490**	–	–	1,830	1,830
Total	**270,132**	**13,062**	**1,490**	**284,684**	255,529	10,810	1,830	268,169
Allowance for credit losses	**190**	**302**	**392**	**884**	126	229	325	680
Carrying value	**$ 269,942**	**$ 12,760**	**$ 1,098**	**$ 283,800**	$ 255,403	$ 10,581	$ 1,505	$ 267,489

(1) Stage 3 includes purchased or originated credit impaired loans.
(2) Portfolios where the customer account level 'Probability of Default' has not been determined have been included in the 'Loans not graded' category.

Personal loans	As at October 31, 2020				As at October 31, 2019			
Category of PD grades ($ millions)	Stage 1	Stage 2	Stage 3(1)	Total	Stage 1	Stage 2	Stage 3(1)	Total
Very low	**$ 29,557**	**$ 499**	**$ –**	**$ 30,056**	$ 29,988	$ 92	$ –	$ 30,080
Low	**25,508**	**1,793**	**–**	**27,301**	26,928	263	–	27,191
Medium	**6,619**	**2,779**	**–**	**9,398**	8,961	396	–	9,357
High	**5,809**	**2,964**	**–**	**8,773**	7,472	3,617	–	11,089
Very high	**318**	**1,367**	**–**	**1,685**	44	1,604	–	1,648
Loans not graded(2)	**13,629**	**1,884**	**–**	**15,513**	15,973	2,199	–	18,172
Default	**–**	**–**	**1,032**	**1,032**	–	–	1,094	1,094
Total	**81,440**	**11,286**	**1,032**	**93,758**	89,366	8,171	1,094	98,631
Allowance for credit losses	**864**	**1,471**	**820**	**3,155**	609	865	591	2,065
Carrying value	**$ 80,576**	**$ 9,815**	**$ 212**	**$ 90,603**	$ 88,757	$ 7,306	$ 503	$ 96,566

(1) Stage 3 includes purchased or originated credit impaired loans.
(2) Portfolios where the customer account level 'Probability of Default' has not been determined have been included in the 'Loans not graded' category.

Credit cards	As at October 31, 2020				As at October 31, 2019			
Category of PD grades ($ millions)	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Very low	**$ 1,318**	**$ 20**	**$ –**	**$ 1,338**	$ 1,509	$ 9	$ –	$ 1,518
Low	**1,971**	**184**	**–**	**2,155**	2,580	17	–	2,597
Medium	**2,416**	**393**	**–**	**2,809**	3,688	34	–	3,722
High	**2,229**	**1,799**	**–**	**4,028**	3,139	1,424	–	4,563
Very high	**41**	**843**	**–**	**884**	23	735	–	758
Loans not graded(1)	**2,414**	**1,169**	**–**	**3,583**	3,217	1,413	–	4,630
Default	**–**	**–**	**–**	**–**	–	–	–	–
Total	**10,389**	**4,408**	**–**	**14,797**	14,156	3,632	–	17,788
Allowance for credit losses	**501**	**1,385**	**–**	**1,886**	424	831	–	1,255
Carrying value	**$ 9,888**	**$ 3,023**	**$ –**	**$ 12,911**	$ 13,732	$ 2,801	$ –	$ 16,533

(1) Portfolios where the customer account level 'Probability of Default' has not been determined have been included in the 'Loans not graded' category.

Undrawn loan commitments – Retail	As at October 31, 2020				As at October 31, 2019			
Category of PD grades ($ millions)	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Very low	**$ 85,242**	**$ 6**	**$ –**	**$ 85,248**	$ 77,614	$ 1	$ –	$ 77,615
Low	**16,775**	**39**	**–**	**16,814**	17,787	–	–	17,787
Medium	**5,739**	**123**	**–**	**5,862**	6,218	80	–	6,298
High	**2,201**	**705**	**–**	**2,906**	2,408	462	–	2,870
Very high	**3**	**134**	**–**	**137**	12	64	–	76
Loans not graded(1)	**11,113**	**4,501**	**–**	**15,614**	11,167	2,673	–	13,840
Default	**–**	**–**	**–**	**–**	–	–	–	–
Carrying value	**$ 121,073**	**$ 5,508**	**$ –**	**$ 126,581**	$ 115,206	$ 3,280	$ –	$ 118,486

(1) Portfolios where the customer account level 'Probability of Default' has not been determined have been included in the 'Loans not graded' category.

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Business and government loans	As at October 31, 2020				As at October 31, 2019			
Category of PD grades ($ millions)	Stage 1	Stage 2	Stage 3(1)	Total	Stage 1	Stage 2	Stage 3(1)	Total
Investment grade	**$ 105,757**	**$ 1,290**	**$ –**	**$ 107,047**	$ 105,033	$ 1,025	$ –	$ 106,058
Non-Investment grade	**93,998**	**8,840**	**–**	**102,838**	93,117	6,527	–	99,644
Watch list	**47**	**3,101**	**–**	**3,148**	53	2,957	–	3,010
Loans not graded(2)	**2,063**	**36**	**–**	**2,099**	1,962	87	–	2,049
Default	**–**	**–**	**2,531**	**2,531**	–	–	2,211	2,211
Total	**201,865**	**13,267**	**2,531**	**217,663**	200,165	10,596	2,211	212,972
Allowance for credit losses	**409**	**560**	**745**	**1,714**	153	245	679	1,077
Carrying value	**$ 201,456**	**$ 12,707**	**$ 1,786**	**$ 215,949**	$ 200,012	$ 10,351	$ 1,532	$ 211,895

(1) Stage 3 includes purchased or originated credit impaired loans.
(2) Portfolios where the customer account level 'Probability of Default' has not been determined have been included in the 'Loans not graded' category.

Undrawn loan commitments – Business and government	As at October 31, 2020				As at October 31, 2019			
Category of PD grades ($ millions)	Stage 1	Stage 2	Stage 3(1)	Total	Stage 1	Stage 2	Stage 3(1)	Total
Investment grade	**$ 182,580**	**$ 1,280**	**$ –**	**$ 183,860**	$ 176,926	$ 980	$ –	$ 177,906
Non-investment grade	**59,600**	**4,336**	**–**	**63,936**	55,238	4,225	–	59,463
Watch list	**6**	**1,704**	**–**	**1,710**	8	774	–	782
Loans not graded(2)	**3,702**	**309**	**–**	**4,011**	1,808	207	–	2,015
Default	**–**	**–**	**161**	**161**	–	–	153	153
Total	**245,888**	**7,629**	**161**	**253,678**	233,980	6,186	153	240,319
Allowance for credit losses	**69**	**32**	**–**	**101**	38	18	–	56
Carrying value	**$ 245,819**	**$ 7,597**	**$ 161**	**$ 253,577**	$ 233,942	$ 6,168	$ 153	$ 240,263

(1) Stage 3 includes purchased or originated credit impaired loans.
(2) Portfolios where the customer account level 'Probability of Default' has not been determined have been included in the 'Loans not graded' category.

(g) Loans past due but not impaired(1)

A loan is considered past due when a counterparty has not made a payment by the contractual due date. The following table presents the carrying value of loans that are contractually past due but not classified as impaired because they are either less than 90 days past due or fully secured and collection efforts are reasonably expected to result in repayment, or restoring it to a current status in accordance with the Bank's policy. In cases where borrowers have opted to participate in payment deferral programs as a result of COVID-19, deferral of payments is not considered past due and such loans are not aged further during the deferral period.

	2020(2)				2019			
As at October 31 ($ millions)	31 – 60 days	61 – 90 days	91 days and greater(3)	Total	31 – 60 days	61 – 90 days	91 days and greater(3)	Total
Residential mortgages	**$ 663**	**$ 282**	**$ –**	**$ 945**	$ 1,128	$ 526	$ –	$ 1,654
Personal loans	**604**	**273**	**–**	**877**	624	330	–	954
Credit cards	**401**	**166**	**277**	**844**	278	179	417	874
Business and government	**288**	**103**	**–**	**391**	188	89	–	277
Total	**$ 1,956**	**$ 824**	**$ 277**	**$ 3,057**	$ 2,218	$ 1,124	$ 417	$ 3,759

(1) Loans past due 30 days or less are not presented in this analysis as they are not administratively considered past due.
(2) For loans where payment deferrals were granted, deferred payments are not considered past due and such loans are not aged further during the deferral period. Regular ageing of the loans resumes, after the end of the deferral period.
(3) All loans that are over 90 days past due are considered impaired with the exception of credit card receivables which are considered impaired when 180 days past due.

(h) Purchased credit-impaired loans

Certain financial assets including loans are credit-impaired on initial recognition either through acquisition or origination. The following table provides details of such assets:

As at October 31 ($ millions)	**2020**	2019
Unpaid principal balance(1)	**$ 393**	$ 489
Credit related fair value adjustments	**(93)**	(125)
Carrying value	**300**	364
Stage 3 allowance	**(10)**	(9)
Carrying value net of related allowance	**$ 290**	$ 355

(1) Represents principal amount owed net of write-offs.

14 Derecognition of Financial Assets

Securitization of residential mortgage loans
The Bank securitizes fully insured residential mortgage loans, Bank originated and others, through the creation of mortgage-backed securities (MBS) under the National Housing Act (NHA) MBS program, sponsored by Canada Mortgage and Housing Corporation (CMHC). MBS created under the program are sold to Canada Housing Trust (the Trust), a government sponsored entity, under the Canada Mortgage Bond (CMB) program, and/or third-party investors. The Trust issues securities to third-party investors.

As part of Canada's response to COVID-19, the Government of Canada launched the Insured Mortgage Purchase Program (IMPP) to provide additional funding to banks and mortgage lenders in order to support continued lending to Canadians. Under this program, the CMHC purchases the insured mortgage pools.

The sale of mortgages under the above programs do not meet the derecognition requirements, where the Bank retains thepre-payment and interest rate risk associated with the mortgages, which represent substantially all the risks and rewards associated with the transferred assets.

The transferred mortgages continue to be recognized on the Consolidated Statement of Financial Position as residential mortgage loans. Cash proceeds from the transfer are treated as secured borrowings and included in Deposits – Business and government on the Consolidated Statement of Financial Position.

The following table provides the carrying amount of transferred assets that do not qualify for derecognition and the associated liabilities:

As at October 31 ($ millions)	2020(1)	2019(1)
Assets		
Carrying value of residential mortgage loans	**$ 20,586**	$ 20,885
Other related assets(2)	**9,548**	4,364
Liabilities		
Carrying value of associated liabilities	**27,819**	22,786

(1) The fair value of the transferred assets is $29,415 (2019 – $25,453) and the fair value of the associated liabilities is $28,920 (2019 – $25,112), for a net position of $495 (2019 – $341).
(2) These include cash held in trust and trust permitted investment assets, including repurchase style transactions of mortgage-backed securities, acquired as part of principal reinvestment account that the Bank is required to maintain in order to participate in the programs.

Securitization of personal lines of credit, credit cards and auto loans
The Bank securitizes a portion of its credit card and auto loan receivables and previously securitized a portion of its unsecured personal lines of credit through consolidated structured entities. These receivables continue to be recognized on the Consolidated Statement of Financial Position as personal loans and credit card loans. For further details, refer to Note 15.

Securities sold under repurchase agreements and securities lent
The Bank enters into transactions, such as repurchase agreements and securities lending agreements, where the Bank transfers assets under agreements to repurchase them on a future date and retains all the substantial risks and rewards associated with the assets. The transferred assets remain on the Consolidated Statement of Financial Position.

The following table provides the carrying amount of the transferred assets and the associated liabilities:

As at October 31 ($ millions)	2020(1)	2019(1)
Carrying value of assets associated with:		
Repurchase agreements(2)	**$ 121,918**	$ 110,879
Securities lending agreements	**53,082**	50,300
Total	**175,000**	161,179
Carrying value of associated liabilities(3)	**$ 137,763**	$ 124,083

(1) The fair value of transferred assets is $175,000 (2019 – $161,179) and the fair value of the associated liabilities is $137,763 (2019 – $124,083), for a net position of $37,237 (2019 – $37,096).
(2) Does not include over-collateralization of assets pledged.
(3) Liabilities for securities lending arrangements only include amounts related to cash collateral received. In most cases, securities are received as collateral.

Continuing involvement in transferred financial assets that qualify for derecognition
Loans issued by the Bank under the Canada Emergency Business Account (CEBA) program are derecognized from the Consolidated Statement of Financial Position as the program meets the pass-through criteria for derecognition of financial assets under IFRS 9.

As at October 31, 2020, the Bank has derecognized $3 billion CEBA loans. The Bank retains a continuing involvement in these derecognized loans through its servicing of these loans on behalf of EDC. The appropriate level of administration fees for servicing the loans has been recognized.

15 Structured Entities

(a) Consolidated structured entities

U.S. multi-seller conduit
The Bank-sponsored U.S. multi-seller conduit purchases high-quality financial assets from independent third parties (the sellers) funded by the issuance of highly rated asset-backed commercial paper. The sellers continue to service the financial assets and provide credit enhancements through overcollateralization protection and cash reserves.

Each asset purchased by the conduit has a deal-specific liquidity facility provided by the Bank in the form of a Liquidity Asset Purchase Agreement (LAPA). The primary purpose of the backstop liquidity facility is to provide an alternative source of financing in the event the conduit is unable to access the asset-backed commercial paper market. The administration agent can require the Bank in its capacity as liquidity provider to perform under its asset-specific LAPA agreements, in which case the Bank is obliged to purchase an interest in the related assets owned by the conduit. The Bank is not obligated to perform under the LAPA agreements in the event the conduit itself is insolvent.

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The Bank's liquidity agreements with the conduit call for the Bank to fund full par value of the assets, including defaulted assets, if any, of the conduit. This facility is available to absorb the losses on defaulted assets, if any, in excess of losses absorbed by deal-specific seller credit enhancements. Further, the Bank holds the subordinated note issued by the conduit.

The Bank's exposure from the U.S. conduit through the LAPA, including the obligation to purchase defaulted assets and investment in the conduit's subordinated note, give the Bank the obligation to absorb losses that could potentially be significant to the conduit, which in conjunction with power to direct the conduit's activities, result in the Bank consolidating the U.S. multi-seller conduit.

The conduit's assets are primarily included in business and government loans on the Bank's Consolidated Statement of Financial Position.

There are contractual restrictions on the ability of the Bank's consolidated U.S. multi-seller conduit to transfer funds to the Bank. The Bank is restricted from accessing the conduit's assets under the relevant arrangements. The Bank has no rights to the assets owned by the conduit. In the normal course of business, the assets of the conduit can only be used to settle the obligations of the conduit.

Bank funding vehicles
The Bank uses funding vehicles to facilitate cost-efficient financing of its own operations, including the issuance of covered bonds and notes. During the year, these vehicles include Scotiabank Covered Bond Guarantor Limited Partnership, Halifax Receivables Trust, Trillium Credit Card Trust II and Securitized Term Auto Receivables Trust 2016-1, 2017-1, 2017-2, 2018-1, 2018-2, 2019-1 and 2019-CRT.

Activities of these structured entities are generally limited to holding an interest in a pool of assets or receivables generated by the Bank.

These structured entities are consolidated due to the Bank's decision-making power and ability to use the power to affect the Bank's returns.

Scotiabank Covered Bond Guarantor Limited Partnership
The Bank has a registered covered bond program through which it issues debt that is guaranteed by Scotiabank Covered Bond Guarantor Limited Partnership (the "LP"). Under this program, the LP purchases uninsured residential mortgages from the Bank, which it acquires with funding provided by the Bank.

As at October 31, 2020, $30.5 billion (2019 – $26.0 billion) covered bonds were outstanding and included in Deposits – Business and government on the Consolidated Statement of Financial Position. The increase in covered bonds is as a result of new issuances that have taken place throughout the year. The Bank's outstanding covered bonds are denominated in U.S. dollars, Australian dollars, British pounds, Swiss francs and Euros. As at October 31, 2020, assets pledged in relation to these covered bonds were uninsured residential mortgages denominated in Canadian dollars of $31.5 billion (2019 – $27.2 billion). These figures exclude activities in connection with Canadian dollar-denominated covered bonds held by the Bank and eliminated upon consolidation, or transferred to the Bank of Canada as part of its term repo program and included in Obligations related to securities sold under repurchase agreements and securities lent on the Consolidated Statement of Financial Position.

Personal line of credit securitization trust
The Bank previously securitized a portion of its Canadian unsecured personal line of credit receivables (receivables) through Halifax Receivables Trust (Halifax), a Bank-sponsored structured entity. Halifax issued notes to third-party investors and the Bank, proceeds of which were used to purchase co-ownership interests in receivables originated by the Bank. Recourse of the note holders was limited to the purchased interests.

The Bank was responsible for servicing the transferred receivables as well as performing administrative functions for Halifax. The Bank's outstanding receivables securitized under this program matured in February 2020. As at October 31, 2020, nil receivables were outstanding and included in Deposits – Business and government on the Consolidated Statement of Financial Position (2019 – $0.5 billion) and assets pledged in relation to these notes were nil (2019 – $0.6 billion).

Credit card receivables securitization trust
The Bank securitizes a portion of its Canadian credit card receivables (receivables) through Trillium Credit Card Trust II (Trillium), a Bank-sponsored structured entity. Trillium issues senior and subordinated notes to third-party investors and previously also issued subordinated notes to the Bank. The proceeds of such issuance are used to purchase co-ownership interests in receivables originated by the Bank. Recourse of the note holders is limited to the purchased interest.

The Bank is responsible for servicing the transferred receivables as well as performing administrative functions for Trillium. As at October 31, 2020, US $1.7 billion ($2.3 billion Canadian dollars) (2019 – US $2.5 billion, $3.2 billion Canadian dollars) Class A notes and US $148 million ($197 million Canadian dollars) (2019 – US $109 million, $143 million Canadian dollars) subordinated Class B and Class C notes were outstanding and included in Deposits – Business and government on the Consolidated Statement of Financial Position. As at October 31, 2020 assets pledged in relation to these notes were credit card receivables, denominated in Canadian dollars, of $2.6 billion (2019 – $3.7 billion).

Auto loan receivables securitization trusts
The Bank securitizes a portion of its Canadian auto loan receivables (receivables) through Securitized Term Auto Receivables Trust 2017-2, 2018-1, 2018-2, 2019-1 and 2019-CRT (START entities). Each entity is a Bank-sponsored structured entity. The START entities issue senior and subordinated notes to the Bank and/or third-party investors, and the proceeds of such issuances are used to purchase discrete pools of retail indirect auto loan receivables from the Bank. Recourse of the note holders is limited to the receivables.

The Bank is responsible for servicing the transferred receivables as well as performing administrative functions for START. As at October 31, 2020, the aggregate senior and subordinated notes issued to third parties outstanding and included in Deposits – Business and government on the Consolidated Statement of Financial Position were US $0.7 billion ($0.9 billion Canadian dollars) (2019 – US $1.4 billion, $1.8 billion Canadian dollars). As at October 31, 2020, assets pledged in relation to these notes were Canadian auto loan receivables denominated in Canadian dollars of $2 billion (2019 – $2.3 billion).

Other
Assets of other consolidated structured entities are comprised of securities, deposits with banks and other assets to meet the Bank's and customer needs.

(b) Unconsolidated structured entities

The following table provides information about other structured entities in which the Bank has a significant interest but does not control and therefore does not consolidate. A significant interest is generally considered to exist where the Bank is exposed to 10% or more of the unconsolidated structured entities' maximum exposure to loss.

	As at October 31, 2020			
($ millions)	Canadian multi-seller conduits that the Bank administers	Structured finance entities	Capital funding vehicles	Total
Total assets (on structured entity's financial statements)	**$ 3,097**	**$ 3,106**	**$ 833**	**$ 7,036**
Assets recognized on the Bank's financial statements				
Trading assets	**1**	**2**	**–**	**3**
Investment securities	**–**	**1,192**	**10**	**1,202**
Loans(1)	**–**	**820**	**59**	**879**
	1	**2,014**	**69**	**2,084**
Liabilities recognized on the Bank's financial statements				
Deposits – Business and government	**–**	**–**	**833**	**833**
Derivative financial instruments	**–**	**–**	**–**	**–**
	–	**–**	**833**	**833**
Bank's maximum exposure to loss	**$ 3,098**	**$ 2,014**	**$ 69**	**$ 5,181**

	As at October 31, 2019			
($ millions)	Canadian multi-seller conduits that the Bank administers	Structured finance entities	Capital funding vehicles	Total
Total assets (on structured entity's financial statements)	$ 2,576	$ 3,114	$ 833	$ 6,523
Assets recognized on the Bank's financial statements				
Trading assets	3	–	–	3
Investment securities	–	1,124	10	1,134
Loans(1)	–	1,070	44	1,114
	3	2,194	54	2,251
Liabilities recognized on the Bank's financial statements				
Deposits – Business and government	–	–	779	779
Derivative financial instruments	1	–	–	1
	1	–	779	780
Bank's maximum exposure to loss	$ 2,579	$ 2,194	$ 54	$ 4,827

(1) Loan balances are presented net of allowance for credit losses.

The Bank's maximum exposure to loss represents the notional amounts of guarantees, liquidity facilities, and other credit support relationships with the structured entities, the credit risk amount for certain derivative contracts with the entities and the amount invested where the Bank holds an ownership interest in the structured entities. Of the aggregate amount of maximum exposure to loss as at October 31, 2020, the Bank has recorded $2.1 billion (2019 – $2.2 billion), primarily its interest in the structured entities, on its Consolidated Statement of Financial Position.

Canadian multi-seller conduits that the Bank administers

The Bank sponsors two Canadian multi-seller conduits. The conduits purchase assets from independent third parties (the sellers) funded by the issuance of asset-backed commercial paper. The sellers continue to service the assets and provide credit enhancements through overcollateralization protection and cash reserves. The Bank has no rights to these assets as they are available to support the obligations of the respective programs, but manages for a fee the commercial paper selling programs. To ensure timely repayment of the commercial paper, each asset pool financed by the multi-seller conduits has a deal-specific LAPA with the Bank. Pursuant to the terms of the LAPA, the Bank as the liquidity provider is obligated to purchase non-defaulted assets, transferred by the conduit at the conduit's original cost as reflected in the table above. In most cases, the liquidity agreements do not require the Bank to purchase defaulted assets. Additionally, the Bank has not provided any program-wide credit enhancement to these conduits. The Bank provides additional liquidity facilities to these multi-seller conduits to a maximum amount of $1.1 billion (2019 – $1.2 billion) based on future asset purchases by these conduits.

Although the Bank has power over the relevant activities of the conduits, it has limited exposure to variability in returns, which results in the Bank not consolidating the two Canadian conduits.

Structured finance entities

The Bank has interests in structured entities used to assist corporate clients in accessing cost-efficient financing through their securitization structures. The Bank may act as an administrator, an investor or a combination of both in these types of structures.

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Capital funding vehicles
These entities are designed to pass the Bank's credit risk to the holders of the securities. Therefore the Bank does not have exposure or rights to variable returns from these entities.

(c) Other unconsolidated Bank-sponsored entities

The Bank sponsors unconsolidated structured entities including mutual funds, in which it has insignificant or no interest at the reporting date. The Bank is a sponsor when it is significantly involved in the design and formation at inception of the structured entities, and the Bank's name is used by the structured entities to create an awareness of the instruments being backed by the Bank's reputation and obligation. The Bank also considers other factors, such as its continuing involvement and obligations to determine if, in substance, the Bank is a sponsor. The Bank considers mutual funds and managed companies as sponsored entities.

The following table provides information on revenue from unconsolidated Bank-sponsored entities.

As at October 31 ($ millions)	2020			2019		
	Funds(1)	Scotia Managed Companies	Total	Funds(1)	Scotia Managed Companies	Total
Revenue	**$ 2,165**	**$ –**	**$ 2,165**	$ 2,189	$ 1	$ 2,190

(1) Includes mutual funds, other funds and trusts.

