Third Quarter 2020



Royal Bank of Canada third quarter 2020 results

All amounts are in Canadian dollars and are based on financial statements prepared in compliance with International Accounting Standard 34 Interim Financial Reporting, unless otherwise noted.

Total PCL⁽²⁾ **CET1** Ratio Net Income Diluted EPS(1) \$675 Million 12.0% \$3.2 Billion \$2.20 15.7% <u>Total PCL ratio on loans</u> Well above regulatory Down 2% YoY down 125 bps⁽³⁾ QoQ requirements

TORONTO, August 26, 2020 – Royal Bank of Canada (RY on TSX and NYSE) today reported net income of \$3,201 million for the quarter ended July 31, 2020, down \$62 million or 2% from the prior year. Diluted EPS was \$2.20, down 1% over the same period. Our results reflect record earnings in Capital Markets as well as solid earnings in Insurance. However, these results were offset by lower earnings in Personal & Commercial Banking, Wealth Management and Investor & Treasury Services, largely due to the impact of lower interest rates

Compared to last quarter, net income was up \$1,720 million with higher results in Capital Markets, Personal & Commercial Banking and Wealth Management, including lower provisions (total PCL was down \$2,155 million from last quarter) as the impact of the onset of the COVID-19 pandemic on provisions was reflected in the prior quarter. Higher results in Insurance also contributed to the increase. These factors were partially offset by lower results in Investor & Treasury Services.

The total PCL ratio on loans was 40 bps, down 125 bps from last quarter. The PCL ratio on impaired loans of 23 bps decreased 14 bps from last quarter, largely reflecting lower provisions in Capital Markets and Personal & Commercial Banking. Our capital position remained robust, with a Common Equity Tier 1 (CET1) ratio of 12.0%, up 30 bps from last quarter. We also had a strong average Liquidity Coverage Ratio (LCR) of 154%.

"We continue to navigate these uncertain times from a position of strength and stability. Our robust capital and liquidity position, diversified business model, prudent approach to risk management, and technology capabilities provide the foundation to enable our people to continue supporting clients, providing advice and creating more value today and over the long-term," **said Dave McKay, RBC President and Chief Executive Officer**. "RBC has a proud history of helping our clients thrive and communities prosper. Since the onset of the COVID-19 pandemic, RBCers have shown their unwavering commitment to delivering on our Purpose by enabling the re-emergence of our economies and supporting our clients with empathy and dedication." and supporting our clients with empathy and dedication.

Q3 2020 Compared to Q3 2019	 Net income of \$3,201 million Diluted EPS⁽¹⁾ of \$2.20 ROE⁽⁴⁾ of 15.7% CET1 ratio of 12.0% 	↓ 2% ↓ 1% ↓ 100 bps ↑ 10 bps
Q3 2020 Compared to Q2 2020	 Net income of \$3,201 million Diluted EPS⁽¹⁾ of \$2.20 ROE⁽⁴⁾ of 15.7% CET1 ratio of 12.0% 	 ↑ 116% ↑ 120% ↑ 840 bps ↑ 30 bps
YTD 2020 Compared to YTD 2019	 Net income of \$8,191 million Diluted EPS⁽¹⁾ of \$5.60 ROE⁽⁴⁾ of 13.6% 	↓ 15% ↓ 15% ↓ 340 bps

- Earnings per share (EPS). Provision for credit losses (PCL).
- (3) (4)
- Basis points (bps). Return on Equity (ROE). This measure does not have a standardized meaning under GAAP. For further information, refer to the Key performance and non-GAAP measures section of this Q3 2020 Report to Shareholders.

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Management's Discussion and Analysis

Management's Discussion and Analysis (MD&A) is provided to enable a reader to assess our results of operations and financial condition for the three and nine month periods ended or as at July 31, 2020, compared to the corresponding periods in the prior fiscal year and the three month period ended April 30, 2020. This MD&A should be read in conjunction with our unaudited Interim Condensed Consolidated Financial Statements for the quarter ended July 31, 2020 (Condensed Financial Statements) and related notes and our 2019 Annual Report. This MD&A is dated August 25, 2020. All amounts are in Canadian dollars, unless otherwise specified, and are based on financial statements prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), unless otherwise noted.

Additional information about us, including our 2019 Annual Information Form, is available free of charge on our website at rbc.com/investorrelations, on the Canadian Securities Administrators' website at sedar.com and on the EDGAR section of the United States (U.S.) Securities and Exchange Commission's (SEC) website at sec.gov.

Information contained in or otherwise accessible through the websites mentioned herein does not form part of this report. All references in this report to websites are inactive textual references and are for your information only.