Substantially all of the revenue earned from the mutual funds and managed companies is presented as non-interest income – mutual funds.

16 Property and Equipment

($ millions)	Land & Building	Equipment	Technology Assets	Leasehold Improvements	Right-of-use Assets	Total
Cost						
Balance as at October 31, 2018	$ 1,883	$ 2,101	$ 2,296	$ 1,585	$ –	$ 7,865
Acquisitions	61	82	44	48	–	235
Additions	560	139	166	60	–	925
Disposals	(631)	(171)	(66)	(85)	–	(953)
Foreign currency adjustments and other	(130)	3	(68)	7	–	(188)
Balance as at October 31, 2019	**$ 1,743**	**$ 2,154**	**$ 2,372**	**$ 1,615**	**$ –**	**$ 7,884**
Impact of first application of IFRS 16(1)	**–**	**–**	**–**	**–**	**3,620**	**3,620**
Acquisitions	**–**	**4**	**1**	**10**	**–**	**15**
Additions	**109**	**262**	**117**	**151**	**259**	**898**
Disposals	**(205)**	**(407)**	**(113)**	**(114)**	**(93)**	**(932)**
Foreign currency adjustments and other	**(28)**	**(77)**	**9**	**(2)**	**–**	**(98)**
Balance as at October 31, 2020	**$ 1,619**	**$ 1,936**	**$ 2,386**	**$ 1,660**	**$ 3,786**	**$ 11,387**
Accumulated depreciation						
Balance as at October 31, 2018	$ 705	$ 1,669	$ 1,848	$ 959	$ –	$ 5,181
Depreciation	56	83	179	84	–	402
Disposals	(134)	(58)	(68)	(75)	–	(335)
Foreign currency adjustments and other	45	(63)	(24)	9	–	(33)
Balance as at October 31, 2019	**$ 672**	**$ 1,631**	**$ 1,935**	**$ 977**	**$ –**	**$ 5,215**
Depreciation	**42**	**111**	**153**	**91**	**400**	**797**
Disposals	**(84)**	**(321)**	**(71)**	**(49)**	**(9)**	**(534)**
Foreign currency adjustments and other	**(10)**	**50**	**(47)**	**5**	**14**	**12**
Balance as at October 31, 2020	**$ 620**	**$ 1,471**	**$ 1,970**	**$ 1,024**	**$ 405**	**$ 5,490**
Net book value						
Balance as at October 31, 2019	$ 1,071	$ 523	$ 437	$ 638	$ –	$ 2,669(2)
Balance as at October 31, 2020	**$ 999**	**$ 465**	**$ 416**	**$ 636**	**$ 3,381**	**$ 5,897(2)**

(1) Refer to Note 4 – Transition to IFRS 16.
(2) Includes $43 (2019 – $38) of investment property.

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17 Investments in Associates

The Bank had significant investments in the following associates:

As at October 31 ($ millions)	Country of incorporation	Nature of business	2020 Ownership percentage	2020 Date of financial statements(1)	2020 Carrying value	2019 Carrying value
Thanachart Bank Public Company Limited(2)	**Thailand**	**Banking**	**–**	**–**	**$ –**	$ 3,554
Canadian Tire's Financial Services business (CTFS)(3)	**Canada**	**Financial Services**	**20.00%**	**September 30, 2020**	**534**	529
Bank of Xi'an Co. Ltd.(4)	**China**	**Banking**	**17.99%**	**September 30, 2020**	**926**	815
Maduro & Curiel's Bank N.V.(5)	**Curacao**	**Banking**	**48.10%**	**September 30, 2020**	**355**	327

(1) Represents the date of the most recent financial statements. Where available, financial statements prepared by the associates' management or other published information is used to estimate the change in the Bank's interest since the most recent financial statements.
(2) Refer to Note 37 – Acquisitions and Divestitures.
(3) Canadian Tire has an option to sell to the Bank up to an additional 29% equity interest until the end of the 10th anniversary (October 1, 2024) at the then fair value, that can be settled, at the Bank's discretion, by issuance of common shares or cash. After October 1, 2024 for a period of six months, the Bank has the option to sell its equity interest back to Canadian Tire at the then fair value.
(4) Based on the quoted price on the Shanghai Stock Exchange, the Bank's investment in Bank of Xi'an Co. Ltd was $818 as at October 31, 2020 (October 31, 2019 - $1,021).
(5) The local regulator requires financial institutions to set aside reserves for general banking risks. These reserves are not required under IFRS, and represent undistributed retained earnings related to a foreign associated corporation, which are subject to local regulatory restrictions. As of October 31, 2020 these reserves amounted to $64 (2019 – $61).

Summarized financial information of the Bank's significant associates are as follows.

($ millions)	For the twelve months ended(1) Revenue	Net income	As at October 31, 2020 Total assets	Total liabilities
Canadian Tire's Financial Services business (CTFS)	**$ 1,183**	**$ 301**	**$ 7,035**	**$ 6,017**
Bank of Xi'an Co. Ltd.	**1,317**	**511**	**60,392**	**55,459**
Maduro & Curiel's Bank N.V.	**334**	**80**	**6,117**	**5,396**

($ millions)	For the twelve months ended(1) Revenue	Net income	As at October 31, 2019 Total assets	Total liabilities
Thanachart Bank Public Company Limited	$ 2,050	$ 627	$ 46,475	$ 39,827
Canadian Tire's Financial Services business (CTFS)	1,218	364	6,370	5,382
Bank of Xi'an Co. Ltd.	1,295	496	49,556	45,225
Maduro & Curiel's Bank N.V.	371	115	5,677	4,982

(1) Based on the most recent available financial statements.

18 Goodwill and Other Intangible Assets

Goodwill

The changes in the carrying amounts of goodwill by cash-generating unit (CGU) are as follows:

($ millions)	Canadian Banking	Global Wealth Management	Global Banking and Markets	Latin America	Caribbean and Central America	Total
Balance as at October 31, 2018	$ 5,095	$ –	$ 260	$ 3,454	$ 1,198	$ 10,007
Acquisitions	–	–	–	–	250	250
Dispositions(1)	–	–	–	(36)	(453)	(489)
Foreign currency adjustments and other	(2)	–	–	(146)	11	(137)
Balance as at October 31, 2019	5,093	–	260	3,272	1,006	9,631
Reclassification due to reorganization of operating segments	**(3,403)**	**3,628**	**–**	**(225)**	**–**	**–**
Acquisitions	**–**	**–**	**–**	**–**	**–**	**–**
Dispositions(1)	**–**	**–**	**(21)**	**(47)**	**(67)**	**(135)**
Foreign currency adjustments and other	**–**	**(14)**	**1**	**(168)**	**(36)**	**(217)**
Balance as at October 31, 2020	**$ 1,690**	**$ 3,614**	**$ 240**	**$ 2,832**	**$ 903**	**$ 9,279**

(1) Includes wind-downs

Global Wealth Management CGU

Effective November 1, 2019, the Bank established Global Wealth Management as a separate business segment. Wealth Management results previously reported in the Canadian Banking and International Banking business segments are now being reported in the new business segment.

Impairment testing of goodwill

Goodwill acquired in business combinations is allocated to each of the Bank's group of CGUs that are expected to benefit from the synergies of the particular acquisition. Goodwill is assessed for impairment annually or more frequently if events or circumstances occur that may result in the recoverable amount of the CGU falling below its carrying value.

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The Bank determines the carrying value of the CGU using a regulatory capital approach based on credit, market, and operational risks, and leverage, consistent with the Bank's capital attribution for business line performance measurement. The recoverable amount is the higher of fair value less costs of disposal and value in use. The recoverable amount for the CGU has been determined using the fair value less costs of disposal method. In arriving at such value for the CGU, the Bank has used price earnings (P/E) multiples applied to normalized net income for the last four quarters as of the test date, a control premium is added based on a five year weighted average acquisition premium paid for comparable companies, and costs of disposal are deducted from the fair value of the CGU. The resulting recoverable amount determined is then compared to its respective carrying amount to identify any impairment. P/E multiples ranging from 10.0 to 11.5 times (2019 – 10.5 to 12.5 times) have been used.

The fair value less costs of disposal of the CGU is sensitive to changes in net income, P/E multiples and control premiums.

Goodwill was assessed for annual impairment as at July 31, 2020 and July 31, 2019 and no impairment was determined to exist.

Management believes that reasonable negative changes in any one key assumption used to determine the recoverable amount of the CGU would not result in an impairment. No significant negative changes were noted as of October 31, 2020.

Intangible assets

Intangible assets consist of assets with indefinite and finite useful lives. Indefinite life intangible assets consist substantially of fund management contracts. The fund management contracts are for the management of open-ended funds. Finite life intangible assets include assets such as computer software, customer relationships and core deposit intangibles.

	Finite life			Indefinite life		
($ millions)	Computer software	Other intangibles		Fund management contracts(1)	Other intangibles	Total
Cost						
Balance as at October 31, 2018	$ 3,946	$ 2,016		$ 4,415	$ 166	$ 10,543
Acquisitions	–	151		–	–	151
Additions	705	23		–	–	728
Disposals	(113)	–		–	–	(113)
Foreign currency adjustments and other	(13)	(59)		–	–	(72)
Balance as at October 31, 2019	$ 4,525	$ 2,131		$ 4,415	$ 166	$ 11,237
Acquisitions	–	–		–	–	–
Additions	723	2		–	–	725
Disposals	(198)	(59)		–	–	(257)
Foreign currency adjustments and other	(59)	(101)		–	–	(160)
Balance as at October 31, 2020	**$ 4,991**	**$ 1,973**		**$ 4,415**	**$ 166**	**$ 11,545**
Accumulated amortization						
Balance as at October 31, 2018	$ 1,705	$ 1,126		$ –	$ –	$ 2,831
Amortization	535	116		–	–	651
Disposals	(102)	–		–	–	(102)
Foreign currency adjustments and other	31	(8)		–	–	23
Balance as at October 31, 2019	$ 2,169	$ 1,234		$ –	$ –	$ 3,403
Amortization	625	124		–	–	749
Disposals	(191)	(55)		–	–	(246)
Foreign currency adjustments and other	(22)	(75)		–	–	(97)
Balance as at October 31, 2020	**$ 2,581**	**$ 1,228**		**$ –**	**$ –**	**$ 3,809**
Net book value						
As at October 31, 2019	$ 2,356(2)	$ 897		$ 4,415	$ 166	$ 7,834
As at October 31, 2020	**$ 2,410(2)**	**$ 745**		**$ 4,415**	**$ 166**	**$ 7,736**

(1) Fund management contracts are attributable to HollisWealth Inc. (formerly DundeeWealth Inc.), MD Financial Management Inc., and Jarislowsky Fraser Limited.
(2) Computer software comprises of purchased software of $507 (2019 – $404), internally generated software of $1,337 (2019 – $1,363), and in process software not subject to amortization of $566 (2019 – $589).

Impairment testing of indefinite life intangible assets

Indefinite life intangible assets are not amortized and are assessed for impairment annually or more frequently if events or changes in circumstances indicate that the asset may be impaired. Impairment is assessed by comparing the carrying value of the indefinite life intangible asset to its recoverable amount. The recoverable amount of the fund management contracts is based on a value in use approach using the multi-period excess earnings method. This approach uses cash flow projections from management-approved financial budgets which include key assumptions related to market appreciation, net sales of funds, and operating margins taking into consideration past experience and market expectations. The forecast cash flows cover a 5-year period, with a terminal growth rate in the range of 3 to 5% (2019 – 3 to 5%) applied thereafter. These cash flows have been discounted at rates in the range of 10 to 12% (2019 – 10 to 12%) depending on the nature of the fund management contract intangible asset.

Indefinite life intangible assets were assessed for annual impairment as at July 31, 2020 and July 31, 2019 and no impairment was determined to exist.

Management believes that reasonable negative changes in any one key assumption used to determine the recoverable amount would not result in an impairment. No significant negative changes were noted as of October 31, 2020.

19 Other Assets

As at October 31 ($ millions)	2020	2019
Accrued interest	**$ 2,812**	$ 2,790
Accounts receivable and prepaids	**2,026**	2,298
Current tax assets	**1,520**	1,534
Margin deposit derivatives	**4,912**	5,560
Segregated fund assets	**2,248**	2,405
Pension assets (Note 28)	**260**	422
Receivable from brokers, dealers and clients	**2,347**	1,161
Other	**3,597**	6,721
Total	**$ 19,722**	$ 22,891

20 Deposits

	2020					2019
	Payable on demand(1)					
As at October 31 ($ millions)	Interest-bearing	Non-interest-bearing	Payable after notice(2)	Payable on a fixed date(3)	Total	
Personal	**$ 8,630**	**$ 9,359**	**$ 149,500**	**$ 78,646**	**$ 246,135**	$ 224,800
Business and government	**140,934**	**30,939**	**39,318**	**253,428**	**464,619**	461,851
Financial institutions	**8,355**	**532**	**1,255**	**29,942**	**40,084**	46,739
Total	**$ 157,919**	**$ 40,830**	**$ 190,073(4)**	**$ 362,016**	**$ 750,838**	$ 733,390
Recorded in:						
Canada	**$ 110,050**	**$ 21,882**	**$ 160,381**	**$ 249,276**	**$ 541,589**	$ 503,158
United States	**31,410**	**855**	**36**	**28,446**	**60,747**	75,675
United Kingdom	**–**	**–**	**248**	**14,729**	**14,977**	20,310
Mexico	**8**	**5,393**	**7,229**	**12,664**	**25,294**	23,672
Peru	**5,930**	**60**	**5,555**	**6,149**	**17,694**	18,738
Chile	**4,153**	**5,932**	**143**	**13,364**	**23,592**	22,714
Colombia	**30**	**608**	**4,764**	**3,906**	**9,308**	9,846
Other International	**6,338**	**6,100**	**11,717**	**33,482**	**57,637**	59,277
Total(5)	**$ 157,919**	**$ 40,830**	**$ 190,073**	**$ 362,016**	**$ 750,838**	$ 733,390

(1) Deposits payable on demand include all deposits for which we do not have the right to notice of withdrawal, generally chequing accounts.
(2) Deposits payable after notice include all deposits for which we require notice of withdrawal, generally savings accounts.
(3) All deposits that mature on a specified date, generally term deposits, guaranteed investments certificates and similar instruments.
(4) Includes $158 (2019 – $137) of non-interest bearing deposits.
(5) Deposits denominated in U.S. dollars amount to $215,836 (2019 – $250,886), deposits denominated in Chilean pesos amount to $21,099 (2019 – $21,021), deposits denominated in Mexican pesos amount to $22,765 (2019 – $21,039) and deposits denominated in other foreign currencies amount to $83,706 (2019 – $83,837).

The following table presents the maturity schedule for term deposits in Canada greater than $100,000(1).

($ millions)	Within three months	Three to six months	Six to twelve months	One to five years	Over five years	Total
As at October 31, 2020	**$ 38,739**	**$ 22,498**	**$ 30,850**	**$ 92,589**	**$ 18,072**	**$ 202,748**
As at October 31, 2019	$ 48,411	$ 23,797	$ 43,377	$ 91,687	$ 14,616	$ 221,888

(1) The majority of foreign term deposits are in excess of $100,000.

21 Subordinated Debentures

These debentures are direct, unsecured obligations of the Bank and are subordinate to the claims of the Bank's depositors and other creditors. The Bank, where appropriate, enters into interest rate and cross-currency swaps to hedge the related risks.

As at October 31 ($ millions)			2020	2019
Maturity date	Interest rate (%)	Terms(1)	Carrying value(2)	Carrying value(2)
June 2025	8.90	Redeemable at any time.	**$ 251**	$ 256
December 2025(3)	3.367	On October 20, 2020, the Bank announced its intention to redeem these notes on December 8, 2020 at 100% of their principal amount plus accrued interest to the redemption date.	**732**	730
December 2025(3)	4.50	US$1,250 million. Interest will be payable semi-annually in arrears on June 16 and December 16 of each year.	**1,665**	1,643
March 2027(3)	2.58	Redeemable on or after March 30, 2022. After March 30, 2022, interest will be payable at an annual rate equal to the three-month bankers' acceptance rate plus 1.19%.	**1,267**	1,239
January 2029(3)	3.89	Redeemable on or after January 18, 2024. After January 18, 2024, interest will be payable at an annual rate equal to the three-month bankers' acceptance rate plus 1.58%.	**1,844**	1,788
July 2029(3)	2.836	Redeemable on or after July 3, 2024. After July 3, 2024, interest will be payable at an annual rate equal to the three-month bankers' acceptance rate plus 1.18%.	**1,544**	1,487
August 2085(4)	Floating	US$76 million bearing interest at a floating rate of the offered rate for six-month US$ LIBOR plus 0.125%. Redeemable on any interest payment date.	**102**	109
			$ 7,405	$ 7,252

(1) In accordance with the provisions of the Capital Adequacy Guideline of the Superintendent, all redemptions are subject to regulatory approval and subject to the terms in the relevant prospectus.
(2) The carrying value of subordinated debentures may differ from par value due to fair value hedge adjustments related to hedge accounting and adjustments related to subordinated debentures held for market-making purposes.
(3) These debentures contain non-viability contingent capital (NVCC) provisions. Under such NVCC provisions, the debentures are convertible into a variable number of common shares if OSFI announces that the Bank has ceased, or is about to cease, to be viable, or if a federal or provincial government in Canada publicly announces that the Bank has accepted or agreed to accept a capital injection, or equivalent support, from the federal government or any provincial government or political subdivision or agent thereof without which the Bank would have been determined by OSFI to be non-viable. If such a conversion were to occur, the debentures would be converted into common shares pursuant to an automatic conversion formula defined as 150% of the par value plus accrued and unpaid interest divided by the conversion price. The conversion price is based on the greater of: (i) a floor price of $5.00 or, where applicable, the US dollar equivalent of $5.00 (subject to, in each case, adjustments in certain events as set out in the respective prospectus supplements), and (ii) the current market price of the Bank's common shares at the time of the trigger event (10-day weighted average), where applicable converted from CAD to USD.
(4) During the year, the Bank purchased for cancellation approximately US$7 million subordinated debentures due 2085.

22 Other Liabilities

As at October 31 ($ millions)	2020	2019(1)
Accrued interest	**$ 2,244**	$ 2,902
Lease liabilities(2)	**3,475**	–
Accounts payable and accrued expenses	**5,441**	5,924
Current tax liabilities	**743**	342
Deferred tax liabilities (Note 27)	**1,073**	1,307
Gold and silver certificates and bullion	**1,112**	4,124
Margin and collateral accounts	**8,622**	5,826
Segregated fund liabilities	**2,248**	2,405
Payables to brokers, dealers and clients	**624**	377
Provisions (Note 23)	**125**	210
Allowance for credit losses on off-balance sheet exposures (Note 13)	**101**	56
Pension liabilities (Note 28)	**2,202**	1,692
Other liabilities of subsidiaries and structured entities	**25,938**	22,626
Other	**8,656**	6,691
Total	**$ 62,604**	$ 54,482

(1) Prior period amounts have been restated to conform with current period presentation.
(2) Presents discounted value of lease liabilities.

The table below sets out a maturity analysis of undiscounted lease liabilities showing the lease payments to be made after the reporting date:

As at October 31 ($ millions)	2020
Within 1 year	**$ 451**
1 to 2 years	**434**
2 to 3 years	**420**
3 to 4 years	**403**
4 to 5 years	**367**
After 5 years	**2,080**
Total	**$ 4,155**

23 Provisions

($ millions)	
As at November 1, 2018	$ 157
Provisions made during the year	125
Provisions utilized / released during the year	(72)
Balance as at October 31, 2019	$ 210
Provisions made during the year	**244**
Provisions utilized / released during the year	**(329)**
Balance as at October 31, 2020	**$ 125**

In the ordinary course of business, the Bank and its subsidiaries are routinely defendants in, or parties to a number of pending and threatened legal actions and regulatory proceedings, including actions brought on behalf of various classes of claimants. In view of the inherent difficulty of predicting the outcome of such matters, the Bank cannot state what the eventual outcome of such matters will be. However, based on current knowledge, management does not believe that liabilities, if any, arising from pending litigation or regulatory proceedings will have a material adverse effect on the Consolidated Statement of Financial Position or results of operations of the Bank.

Legal provisions are established when it becomes probable that the Bank will incur an expense related to a legal action and the amount can be reliably estimated. Such provisions are recorded at the best estimate of the amount required to settle any obligation related to these legal actions as at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation. Management and internal and external experts are involved in estimating any amounts that may be required. The actual costs of resolving these claims may vary significantly from the amount of the legal provisions. The Bank's estimate involves significant judgement, given the varying stages of the proceedings, the fact that the Bank's liability, if any, has yet to be determined and the fact that the underlying matters will change from time to time. As such, there is a possibility that the ultimate resolution of those legal actions may be material to the Bank's consolidated results of operations for any particular reporting period.

In addition during the year, Scotiabank has entered into a Deferred Prosecution Agreement ("DPA") with the U.S. Department of Justice (the "DOJ"). Additionally, the Commodity Futures Trading Commission (the "CFTC") issued three separate orders against Scotiabank (collectively, the "Orders"). The DPA and the Orders (together, the "Resolutions") resolve the DOJ's and CFTC's previously disclosed investigations into Scotiabank's activities and trading practices in the metals markets and related conduct as well as pre-trade mid-market marks and related swap dealer compliance issues.

Under the terms of the Resolutions, the Bank made aggregate payments to the DOJ and CFTC of approximately $127.5 million (USD) and has agreed to retain an independent compliance monitor. Under one of the orders, the CFTC will defer proceedings to suspend or revoke the Bank's provisional registration as a swap dealer subject to the Bank's implementation of a remediation plan, among other conditions.

24 Common shares, preferred shares and other equity instruments

(a) Common shares

Authorized:

An unlimited number of common shares without nominal or par value.

Issued and fully paid:

	2020		2019	
As at October 31 ($ millions)	Number of shares	Amount	Number of shares	Amount
Outstanding at beginning of year	**1,216,132,250**	**$ 18,264**	1,227,027,624	$ 18,234
Issued in relation to share-based payments, net (Note 26)	**941,847**	**59**	4,111,476	253
Issued in relation to the acquisition of a subsidiary or associated corporation	**–**	**–**	21,250	2
Repurchased for cancellation under the Normal Course Issuer Bid	**(5,594,800)**	**(84)**	(15,028,100)	(225)
Outstanding at end of year	**1,211,479,297(1)**	**$ 18,239**	1,216,132,250(1)	$ 18,264

(1) In the normal course of business, the Bank's regulated Dealer subsidiary purchases and sells the Bank's common shares to facilitate trading/institutional client activity. During fiscal 2020, the number of such shares bought and sold was 20,290,297 (2019 – 16,818,144).

Dividend

The dividends paid on common shares in fiscal 2020 and 2019 were $4,363 million ($3.60 per share) and $4,260 million ($3.49 per share), respectively. The Board of Directors approved a quarterly dividend of 90 cents per common share at its meeting on November 30, 2020. This quarterly dividend applies to shareholders of record at the close of business on January 5, 2021, and is payable January 27, 2021. Refer to Note 24(c) – Restriction on payment of dividends and retirement of shares.

Normal Course Issuer Bid

On May 30, 2019, the Bank announced that OSFI and the Toronto Stock Exchange have approved a normal course issuer bid (the "2019 NCIB") pursuant to which it may repurchase for cancellation up to 24 million of the Bank's common shares. Purchases under the 2019 NCIB commenced on June 4, 2019 and terminated on June 3, 2020. Under the 2019 NCIB, the Bank has cumulatively repurchased and cancelled approximately 11.8 million common shares at an average price of $72.41 per share.

During the year ended October 31, 2020, the Bank repurchased and cancelled approximately 5.6 million common shares (2019 – 15 million) at a volume weighted average price of $73.95 per share (2019 – $71.51) for a total amount of $414 million (2019 – $1,075 million).

On March 13, 2020, OSFI advised federally regulated deposit taking institutions to suspend common share buybacks as part of COVID-19 measures. The Bank does not currently have an active NCIB program.

Consolidated Financial Statements

Non-viability Contingent Capital

The maximum number of common shares issuable on conversion of NVCC subordinated debentures, NVCC subordinated additional tier 1 capital securities and NVCC preferred shares as at October 31, 2020 would be 3,237 million common shares (2019 – 2,810 million common shares) based on the floor price and excluding the impact of any accrued and unpaid interest and any declared but unpaid dividends (refer to Note 21 – Subordinated debentures and Note 24(b) – Preferred shares and other equity instruments for further details).

(b) Preferred shares and other equity instruments

Preferred shares

Authorized:

An unlimited number of preferred shares without nominal or par value.

Issued and fully paid:

	2020				2019			
As at October 31 ($ millions)	Number of shares	Amount	Dividends declared per share(1)	Conversion feature	Number of shares	Amount	Dividends declared per share(1)	Conversion feature
Preferred shares(a):								
Series 30(b)	–	–	**0.227500**	**Series 31**	6,142,738	154	0.455000	Series 31
Series 31(b)	–	–	**0.331828**	**Series 30**	4,457,262	111	0.657072	Series 30
Series 32(c)(d)	**11,161,422**	**279**	**0.515752**	**Series 33**	11,161,422	279	0.515752	Series 33
Series 33(c)(d)	**5,184,345**	**130**	**0.579323**	**Series 32**	5,184,345	130	0.742073	Series 32
Series 34(c)(e)(f)	**14,000,000**	**350**	**1.375000**	**Series 35**	14,000,000	350	1.375000	Series 35
Series 36(c)(e)(g)	**20,000,000**	**500**	**1.375000**	**Series 37**	20,000,000	500	1.375000	Series 37
Series 38(c)(e)(h)	**20,000,000**	**500**	**1.212500**	**Series 39**	20,000,000	500	1.212500	Series 39
Series 40(c)(e)(i)	**12,000,000**	**300**	**1.212500**	**Series 41**	12,000,000	300	1.271475	Series 41
Total preferred shares	**82,345,767**	**$ 2,059**			92,945,767	$ 2,324		

(1) Dividends declared from November 1, 2019 to October 31, 2020.

Terms of preferred shares

	First issue date	Issue price	Initial dividend	Initial dividend payment date	Rate reset spread	Redemption date	Redemption price
Preferred shares(a):							
Series 30(b)	April 12, 2010	25.00	0.282200	July 28, 2010	1.00%	April 27, 2020	25.00
Series 31(b)	April 26, 2015	25.00	0.095500	July 29, 2015	1.00%	April 27, 2020	25.00
Series 32(c)(d)	February 28, 2011	25.00	0.215410	April 27, 2011	1.34%	February 2, 2021	25.00
Series 33(c)(d)	February 2, 2016	25.00	0.105690	April 27, 2016	1.34%	February 2, 2016 to February 2, 2021	25.50
Series 34(c)(e)(f)	December 17, 2015	25.00	0.497300	April 27, 2016	4.51%	April 26, 2021	25.00
Series 36(c)(e)(g)	March 14, 2016	25.00	0.508600	July 27, 2016	4.72%	July 26, 2021	25.00
Series 38(c)(e)(h)	September 16, 2016	25.00	0.441800	January 27, 2017	4.19%	January 27, 2022	25.00
Series 40(c)(e)(i)	October 12, 2018	25.00	0.362100	January 29, 2019	2.43%	January 27, 2024	25.00

(a) Non-cumulative preferential cash dividends on all series are payable quarterly, as and when declared by the Board. Dividends on the Non-cumulative 5-Year Rate Reset Preferred Shares Non Viability Contingent Capital (NVCC) (Series 34, 36, 38, and 40) are payable at the applicable rate for the initial five-year fixed rate period ending one day prior to the redemption date. Subsequent to the initial five-year fixed rate period, and resetting every five years thereafter, the dividend on such Rate Reset Preferred Shares will be determined by the sum of the 5-year Government of Canada Yield plus the indicated rate reset spread, multiplied by $25.00. If outstanding, non-cumulative preferential cash dividends on the Series 33, 35, 37, 39, and 41 are payable quarterly, as and when declared by the Board. Dividends on the Non-cumulative 5-Year Rate Reset Preferred Shares (Series 33) and the Non-cumulative 5-Year Rate Reset Preferred Shares NVCC (Series 35, 37, 39, and 41) are payable, at a rate equal to the sum of the three month Government of Canada Treasury Bill rate plus the rate reset spread of the converted preferred shares, multiplied by $25.00. For each of the years presented, the Bank paid all of the non-cumulative preferred share dividends.

(b) On April 27, 2020 the Bank redeemed all outstanding Non-cumulative Preferred shares Series 30 and 31 and paid dividends of $0.227500 and $0.331828, respectively, per share.

(c) Holders of Fixed Rate Reset Preferred Shares (Series 32, 34, 36, 38, and 40) will have the option to convert shares into an equal number of the relevant series of Floating Rate Preferred Shares on the applicable Rate Reset Series conversion date and every five years thereafter. Holders of Floating Rate Reset Preferred Shares (Series 33, 35, 37, 39, and 41, if outstanding) have reciprocal conversion options into the relevant series of Fixed Rate Reset Preferred Shares. With respect to Series 32 and 33, 34 and 35, 36 and 37, 38 and 39, and 40 and 41, if the Bank determines that, after giving effect to any Election Notices received, there would be less than 1,000,000 Fixed Rate or Floating Rate Preferred Shares of such Series issued and outstanding on an applicable conversion date, then all of the issued and outstanding preferred shares of such Series will automatically be converted into an equal number of the preferred shares of the other relevant Series.

(d) Holders of Series 32 Non-cumulative 5-Year Rate Reset Preferred Shares will have the option to convert shares into an equal number of Series 33 non-cumulative floating rate preferred shares on February 2, 2021 and on February 2 every five years thereafter. With regulatory approval, the Series 32 preferred shares may be redeemed by the Bank on February 2, 2021, and every five years thereafter, at $25.00 per share, together with declared and unpaid dividends. With regulatory approval, the Series 33 Non-cumulative Preferred Shares may be redeemed by the Bank at (i) $25.00 together with all declared and unpaid dividends to the date fixed for redemption in the case of redemptions on February 2, 2021 and on February 2 every five years thereafter, or (ii) $25.50 together with all declared and unpaid dividends to the date fixed redemption on any other date after February 2, 2016.

(e) These preferred shares contain NVCC provisions necessary for the shares to qualify as Tier 1 regulatory capital under Basel III.

(f) Holders of Series 34 Non-cumulative 5-Year Rate Reset Preferred Shares (NVCC) will have the option to convert shares into an equal number of Series 35 non-cumulative floating rate preferred shares on April 26, 2021, and on April 26 every five years thereafter. With regulatory approval, Series 34 preferred shares may be redeemed by the Bank on April 26, 2021 and every five years thereafter, and for Series 35 preferred shares (NVCC), if applicable, on April 26, 2026 and every five years thereafter, at $25.00 per share, together with declared and unpaid dividends.

(g) Holders of Series 36 Non-cumulative 5-Year Rate Reset Preferred Shares (NVCC) will have the option to convert shares into an equal number of Series 37 non-cumulative floating rate preferred shares (NVCC) on July 26, 2021, and on July 26 every five years thereafter. With regulatory approval, Series 36 preferred shares may be redeemed by the Bank on July 26, 2021 and every five years thereafter, and for Series 37 preferred shares, if applicable, on July 26, 2026 and every five years thereafter, at $25.00 per share, together with declared and unpaid dividends.

(h) Holders of Series 38 Non-cumulative 5-Year Rate Reset Preferred Shares (NVCC) will have the option to convert shares into an equal number of Series 39 non-cumulative floating rate preferred shares (NVCC) on January 27, 2022, and on January 27 every five years thereafter. With regulatory approval, Series 38 preferred shares may be redeemed by the Bank on January 27, 2022 and every five years thereafter, and for Series 39 preferred shares, if applicable, on January 27, 2027 and every five years thereafter, at $25.00 per share, together with declared and unpaid dividends.

(i) Holders of Series 40 Non-cumulative 5-Year Rate Reset Preferred Shares (NVCC) will have the option to convert shares into an equal number of Series 41 non-cumulative floating rate preferred shares (NVCC) on January 27, 2024, and on January 27 every five years thereafter. With regulatory approval, Series 40 preferred shares may be redeemed by the Bank on January 27, 2024 and every five years thereafter, and for Series 41 preferred shares, if applicable, on January 27, 2029 and every five years thereafter, at $25.00 per share, together with declared and unpaid dividends.

Under NVCC provisions, NVCC preferred shares Series 34, 35, 36, 37, 38, 39, 40 and 41, if outstanding, are convertible into a variable number of common shares if OSFI announces that the Bank has ceased, or is about to cease, to be viable, or if a federal or provincial government in Canada publicly announces that the Bank has accepted or agreed to accept a capital injection, or equivalent support, from the federal government or any provincial government or political subdivision or agent thereof without which the Bank would have been determined by OSFI to be non-viable. If such a conversion were to occur, NVCC preferred shares Series 34, 35, 36, 37, 38, 39, 40 and 41, if outstanding, would be converted into common shares pursuant to an automatic conversion formula defined as 100% times the share value of $25.00 plus declared and unpaid dividends divided by the conversion price. The conversion price is based on the greater of: (i) a floor price of $5.00 or (subject to adjustments in certain events as set out in their respective prospectus supplements), and (ii) the current market price of the Bank's common shares at the time of the trigger event (10-day weighted average).

Other equity instruments

Other equity instruments are comprised of subordinated additional Tier 1 capital securities (NVCC):

First issue date	Notional Amount ($ millions)	Reset date	Interest rate	Payment frequency	Interest rate after reset	Redemption frequency after reset	2020 Amount	2020 Distributions paid per Note(1)	2019 Amount	2019 Distributions paid per Note(1)
October 12, 2017	**US$1,250**	October 12, 2022	4.65%	Semi-annually	LIBOR(2) +2.648%	Quarterly	**$ 1,560**	**US$46.50**	$1,560	US$46.50
June 4, 2020	**US$1,250**	June 4, 2025	4.90%	Quarterly	UST(3) +4.551%	Every five years	**$1,689**	**US$12.25**	–	–
Total other equity instruments							**$3,249**		$1,560	

(1) Distributions paid from November 1, 2019 to October 31, 2020 per face amount of US$1,000.
(2) Three-month US$ LIBOR.
(3) The then-prevailing five-year U.S. Treasury Rate.

Additional terms of the securities are described below:

(1) While interest is payable on the securities when it becomes due, the Bank may, at its sole discretion and with notice, cancel interest payments. Refer to Note 24(c) – Restriction on payment of dividends and retirement of shares.

(2) Each security is redeemable at the sole discretion of the Bank 5 years after its issuance and every quarter or five years, as applicable, thereafter. The securities are also redeemable following a regulatory or tax event, as described in the offering documents. All redemptions are subject to regulatory consent and occur at a redemption price of par plus accrued and unpaid interest (unless canceled).

(3) The securities rank pari passu to each other and are the Bank's direct unsecured obligations, ranking subordinate to Bank's other subordinated indebtedness.

NVCC provisions require the conversion of these securities into a variable number of common shares if OSFI announces that the Bank has ceased, or is about to cease, to be viable, or if a federal or provincial government in Canada publicly announces that the Bank has accepted or agreed to accept a capital injection, or equivalent support, from the federal government or any provincial government or political subdivision or agent thereof without which the Bank would have been determined by OSFI to be non-viable. If such a conversion were to occur, outstanding subordinated additional Tier 1 capital securities (NVCC), would be converted into common shares pursuant to an automatic conversion formula defined as 125% of the par value plus accrued and unpaid interest divided by the conversion price. The conversion price is based on the greater of: (i) the U.S. dollar equivalent of $5.00 (subject to adjustments in certain events as set out in their respective prospectus supplements), and (ii) the U.S. dollar equivalent of the current market price of the Bank's common shares at the time of the trigger event (10-day weighted average). The U.S. dollar equivalents of the floor price and the current market price are based on the CAD/USD exchange rate on the day prior to the trigger event.

The equity instruments above have been determined to be compound instruments that have both equity and liability features. At inception, the fair value of the liability component is initially measured with any residual amount assigned to the equity component. On the date of issuance, the Bank has assigned an insignificant value to the liability component of the securities and, as a result, the proceeds received upon issuance of the notes have been presented as equity. The Bank will continue to monitor events that could impact the value of the liability component.

During the year ended October 31, 2020, the Bank paid aggregate interest of US$73 million (2019 – US$58 million) in respect of these securities.

(c) Restrictions on payment of dividend payment and retirement of shares

Under the Bank Act, the Bank is prohibited from declaring any dividends on its common or preferred shares or redeeming, purchasing or otherwise retiring such shares when the Bank is, or would be placed by such a declaration or retirement, in contravention of the capital adequacy, liquidity or any other regulatory directives issued under the Bank Act.

In the event that applicable cash distributions on any of the Scotiabank Trust Securities are not paid on a regular distribution date, the Bank has undertaken not to declare dividends of any kind on its preferred or common shares until such distributions are made in full or the twelfth month following the non-payment of such distributions. Similarly, should the Bank fail to declare regular dividends on any of its directly issued outstanding preferred or common shares, cash distributions will also not be made on any of the Scotiabank Trust Securities.

In the event that distributions on the Bank's subordinated additional Tier 1 capital securities (NVCC) are not paid in full, the Bank has undertaken not to declare dividends on its common or preferred shares or redeem, purchase or otherwise retire such shares until the month commencing after such distributions have been made in full.

In the event that dividends to which preferred shareholders are then entitled have not been paid or sufficient funds have not been set aside to do so, the Bank has undertaken not to declare dividends on its common shares or redeem, purchase or otherwise retire its common shares.

Currently, the above limitations do not restrict the payment of dividends on or retirement of preferred shares, however, on March 13, 2020, OSFI advised federally regulated deposit taking institutions to suspend buybacks and increases to dividends in respect of its common shares as part of COVID-19 measures.

25 Capital Management

The primary regulator over the Bank's consolidated capital adequacy is the Office of the Superintendent of Financial Institutions, Canada (OSFI). The capital adequacy regulations in Canada are largely consistent with international standards set by the Basel Committee on Banking Supervision (BCBS). OSFI requires Canadian deposit-taking institutions to fully implement the 2019 Basel III reforms and achieve minimums of 7%, 8.5% and 10.5% for CET1, Tier 1 and Total Capital, respectively. OSFI has also designated the Bank as a domestic systemically important bank (D-SIB), increasing its minimum capital ratio requirements by 1% across all tiers of capital effective January 1, 2016, in line with the requirements for global systemically important banks.

In addition, OSFI expects D-SIBs to hold a 1.0% Domestic Stability Buffer, as at October 31, 2020. This results in current targets, including all buffers, for CET1, Tier 1 and Total Capital ratios of 9.0%, 10.5% and 12.5%, respectively. In addition to risk-based capital requirements, the Basel III reforms introduced a simpler, non risk-based Leverage ratio requirement to act as a supplementary measure to its risk-based capital requirements. Institutions are expected to maintain a material operating buffer above the 3% minimum.

The Bank's regulatory capital ratios were as follows:

As at October 31 ($ millions)	2020	2019
Capital		
Common Equity Tier 1 capital	**$ 49,165**	$ 46,578
Net Tier 1 capital	**55,362**	51,304
Total regulatory capital	**64,512**	59,850
Risk-weighted assets/exposures used in calculation of capital ratios		
Risk-weighted assets(1)	**$ 417,138**	$ 421,185
Leverage exposures	**1,170,290**	1,230,648
Capital ratios		
Common Equity Tier 1 capital ratio	**11.8%**	11.1%
Tier 1 capital ratio	**13.3%**	12.2%
Total capital ratio	**15.5%**	14.2%
Leverage ratio	**4.7%**	4.2%

(1) OSFI has prescribed a minimum capital floor for institutions that use the advanced internal ratings-based approach for credit risk. The Basel II capital floor add-on is determined by comparing a capital requirement under the Basel II standardized approach for credit risk, in addition to OSFI prescribed requirements for market risk and credit valuation adjustment RWA. A shortfall in the Basel III capital requirement as compared with the Basel II capital floor is added to RWA. Under this Basel II regulatory capital floor requirement, the Bank does not have a capital floor add-on as at October 31, 2020 (October 31, 2019 – nil).

The Bank substantially exceeded the OSFI minimum capital ratios as at October 31, 2020, including the Domestic Stability Buffer requirement.

26 Share-Based Payments

(a) Stock option plans

The Bank grants stock options as part of the employee Stock Option Plan as well as stand-alone stock appreciation rights (SARs). Options to purchase common shares and/or to receive an equivalent cash payment, as applicable, may be granted to select employees at an exercise price of the higher of the closing price of the Bank's common shares on the Toronto Stock Exchange (TSX) on the trading day prior to the grant date or the volume weighted average trading price for the five trading days immediately preceding the grant date.

Stock options granted since December 2014 vest 50% at the end of the third year and 50% at the end of the fourth year. This change is prospective and does not impact prior period grants. Stock options are exercisable no later than 10 years after the grant date. In the event that the expiry date falls within an insider trading blackout period, the expiry date will be extended for 10 business days after the end of the blackout period. As approved by the shareholders, a total of 129 million common shares have been reserved for issuance under the Bank's employee Stock Option Plan of which 112 million common shares have been issued as a result of the exercise of options and 12 million common shares are committed under outstanding options, leaving 5 million common shares available for issuance as options. Outstanding options expire on dates ranging from December 6, 2020 to December 5, 2029.

The cost of these options is recognized on a graded vesting basis except where the employee is eligible to retire prior to a tranche's vesting date, in which case the cost is recognized between the grant date and the date the employee is eligible to retire.

The Stock Option Plan includes:

- Tandem stock appreciation rights

  Employee stock options granted between December 2, 2005 to November 1, 2009 have Tandem SARs, which provide the employee the choice to either exercise the stock option for shares, or to exercise the Tandem SARs and thereby receive the intrinsic value of the stock option in cash. As at October 31, 2020, nil Tandem SARs were outstanding (2019 – nil).

  The share-based payment liability recognized for vested Tandem SARs as at October 31, 2020 was nil (2019 – nil). The corresponding intrinsic value of this liability as at October 31, 2020 was nil (2019 – nil).

  In 2020, a benefit of nil (2019 – $0.1 million) was recorded in salaries and employee benefits in the Consolidated Statement of Income.

- Stock options

  Employee stock options granted beginning December 2009 are equity-classified stock options which call for settlement in shares and do not have Tandem SAR features.

  The amount recorded in equity – other reserves for vested stock options as at October 31, 2020 was $130 million (2019 – $133 million).

  In 2020, an expense of $6 million (2019 – $6 million) was recorded in salaries and employee benefits in the Consolidated Statement of Income. As at October 31, 2020, future unrecognized compensation cost for non-vested stock options was $4 million (2019 – $5 million) which is to be recognized over a weighted-average period of 2.01 years (2019 – 2.11 years).

- Stock appreciation rights

  Stand-alone SARs are granted instead of stock options to select employees in countries where local laws may restrict the Bank from issuing shares. When a SAR is exercised, the Bank pays the appreciation amount in cash equal to the rise in the market price of the Bank's common shares since the grant date.

  During fiscal 2020, 83,050 SARs were granted (2019 – 70,554) and as at October 31, 2020, 704,439 SARs were outstanding (2019 – 805,481), of which 698,533 SARs were vested (2019 – 801,116).

  The share-based payment liability recognized for vested SARs as at October 31, 2020 was $2 million (2019 – $10 million). The corresponding intrinsic value of this liability as at October 31, 2020 was nil (2019 – $16 million).

  In 2020, a benefit of $3 million (2019 – expense of $2 million) was recorded in salaries and employee benefits in the Consolidated Statement of Income. This benefit is net of losses arising from derivatives used to manage the volatility of share-based payments of $5 million (2019 – $5 million gains).

Determination of fair values

The share-based payment liability and corresponding expense for SARs and options with Tandem SAR features were quantified using the Black-Scholes option pricing model with the following assumptions and resulting fair value per award:

As at October 31	2020	2019
Assumptions		
Risk-free interest rate%	**0.25% - 0.45%**	1.48% - 1.88%
Expected dividend yield	**6.30%**	4.50%
Expected price volatility	**21.30% - 31.40%**	13.00% - 26.10%
Expected life of option	**0.00 - 6.10 years**	0.00 - 4.74 years
Fair value		
Weighted-average fair value	**$ 2.78**	$ 13.49

The share-based payment expense for stock options, i.e., without Tandem SAR features, was quantified using the Black-Scholes option pricing model on the date of grant. The fiscal 2020 and 2019 stock option grants were fair valued using the following weighted-average assumptions and resulting fair value per award:

	2020 Grant	2019 Grant
Assumptions		
Risk-free interest rate %	**1.61%**	2.01%
Expected dividend yield	**4.55%**	4.49%
Expected price volatility	**13.37%**	15.64%
Expected life of option	**6.7 years**	6.67 years
Fair value		
Weighted-average fair value	**$ 3.81**	$ 5.01

The risk-free rate is based on Canadian treasury bond rates interpolated for the maturity equal to the expected life until exercise of the options. Expected dividend yield is based on historical dividend payout. Expected price volatility is determined based on the historical volatility for compensation. For accounting purposes, an average of the market consensus implied volatility for traded options on our common shares and the historical volatility is used.

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Details of the Bank's Employee Stock Option Plan are as follows[1]:

As at October 31	2020 Number of stock options (000's)	2020 Weighted average exercise price	2019 Number of stock options (000's)	2019 Weighted average exercise price
Outstanding at beginning of year	**11,509**	**$ 64.35**	14,140	$ 60.02
Granted	**1,594**	**74.34**	1,549	72.28
Exercised as options	**(942)**	**53.50**	(4,111)	52.51
Exercised as Tandem SARs	**(37)**	**61.30**	(51)	55.19
Forfeited	**(293)**	**70.23**	(18)	75.20
Expired	**(39)**	**61.55**	–	33.89
Outstanding at end of year[2]	**11,792**	**$ 66.44**	11,509	$ 64.35
Exercisable at end of year[2]	**7,337**	**$ 61.08**	7,318	$ 59.20
Available for grant	**5,628**		6,853	

As at October 31, 2020	Options Outstanding Number of stock options (000's)	Weighted average remaining contractual life (years)	Weighted average exercise price	Options Exercisable Number of stock options (000's)	Weighted average exercise price
Range of exercise prices					
$49.93 to $55.21	**905**	**1.08**	**$ 49.99**	**905**	**$ 49.99**
$55.63 to $60.67	**4,702**	**2.73**	**$ 59.89**	**4,702**	**$ 59.89**
$63.98 to $81.81	**6,185**	**6.96**	**$ 73.82**	**1,730**	**$ 70.10**
	11,792	**4.82**	**$ 66.44**	**7,337**	**$ 61.08**

(1) Excludes SARs.
(2) Includes options of nil Tandem SARs (2019 – nil) and 10,000 options originally issued under HollisWealth plans (2019 – 130,000).

(b) Employee share ownership plans

Eligible employees can contribute up to a specified percentage of salary towards the purchase of common shares of the Bank. In general, the Bank matches50-60% of eligible contributions, depending on the region, up to a maximum dollar amount, which is expensed in salaries and employee benefits. During 2020, the Bank's contributions totalled $71 million (2019 – $66 million). Contributions, which are used to purchase common shares in the open market, do not result in a subsequent expense to the Bank from share price appreciation.

As at October 31, 2020, an aggregate of 17 million common shares were held under the employee share ownership plans (2019 – 15 million). The shares in the employee share ownership plans are considered outstanding for computing the Bank's basic and diluted earnings per share.

(c) Other share-based payment plans

Other share-based payment plans use notional units that are valued based on the Bank's common share price on the TSX. Most grants of units accumulate dividend equivalents in the form of additional units based on the dividends paid on the Bank's common shares. These plans are settled in cash and, as a result, are liability-classified. Fluctuations in the Bank's share price change the value of the units, which affects the Bank's share-based payment expense. As described below, the value of the Performance Share Units also varies based on Bank performance. Upon exercise or redemption, payments are made to the employees with a corresponding reduction in the accrued liability.

In 2020, an aggregate expense of $294 million (2019 – $269 million) was recorded in salaries and employee benefits in the Consolidated Statement of Income for these plans. This expense includes losses from derivatives used to manage the volatility of share-based payments of $180 million (2019 – $55 million gains).

As at October 31, 2020, the share-based payment liability recognized for vested awards under these plans was $534 million (2019 – $735 million).

Details of these other share-based payment plans are as follows:

Deferred Stock Unit Plan (DSU)

Under the DSU Plan, senior executives may elect to receive all or a portion of their cash bonus under the Annual Incentive Plan (which is expensed for the year awarded in salaries and employee benefits in the Consolidated Statement of Income) in the form of deferred stock units which vest immediately. In addition the DSU plan allows for eligible executives of the Bank to participate in grants that are not allocated from the Annual Incentive Plan election. These grants are subject to specific vesting schedules. Units are redeemable in cash only when an executive ceases to be a Bank employee, and must be redeemed by December 31 of the year following that event. As at October 31, 2020, there were 1,239,755 units (2019 – 1,024,416) awarded and outstanding of which 762,568 units were vested (2019 – 792,273).

Directors' Deferred Stock Unit Plan (DDSU)

Under the DDSU Plan, non-officer directors of the Bank may elect to receive all or a portion of their fee for that fiscal year (which is expensed by the Bank in other expenses in the Consolidated Statement of Income) in the form of deferred stock units which vest immediately. Units are redeemable in cash, only following resignation or retirement, and must be redeemed by December 31 of the year following that event. As at October 31, 2020, there were 253,960 units outstanding (2019 – 243,537).

Restricted Share Unit Plan (RSU)

Under the RSU Plan, select employees receive an award of restricted share units which, for the majority of grants, vest at the end of three years. There are certain grants that provide for a graduated vesting schedule. Upon vesting, all RSU units are paid in cash to the employee. The share-based payment expense is recognized evenly over the vesting period except where the employee is eligible to retire prior to the vesting date in

which case, the expense is recognized between the grant date and the date the employee is eligible to retire. As at October 31, 2020, there were 3,641,678 units (2019 – 3,234,439) awarded and outstanding of which 2,571,388 were vested (2019 – 2,147,611).

Performance Share Unit Plan (PSU)

Eligible executives receive an award of performance share units which, for the majority of grants, vest at the end of three years. Certain grants provide for a graduated vesting schedule which includes a specific performance factor calculation. PSU awards are subject to performance criteria measured over a three-year period whereby a multiplier factor is applied which impacts the incremental number of units due to employees. The three-year performance measures include return on equity compared to target and total shareholder return relative to a comparator group selected prior to the granting of the award. The Bank uses a probability-weighted-average of potential outcomes to estimate the multiplier impact. The share-based payment expense is recognized over the vesting period except where the employee is eligible to retire prior to the vesting date; in which case, the expense is recognized between the grant date and the date the employee is eligible to retire. This expense varies based on changes in the Bank's share price and the Bank's performance compared to the performance measures. Upon vesting, the units are paid in cash to the employee. As at October 31, 2020, there were 7,786,944 units (2019 – 7,634,641) outstanding subject to performance criteria, of which 5,982,171 units were vested (2019 – 6,007,448).

Deferred Performance Plan

Under the Deferred Performance Plan, a portion of the bonus received by Global Banking and Markets employees in 2017 and prior years (which is accrued and expensed in the year to which it relates) is allocated to qualifying employees in the form of units. These units are subsequently paid in cash to the employees over each of the following three years. Changes in the value of the units, which arise from fluctuations in the market price of the Bank's common shares, are expensed in the same manner as the Bank's other liability-classified share-based payment plans in the salaries and employee benefits expense in the Consolidated Statement of Income. As at October 31, 2020, there were 168,580 units outstanding (2019 – 558,100). November 30, 2017 was the last grant under this plan, there will be no further grants.

27 Corporate Income Taxes

Corporate income taxes recorded in the Bank's consolidated financial statements for the years ended October 31 are as follows:

(a) Components of income tax provision

For the year ended October 31 ($ millions)	2020	2019	2018
Provision for income taxes in the Consolidated Statement of Income:			
Current income taxes:			
Domestic:			
Federal	**$ 635**	$ 525	$ 797
Provincial	**529**	444	633
Adjustments related to prior periods	**(29)**	5	(25)
Foreign	**1,053**	1,215	994
Adjustments related to prior periods	**24**	(48)	(14)
	2,212	2,141	2,385
Deferred income taxes:			
Domestic:			
Federal	**(159)**	174	34
Provincial	**(97)**	103	16
Foreign	**(413)**	54	(53)
	(669)	331	(3)
Total provision for income taxes in the Consolidated Statement of Income	**$ 1,543**	$ 2,472	$ 2,382
Provision for income taxes in the Consolidated Statement of Changes in Equity:			
Current income taxes	**$ 149**	$ (108)	$ (136)
Deferred income taxes	**(212)**	60	(193)
	(63)	(48)	(329)
Reported in:			
Other Comprehensive Income	**(63)**	(33)	(145)
Retained earnings	**–**	(18)	(194)
Accumulated Other Comprehensive Income	**–**	–	18
Common shares	**–**	–	(10)
Other reserves	**–**	3	2
Total provision for income taxes in the Consolidated Statement of Changes in Equity	**(63)**	(48)	(329)
Total provision for income taxes	**$ 1,480**	$ 2,424	$ 2,053
Provision for income taxes in the Consolidated Statement of Income includes:			
Deferred tax expense (benefit) relating to origination/reversal of temporary differences	**$ (672)**	$ 329	$ 64
Deferred tax expense (benefit) of tax rate changes	**3**	2	(2)
Deferred tax expense (benefit) of unrecognized tax losses, tax credits and temporary differences	**–**	–	(65)
	$ (669)	$ 331	$ (3)

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(b) Reconciliation to statutory rate

Income taxes in the Consolidated Statement of Income vary from the amounts that would be computed by applying the composite federal and provincial statutory income tax rate for the following reasons:

For the year ended October 31 ($ millions)	2020 Amount	2020 Percent of pre-tax income	2019 Amount	2019 Percent of pre-tax income	2018 Amount	2018 Percent of pre-tax income
Income taxes at Canadian statutory rate	**$ 2,209**	**26.3%**	$ 2,983	26.5%	$ 2,943	26.5%
Increase (decrease) in income taxes resulting from:						
Lower average tax rate applicable to subsidiaries and foreign branches	**(489)**	**(5.8)**	(300)	(2.7)	(439)	(3.9)
Tax-exempt income from securities	**(207)**	**(2.4)**	(221)	(2.0)	(90)	(0.8)
Deferred income tax effect of substantively enacted tax rate changes	**3**	**–**	2	–	(2)	–
Other, net	**27**	**0.3**	8	0.1	(30)	(0.3)
Total income taxes and effective tax rate	**$ 1,543**	**18.4%**	$ 2,472	21.9%	$ 2,382	21.5%

(c) Deferred taxes

Significant components of the Bank's deferred tax assets and liabilities are as follows:

October 31 ($ millions)	Statement of Income For the year ended 2020	Statement of Income For the year ended 2019	Statement of Financial Position As at 2020	Statement of Financial Position As at 2019
Deferred tax assets:				
Loss carryforwards	**$ 60**	$ 48	**$ 226**	$ 286
Allowance for credit losses	**(718)**	(13)	**1,380**	767
Deferred compensation	**44**	34	**164**	208
Deferred income	**112**	15	**352**	475
Property and equipment	**(35)**	112	**368**	321
Pension and other post-retirement benefits	**(52)**	(44)	**980**	853
Securities	**(26)**	(14)	**187**	161
Lease liabilities	**49**	–	**827**	–
Other	**(78)**	(195)	**650**	633
Total deferred tax assets	**$ (644)**	$ (57)	**$ 5,134**	$ 3,704
Deferred tax liabilities:				
Cash flow hedges	**$ –**	$ –	**$ 360**	$ 317
Deferred compensation	**(25)**	(48)	**121**	109
Deferred income	**(15)**	(31)	**15**	178
Property and equipment	**158**	(20)	**849**	132
Pension and other post-retirement benefits	**(7)**	(67)	**90**	150
Securities	**(40)**	(12)	**201**	158
Investment in subsidiaries and associates	**82**	(116)	**98**	180
Intangible assets	**(1)**	(5)	**1,837**	1,836
Other	**(127)**	(89)	**451**	381
Total deferred tax liabilities	**$ 25**	$ (388)	**$ 4,022**	$ 3,441
Net deferred tax assets (liabilities)(1)	**$ (669)**	$ 331	**$ 1,112**	$ 263

(1) For Consolidated Statement of Financial Position presentation, deferred tax assets and liabilities are assessed by legal entity. As a result, the net deferred tax assets of $1,112 (2019 – $263) are represented by deferred tax assets of $2,185 (2019 – $1,570), and deferred tax liabilities of $1,073 (2019 – $1,307) on the Consolidated Statement of Financial Position.

The major changes to net deferred taxes were as follows:

For the year ended October 31 ($ millions)	2020	2019
Balance at beginning of year	**$ 263**	$ 733
Deferred tax benefit (expense) for the year recorded in income	**669**	(331)
Deferred tax benefit (expense) for the year recorded in equity	**212**	(60)
Acquired in business combinations	**–**	(56)
Disposed in divestitures	**9**	–
Other	**(41)**	(23)
Balance at end of year	**$ 1,112**	$ 263

The tax related to temporary differences, unused tax losses and unused tax credits for which no deferred tax asset is recognized in the Consolidated Statement of Financial Position amounts to $15 million (October 31, 2019 – $40 million). The amount related to unrecognized losses is $15 million, which will expire as follows: $6 million in 2021 and $9 million in 2023.

Included in the net deferred tax asset are tax benefits of $177 million (2019 – $52 million) that have been recognized in certain Canadian and foreign subsidiaries that have incurred losses in either the current or the preceding year. In determining if it is appropriate to recognize these tax benefits, the Bank relied on projections of future taxable profits.

The amount of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures for which deferred tax liabilities have not been recognized at October 31, 2020 is approximately $35 billion (2019 – $36 billion).

Reassessment of dividend deductions

Since 2016, the Bank has received reassessments totaling $808 million of tax and interest as a result of the Canada Revenue Agency denying the tax deductibility of certain Canadian dividends received during the 2011–2014 taxation years. In June 2020, the Bank received a reassessment for $217 million of tax and interest in respect of certain Canadian dividends received during the 2015 taxation year. The circumstances of the dividends subject to these reassessments are similar to those prospectively addressed by rules introduced in 2015 and 2018. The Bank is confident that its tax filing position was appropriate and in accordance with the relevant provisions of the Income Tax Act (Canada) and intends to vigorously defend its position.

28 Employee Benefits

The Bank sponsors a number of employee benefit plans, including pensions (defined benefit and defined contribution) and other benefit plans (post-retirement benefits and other long-term employee benefits) for most of its employees globally. The information presented below relates to the Bank's principal plans; other plans operated by certain subsidiaries of the Bank are not considered material and are not included in these disclosures.

Global pension plans

The principal pension plans include plans in Canada, the US, Mexico, the UK, Ireland, Jamaica, Trinidad & Tobago and other countries in the Caribbean in which the Bank operates. The Bank has a strong and well defined governance structure to manage these global obligations. The investment policy for each principal plan is reviewed periodically and all plans are in good standing with respect to legislation and local regulations.

Actuarial valuations for funding purposes for the Bank's funded pension plans are conducted as required by applicable legislation. The purpose of the actuarial valuation is to determine the funded status of the plans on a going-concern and statutory basis and to determine the required contributions. The plans are funded in accordance with applicable pension legislation and the Bank's funding policies such that future benefit promises based on plan provisions are well secured. The assumptions used for the funding valuations are set by independent plan actuaries on the basis of the requirements of the local actuarial standards of practice and statutes.

Scotiabank Pension Plan (Canada)

The most significant pension plan is the Scotiabank Pension Plan (SPP) in Canada, which includes a closed defined benefit (DB) component. New employees hired in Canada on or after May 1, 2018, participate in a defined contribution (DC) component only. As the administrator of the SPP, the Bank has established a well-defined governance structure and policies to maintain compliance with legislative and regulatory requirements under OSFI and the Canada Revenue Agency. The Bank appoints a number of committees to oversee and make decisions related to the administration of the SPP. Certain committees are also responsible for the investment of the assets of the SPP Fund and for monitoring the investment managers and performance.

- The Human Resources Committee (HRC) of the Board approves the charter of the Pension Administration and Investment Committee (PAIC), reviews reports, and approves the investment policy. The HRC also reviews and recommends any amendments to the SPP to the Board of Directors.
- PAIC is responsible for recommending the investment policy to the HRC, for appointing and monitoring investment managers, and for reviewing auditor and actuary reports. PAIC also monitors the administration of member pension benefits. PAIC has independent member representation on the committee.
- The Scotiabank Master Trust Committee (MTC) invests assets in accordance with the investment policy and all applicable legislation. The MTC assigns specific mandates to investment managers.
- The Capital Accumulation Plans (CAP) Committee is responsible for the administration and investment of the DC component of the SPP including the selection and monitoring of investment options available to DC participants.

Actuarial valuations for funding purposes for the SPP are conducted on an annual basis. The most recent funding valuation was conducted as of November 1, 2019. Contributions are being made to the SPP in accordance with this valuation and are shown in the table in b) below. The assumptions used for the funding valuation are set by independent plan actuaries on the basis of the requirements of the Canadian Institute of Actuaries and applicable regulation.

Other benefit plans

The principal other benefit plans include plans in Canada, the US, Mexico, Uruguay, the UK, Jamaica, Trinidad & Tobago, Colombia and other countries in the Caribbean in which the Bank operates. The most significant other benefit plans provided by the Bank are in Canada.

Key assumptions

The financial information reported below in respect of pension and other benefit plans is based on a number of assumptions. The most significant assumption is the discount rate used to determine the defined benefit obligation, which is set by reference to the yields on high quality corporate bonds that have durations that match the terms of the Bank's obligations. Separate discount rates are used to determine the annual benefit expense in Canada and the US. These rates are determined with reference to the yields on high quality corporate bonds with durations that match the various components of the annual benefit expense. The discount rate used to determine the annual benefit expense for all other plans continues to be the same as the rate used to determine the defined benefit obligation. Other assumptions set by management are determined in reference to market conditions, plan-level experience, best practices and future expectations. The key weighted-average assumptions used by the Bank for the measurement of the benefit obligation and benefit expense for all of the Bank's principal plans are summarized in the table in f) below.

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Risk management

The Bank's defined benefit pension plans and other benefit plans expose the Bank to a number of risks. Some of the more significant risks include interest rate risk, investment risk, longevity risk and health care cost increases, among others. These risks could result in higher defined benefit expense and a higher defined benefit obligation to the extent that:

- there is a decline in discount rates; and/or
- plan assets returns are less than expected; and/or
- plan members live longer than expected; and/or
- health care costs are higher than assumed.

In addition to the governance structure and policies in place, the Bank manages risks by regularly monitoring market developments and asset investment performance. The Bank also monitors regulatory and legislative changes along with demographic trends and revisits the investment strategy and/or plan design as warranted.

(a) Relative size of plan obligations and assets

	Pension plans			Other benefit plans	
	Canada				
For the year ended October 31, 2020	SPP	Other	International	Canada	International
Percentage of total benefit obligations	**72%**	**15%**	**13%**	**56%**	**44%**
Percentage of total plan assets	**72%**	**10%**	**18%**	**0%**	**100%**
Percentage of total benefit expense[1]	**78%**	**20%**	**2%**	**36%**	**64%**

	Pension plans			Other benefit plans	
	Canada				
For the year ended October 31, 2019	SPP	Other	International	Canada	International
Percentage of total benefit obligations	70%	15%	15%	54%	46%
Percentage of total plan assets	71%	9%	20%	1%	99%
Percentage of total benefit expense[1]	75%	22%	3%	40%	60%

(1) Excludes non-routine benefit expense items such as past service costs, curtailment charges and settlement charges.

(b) Cash contributions and payments

The table below shows the cash contributions and payments made by the Bank to its principal plans in 2020, and the two prior years.

Contributions to the principal plans for the year ended October 31 ($ millions)	**2020**	2019	2018
Defined benefit pension plans (cash contributions to fund the plans, including paying beneficiaries under the unfunded pension arrangements)			
SPP (excluding DC provision)	**$ 218**	$ 196	$ 238
All other plans	**158**	53	78
Other benefit plans (cash contributions mainly in the form of benefit payments to beneficiaries)	**53**	78	61
Defined contribution pension and other benefit plans (cash contributions)	**90**	69	41
Total contributions[1]	**$ 519**	$ 396	$ 418

(1) Based on preliminary estimates, the Bank expects to make contributions of $295 to the SPP (excluding the DC provision), $59 to all other defined benefit pension plans, $62 to other benefit plans and $107 to all defined contribution plans for the year ending October 31, 2021.

(c) Funded and unfunded plans

The excess (deficit) of the fair value of assets over the benefit obligation at the end of the year includes the following amounts for plans that are wholly unfunded and plans that are wholly or partly funded.

	Pension plans			Other benefit plans		
As at October 31 ($ millions)	**2020**	2019	2018	**2020**	2019	2018
Benefit obligation						
Benefit obligation of plans that are wholly unfunded	**$ 476**	$ 459	$ 400	**$ 1,139**	$ 1,157	$ 1,101
Benefit obligation of plans that are wholly or partly funded	**9,873**	9,248	7,868	**281**	300	273
Funded status						
Benefit obligation of plans that are wholly or partly funded	**$ 9,873**	$ 9,248	$ 7,868	**$ 281**	$ 300	$ 273
Fair value of assets	**8,541**	8,439	8,037	**158**	193	240
Excess (deficit) of fair value of assets over benefit obligation of wholly or partly funded plans	**$ (1,332)**	$ (809)	$ 169	**$ (123)**	$ (107)	$ (33)
Benefit obligation of plans that are wholly unfunded	**476**	459	400	**1,139**	1,157	1,101
Excess (deficit) of fair value of assets over total benefit obligation	**$ (1,808)**	$ (1,268)	$ (231)	**$ (1,262)**	$ (1,264)	$ (1,134)
Effect of asset limitation and minimum funding requirement	**(134)**	(2)	(2)	**–**	–	–
Net asset (liability) at end of year	**$ (1,942)**	$ (1,270)	$ (233)	**$ (1,262)**	$ (1,264)	$ (1,134)

(d) Financial information

The following tables present financial information related to the Bank's principal plans.

For the year ended October 31 ($ millions)	Pension plans 2020	Pension plans 2019	Pension plans 2018	Other benefit plans 2020	Other benefit plans 2019	Other benefit plans 2018
Change in benefit obligation						
Benefit obligation at beginning of year	**$ 9,707**	$ 8,268	$ 8,842	**$ 1,457**	$ 1,374	$ 1,658
Current service cost	**369**	291	334	**28**	26	30
Interest cost on benefit obligation	**290**	331	309	**62**	72	70
Employee contributions	**26**	25	22	**–**	–	–
Benefits paid	**(467)**	(770)	(1,012)	**(75)**	(96)	(90)
Actuarial loss (gain)	**531**	1,590	(495)	**(17)**	120	(96)
Past service cost	**–**	7	5	**(7)**	(9)	(196)(2)
Business acquisition	**–**	(4)	264	**(6)**	1	6
Settlements	**(115)**	(2)	(2)	**–**	(45)	–
Foreign exchange	**8**	(29)	1	**(22)**	14	(8)
Benefit obligation at end of year	**$ 10,349**	$ 9,707	$ 8,268	**$ 1,420**	$ 1,457	$ 1,374
Change in fair value of assets						
Fair value of assets at beginning of year	**8,439**	8,037	8,329	**193**	240	266
Interest income on fair value of assets	**268**	331	305	**15**	23	20
Return on plan assets in excess of (less than) interest income on fair value of assets	**46**	634	(166)	**(13)**	(16)	(11)
Employer contributions	**376**	249	316	**53**	78	61
Employee contributions	**26**	25	22	**–**	–	–
Benefits paid	**(467)**	(770)	(1,012)	**(75)**	(96)	(90)
Administrative expenses	**(14)**	(17)	(14)	**–**	–	–
Business acquisition	**–**	–	251	**–**	–	–
Settlements	**(105)**	(2)	(2)	**–**	(46)	–
Foreign exchange	**(28)**	(48)	8	**(15)**	10	(6)
Fair value of assets at end of year	**$ 8,541**	$ 8,439	$ 8,037	**$ 158**	$ 193	$ 240
Funded status						
Excess (deficit) of fair value of assets over benefit obligation at end of year	**(1,808)**	(1,268)	(231)	**(1,262)**	(1,264)	(1,134)
Effect of asset limitation and minimum funding requirement (1)	**(134)**	(2)	(2)	**–**	–	–
Net asset (liability) at end of year	**$ (1,942)**	$ (1,270)	$ (233)	**$ (1,262)**	$ (1,264)	$ (1,134)
Recorded in:						
Other assets in the Bank's Consolidated Statement of Financial Position	**260**	422	360	**–**	–	–
Other liabilities in the Bank's Consolidated Statement of Financial Position	**(2,202)**	(1,692)	(593)	**(1,262)**	(1,264)	(1,134)
Net asset (liability) at end of year	**$ (1,942)**	$ (1,270)	$ (233)	**$ (1,262)**	$ (1,264)	$ (1,134)
Annual benefit expense						
Current service cost	**369**	291	334	**28**	26	30
Net interest expense (income)	**22**	–	7	**47**	49	50
Administrative expenses	**17**	14	12	**–**	–	–
Past service costs	**–**	7	5	**(7)**	(9)	(196)(2)
Amount of settlement (gain) loss recognized	**(10)**	–	–	**–**	1	–
Remeasurement of other long-term benefits	**–**	–	–	**–**	(5)	(10)
Benefit expense (income) recorded in the Consolidated Statement of Income	**$ 398**	$ 312	$ 358	**$ 68**	$ 62	$ (126)
Defined contribution benefit expense	**$ 89**	$ 66	$ 41	**$ 1**	$ 3	$ –
Remeasurements						
(Return) on plan assets in excess of interest income on fair value of assets	**(46)**	(634)	166	**13**	17	11
Actuarial loss (gain) on benefit obligation	**531**	1,590	(495)	**(17)**	124	(86)
Change in the asset limitation	**139**	–	(40)	**–**	–	–
Remeasurements recorded in OCI	**$ 624**	$ 956	$ (369)	**$ (4)**	$ 141	$ (75)
Total benefit cost	**$ 1,111**	$ 1,334	$ 30	**$ 65**	$ 206	$ (201)
Additional details on actual return on assets and actuarial (gains) and losses						
Actual return on assets (net of administrative expenses)	**$ 300**	$ 948	$ 125	**$ 2**	$ 7	$ 9
Actuarial (gains) and losses from changes in demographic assumptions	**(65)**	(5)	(148)	**(53)**	(35)	(23)
Actuarial (gains) and losses from changes in financial assumptions	**524**	1,496	(548)	**49**	150	(92)
Actuarial (gains) and losses from changes in experience	**72**	99	201	**(13)**	5	19
Additional details on fair value of pension plan assets invested						
In Scotiabank securities (stock, bonds)	**293**	392	377	**21**	–	3
In property occupied by Scotiabank	**4**	4	4	**–**	–	–
Change in asset ceiling/onerous liability						
Asset ceiling /onerous liability at end of prior year	**2**	2	39	**–**	–	–
Interest expense	**–**	–	3	**–**	–	–
Remeasurements	**139**	–	(40)	**–**	–	–
Foreign exchange	**(7)**	–	–	**–**	–	–
Asset ceiling /onerous liability at end of year	**$ 134**	$ 2	$ 2	**$ –**	$ –	$ –

(1) The recognized asset is limited by the present value of economic benefits available from a reduction in future contributions to a plan and from the ability to pay plan expenses from the fund.
(2) The past service cost for other benefit plans includes a decrease of $203 million in the first quarter of fiscal 2018, related to modifications to the Bank's post-retirement benefits plan.

(e) Maturity profile of the defined benefit obligation

The weighted average duration of the total benefit obligation at October 31, 2020 is 15.9 years (2019 – 15.7 years, 2018 – 14.4 years).

	Pension plans			Other benefit plans		
For the year ended October 31	**2020**	2019	2018	**2020**	2019	2018
Disaggregation of the benefit obligation (%)						
Canada						
Active members	**55%**	53%	57%	**6%**	6%	9%
Inactive and retired members	**45%**	47%	43%	**94%**	94%	91%
Total	**100%**	100%	100%	**100%**	100%	100%
Mexico						
Active members	**25%**	25%	26%	**49%**	49%	54%
Inactive and retired members	**75%**	75%	74%	**51%**	51%	46%
Total	**100%**	100%	100%	**100%**	100%	100%
United States						
Active members	**40%**	42%	45%	**34%**	38%	34%
Inactive and retired members	**60%**	58%	55%	**66%**	62%	66%
Total	**100%**	100%	100%	**100%**	100%	100%

(f) Key assumptions (%)

The key weighted-average assumptions used by the Bank for the measurement of the benefit obligation and benefit expense for all of the Bank's principal plans are summarized as follows:

	Pension plans			Other benefit plans		
For the year ended October 31	**2020**	2019	2018	**2020**	2019	2018
Benefit obligation at end of year						
Discount rate – all plans	**3.08%**	3.32%	4.35%	**4.44%**	4.71%	5.54%
Discount rate – Canadian plans only	**2.80%**	3.10%	4.10%	**2.57%**	2.98%	3.96%
Rate of increase in future compensation(1)	**2.74%**	2.70%	2.80%	**4.31%**	3.86%	3.83%
Benefit expense (income) for the year						
Discount rate – All plans						
Discount rate for defined benefit obligations	**3.32%**	4.35%	3.90%	**4.71%**	5.54%	4.86%
Discount rate for net interest cost	**3.06%**	4.09%	3.55%	**4.54%**	5.37%	4.60%
Discount rate for service cost	**3.38%**	4.41%	4.04%	**4.83%**	5.78%	5.11%
Discount rate for interest on service cost	**3.20%**	4.14%	3.77%	**4.72%**	5.67%	5.04%
Discount rate – Canadian plans only						
Discount rate for defined benefit obligations	**3.10%**	4.10%	3.60%	**2.98%**	3.96%	3.53%
Discount rate for net interest cost	**2.80%**	3.80%	3.20%	**2.71%**	3.70%	3.18%
Discount rate for service cost	**3.10%**	4.10%	3.70%	**3.08%**	4.07%	3.76%
Discount rate for interest on service cost	**2.90%**	3.80%	3.40%	**2.89%**	3.88%	3.66%
Rate of increase in future compensation(1)	**2.70%**	2.80%	2.76%	**3.86%**	3.83%	4.07%
Health care cost trend rates at end of year						
Initial rate	**n/a**	n/a	n/a	**5.75%**	5.80%	5.81%
Ultimate rate	**n/a**	n/a	n/a	**4.72%**	4.69%	4.66%
Year ultimate rate reached	**n/a**	n/a	n/a	**2040**	2040	2040
Assumed life expectancy in Canada (years)						
Life expectancy at 65 for current pensioners – male	**23.4**	23.4	23.3	**23.4**	23.4	23.3
Life expectancy at 65 for current pensioners – female	**24.5**	24.5	24.4	**24.5**	24.5	24.4
Life expectancy at 65, for future pensioners currently aged 45 – male	**24.4**	24.3	24.3	**24.4**	24.3	24.3
Life expectancy at 65, for future pensioners currently aged 45 – female	**25.4**	25.3	25.3	**25.4**	25.3	25.3
Assumed life expectancy in Mexico (years)						
Life expectancy at 65 for current pensioners – male	**21.3**	21.3	21.3	**21.3**	21.3	21.3
Life expectancy at 65 for current pensioners – female	**23.8**	23.8	23.8	**23.8**	23.8	23.8
Life expectancy at 65, for future pensioners currently aged 45 – male	**21.7**	21.7	21.7	**21.7**	21.7	21.7
Life expectancy at 65, for future pensioners currently aged 45 – female	**24.0**	24.0	24.0	**24.0**	24.0	24.0
Assumed life expectancy in United States (years)						
Life expectancy at 65 for current pensioners – male	**21.7**	21.9	22.7	**21.7**	21.9	22.7
Life expectancy at 65 for current pensioners – female	**23.1**	23.3	24.4	**23.1**	23.3	24.4
Life expectancy at 65, for future pensioners currently aged 45 – male	**23.1**	23.4	24.3	**23.1**	23.4	24.3
Life expectancy at 65, for future pensioners currently aged 45 – female	**24.5**	24.9	25.9	**24.5**	24.9	25.9

(1) The weighted-average rates of increase in future compensation shown for other benefit plans do not include Canadian flexible post-retirement benefits plans established in fiscal 2005, as they are not impacted by future compensation increases.

(g) Sensitivity analysis

The sensitivity analysis presented represents the impact of a change in a single assumption with other assumptions left unchanged. For purposes of the sensitivity analysis, the present value of the defined benefit obligation has been calculated using the projected unit credit method at the end of the reporting period, which is the same as that applied in calculating the defined benefit obligation recognized in the statement of financial position.

	Pension plans		Other benefit plans	
For the year ended October 31, 2020 ($ millions)	Benefit obligation	Benefit expense	Benefit obligation	Benefit expense
Impact of the following changes:				
1% decrease in discount rate	**$1,856**	**$ 118**	**$ 202**	**$ 6**
0.25% increase in rate of increase in future compensation	**94**	**11**	**1**	**–**
1% increase in health care cost trend rate	**n/a**	**n/a**	**137**	**14**
1% decrease in health care cost trend rate	**n/a**	**n/a**	**(111)**	**(11)**
1 year increase in Canadian life expectancy	**210**	**12**	**25**	**1**
1 year increase in Mexican life expectancy	**3**	**–**	**5**	**–**
1 year increase in the United States life expectancy	**4**	**–**	**5**	**–**

(h) Assets

The Bank's principal pension plans' assets are generally invested with the long-term objective of maximizing overall expected returns, at an acceptable level of risk relative to the benefit obligation. A key factor in managing long-term investment risk is asset mix. Investing the pension assets across different asset classes and geographic regions helps to mitigate risk and to minimize the impact of declines in any single asset class, particular region or type of investment. Investment managers – including related-party managers – are typically hired and assigned specific mandates within each asset class.

Pension plan asset mix guidelines are set for the long term, and are documented in each plan's investment policy. Asset mix policy typically also reflects the nature of the plan's benefit obligations. Legislation places certain restrictions on asset mix – for example, there are usually limits on concentration in any one investment. Other concentration and quality limits are also set forth in the investment policies. Derivatives are not a significant component of the investment strategy and cannot be used without specific authorization; currently, the main use of derivatives is for currency hedging. Asset mix guidelines are reviewed at least once each year, and adjusted, where appropriate, based on market conditions and opportunities. However, large asset class shifts are not common, and typically reflect a change in the pension plan's situation (e.g. plan amendments) and/or in the investment strategy. Actual asset mix is reviewed regularly, and rebalancing back to target asset mix is considered – as needed – generally on a semi-annual basis. The Bank's other benefit plans are generally not funded, with the exception of certain programs in Mexico.

The tables below show the weighted-average actual and target asset allocations for the Bank's principal plans at October 31, by asset category.

	Pension plans			Other benefit plans		
Asset category %	**Actual 2020**	Actual 2019	Actual 2018	**Actual 2020**	Actual 2019	Actual 2018
Cash and cash equivalents	**2%**	3%	4%	**1%**	1%	1%
Equity investments						
Quoted in an active market	**29%**	33%	36%	**40%**	42%	42%
Non quoted	**10%**	10%	12%	**–%**	–%	2%
	39%	43%	48%	**40%**	42%	44%
Fixed income investments						
Quoted in an active market	**5%**	13%	9%	**59%**	57%	34%
Non quoted	**41%**	30%	29%	**–%**	–%	21%
	46%	43%	38%	**59%**	57%	55%
Property						
Quoted in an active market	**–%**	–%	–%	**–%**	–%	–%
Non quoted	**1%**	1%	1%	**–%**	–%	–%
	1%	1%	1%	**–%**	–%	–%
Other						
Quoted in an active market	**3%**	–%	–%	**–%**	–%	–%
Non quoted	**9%**	10%	9%	**–%**	–%	–%
	12%	10%	9%	**–%**	–%	–%
Total	**100%**	100%	100%	**100%**	100%	100%

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Target asset allocation at October 31, 2020 Asset category %	Pension plans	Other benefit plans
Cash and cash equivalents	–%	–%
Equity investments	43%	44%
Fixed income investments	45%	56%
Property	2%	–%
Other	10%	–%
Total	100%	100%

29 Operating Segments

Scotiabank is a diversified financial services institution that provides a wide range of financial products and services to retail, commercial and corporate customers around the world. The Bank's businesses are grouped into four business lines: Canadian Banking, International Banking, Global Banking and Markets and Global Wealth Management. Other smaller business segments are included in the Other segment. The results of these business segments are based upon the internal financial reporting systems of the Bank. The accounting policies used in these segments are generally consistent with those followed in the preparation of the consolidated financial statements as disclosed in Note 3. Notable accounting measurement differences are:

- tax normalization adjustments related to the gross-up of income from associated corporations. This adjustment normalizes the effective tax rate in the divisions to better present the contribution of the associated companies to the divisional results.
- the grossing up of tax-exempt net interest income and non-interest income to an equivalent before-tax basis for those affected segments.

These differences in measurement enable comparison of net interest income and non-interest income arising from taxable and tax-exempt sources.

Changes to operating segments effective November 1, 2019

Effective November 1, 2019, Global Wealth Management became a fourth business segment. The Canadian and International businesses of Global Wealth results that were previously included in Canadian Banking's and International Banking's results, respectively, are included in Global Wealth Management results. The historical comparative segment financial information has been restated to reflect this realignment. The restated historical segment financial information of Canadian Banking, International Banking and Other did not impact the Bank's previously reported consolidated financial information.

The aggregate number of cash-generating units (CGUs) for the purposes of goodwill impairment assessment as of November 1, 2019 has increased to 5 (October 31, 2019 – 4 CGUs) with the creation of the new Global Wealth Management CGU (GWM-CGU). This has resulted in the allocation of $3.4 billion of goodwill related to the wealth business from the Canadian Banking CGU to the GWM-CGU. As at November 1, 2019, the Bank has determined that goodwill allocated to GWM-CGU is not impaired.

Scotiabank's results, and average assets and liabilities, allocated by these operating segments, are as follows:

For the year ended October 31, 2020 Taxable equivalent basis ($ millions)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other(1)(2)	Total
Net interest income(3)	$ 7,838	$ 7,603	$ 575	$ 1,435	$ (131)	$ 17,320
Non-interest income(4)(5)	2,461	3,207	4,009	3,947	392	14,016
Total revenues	10,299	10,810	4,584	5,382	261	31,336
Provision for credit losses	2,073	3,613	7	390	1	6,084
Depreciation and amortization	633	525	170	156	62	1,546
Non-interest expenses	4,178	5,418	2,708	2,317	689	15,310
Income tax expense	879	182	437	564	(519)	1,543
Net income	$ 2,536	$ 1,072	$ 1,262	$ 1,955	$ 28	$ 6,853
Net income attributable to non-controlling interests in subsidiaries	–	92	10	–	(27)	75
Net income attributable to equity holders of the Bank	2,536	980	1,252	1,955	55	6,778
Represented by:						
Net income attributable to equity holders of the Bank —relating to divested operations(6)	–	60	–	–	–	60
Net income attributable to equity holders of the Bank —relating to operations other than divested operations	2,536	920	1,252	1,955	55	6,718
Average assets ($ billions)	359	206	26	412	158	1,161
Average liabilities ($ billions)	277	155	39	379	240	1,090

(1) Includes all other smaller operating segments and corporate adjustments, such as the elimination of the tax-exempt income gross-up reported in net interest income and non-interest income and provision for income taxes for the year ended October 31, 2020 amounting to $275 to arrive at the amounts reported in the Consolidated Statement of Income, differences in the actual amount of costs incurred and charged to the operating segments.
(2) Net income attributable to equity holders includes Net gain on divestitures of $354 (pre-tax $298).
(3) Interest income is reported net of interest expense as management relies primarily on net interest income as a performance measure.
(4) Card revenues and Banking services fees are mainly earned in Canadian and International Banking. Mutual fund, Brokerage fees and Investment management and trust fees are primarily earned in Global Wealth Management. Underwriting and other advisory fees are predominantly earned in Global Banking and Markets.
(5) Includes net income (on a taxable equivalent basis) from investments in associated corporations for Canadian Banking – $56; International Banking – $243; Global Wealth Management – $13 and Other – $(70).
(6) Refer to Note 37 for closed divestitures impacting the current year.

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Taxable equivalent basis ($ millions)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other(1)(2)	Total
Net interest income(3)	$ 7,848	$ 8,353	$ 564	$ 1,396	$ (984)	$ 17,177
Non-interest income(4)(5)	2,616	4,366	3,937	3,084	(146)	13,857
Total revenues	10,464	12,719	4,501	4,480	(1,130)	31,034
Provision for credit losses	972	2,076	–	(22)	1	3,027
Depreciation and amortization	441	379	126	91	16	1,053
Non-interest expenses	4,331	6,217	2,779	2,372	(15)	15,684
Income tax expense	1,232	909	412	505	(586)	2,472
Net income	$ 3,488	$ 3,138	$ 1,184	$ 1,534	$ (546)	$ 8,798
Net income attributable to non-controlling interests in subsidiaries	–	373	18	–	17	408
Net income attributable to equity holders of the Bank	3,488	2,765	1,166	1,534	(563)	8,390
Represented by:						
Net income attributable to equity holders of the Bank – relating to divested operations(6)	–	630	17	–	–	647
Net income attributable to equity holders of the Bank – relating to operations other than divested operations	3,488	2,135	1,149	1,534	(563)	7,743
Average assets ($ billions)	340	201	25	372	118	1,056
Average liabilities ($ billions)	255	153	32	304	243	987

(1) Includes all other smaller operating segments and corporate adjustments, such as the elimination of the tax-exempt income gross-up reported in net interest income and non-interest income and provision for income taxes for the year ended October 31, 2019 amounting to $181 to arrive at the amounts reported in the Consolidated Statement of Income, differences in the actual amount of costs incurred and charged to the operating segments.
(2) Net income attributable to equity holders includes Net loss on divestitures of $308 (pre-tax $148).
(3) Interest income is reported net of interest expense as management relies primarily on net interest income as a performance measure.
(4) Card revenues and Banking services fees are mainly earned in Canadian and International Banking. Mutual fund, Brokerage fees and Investment management and trust fees are primarily earned in Global Wealth Management. Underwriting and other advisory fees are predominantly earned in Global Banking and Markets.
(5) Includes net income (on a taxable equivalent basis) from investments in associated corporations for Canadian Banking – $65; International Banking – $753; Global Wealth Management – $10 and Other – $(178).
(6) Refer to Note 37 for closed divestitures impacting the current year.

For the year ended October 31, 2018

Taxable equivalent basis ($ millions)	Canadian Banking	International Banking	Global Wealth Management	Global Banking and Markets	Other(1)	Total
Net interest income(2)	$ 7,504	$ 7,218	$ 498	$ 1,454	$ (483)	$ 16,191
Non-interest income(3)	2,907	3,475	3,486	3,074	(358)	12,584
Total revenues	10,411	10,693	3,984	4,528	(841)	28,775
Provision for credit losses	790	1,868	3	(50)	–	2,611
Depreciation and amortization	385	288	92	68	15	848
Non-interest expenses	4,426	5,412	2,467	2,165	(260)	14,210
Income tax expense	1,251	617	376	587	(449)	2,382
Net income	$ 3,559	$ 2,508	$ 1,046	$ 1,758	$ (147)	$ 8,724
Net income attributable to non-controlling interests in subsidiaries	–	162	14	–	–	176
Net income attributable to equity holders of the Bank	3,559	2,346	1,032	1,758	(147)	8,548
Represented by:						
Net income attributable to equity holders of the Bank – relating to divested operations(4)	–	565	31	–	–	596
Net income attributable to equity holders of the Bank – relating to operations other than divested operations	3,559	1,781	1,001	1,758	(147)	7,952
Average assets ($ billions)	327	165	17	321	116	946
Average liabilities ($ billions)	234	127	24	265	232	882

(1) Includes all other smaller operating segments and corporate adjustments, such as the elimination of the tax-exempt income gross-up reported in net interest income and non-interest income and provision for income taxes for the year ended October 31, 2018 amounting to $112 to arrive at the amounts reported in the Consolidated Statement of Income, differences in the actual amount of costs incurred and charged to the operating segments.
(2) Interest income is reported net of interest expense as management relies primarily on net interest income as a performance measure.
(3) Includes net income (on a taxable equivalent basis) from investments in associated corporations for Canadian Banking – $93; International Banking – $629; Global Wealth Management – $14 and Other – $(177).
(4) Refer to Note 37 for closed divestitures impacting the current year.

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Geographicalsegmentation

The following table summarizes the Bank's financial results by geographic region. Revenues and expenses which have not been allocated back to specific operating business lines are reflected in corporate adjustments.

For the year ended October 31, 2020 ($ millions)(1)(2)	Canada	United States	Mexico	Peru	Chile	Colombia	Caribbean and Central America	Other International	Total
Net interest income	**$ 8,515**	**$ 763**	**$1,661**	**$1,705**	**$1,415**	**$ 812**	**$ 1,734**	**$ 715**	**$ 17,320**
Non-interest income(1)	**8,085**	**1,375**	**724**	**605**	**677**	**449**	**753**	**1,348**	**14,016**
Total revenues(2)	**16,600**	**2,138**	**2,385**	**2,310**	**2,092**	**1,261**	**2,487**	**2,063**	**31,336**
Provision for credit losses	**2,271**	**128**	**644**	**971**	**639**	**666**	**570**	**195**	**6,084**
Non-interest expenses	**8,952**	**1,080**	**1,298**	**827**	**973**	**813**	**1,589**	**1,324**	**16,856**
Income tax expense	**967**	**192**	**98**	**116**	**78**	**(74)**	**45**	**121**	**1,543**
Subtotal	**4,410**	**738**	**345**	**396**	**402**	**(144)**	**283**	**423**	**6,853**
Net income attributable to non-controlling interests in subsidiaries	**(28)**	**–**	**7**	**16**	**91**	**(87)**	**76**	**–**	**75**
Net income attributable to equity holders of the Bank	**$ 4,438**	**$ 738**	**$ 338**	**$ 380**	**$ 311**	**$ (57)**	**$ 207**	**$ 423**	**$ 6,778**
Total average assets ($ billions)	**$ 689**	**$ 164**	**$ 41**	**$ 31**	**$ 52**	**$ 14**	**$ 35**	**$ 135**	**$ 1,161**

(1) Includes net income from investments in associated corporations for Canada – $(15); Peru – $5, Chile – $3, Caribbean and Central America – $55, and Other International – $194.
(2) Revenues are attributed to countries based on where services are performed or assets are recorded.

For the year ended October 31, 2019 ($ millions)(1)(2)	Canada	United States	Mexico	Peru	Chile	Colombia	Caribbean and Central America	Other International	Total
Net interest income	$ 7,630	$ 720	$ 1,684	$ 1,576	$ 1,613	$ 1,017	$ 2,143	$ 794	$ 17,177
Non-interest income(1)	7,304	1,189	671	790	806	567	1,048	1,482	13,857
Total revenues(3)	14,934	1,909	2,355	2,366	2,419	1,584	3,191	2,276	31,034
Provision for credit losses	981	(16)	335	523	436	362	352	54	3,027
Non-interest expenses	8,275	870	1,306	846	1,166	920	1,933	1,421	16,737
Income tax expense	1,082	267	121	248	185	117	324	128	2,472
Subtotal	4,596	788	593	749	632	185	582	673	8,798
Net income attributable to non-controlling interests in subsidiaries	1	–	14	(11)	179	124	101	–	408
Net income attributable to equity holders of the Bank	$ 4,595	$ 788	$ 579	$ 760	$ 453	$ 61	$ 481	$ 673	$ 8,390
Total average assets ($ billions)	$ 607	$ 149	$ 37	$ 28	$ 51	$ 13	$ 42	$ 129	$ 1,056

(1) Includes net income from investments in associated corporations for Canada – $(114); Peru – $7, Caribbean and Central America – $69, and Other International – $867.
(2) Prior period amounts have been restated to conform with current period presentation.
(3) Revenues are attributed to countries based on where services are performed or assets are recorded.

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For the year ended October 31, 2018 ($ millions)(1)(2)	Canada	United States	Mexico	Peru	Chile	Colombia	Caribbean and Central America	Other International	Total
Net interest income	$ 7,780	$ 691	$ 1,561	$ 1,378	$ 1,117	$ 839	$ 2,028	$ 797	$ 16,191
Non-interest income(1)	6,805	843	613	662	565	484	968	1,644	12,584
Total revenues(3)	14,585	1,534	2,174	2,040	1,682	1,323	2,996	2,441	28,775
Provision for credit losses	802	(34)	239	351	498	511	211	33	2,611
Non-interest expenses	7,683	701	1,196	770	837	723	1,795	1,353	15,058
Income tax expense	1,310	220	76	235	51	39	175	276	2,382
Subtotal	4,790	647	663	684	296	50	815	779	8,724
Net income attributable to non-controlling interests in subsidiaries	–	–	17	12	28	16	102	1	176
Net income attributable to equity holders of the Bank	$ 4,790	$ 647	$ 646	$ 672	$ 268	$ 34	$ 713	$ 778	$ 8,548
Total average assets ($ billions)	$ 565	$ 119	$ 32	$ 24	$ 33	$ 12	$ 40	$ 121	$ 946

(1) Includes net income from investments in associated corporations for Canada – $93, Peru – $9, Caribbean and Central America – $58, and Other International – $576.
(2) Prior period amounts have been restated to conform with current period presentation.
(3) Revenues are attributed to countries based on where services are performed or assets are recorded.

30 Related Party Transactions

Compensation of key management personnel of the Bank

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Bank, directly or indirectly, and comprise the directors of the Bank, the President and Chief Executive Officer, certain direct reports of the President and Chief Executive Officer and Group Heads.

For the year ended October 31 ($ millions)	2020	2019
Salaries and cash incentives(1)	**$ 19**	$ 17
Equity-based payment(2)	**30**	25
Pension and other benefits(1)	**6**	5
Total	**$ 55**	$ 47

(1) Expensed during the year.
(2) Awarded during the year.

Directors can use some or all of their director fees earned to buy common shares of the Bank at market rates through the Director's Share Purchase Plan. Non-officer directors may elect to receive all or a portion of their fees in the form of deferred stock units which vest immediately. Refer to Note 26 for further details of these plans.

Loans and deposits of key management personnel

As at October 31 ($ millions)	2020	2019
Loans	**$ 15**	$ 14
Deposits	**$ 11**	$ 9

The Bank's committed credit exposure to companies controlled by directors totaled $177.6 million as at October 31, 2020 (2019 – $18.9 million), while actual utilized amounts were $115.9 million (2019 – $3.3 million).

Transactions with associates and joint ventures

In the ordinary course of business, the Bank provides normal banking services and enters into transactions with its associated and other related corporations on terms similar to those offered to non-related parties. If these transactions are eliminated on consolidation, they are not disclosed as related party transactions. Transactions between the Bank and its associated companies and joint ventures also qualify as related party transactions and were recorded as follows:

As at and for the year ended October 31 ($ millions)	2020	2019	2018
Net income / (loss)	**$ (75)**	$ (68)	$ (64)
Loans	**203**	327	702
Deposits	**159**	194	151
Guarantees and commitments	**23**	16	123

Scotiabank principal pension plan

The Bank manages assets of $4.1 billion (2019 – $4.1 billion) which is a portion of the Scotiabank principal pension plan assets and earned $7.2 million (2019 – $7.2 million) in fees.

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31 Principal Subsidiaries and Non-Controlling Interests in Subsidiaries

(a) Principal subsidiaries(1)

The following table presents certain operating subsidiaries the Bank owns, directly or indirectly. All of these subsidiaries are included in the Bank's consolidated financial statements.

As at October 31 ($ millions)	Principal office	Carrying value of shares 2020	2019
Canadian			
1832 Asset Management L.P.	Toronto, Ontario	**$ 1,562**	$ 1,691
BNS Investments Inc.	Toronto, Ontario	**14,510**	14,292
Montreal Trust Company of Canada	Montreal, Quebec		
The Bank of Nova Scotia Trust Company	Toronto, Ontario	**155**	127
National Trust Company	Stratford, Ontario	**359**	449
Roynat Inc.	Calgary, Alberta	**409**	439
Scotia Capital Inc.	Toronto, Ontario	**2,338**	1,634
Scotia Dealer Advantage Inc.	Burnaby, British Columbia	**614**	642
Scotia Mortgage Corporation	Toronto, Ontario	**760**	675
Scotia Securities Inc.	Toronto, Ontario	**49**	47
Tangerine Bank	Toronto, Ontario	**3,264**	3,629
Jarislowsky, Fraser Limited	Montreal, Quebec	**957**	952
MD Financial Management Inc.	Ottawa, Ontario	**2,645**	2,639
International			
Scotiabank Colpatria S.A. (51%)	Bogota, Colombia	**1,004**	1,251
The Bank of Nova Scotia Berhad	Kuala Lumpur, Malaysia	**332**	326
BNS International (Bahamas) Limited(2)	Nassau, Bahamas	**18,510**	19,824
BNS Asia Limited	Singapore		
The Bank of Nova Scotia Trust Company (Bahamas) Limited	Nassau, Bahamas		
Grupo BNS de Costa Rica, S.A.	San Jose, Costa Rica		
Scotiabank & Trust (Cayman) Ltd.	Grand Cayman, Cayman Islands		
Scotiabank (Bahamas) Limited	Nassau, Bahamas		
Scotiabank (British Virgin Islands) Limited(3)	Road Town, Tortola, B.V.I.		
Scotiabank (Hong Kong) Limited	Hong Kong, China		
Scotiabank (Ireland) Designated Activity Company	Dublin, Ireland		
Scotiabank (Turks and Caicos) Ltd.	Providenciales, Turks and Caicos Islands		
BNS International (Panama) S.A.	Panama City, Panama		
Grupo Financiero Scotiabank Inverlat, S.A. de C.V. (97.4%)	Mexico City, Mexico	**4,320**	4,512
Nova Scotia Inversiones Limitada	Santiago, Chile	**5,255**	5,096
Scotiabank Chile S.A. (76.01%)	Santiago, Chile		
Scotia Holdings (US) Inc.(4)	New York, New York		
Scotia Capital (USA) Inc.(4)(5)	New York, New York		
Scotiabank Brasil S.A. Banco Multiplo	Sao Paulo, Brazil	**282**	382
Scotiabank Caribbean Holdings Ltd.	Bridgetown, Barbados	**1,842**	1,842
Scotia Group Jamaica Limited (71.8%)	Kingston, Jamaica		
The Bank of Nova Scotia Jamaica Limited	Kingston, Jamaica		
Scotia Investments Jamaica Limited	Kingston, Jamaica		
Scotiabank (Belize) Ltd.	Belize City, Belize		
Scotiabank Trinidad and Tobago Limited (50.9%)	Port of Spain, Trinidad and Tobago		
Scotiabank (Panama) S.A.	Panama City, Panama		
Scotiabank Uruguay S.A.	Montevideo, Uruguay	**472**	489
Scotiabank de Puerto Rico(3)	San Juan, Puerto Rico	**–**	1,017
Scotiabank El Salvador, S.A.(3)	San Salvador, El Salvador	**–**	325
Scotiabank Europe plc	London, United Kingdom	**2,505**	2,418
Scotiabank Peru Holding S.A.	Lima, Peru	**5,677**	5,676
Scotiabank Peru S.A.A. (98.05%)	Lima, Peru		
Profuturo AFP S.A.	Lima, Peru		
Scotiabank Republica Dominicana, S.A. – Banco Multiple(6)	Santo Domingo, Dominican Republic	**808**	402
Scotiabank Barbados Limited	Bridgetown, Barbados	**219**	-

(1) The Bank (or immediate parent of an entity) owns 100% of the outstanding voting shares of each subsidiary unless otherwise noted.
(2) Formerly The Bank of Nova Scotia International Limited. Effective April 5, 2019, the name was changed to BNS International (Bahamas) Limited.
(3) These subsidiaries were divested during the year.
(4) The carrying value of this subsidiary is included with that of its parent, BNS Investments Inc.
(5) The carrying value of this subsidiary is included with that of its parent, Scotia Holdings (US) Inc.
(6) Formerly Banco Dominicano del Progreso, S.A. – Banco Multiple. Effective June 1, 2020, the name was changed to Scotiabank, Republica Dominicana, S.A. - Banco Multiple.

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Subsidiaries may have a different reporting date from that of the Bank of October 31. Dates may differ for a variety of reasons including local reporting requirements or tax laws. In accordance with our accounting policies, for the purpose of inclusion in the consolidated financial statements of the Bank, adjustments are made where significant for subsidiaries with different reporting dates.

(b) Non–controlling interests in subsidiaries

The Bank's significant non-controlling interests in subsidiaries are comprised of the following entities:

	As at and for the year ended					
		2020			2019	
	Non-controlling interest %	Non-controlling interests in subsidiaries	Dividends paid to non-controlling interest	Non-controlling interests in subsidiaries	Dividends paid to non-controlling interest
Scotiabank Chile S.A.(1)	**24.0%**	**$ 1,050**	**$ 71**	$ 1,017	$ 38
Scotiabank Colpatria S.A.(2)	**49.0%**	**387**	**13**	564	12
Scotia Group Jamaica Limited	**28.2%**	**288**	**14**	323	40
Scotiabank Trinidad and Tobago Limited	**49.1%**	**381**	**50**	380	52
Other	**0.1% – 49.0%(3)**	**270**	**–**	386	8
Total		**$ 2,376**	**$ 148**	$ 2,670	$ 150

(1) Non–controlling interest holders for Scotiabank Chile S.A. have the right at any time to sell all or a portion of their holdings to the Bank at fair market value that can be settled at the Bank's discretion, by issuance of common shares or cash.
(2) Non–controlling interest holders for Scotiabank Colpatria S.A. have a right to sell their holding to the Bank after the end of 7th anniversary (January 17, 2019) and at subsequent pre–agreed intervals, into the future, at fair market value that can be settled at the Bank's discretion, by issuance of common shares or cash.
(3) Range of non–controlling interest % for other subsidiaries.

Summarized financial information of the Bank's subsidiaries with significant non–controlling interests are as follows:

	As at and for the year ended October 31, 2020				As at and for the year ended October 31, 2019			
($ millions)	Revenue	Total comprehensive income (loss)	Total assets	Total liabilities	Revenue	Total comprehensive income (loss)	Total assets	Total liabilities
Total	**$ 4,098**	**$ (136)**	**$ 89,808**	**$ 82,107**	$ 4,700	$ 313	$ 86,435	$ 78,851

32 Interest Income and Expense

For the year ended October 31 ($ millions)	**2020**		2019		2018	
	Interest income	Interest expense	Interest income	Interest expense	Interest income	Interest expense
Measured at amortized cost(1)	**$ 28,113**	**$ 12,211**	$ 30,996	$ 15,575	$ 26,649	$ 11,757
Measured at FVOCI(1)	**1,060**	**–**	1,440	–	1,205	–
	29,173	**12,211**	32,436	15,575	27,854	11,757
Other	**539(2)**	**181(3)**	348(2)	32	213(2)	119
Total	**$ 29,712**	**$ 12,392**	$ 32,784	$ 15,607	$ 28,067	$ 11,876

(1) The interest income/expense on financial assets/liabilities are calculated using the effective interest method.
(2) Includes dividend income on equity securities.
(3) The interest on lease liabilities was $117; prior period amounts have not been restated (refer to Notes 3 and 4).

33 Trading Revenues

The following table presents details of trading revenues.

For the fiscal years ($ millions)	**2020**	2019	2018
Trading-related revenue (Non-TEB)(1)			
Net interest income			
Non-interest income	**$ 112**	$ 67	$ 130
Trading revenues	**2,411**	1,488	1,420
Other fees and commissions	**205**	379	405
Total - Reported	**$ 2,728**	$ 1,934	$ 1,955
Trading-related revenue by product (Non-TEB)			
Interest rate and credit	**$ 1,552**	$ 644	$ 559
Equities	**371**	532	686
Foreign exchange	**396**	273	299
Commodities	**263**	216	230
Other	**146**	269	181
Total trading-related revenue (Non-TEB)	**$ 2,728**	$ 1,934	$ 1,955

(1) Trading-related revenue consists of net interest income and non-interest income. Included are unrealized gains and losses on security positions held, realized gains and losses from the purchase and sale of securities, fees and commissions from securities borrowing and lending activities, and gains and losses on trading derivatives. Underwriting and other advisory fees, which are shown separately in the consolidated statement of income, are excluded. On TEB basis, total trading-related revenue was $2,988 (2019 – $2,098; 2018 – $2,056).

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34 Earnings Per Share

For the year ended October 31 ($ millions)	2020	2019	2018
Basic earnings per common share			
Net income attributable to common shareholders	**$ 6,582**	$ 8,208	$ 8,361
Weighted average number of common shares outstanding (millions)	**1,212**	1,222	1,213
Basic earnings per common share(1) (in dollars)	**$ 5.43**	$ 6.72	$ 6.90
Diluted earnings per common share			
Net income attributable to common shareholders	**$ 6,582**	$ 8,208	$ 8,361
Dilutive impact of share-based payment options and others(2)	**6**	142	16
Net income attributable to common shareholders (diluted)	**$ 6,588**	$ 8,350	$ 8,377
Weighted average number of common shares outstanding (millions)	**1,212**	1,222	1,213
Dilutive impact of share-based payment options and others(2) (millions)	**31**	29	16
Weighted average number of diluted common shares outstanding (millions)	**1,243**	1,251	1,229
Diluted earnings per common share(1) (in dollars)	**$ 5.30**	$ 6.68	$ 6.82

(1) Earnings per share calculations are based on full dollar and share amounts.
(2) Certain tandem stock appreciation rights or options as well as acquisition-related put/call options that the Bank may settle at its own discretion by issuing common shares were not included in the calculation of diluted earnings per share as they were anti-dilutive.

35 Guarantees, Commitments and Pledged Assets

(a) Guarantees

The Bank enters into various types of guarantees and indemnifications in the normal course of business. Guarantees represent an undertaking to another party to make a payment to that party when certain specified events occur. The various guarantees and indemnifications that the Bank provides with respect to its customers and other third parties are presented below:

As at October 31 ($ millions)	2020 Maximum potential amount of future payments(1)	2019 Maximum potential amount of future payments(1)
Standby letters of credit and letters of guarantee	**$ 34,836**	$ 35,577
Liquidity facilities	**4,248**	3,758
Derivative instruments	**4,866**	7,104
Indemnifications	**1,390**	583

(1) The maximum potential amount of future payments represents those guarantees that can be quantified and excludes other guarantees that cannot be quantified. As many of these guarantees will not be drawn upon and the maximum potential amount of future payments listed above does not consider the possibility of recovery under recourse or collateral provisions, the above amounts are not indicative of future cash requirements, credit risk, or the Bank's expected losses from these arrangements.

(i) Standby letters of credit and letters of guarantee

Standby letters of credit and letters of guarantee are irrevocable undertakings by the Bank on behalf of a customer, to make payments to a third party in the event that the customer is unable to meet its obligations to the third party. Generally, the term of these guarantees does not exceed four years. The types and amounts of collateral security held by the Bank for these guarantees is generally the same as for loans. As at October 31, 2020, $4 million (2019 – $4 million) was included in other liabilities in the Consolidated Statement of Financial Position with respect to these guarantees.

(ii) Liquidity facilities

The Bank's backstop liquidity facilities are committed liquidity and provided to asset-backed commercial paper conduits, administered by the Bank. These facilities generally provide an alternative source of financing in the event market disruption prevents the conduit from issuing commercial paper or, in some cases, when certain specified conditions or performance measures are not met. These facilities generally have a term of up to three years.

(iii) Derivative instruments

The Bank enters into written credit derivative contracts under which a counterparty is compensated for losses on a specified referenced asset, typically a loan or bond, if certain events occur. The Bank also enters into written option contracts under which a counterparty is granted the right, but not the obligation, to sell a specified quantity of a financial instrument at a pre-determined price on or before a set date. These written option contracts are normally referenced to interest rates, foreign exchange rates, commodity prices or equity prices. Typically, a corporate or government entity is the counterparty to the written credit derivative and option contracts that meet the characteristics of guarantees described above. The maximum potential amount of future payments disclosed in the table above relates to written credit derivatives, puts and floors. However, these amounts exclude certain derivatives contracts, such as written caps, as the nature of these contracts prevents quantification of the maximum potential amount of future payments. As at October 31, 2020 $805 million (2019 – $617 million) was included in derivative instrument liabilities in the Consolidated Statement of Financial Position with respect to these derivative instruments.

(iv) Indemnifications

In the ordinary course of business, the Bank enters into many contracts which contain indemnification provisions, such as purchase contracts, service agreements, trademark licensing agreements, director / officer contracts, escrow arrangements, sales of assets or businesses, outsourcing agreements, leasing arrangements, clearing system arrangements, securities lending agency agreements and structured transactions. The Bank

cannot estimate the maximum potential future amount that may be payable. The Bank has not made any significant payments under such indemnifications. Historically, the Bank has not made any significant payments under these indemnities. As at October 31, 2020, $1 million (2019 – $2 million) was included in other liabilities in the Consolidated Statement of Financial Position with respect to indemnifications.

(b) Other indirect commitments

In the normal course of business, various other indirect commitments are outstanding which are not reflected on the Consolidated Statement of Financial Position. These may include:

- Commercial letters of credit which require the Bank to honour drafts presented by a third-party when specific activities are completed;
- Commitments to extend credit which represent undertakings to make credit available in the form of loans or other financings for specific amounts and maturities, subject to specific conditions;
- Securities lending transactions under which the Bank, acting as principal or agent, agrees to lend securities to a borrower. The borrower must fully collateralize the security loan at all times. The market value of the collateral is monitored relative to the amounts due under the agreements, and where necessary, additional collateral is obtained; and
- Security purchase commitments which require the Bank to fund future investments.

These financial instruments are subject to normal credit standards, financial controls and monitoring procedures.

The table below provides a detailed breakdown of the Bank's other indirect commitments expressed in terms of the contractual amounts of the related commitment or contract which are not reflected on the Consolidated Statement of Financial Position.

As at October 31 ($ millions)	2020	2019
Commercial letters of credit	**$ 682**	$ 811
Commitments to extend credit[1]		
Original term to maturity of one year or less	**85,997**	70,862
Original term to maturity of more than one year	**149,377**	141,011
Securities lending	**53,082**	50,300
Securities purchase and other commitments	**1,095**	1,142
Total	**$ 290,233**	$ 264,126

(1) Includes liquidity facilities.

(c) Assets pledged and repurchase agreements

In the ordinary course of business, securities and other assets are pledged against liabilities. As well, securities are sold under repurchase agreements. The carrying value of pledged assets and details of related activities are shown below.

As at October 31 ($ millions)	2020	2019
Assets pledged to:		
Bank of Canada[1]	**$ 168**	$ 164
Foreign governments and central banks[1]	**4,165**	4,505
Clearing systems, payment systems and depositories[1]	**1,353**	1,221
Assets pledged in relation to exchange-traded derivative transactions	**5,356**	3,579
Assets pledged in relation to over-the-counter derivative transactions	**16,997**	13,491
Assets pledged as collateral related to securities borrowing and lending	**136,193**	123,760
Assets pledged in relation to covered bond program (Note 15)[2]	**31,484**	27,154
Assets pledged in relation to other securitization programs (Note 15)	**4,600**	6,683
Assets pledged under CMHC programs (Note 14)	**30,134**	25,249
Other	**1,420**	1,047
Total assets pledged	**$ 231,870**	$ 206,853
Obligations related to securities sold under repurchase agreements[3]	**121,918**	110,879
Total[4]	**$ 353,788**	$ 317,732

(1) Includes assets pledged in order to participate in clearing and payment systems and depositories, or pledged to have access to the facilities of central banks in foreign jurisdictions.
(2) Excludes mortgages related to covered bonds held by the Bank or transferred to the Bank of Canada as part of its term repo program.
(3) Includes the Bank of Canada term repo program.
(4) Includes assets that have been received from counterparties through normal course of business in securities financing and derivative transactions.

(d) Other executory contracts

Effective July 2018, the Bank has entered into an $800 million contract for naming rights of an arena for 20 years.

The Bank and its subsidiaries have also entered into other long-term executory contracts, relating to outsourced services. The significant outsourcing arrangements have variable pricing based on utilization and are cancellable with notice.

36 Financial Instruments – Risk Management

The Bank's principal business activities result in a balance sheet that consists primarily of financial instruments. In addition, the Bank uses derivative financial instruments for both trading and hedging purposes. The principal financial risks that arise from transacting financial instruments include credit risk, liquidity risk and market risk. The Bank's framework to monitor, evaluate and manage these risks is consistent with that in place as at October 31, 2020:

- extensive risk management policies define the Bank's risk appetite, set the limits and controls within which the Bank and its subsidiaries can operate, and reflect the requirements of regulatory authorities. These policies are approved by the Bank's Board of Directors, either directly or through the Risk Committee of the Board, (the Board);
- guidelines are developed to clarify risk limits and conditions under which the Bank's risk policies are implemented;
- processes are implemented to identify, evaluate, document, report and control risk. Standards define the breadth and quality of information required to make a decision; and
- compliance with risk policies, limits and guidelines is measured, monitored and reported to ensure consistency against defined goals.

Further details on the fair value of financial instruments and how these amounts were determined are provided in Note 7. Note 10 provides details on the terms and conditions of the Bank's derivative financial instruments including notional amounts, remaining term to maturity, credit risk, and fair values of derivatives used in trading and hedging activities.

(a) Credit risk

Credit risk is the risk of loss resulting from the failure of a borrower or counterparty to honour its financial or contractual obligations to the Bank. The Bank's Credit Risk Appetite and Credit Risk Policy are developed by its Global Risk Management (GRM) department and limits are reviewed and approved by the Board on an annual and biennial basis, respectively. The Credit Risk Appetite defines target markets and risk tolerances that are developed at an all-Bank level, and then further refined at the business line level. The objectives of the Credit Risk Appetite are to ensure that, for the Bank, including the individual business lines:

- target markets and product offerings are well defined;
- the risk parameters for new underwritings and for the portfolios as a whole are clearly specified; and
- transactions, including origination, syndication, loan sales and hedging, are managed in a manner to ensure the goals for the overall portfolio are met.

The Credit Risk Policy sets out, among other things, the credit risk rating systems and associated parameter estimates, the delegation of authority for granting credit, and the calculation of allowance for credit losses. It forms an integral part of enterprise-wide policies and procedures that encompass governance, risk management and control structure.

The Bank's credit risk rating systems are designed to support the determination of key credit risk parameter estimates which measure credit and transaction risk. For non-retail exposures, parameters are associated with each credit facility through the assignment of borrower and transaction ratings. Borrower risk is evaluated using methodologies that are specific to particular industry sectors and/or business lines. The risk associated with facilities of a given borrower is assessed by considering the facilities' structural and collateral-related elements. For retail portfolios, product specific models assign accounts into homogeneous segments using internal and external borrower/facility-level credit experience. This process provides for a meaningful differentiation of risk, and allows for appropriate and consistent estimation of loss characteristics at the model and segment level. Further details on credit risk relating to derivatives are provided in Note 10(c).

(i) Credit risk exposures

Credit risk exposures disclosed below are presented based on the Basel framework utilized by the Bank i.e. exposures subject to credit risk capital. The Bank uses the Advanced Internal Ratings Based approach (AIRB) for all material Canadian, U.S., European portfolios, and for a significant portion of all international corporate and commercial portfolios. The remaining portfolios, including other individual portfolios, are treated under the standardized approach. Under the AIRB approach, the Bank uses internal risk parameter estimates, based on historical experience, for probability of default (PD), loss given default (LGD) and exposure at default (EAD), as defined below:

- EAD: Generally represents the expected gross exposure – outstanding amount for on-balance sheet exposure and loan equivalent amount for off-balance sheet exposure.
- PD: Measures the likelihood that a borrower will default within a 1-year time horizon, expressed as a percentage.
- LGD: Measures the severity of loss on a facility in the event of a borrower's default, expressed as a percentage of exposure at default.

Under the standardized approach, credit risk is estimated using the risk weights as prescribed by the Basel framework either based on credit assessments by external rating agencies or based on the counterparty type for non-retail exposures and product type for retail exposures. Standardized risk weights also take into account other factors such as specific provisions for defaulted exposures, eligible collateral, and loan-to-value for real estate secured retail exposures.

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Category	2020 Exposure at default(1) Drawn(2)	Undrawn commitments	Other exposures(3)	Total	2019 Total
By counterparty type					
Non-retail					
AIRB portfolio					
Corporate	$ 170,514	$ 102,141	$ 86,342	$ 358,997	$ 344,032
Bank	18,472	8,714	15,934	43,120	38,726
Sovereign	233,839	1,005	8,560	243,404	182,086
	422,825	111,860	110,836	645,521	564,844
Standardized portfolio					
Corporate	53,013	3,482	10,005	66,500	66,472
Bank	2,505	71	62	2,638	2,211
Sovereign	8,315	7	–	8,322	6,781
	63,833	3,560	10,067	77,460	75,464
Total non-retail	$ 486,658	$ 115,420	$ 120,903	$ 722,981	$ 640,308
Retail					
AIRB portfolio					
Real estate secured	174,635	18,292	–	192,927	179,916
Qualifying revolving	14,598	31,264	–	45,862	45,885
Other retail	31,777	3,279	–	35,056	35,279
	$ 221,010	$ 52,835	$ –	$ 273,845	$ 261,080
Standardized portfolio					
Real estate secured	47,715	–	–	47,715	47,427
Other retail	39,683	–	–	39,683	44,709
	87,398	–	–	87,398	92,136
Total retail	$ 308,408	$ 52,835	$ –	$ 361,243	$ 353,216
Total	$ 795,066	$ 168,255	$ 120,903	$ 1,084,224	$ 993,524
By geography(4)					
Canada	$ 478,070	$ 105,686	$ 37,653	$ 621,409	$ 549,233
United States	103,091	40,036	45,083	188,210	176,036
Chile	51,118	1,418	4,202	56,738	53,521
Mexico	35,007	1,175	3,005	39,187	37,969
Peru	29,523	949	3,459	33,931	32,954
Colombia	11,794	348	981	13,123	13,673
Other International					
Europe	22,871	11,200	17,699	51,770	45,885
Caribbean	28,540	1,720	1,160	31,420	38,636
Latin America (other)	12,178	1,077	392	13,647	12,402
All other	22,874	4,646	7,269	34,789	33,215
Total	$ 795,066	$ 168,255	$ 120,903	$ 1,084,224	$ 993,524

(1) Exposure at default is presented after credit risk mitigation. Exposures exclude equity securities and other assets.
(2) Non-retail drawn includes loans, acceptances, deposits with financial institutions and FVOCI debt securities. Retail drawn includes residential mortgages, credit cards, lines of credit, and other personal loans.
(3) Non-retail other exposures include off-balance sheet lending instruments such as letters of credit, letters of guarantees, securitizations including $27.6 million first loss protection (2019 – nil), derivatives and repo-style transactions (reverse repurchase agreements, repurchase agreements, securities lending and securities borrowing), net of related collateral. Not applicable for retail exposures.
(4) Geographic segmentation is based upon the location of the ultimate risk of the credit exposure.

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Consolidated Statement of Financial Position asset categories cross-referenced to credit risk exposures

The table below provides mapping of on-balance sheet asset categories that are included in the various Basel III exposure categories as presented in the credit risk exposure summary table of these consolidated financial statements. In addition, it also provides other exposures which are subject to market risk and/or other assets which are not subject to market and credit risk with a reconciliation to the Consolidated Statement of Financial Position. The credit risk exposures on certain assets such as cash, precious metals, investment securities (equities) and other assets are not included on the credit risk exposure summary table. Also excluded from the credit risk exposures are certain trading assets and all assets of the Bank's insurance subsidiaries.

	Credit Risk Exposures						Other Exposures		
	Drawn		Other Exposures				Market Risk Exposures		
As at October 31, 2020 ($ millions)	Non-retail	Retail	Securitization	Repo-style Transactions	OTC Derivatives	Equity	Also subject to Credit Risk		All Other(1)	Total
Cash and deposits with financial institutions	**$ 73,406**	**$ –**	**$ –**	**$ –**	**$ –**	**$ –**	**$ –**	**$ –**	**$ 3,054**	**$ 76,460**
Precious metals	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**1,181**	**–**	**1,181**
Trading assets										
Securities	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**108,331**	**–**	**108,331**
Loans	**1,640**	**–**	**–**	**177**	**–**	**–**	**1,470**	**6,535**	**–**	**8,352**
Other	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**1,156**	**–**	**1,156**
Financial assets designated at fair value through profit or loss	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Securities purchased under resale agreements and securities borrowed	**–**	**–**	**–**	**119,747**	**–**	**–**	**–**	**–**	**–**	**119,747**
Derivative financial instruments	**–**	**–**	**–**	**–**	**45,065**	**–**	**39,294**	**–**	**–**	**45,065**
Investment securities	**105,811**	**–**	**–**	**–**	**–**	**3,056**	**–**	**–**	**2,522**	**111,389**
Loans:										
Residential mortgages(2)	**83,606**	**200,985**	**–**	**–**	**–**	**–**	**–**	**–**	**93**	**284,684**
Personal loans	**–**	**91,435**	**2,314**	**–**	**–**	**–**	**–**	**–**	**9**	**93,758**
Credit cards	**–**	**12,347**	**93**	**–**	**–**	**–**	**–**	**–**	**2,357**	**14,797**
Business & government	**206,607**	**3,649**	**6,974**	**–**	**–**	**–**	**–**	**–**	**433**	**217,663**
Allowances for credit losses(3)	**(561)**	**(944)**	**–**	**–**	**–**	**–**	**–**	**–**	**(6,134)**	**(7,639)**
Customers' liability under acceptances	**14,305**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**(77)**	**14,228**
Property and equipment	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**5,897**	**5,897**
Investment in associates	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**2,475**	**2,475**
Goodwill and other intangibles assets	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**17,015**	**17,015**
Other (including Deferred tax assets)	**1,844**	**936**	**–**	**10**	**–**	**–**	**–**	**–**	**19,117**	**21,907**
Total	**$ 486,658**	**$ 308,408**	**$ 9,381**	**$ 119,934**	**$ 45,065**	**$ 3,056**	**$ 40,764**	**$ 117,203**	**$ 46,761**	**$ 1,136,466**

(1) Includes the Bank's insurance subsidiaries' assets and all other assets which are not subject to credit and market risks.
(2) Includes $85.4 billion in mortgages guaranteed by Canada Mortgage Housing Corporation including 90% of privately insured mortgages.
(3) Amounts for AIRB exposures are reported gross of allowances and amounts for standardized exposures are reported net of allowances.

	Credit Risk Exposures						Other Exposures		
	Drawn		Other Exposures				Market Risk Exposures		
As at October 31, 2019 ($ millions)	Non-retail	Retail	Securitization	Repo-style Transactions	OTC Derivatives	Equity	Also subject to Credit Risk		All Other(1)	Total
Cash and deposits with financial institutions	$ 43,392	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ 3,328	$ 46,720
Precious metals	–	–	–	–	–	–	–	3,709	–	3,709
Trading assets										
Securities	21	–	–	–	–	–	–	112,643	–	112,664
Loans	7,255	145	–	–	–	–	6,779	6,429	–	13,829
Other	–	–	–	–	–	–	–	995	–	995
Financial assets designated at fair value through profit or loss	–	–	–	–	–	–	–	–	–	–
Securities purchased under resale agreements and securities borrowed	–	–	–	131,173	–	–	–	–	5	131,178
Derivative financial instruments	–	–	–	–	38,119	–	34,489	–	–	38,119
Investment securities	78,235	–	–	–	–	2,279	–	–	1,845	82,359
Loans:										
Residential mortgages(2)	80,777	187,284	–	–	–	–	–	–	108	268,169
Personal loans	–	97,253	1,366	–	–	–	–	–	12	98,631
Credit cards	–	14,033	575	–	–	–	–	–	3,180	17,788
Business & government	202,935	3,461	6,255	–	–	–	–	–	321	212,972
Allowances for credit losses(3)	(583)	(708)	–	–	–	–	–	–	(3,786)	(5,077)
Customers' liability under acceptances	13,902	–	–	–	–	–	–	–	(6)	13,896
Property and equipment	–	–	–	–	–	–	–	–	2,669	2,669
Investment in associates	–	–	–	–	–	–	–	–	5,614	5,614
Goodwill and other intangibles assets	–	–	–	–	–	–	–	–	17,465	17,465
Other (including Deferred tax assets)	3,721	905	–	62	–	–	–	–	19,773	24,461
Total	$ 429,655	$ 302,373	$ 8,196	$ 131,235	$ 38,119	$ 2,279	$ 41,268	$ 123,776	$ 50,528	$ 1,086,161

(1) Includes the Bank's insurance subsidiaries' assets and all other assets which are not subject to credit and market risks.
(2) Includes $81.5 billion in mortgages guaranteed by Canada Mortgage Housing Corporation including 90% of privately insured mortgages.
(3) Amounts for AIRB exposures are reported gross of allowances and amounts for standardized exposures are reported net of allowances.

(ii) Credit quality of non-retail exposures

Credit decisions are made based upon an assessment of the credit risk of the individual borrower or counterparty. Key factors considered in the assessment include: the borrower's management; the borrower's current and projected financial results and credit statistics; the industry in which the borrower operates; economic trends; and geopolitical risk. Banking units and Global Risk Management also review the credit quality of the credit portfolio across the organization on a regular basis to assess whether economic trends or specific events may affect the performance of the portfolio.

The Bank's non-retail portfolio is well diversified by industry. As at October 31, 2020, and October 31, 2019, a significant portion of the authorized corporate and commercial lending portfolio was internally assessed at a grade that would generally equate to an investment grade rating by external rating agencies. There has not been a significant change in concentrations of credit risk since October 31, 2019.

Internal grades (IG) are used to differentiate the risk of default of a borrower. The following table cross references the Bank's internal borrower grades with equivalent ratings categories utilized by external rating agencies:

Cross referencing of internal ratings to external ratings(1)

Equivalent External Rating					
S&P	Moody's	DBRS	Internal Grade	Internal Grade Code	PD Range(2)
AAA to AA+	Aaa to Aa1	AAA to AA (high)		99 – 98	0.0000% – 0.0428%
AA to A+	Aa2 to A1	AA to A (high)		95	0.0428% – 0.1159%
A to A-	A2 to A3	A to A (low)	Investment grade	90	0.0512% – 0.1271%
BBB+	Baa1	BBB (high)		87	0.0800% – 0.2027%
BBB	Baa2	BBB		85	0.1143% – 0.2950%
BBB-	Baa3	BBB (low)		83	0.1632% – 0.4293%
BB+	Ba1	BB (high)		80	0.2638% – 0.4731%
BB	Ba2	BB		77	0.4264% – 0.5215%
BB-	Ba3	BB (low)	Non-Investment grade	75	0.5215% – 0.6892%
B+	B1	B (high)		73	0.6892% – 1.3282%
B to B-	B2 to B3	B to B (low)		70	1.3282% – 2.5597%
CCC+	Caa1	–		65	2.5597% – 9.3860%
CCC	Caa2	–	Watch list	60	9.3860% – 17.8585%
CCC- to CC	Caa3 to Ca	–		40	17.8585% – 34.4434%
–	–	–		30	34.4434% – 58.6885%
Default			Default	21	100%

(1) Applies to non-retail portfolio.
(2) PD ranges overlap across IG codes as the Bank utilizes two risk rating systems for its AIRB portfolios, and each risk rating system has its own separate IG to PD mapping.

Non-retail AIRB portfolio

The credit quality of the non-retail AIRB portfolio, expressed in terms of risk categories of borrower internal grades is shown in the table below:

		2020				2019
		Exposure at Default(1)				
As at October 31 ($ millions) Category of internal grades	IG Code	Drawn	Undrawn commitments	Other exposures(2)	Total	Total
Investment grade	**99 – 98**	**$ 105,322**	**$ 2,803**	**$ 19,409**	**$ 127,534**	$ 90,373
	95	**49,979**	**10,825**	**21,978**	**82,782**	61,929
	90	**26,423**	**20,272**	**24,086**	**70,781**	68,016
	87	**28,435**	**21,333**	**14,136**	**63,904**	59,294
	85	**19,728**	**16,560**	**9,685**	**45,973**	49,291
	83	**29,893**	**14,181**	**9,895**	**53,969**	44,253
Non-Investment grade	**80**	**26,095**	**11,992**	**4,422**	**42,509**	48,807
	77	**23,794**	**6,732**	**3,182**	**33,708**	29,938
	75	**19,321**	**4,029**	**2,177**	**25,527**	21,049
	73	**7,864**	**1,525**	**937**	**10,326**	8,539
	70	**3,288**	**1,009**	**258**	**4,555**	3,485
Watch list	**65**	**981**	**104**	**139**	**1,224**	727
	60	**1,169**	**324**	**309**	**1,802**	1,198
	40	**357**	**72**	**77**	**506**	616
	30	**109**	**–**	**–**	**109**	225
Default	**21**	**1,313**	**99**	**143**	**1,555**	990
Total		**$ 344,071**	**$ 111,860**	**$ 110,833**	**$ 566,764**	$ 488,730
Government guaranteed residential mortgages(3)		**78,754**	**–**	**–**	**78,754**	76,114
Total		**$ 422,825**	**$ 111,860**	**$ 110,833**	**$ 645,518**	$ 564,844

(1) After credit risk mitigation.
(2) Includes off-balance sheet lending instruments such as letters of credit, letters of guarantee, securitizations excluding $3.5 million first loss protection (2019 - nil), derivatives and repo-style transactions (reverse repurchase agreements, repurchase agreements and securities lending and borrowing), net of related collateral.
(3) These exposures are classified as sovereign exposures and are included in the non-retail category.

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Non-retail standardized portfolio

The non-retail standardized portfolio relies on external credit ratings (e.g. S&P, Moody's, DBRS, etc.,) of the borrower, if available, to compute regulatory capital for credit risk. Exposures are risk weighted based on prescribed percentages and a mapping process as defined within OSFI's Capital Adequacy Requirements Guideline. Non-retail standardized portfolio as at October 31, 2020 comprised of drawn, undrawn and other exposures to corporate, bank and sovereign counterparties amounted to $77 billion (October 31, 2019 – $75 billion). Within this portfolio, the majority of Corporate/Commercial exposures are to unrated counterparties, mainly in Canada and the Pacific Alliance countries.

(iii) Credit quality of retail exposures

The Bank's retail portfolios consist of a number of relatively small loans to a large number of borrowers. The portfolios are distributed across Canada and a wide range of countries. As such, the portfolios inherently have a high degree of diversification. In addition, as of October 31, 2020, 38% of the Canadian banking residential mortgage portfolio is insured and the average loan-to-value ratio of the uninsured portion of the portfolio is 52%.

Retail AIRB portfolio

The data in the table below provides a distribution of the retail AIRB exposure within each PD range by asset class:

As at October 31 ($ millions)		2020					2019
		Exposure at default(1)					
		Real estate secured					
Category of (PD) grades	PD range	Mortgages	HELOC	Qualifying revolving	Other retail	Total	Total
Exceptionally Low	**0.0000% – 0.0499%**	**$ –**	**$ –**	**$ 14,293**	**$ 692**	**$ 14,985**	$ 12,792
Very Low	**0.0500% – 0.1999%**	**50,136**	**33,190**	**9,565**	**6,223**	**99,114**	92,440
Low	**0.2000% – 0.9999%**	**94,313**	**4,884**	**11,484**	**18,664**	**129,345**	121,184
Medium Low	**1.0000% – 2.9999%**	**7,969**	**740**	**5,484**	**5,969**	**20,162**	22,015
Medium	**3.0000% – 9.9999%**	**671**	**181**	**4,134**	**2,712**	**7,698**	9,039
High	**10.0000% – 19.9999%**	**262**	**111**	**245**	**13**	**631**	886
Extremely High	**20.0000% – 99.9999%**	**172**	**36**	**567**	**613**	**1,388**	2,107
Default	**100%**	**190**	**72**	**90**	**170**	**522**	617
Total		**$ 153,713**	**$ 39,214**	**$ 45,862**	**$ 35,056**	**$ 273,845**	$ 261,080

(1) After credit risk mitigation.

Retail standardized portfolio

The retail standardized portfolio of $87 billion as at October 31, 2020 (2019 – $92 billion) was comprised of residential mortgages, personal loans, credit cards and lines of credit to individuals, mainly in the Latin American and Caribbean region. Of the total retail standardized exposures, $48 billion (2019 – $47 billion) was represented by mortgages and loans secured by residential real estate, mostly with a loan-to-value ratio of below 80%.

(iv) Collateral

Collateral held

In the normal course of business, to reduce its exposure to counterparty credit risk, the Bank receives collateral for capital markets related activities. The following are examples of the terms and conditions customary to collateral for these types of transactions:

- The risks and rewards of the pledged assets reside with the pledgor.
- Additional collateral is required when the market value of the transaction exceeds thresholds agreed upon with the pledgor.
- The Bank is normally permitted to sell or repledge the collateral it receives, although this right is specific to each agreement under which the collateral is pledged.
- Upon satisfaction of the obligation, the Bank must return the pledged assets, unless the Bank has the right to sell or repledge the collateral it receives, in which case the Bank must return comparable collateral to the pledgor.

As at October 31, 2020, the approximate market value of cash and securities collateral accepted that may be sold or repledged by the Bank was $176 billion (2019 – $167 billion). This collateral is held primarily in connection with reverse repurchase agreements, margin loans, securities lending and derivative transactions. The Bank also borrows securities under standard securities borrowing agreements that it is able to re-pledge. Including these borrowed securities, the approximate market value of securities collateral accepted that may be sold or re-pledged was $208 billion (2019 – $211 billion), of which approximately $37 billion was not sold or re-pledged (2019 – $27 billion).

Collateral pledged

In the normal course of business, securities and other assets are pledged to secure an obligation, participate in clearing or settlement systems, or operate in a foreign jurisdiction. Note 35(c) details the nature and extent of the Bank's asset pledging activities. Asset pledging transactions are conducted under terms that are common and customary to standard derivative, securities financing, and other borrowing activities. Standard risk management controls are applied with respect to asset pledging.

Assets acquired in exchange for loans

The carrying value of assets acquired in exchange for loans as at October 31, 2020 was $301 million (2019 – $372 million) mainly comprised of real estate and was classified as either held for sale or held for use as appropriate.

(b) Liquidity risk

Liquidity risk is the risk that the Bank is unable to meet its financial obligations in a timely manner at reasonable prices. The Bank's liquidity risk is subject to extensive risk management controls and is managed within the framework of policies and limits approved by the Board. The Board receives reports on risk exposures and performance against approved limits. The Asset-Liability Committee (ALCO) provides senior management oversight of liquidity risk.

The key elements of the Bank's liquidity risk management framework include:

- liquidity risk measurement and management limits, including limits on maximum net cash outflow by currency over specified short-term horizons;
- prudent diversification of its wholesale funding activities by using a number of different funding programs to access the global financial markets and manage its maturity profile, as appropriate;
- large holdings of liquid assets to support its operations, which can generally be sold or pledged to meet the Bank's obligations;
- liquidity stress testing, including Bank-specific, global-systemic, and combination systemic/Bank-specific scenarios; and
- liquidity contingency planning.

The Bank's foreign operations have liquidity management frameworks that are similar to the Bank's framework. Local deposits are managed from a liquidity risk perspective based on the local management frameworks and regulatory requirements.

(i) Commitments to extend credit

In the normal course of business, the Bank enters into commitments to extend credit in the form of loans or other financings for specific amounts and maturities, subject to specific conditions. These commitments, which are not reflected on the Consolidated Statement of Financial Position, are subject to normal credit standards, financial controls and monitoring procedures.

(ii) Derivative instruments

The Bank is subject to liquidity risk relating to its use of derivatives to meet customer needs, generate revenues from trading activities, manage market and credit risks arising from its lending, funding and investment activities, and lower its cost of capital. The maturity profile of the notional amounts of the Bank's derivative instruments is summarized in Note 10(b).

(c) Market risk

Market risk arises from changes in market prices and rates (including interest rates, credit spreads, equity prices, foreign exchange rates and commodity prices), the correlations between them, and their levels of volatility. Market risk is subject to extensive risk management controls, and is managed within the framework of market risk policies and limits approved by the Board. The ALCO and Market Risk Management and Policy Committee oversee the application of the framework set by the Board, and monitor the Bank's market risk exposures and the activities that give rise to these exposures.

The Bank uses a variety of metrics and models to measure and control market risk exposures. The measurements used are selected based on an assessment of the nature of risks in a particular activity. The principal measurement techniques are Value at Risk (VaR), stress testing, sensitivity analysis and simulation modeling. The Board reviews results from these metrics quarterly. Models are independently validated internally prior to implementation and are subject to formal periodic review.

VaR is a statistical measure that estimates the potential loss in value of the Bank's trading positions due to adverse market movements over a defined time horizon with a specified confidence level. The quality of the Bank's VaR is validated by regular back testing analysis, in which the VaR is compared to theoretical and actual profit and loss results. To complement VaR, the Bank also uses stress testing to examine the impact that abnormally large swings in market factors and periods of prolonged inactivity might have on trading portfolios. The stress testing program is designed to identify key risks and ensure that the Bank's capital can absorb potential losses from abnormal events. The Bank subjects its trading portfolios to a series of stress tests on a daily, weekly and monthly basis.

In trading portfolios, sensitivity analysis is used to measure the effect of changes in risk factors, including prices and volatility, on financial products and portfolios. In non-trading portfolios, sensitivity analysis assesses the effect of changes in interest rates on current earnings and on the economic value of shareholders' equity. Simulation modeling under various scenarios is particularly important for managing risk in the deposit, lending and investment products the Bank offers to its retail customers.

(i) Non-trading interest rate risk

Interest rate risk is the risk of loss due to the following: changes in the level, slope and curvature of the yield curve; the volatility of interest rates and changes in customer preferences (e.g. mortgage prepayment rates). The Bank actively manages its interest rate exposures with the objective of protecting and enhancing net interest income within established risk tolerances. Interest rate risk arising from the Bank's funding and investment activities is managed in accordance with Board-approved policies and global limits, which are designed to control the risk to net interest income and economic value of shareholders' equity. The income limit measures the effect of a specified shift in interest rates on the Bank's annual net interest income over the next twelve months, while the economic value limit measures the impact of a specified change in interest rates on the present value of the Bank's net assets. These calculations are based on models that consider a number of inputs and are on a constant balance sheet and make no assumptions for management actions that may mitigate the risk.

Interest rate sensitivity

Based on the Bank's interest rate positions, the following table shows the pro-forma after-tax impact on the Bank's net interest income over the next twelve months and economic value of shareholders' equity of an immediate and sustained 100 basis point increase and decrease in interest rates across major currencies as defined by the Bank. Corresponding with the current low interest rate environment, starting in Q2 2020, the net interest income and economic value for a down shock scenario are measured using 25 basis points decline rather than 100 basis points previously, to account for certain rates being floored at zero.

As at October 31 ($ millions)	2020						2019		
	Net interest income			Economic value of equity					
	Canadian dollar	Other currencies	Total	Canadian dollar	Other currencies	Total		Net interest income	Economic value of equity
100 bp increase	**$ (38)**	**$ 172**	**$134**	**$ (524)**	**$ 14**	**$(510)**	100 bp increase	$ (273)	$ (1,448)
25 bp decrease	**$ 6**	**$ (44)**	**$ (38)**	**$ 83**	**$ (20)**	**$ 63**	100 bp decrease	$ 267	$ 1,173

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(ii) Non-trading foreign currency risk

Foreign currency risk is the risk of loss due to changes in spot and forward rates, and the volatility of currency exchange rates. Non-trading foreign currency risk, also referred to as structural foreign exchange risk, arises primarily from the Bank's net investments in self-sustaining foreign operations and is controlled by a Board-approved limit. This limit considers potential volatility to shareholders' equity as well as the potential impact on capital ratios from foreign exchange fluctuations. On a quarterly basis, the Asset-Liability Committee (ALCO) reviews the Bank's exposures to these net investments. The Bank may fully or partially hedge this exposure by funding the investments in the same currency, or by using other financial instruments, including derivatives.

The Bank is subject to foreign currency risk on the earnings of its foreign operations. To manage this risk, foreign currency revenues and expenses, which are primarily denominated in U.S. dollars, are projected over a number of future fiscal quarters. The ALCO assesses economic data and forecasts to decide on the portion of the estimated future foreign currency revenues and expenses to hedge. Hedging instruments normally include foreign currency spot and forward contracts, as well as foreign currency options and swaps.

As at October 31, 2020, a one percent increase (decrease) in the Canadian dollar against all currencies in which the Bank operates decreases (increases) the Bank's before-tax annual earnings by approximately $66 million (October 31, 2019 – $64 million) in the absence of hedging activity, primarily from exposure to U.S. dollars. A similar change in the Canadian dollar as at October 31, 2020 would increase (decrease) the unrealized foreign currency translation losses in the accumulated other comprehensive income in equity by approximately $354 million (2019 – $374 million), net of hedging.

(iii) Non-trading equity risk

Equity risk is the risk of loss due to adverse movements in equity prices. Equity price risk is often classified into two categories: general equity risk, which refers to the sensitivity of an instrument or portfolio's value to changes in the overall level of equity prices, and specific equity risk, which refers to that portion of an individual equity instrument's price volatility that is determined by entity-specific characteristics.

The Bank is exposed to equity risk through its equity investment portfolios, which are controlled by Board-approved portfolio, VaR, and stress-test limits. Equity investments include common and preferred shares, as well as a diversified portfolio of third-party managed funds.

The majority of the Bank's equity investment portfolios are managed by Group Treasury under the strategic direction of the ALCO. Group Treasury delegates the management of a portion of equity and equity-related portfolios to other external fund managers to take advantage of these fund managers' expertise in particular market niches and products.

The fair value of equity securities designated at FVOCI is shown in Note 12.

(iv) Trading portfolio risk management

The Bank's policies, processes and controls for trading activities are designed to achieve a balance between pursuing profitable trading opportunities and managing earnings volatility within a framework of sound and prudent practices. Trading activities are primarily customer focused.

Market risk arising from the Bank's trading activities is managed in accordance with Board-approved policies and limits, including aggregate VaR and stress testing limits.

Trading portfolios are marked-to-market in accordance with the Bank's valuation policies. Positions are marked-to-market daily and valuations are independently reviewed by back office, GRM or finance units on a regular basis. These units also provide profit and loss reporting, as well as VaR and limit compliance reporting to business unit management and executive management for evaluation and action as appropriate. VaR is calculated daily using a 99% confidence level, and a one-day holding period. This means that, once in every 100 days, the trading positions are expected to lose more than the VaR estimate. The Bank calculates general market risk VaR using historical simulation based on 300 days of market data. For debt specific risk VaR, the Bank uses historical resampling. The table below shows the Bank's VaR by risk factor:

		For the year ended October 31, 2020			
($ millions)	**As at October 31, 2020**	Average	High	Low	As at October 31, 2019
Credit spread plus interest rate	**$ 11.5**	**$ 22.1**	**$ 60.8**	**$ 9.4**	$ 13.8
Credit spread	**11.1**	**18.5**	**55.0**	**6.2**	8.0
Interest rate	**11.4**	**11.2**	**18.0**	**4.8**	7.2
Equities	**3.1**	**6.5**	**27.4**	**1.8**	3.4
Foreign exchange	**4.6**	**3.5**	**10.3**	**1.4**	2.7
Commodities	**5.0**	**5.4**	**9.1**	**2.2**	3.1
Debt specific	**5.2**	**5.9**	**14.1**	**2.5**	3.3
Diversification effect	**(14.8)**	**(19.5)**	**n/a**	**n/a**	(10.9)
All-Bank VaR	**$ 14.6**	**$ 23.9**	**$ 63.6**	**$ 10.1**	$ 15.4
All-Bank stressed VaR	**$ 37.0**	**$ 38.7**	**$ 61.3**	**$ 14.9**	$ 45.9

Below are the market risk capital requirements as at October 31, 2020.

($ millions)	
All-Bank VaR	**$ 157**
All-Bank stressed VaR	**119**
Incremental risk charge	**227**
Standardized approach	**83**
Total market risk capital	**$ 586**(1)

(1) Equates to $7,327 million of risk-weighted assets (2019 – $8,674 million).

(d) Operational risk

Operational risk is the risk of loss resulting from people, inadequate or failed processes and systems, or from external events. Operational risk includes third party risk management and legal risk but excludes strategic risk and reputational risk. It also exists in some form in each of the Bank's business and support activities, and third parties to whom activities have been outsourced. It can result in financial loss, regulatory sanctions and damage to the Bank's reputation. The Bank's Operational Risk Management Framework outlines the Bank's structured approach for effective management of enterprise-wide operational risk in a manner consistent with best practices and regulatory requirements.

37 Acquisitions and divestitures

Acquisitions

Completed acquisitions impacting the prior year

Banco Dominicano del Progreso, Dominican Republic

On March 1, 2019, the Bank acquired 97.44% of the voting shares of Banco Dominicano del Progreso, a bank with operations in Dominican Republic, in exchange for total consideration of $440 million in cash. The acquired business forms part of the International Banking business segment.

The fair value of the identifiable assets and liabilities acquired of Banco Dominicano del Progreso, Dominican Republic at the date of acquisition were:

($ millions)	
Total net assets acquired[1]	**176**
Goodwill arising on acquisition	**271**
Deferred tax liabilities	**(3)**
Non-controlling interest	**(4)**
Total purchase consideration transferred	**$ 440**

(1) Includes finite life intangible assets of $26 million relating to core-deposits and customer relationships.

Goodwill value of $271 million arising on acquisition largely reflects the synergies through combining and streamlining the Bank's current operations in Dominican Republic with Banco Dominicano del Progreso's operations.

Banco Cencosud, Peru

On March 1, 2019, the Bank acquired 51% of the voting shares of Banco Cencosud, Peru in exchange for total consideration of $133 million in cash. The Bank and Banco Cencosud will jointly manage the credit card operations and offer other products and services to customers in partnership for 15 years. On acquisition, the Bank recorded $562 million of assets (mainly loans and intangible assets), $386 million of liabilities (mainly deposits) and a non-controlling interest of $43 million. The intangible assets arising from acquisition of $123 million relates to the 15 year exclusivity contract. The acquired business forms part of the International Banking business segment.

Aggregate impact to Consolidated Income

For the year ended October 31, 2019, both acquisitions contributed revenue of $217million in aggregate and a net loss of $64 million in aggregate. The primary reason for the net loss is the recording of a provision for credit losses of $151 million ($106 million after-tax) on acquired performing financial assets, as required under IFRS 9.

Divestitures

Closed divestitures impacting the current year

Thanachart Bank, Thailand

On December 3, 2019, the Bank completed the sale to reduce its 49% interest in Thanachart Bank Public Company Limited ("TBank") in Thailand, upon receiving regulatory approvals and satisfying closing conditions.

As part of agreements entered into with ING Groep N.V., TBank, Thanachart Capital Public Co., Ltd and TMB Bank Public Company Limited ("TMB") in August 2019, the Bank sold its 49% interest in TBank in exchange for cash and an approximately 6% ownership interest in the form of common shares in TMB. As per the agreements, TBank became a wholly-owned subsidiary of TMB. The shares held by the Bank in TMB are classified as investment securities measured at fair value through profit or loss.

The carrying value of the Bank's 49% interest in TBank of $3.6 billion was derecognized on the date of close and a net gain of approximately $426 million before tax ($414 million after tax) was recorded in Non-interest income – Other and reported in the Other segment. The transaction increased the Bank's common equity Tier 1 (CET1) ratio by approximately 36 basis points.

As part of the overall transaction, the Bank retained a 49% interest in two TBank subsidiaries, which are classified as investment in associates and the Bank follows the equity method of accounting.

Pension fund operations in Colombia

On December 13, 2019, the Bank completed the sale of its 51% interest in AFP Colfondos to an affiliate of AFP Habitat, upon receiving regulatory approvals and satisfying closing conditions.

All assets and liabilities of approximately $240 million and $53 million, respectively, in relation to these operations have been derecognized on the date of close and a total loss of approximately $112 million after tax and non-controlling interests (2020 – $48 million; 2019 – $64 million) was recorded in Non-interest income – Other and reported in the Other segment.

In the Consolidated Statement of Shareholder's Equity, a gain of $27 million after tax was reclassified from AOCI to retained earnings related to investment securities designated as fair value through other comprehensive income, bringing the net impact of the divestiture to a net loss of $85 million.

Consolidated Financial Statements

Operations in Puerto Rico and the U.S. Virgin Islands

On December 31, 2019, the Bank completed the sale of its operations in Puerto Rico and the U.S. Virgin Islands ("USVI") to Oriental Bank, a subsidiary of OFG Bancorp, upon receiving regulatory approvals and satisfying closing conditions.

All assets and liabilities of approximately $4,800 million and $4,166 million, respectively, in relation to these operations have been derecognized on the date of close and a total loss of approximately $424 million after tax (2020 – $22 million; 2019 – $402 million) was recorded in Non-interest income – Other and reported in the Other segment.

The transaction increased the Bank's common equity Tier 1 (CET1) ratio by approximately seven basis points.

Insurance and banking operations in El Salvador

On January 31, 2020, the Bank completed the sale of its banking and insurance operations in El Salvador, including Scotiabank El Salvador, its subsidiaries and Scotia Seguros to Imperia Intercontinental Inc, upon receiving regulatory approvals and satisfying closing conditions.

All assets and liabilities of approximately $2,796 million and $2,481 million, respectively, in relation to these operations have been derecognized on the date of close and a total loss of approximately $164 million after tax (2020 – $28 million; 2019 – $136 million) was recorded in Non-interest income – Other and reported in the Other segment. The transaction increased the Bank's common equity Tier 1 (CET1) ratio by approximately four basis points.

Operations in British Virgin Islands

On May 31, 2020, the Bank completed the sale of its banking operations in the British Virgin Islands to Republic Financial Holdings Limited, upon receiving regulatory approvals and satisfying closing conditions.

All assets and liabilities of approximately $631 million and $537 million, respectively, in relation to these operations have been derecognized on the date of close and a total gain of approximately $48 million after tax was recorded in Non-interest income – Other and reported in the Other segment. The transaction increased the Bank's common equity Tier 1 (CET1) ratio by approximately two basis points.

Closed divestitures impacting the prior year

Pension and insurance operations in the Dominican Republic

On April 30, 2019, the Bank completed the sale of Scotia Crecer AFP and Scotia Seguros, its pension and related insurance businesses in the Dominican Republic to Grupo Rizek, upon receiving regulatory approvals and satisfying closing conditions.

All assets and liabilities of approximately $111 million and $26 million, respectively, in relation to this business have been derecognized on the date of close and a net gain of approximately $273 million after tax was recorded in Non-interest income – Other and reported in the Other segment.

Banking operations in the Caribbean

On November 27, 2018, the Bank announced it has entered into an agreement to sell its banking operations in nine non-core markets in the Caribbean. Subsequently, the Bank did not close operations in two markets (Antigua and Barbuda, and Guyana) while remaining seven (Anguilla, Dominica, Grenada, St. Kitts & Nevis, St. Lucia, St. Maarten, St. Vincent & the Grenadines) were sold to Republic Financial Holdings Limited on October 31, 2019, upon receiving regulatory approvals and satisfying closing conditions.

All assets and liabilities of approximately $2,086 million and $2,069 million, respectively, in relation to these operations have been derecognized on the date of close and a net gain of approximately $38 million after tax was recorded in Non-interest income – Other and reported in the Other segment.

Divestitures announced that are expected to close in a future period

Operations in Belize

On June 22, 2020, the Bank announced the sale of its 100% interest in Scotiabank (Belize) Ltd., to Caribbean Investment Holdings Limited. The transaction is subject to regulatory approvals and customary closing conditions. This divestiture is not considered material to the Bank.

Operations in Antigua and Barbuda

On October 13, 2020, the Bank announced that it has entered into an agreement to sell its banking operations in Antigua and Barbuda to Eastern Caribbean Amalgamated Bank Limited. The transaction is subject to regulatory approvals and customary closing conditions. This divestiture is not considered material to the Bank.

Metals business wind-down

In line with its strategy and as announced on April 28, 2020, the Bank has made the decision to wind-down the metals business. The Bank has recorded a loss in the current year of approximately $70 million in relation to goodwill and other wind-down costs.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of The Bank of Nova Scotia (the Bank) is responsible for establishing and maintaining adequate internal control over financial reporting, and have designed such internal control over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Management has used the *Internal Control – Integrated Framework (2013)* to evaluate the effectiveness of internal control over financial reporting, which is a recognized and suitable framework developed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management has evaluated the design and operation of the Bank's internal control over financial reporting as of October 31, 2020, and has concluded that such internal control over financial reporting is effective. There are no material weaknesses that have been identified by management in this regard.

KPMG LLP, the independent auditors appointed by the shareholders of the Bank, who have audited the consolidated financial statements, have also audited internal control over financial reporting and have issued their report below.

Brian J. Porter
President and Chief Executive Officer

Raj Viswanathan
Group Head and Chief Financial Officer

Toronto, Canada
December 1, 2020

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders of The Bank of Nova Scotia

Opinion on Internal Control Over Financial Reporting

We have audited The Bank of Nova Scotia's internal control over financial reporting as of October 31, 2020, based on the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, The Bank of Nova Scotia (the Bank) maintained, in all material respects, effective internal control over financial reporting as of October 31, 2020, based on the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statements of financial position of the Bank as at October 31, 2020, and 2019, the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the years in the three-year period ended October 31, 2020, and the related notes (collectively, the consolidated financial statements) and our report dated December 1, 2020 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Bank's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included under the heading "Management's Report on Internal Control Over Financial Reporting" above. Our responsibility is to express an opinion on the Bank's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Bank in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.



Chartered Professional Accountants, Licensed Public Accountants

Toronto, Canada
December 1, 2020

CORPORATE GOVERNANCE

Corporate Governance Regulation

The Board of Directors and management believe that a strong, effective, independent Board plays a crucial role in building long-term sustainable growth in shareholder value, maximizing the value shareholders receive from their investment in the Bank and protecting the interests of stakeholders. The Board is committed to meeting high standards of corporate governance in all aspects of the Bank's affairs.

The Bank's corporate governance practices are regulated by many different parties, including the Bank's primary regulator, the Office of the Superintendent of Financial Institutions Canada, and the Board looks to evolving best practices domestically and internationally in reviewing its corporate governance practices. Our practices:

- Meet or exceed the standards set out in the guidelines and rules of the Bank Act (Canada) (the "Bank Act") and those of the Canadian Securities Administrators ("CSA") – which include National Instrument 52-110, National Instrument 52-109, National Policy 58-201 and National Instrument 58-101, and
- Comply with applicable requirements of the New York Stock Exchange ("NYSE") and the Sarbanes-Oxley Act of 2002, including applicable rules of the U.S. Securities and Exchange Commission.

The Bank is not required to comply with most of the NYSE corporate governance rules. However, the Bank meets or exceeds these rules in all significant respects, except as summarized in the Governance section of the Bank's website (https://www.scotiabank.com/ca/en/about/inside-scotiabank/corporate-governance/differences.html).

The Corporate Governance Policies and the committee charters are available in the Governance section of the Bank's website and in print to any shareholder who requests a copy from the Bank's Corporate Secretary. Additional information on the Bank's Audit and Conduct Review Committee, including a copy of its charter and descriptions of its members and their applicable education and experience, can be found in Exhibit 1, the Bank's Annual Information Form under the heading "The Bank's Audit and Conduct Review Committee" and in Schedule "C" thereto.

Director Independence

The Bank is committed to complying with all applicable laws, rules and regulations related to the status of its Directors. The Bank defines a Director who does not have a direct or indirect material relationship with the Bank as independent. The Board has approved Director Independence Standards (the "Independence Standards"), which provide a framework for the Board to assess any material relationships of the Directors with the Bank. The Independence Standards are derived from the Bank Act Affiliated Persons Regulations, the CSA rules and the NYSE corporate governance rules. Each year:

- The Board reviews its Directors against these standards, considering all relevant facts and circumstances, including the relationship of the non-management Directors to the Bank — as well as any relationship to the Bank of their spouses, children, principal business affiliations and any other relevant individuals.
- All Directors complete a detailed questionnaire to inform this review.
- All Directors certify their compliance with the Bank's Code of Conduct, including the requirement that they declare any material interest in matters coming before the Board.

Brian J. Porter is non-independent, due to his position as President and Chief Executive Officer.

That means, 13 of the current 14 (or 93%) Directors are independent, including Aaron W. Regent, the Chairman of the Board.

The Board also takes appropriate steps to ensure that the Board is able to function independent of management.

The independent members of the Board held an "in camera" session at all regularly scheduled Board meetings held in fiscal 2020.

The following Directors are independent: Nora A. Aufreiter, Guillermo E. Babatz, Scott B. Bonham, Charles H. Dallara, Lynn K. Patterson, Michael D. Penner, Una M. Power, Aaron W. Regent, Calin Rovinescu, Indira V. Samarasekera, Susan L. Segal, L. Scott Thomson and Benita M. Warmbold.

Director Independence Standards

A majority of the Bank's directors are independent, as required by the CSA's National Policy 58- 201 — *Corporate Governance Guidelines* and the current NYSE listed company corporate governance rules. To be considered independent under these rules, the Board must determine that a director has no direct or indirect material relationship with the Bank. A material relationship is a relationship that could, in the view of the Board, be reasonably expected to interfere with the exercise of a director's judgement independent of management. The rules permit the Board to adopt categorical standards in making its independence determinations. The standards adopted by the Board are reproduced below. Definitions and interpretation of terms in the standards are in accordance with applicable source rules and regulations, as amended from time to time. In applying these standards, the Board broadly considers all relevant facts and circumstances.

1. A director will not be independent if:
    - the director is, or has been within the last three years, an employee or executive officer of the Bank or a subsidiary, or an immediate family member of the director is, or has been within the last three years, an executive officer of the Bank or a subsidiary;
    - the director has received, or an immediate family member of the director has received for service as an executive officer, during any twelve-month period within the last three years, more than the lesser of Cdn$75,000 and US$120,000 in direct compensation from the Bank or a subsidiary, other than director and committee fees and pension or other forms of deferred compensation for prior service (provided such compensation is not contingent in any way on continued service);
    - (a) the director or an immediate family member of the director is a current partner of a firm that is the Bank's or a subsidiary's internal or external auditor; (b) the director is a current employee of such firm; (c) an immediate family member of the director is a current employee of such a firm and personally works on the Bank's or a subsidiary's audit, or the director's spouse, or child or stepchild who shares a home with the director, is an employee of such firm and participates in the firm's audit, assurance or tax compliance (but not tax planning) practice; or (d) the director or an immediate family member was within the last three years a partner or employee of such a firm and personally worked on the Bank's or a subsidiary's audit within that time;
    - the director or an immediate family member of the director, is, or has been within the last three years, employed as an executive officer of another company where any of the Bank's or a subsidiary's present executive officers at the same time serves or served on that company's compensation committee;
    - the director is currently an employee, or an immediate family member of the director is currently an executive officer, of a company that has made payments to, or received payments from, the Bank or a subsidiary for property or services in an amount which, in any of the last three fiscal years, exceeds the greater of US$1 million or 2% of such other company's consolidated gross revenues (with the exception that contributions to tax exempt organizations shall not be considered payments for this purpose); or
    - the director is "affiliated" with the Bank as that term is used in the Affiliated Persons (Banks) Regulations made under the Bank Act (Canada).

An "immediate family member" includes a person's spouse, parents, children, stepchildren, siblings, mothers and fathers-in-law, sons and daughters-in-law, brothers and sisters-in-law, and anyone (other than domestic employees) who shares the person's home.

2. In addition to satisfying the independence standards set forth above, members of the audit committee must satisfy the following additional independence requirements:
    - An audit committee member may not accept, directly or indirectly, any consulting, advisory or other compensatory fee from the Bank or any subsidiary, other than compensation in his

or her capacity as a member of the Board or any committee or any fixed amount of compensation under a retirement plan (including deferred compensation) for prior service with the Bank (provided such compensation is not contingent in any way on continued service).

- An audit committee member may not be an “affiliated” person of the Bank or any subsidiary, as defined in applicable Canadian and U.S. securities laws.

The indirect acceptance by an audit committee member of any consulting, advisory or other compensatory fee includes acceptance of such fee by a spouse, minor child or stepchild or a child or stepchild who shares a home with the audit committee member or by an entity in which such audit committee member is a partner, member, an officer such as a managing director occupying a comparable position or executive officer, or occupies a similar position (except limited partners, non-managing members and those occupying similar positions who, in each case, have no active role in providing services to the entity) and which provides accounting, consulting, legal, investment banking or financial advisory services to the Bank or any subsidiary.

3. In addition to satisfying the independence standards set forth above in section 1, in affirmatively determining the independence of any director who will serve on the Bank’s compensation committee, the Board must consider all factors specifically relevant to determining whether a director has a relationship to the Bank which is material to that director’s ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to:
    - the source of compensation of such director, including any consulting, advisory or other compensatory fee paid by the Bank or a subsidiary to such director; and
    - whether such director is affiliated with the Bank, a subsidiary of the Bank or an affiliate of a subsidiary of the Bank.

Whether directors meet these categorical independence standards will be reviewed and will be made public annually prior to their standing for re-election to the Board. The Board will examine relationships such as the nature of the director’s banking, lending or other business dealings with the Bank or a director’s role in a charitable organization which has received a certain level of contributions from the Bank. For relationships not covered by the standards in section 1 above, the determination of whether the relationship is material, and therefore whether the director would be independent, will be made by the directors who satisfy those standards. The Bank will disclose the basis for any Board determination that a relationship is immaterial despite the fact that it does not meet the categorical standards set forth above.

Exhibit 99.6

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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors of The Bank of Nova Scotia (the Bank)

We, KPMG LLP, consent to the inclusion in this annual report on Form 40-F of:

i) our report of independent registered public accounting firm dated December 1, 2020 to the Shareholders of the Bank on the consolidated financial statements of the Bank, which comprise the consolidated statements of financial position as at October 31, 2020 and October 31, 2019, the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the years in the three-year period ended October 31, 2020, and the related notes; and

ii) our report of independent registered public accounting firm dated December 1, 2020 to the Shareholders of the Bank on the effectiveness of internal control over financial reporting as of October 31, 2020;

each of which is contained in this annual report on Form 40-F of the Bank for the fiscal year ended October 31, 2020.

We, KPMG LLP, also consent to the incorporation by reference of such reports in the Registration Statement – Form F-3 – File No. 333-228614 and the Registration Statement – Form S-8 – File No. 333-199099 of the Bank.

KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants

December 1, 2020
Toronto, Canada

KPMG LLP is a Canadian limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.
KPMG Canada provides services to KPMG LLP.

Exhibit 99.7

CERTIFICATIONS

I, BRIAN J. PORTER, certify that:

1. I have reviewed the annual report on Form 40-F of The Bank of Nova Scotia;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The issuer's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: December 1, 2020

/s/ Brian J. Porter
Brian J. Porter
President and Chief Executive Officer

CERTIFICATIONS

I, RAJAGOPAL VISWANATHAN, certify that:

1. I have reviewed the annual report on Form 40-F of The Bank of Nova Scotia;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The issuer's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: December 1, 2020

/s/ Rajagopal Viswanathan
Rajagopal Viswanathan
Group Head and Chief Financial Officer

Exhibit 99.8

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ENACTED PURSUANT TO
SECTION 906 OF THE U.S. SARBANES-OXLEY ACT OF 2002

In connection with the annual report of The Bank of Nova Scotia (the "Bank") on Form 40-F for the year ended October 31, 2020 (the "Report") as filed with the U.S. Securities and Exchange Commission,

I, Brian J. Porter, President and Chief Executive Officer of the Bank, certify, pursuant to 18 U.S.C. section 1350, as enacted pursuant to section 906 of the U.S. Sarbanes-Oxley Act of 2002, that to my knowledge:

(i) the Report fully complies with the requirements of section 13(a) or 15(d) of the U.S. Securities Exchange Act of 1934; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Bank.

December 1, 2020

/s/ Brian J. Porter
Brian J. Porter
President and Chief Executive Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ENACTED PURSUANT TO
SECTION 906 OF THE U.S. SARBANES-OXLEY ACT OF 2002

In connection with the annual report of The Bank of Nova Scotia (the "Bank") on Form 40-F for the year ended October 31, 2020 (the "Report") as filed with the U.S. Securities and Exchange Commission,

I, Rajagopal Viswanathan, Group Head and Chief Financial Officer of the Bank, certify, pursuant to 18 U.S.C. section 1350, as enacted pursuant to section 906 of the U.S. Sarbanes-Oxley Act of 2002, that to my knowledge:

(i) the Report fully complies with the requirements of section 13(a) or 15(d) of the U.S. Securities Exchange Act of 1934; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Bank.

December 1, 2020

/s/ Rajagopal Viswanathan
Rajagopal Viswanathan
Group Head and Chief Financial Officer