Caution regarding forward-looking statements

From time to time, we make written or oral forward-looking statements within the meaning of certain securities laws, including the "safe harbour" provisions of the *United States Private Securities Litigation Reform Act of 1995* and any applicable Canadian securities legislation. We may make forward-looking statements in this Q3 2020 Report to Shareholders, in other filings with Canadian regulators or the SEC, in other reports to shareholders, and in other communications, including statements by our President and Chief Executive Officer. Forward-looking statements in this document include, but are not limited to, statements relating to our financial performance objectives, vision and strategic goals, the Economic, market, and regulatory review and outlook for Canadian, U.S., European and global economies, the regulatory environment in which we operate, and the risk environment including our liquidity and funding risk, and the potential continued impacts of the coronavirus (COVID-19) pandemic on our business operations, financial results and financial condition and on the global economy and financial market conditions. The forward-looking information contained in this document is presented for the purpose of assisting the holders of our securities and financial analysts in understanding our financial position and results of operations as at and for the periods ended on the dates presented, as well as our financial performance objectives, vision and strategic goals, and may not be appropriate for other purposes. Forward-looking statements are typically identified by words such as "believe", "expect", "foresee", "forecast", "anticipate", "intend", "estimate", "goal", "plan" and "project" and similar expressions of future or conditional verbs such as "will", "may", "should", "could" or "would".

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 could cause our actual results to differ materially from the expectations expressed in such forward-looking statements. These factors – many of which are beyond our control and the effects of which can be difficult to predict – include: credit, market, liquidity and funding, insurance, operational, regulatory compliance, strategic, reputation, legal and regulatory environment, competitive and systemic risks and other risks discussed in the risk sections of our 2019 Annual Report and the Risk management and Significant developments: COVID-19 sections of this Q3 2020 Report to Shareholders; including information technology and cyber risk, privacy, data and third party related risks, geopolitical uncertainty, Canadian housing and household indebtedness, regulatory changes, digital disruption and innovation, climate change, the business and economic conditions in the geographic regions in which we operate, the effects of changes in government fiscal, monetary and other policies, tax risk and transparency, environmental and social risk and the emergence of widespread health emergencies or public health crises such as pandemics and epidemics, including the COVID-19 pandemic and its impact on the global economy and financial market conditions and our business operations, financial results and financial condition.

We caution that the foregoing list of risk factors is not exhaustive and other factors could also adversely affect our results. When relying on our forward-looking statements to make decisions with respect to us, investors and others should carefully consider the foregoing factors and other uncertainties and potential events. Material economic assumptions underlying the forward-looking statements contained in this Q3 2020 Report to Shareholders are set out in the Economic, market and regulatory review and outlook and for each business segment under the Strategic priorities and Outlook headings in our 2019 Annual Report, as updated by the Economic, market and regulatory review and outlook of this Q3 2020 Report to Shareholders. Except as required by law, we do not undertake to update any forward-looking statement, whether written or oral, that may be made from time to time by us or on our behalf.

Additional information about these and other factors can be found in the risk sections of our 2019 Annual Report and the Risk management and Significant developments: COVID-19 sections of this Q3 2020 Report to Shareholders.

Overview and outlook

About Royal Bank of Canada

Royal Bank of Canada is a global financial institution with a purpose-driven, principles-led approach to delivering leading performance. Our success comes from the 86,000+ employees who bring our vision, values and strategy to life so we can help our clients thrive and communities prosper. As Canada's biggest bank, and one of the largest in the world based on market capitalization, we have a diversified business model with a focus on innovation and providing exceptional experiences to our 17 million clients in Canada, the U.S. and 34 other countries. Learn more at rbc.com.

	As at or for the three months ended			ed	As at or for the nine months ended					
(Millions of Canadian dollars, except per share, number of and percentage amounts) (1)		July 31 2020		April 30 2020		July 31 2019		July 31 2020		July 31 2019
Total revenue Provision for credit losses (PCL) Insurance policyholder benefits, claims and	\$	12,920 675	\$	10,333 2,830	\$	11,544 425	\$	36,089 3,924	\$	34,632 1,365
acquisition expense (PBCAE) Non-interest expense Income before income taxes		1,785 6,380 4,080		(177) 5,942 1,738		1,046 5,992 4,081		3,222 18,700 10,243		3,431 17,820 12,016
Net income	\$	3,201	\$	1,481	\$	3,263	\$	8,191	\$	9,665
Segments – net income Personal & Commercial Banking Wealth Management Insurance Investor & Treasury Services Capital Markets Corporate Support	\$	1,367 562 216 76 949 31	\$	532 424 180 226 105 14	\$	1,664 639 204 118 653 (15)	\$	3,585 1,609 577 445 1,936 39	\$	4,784 1,821 524 430 2,082 24
Net income	\$	3,201	\$	1,481	\$	3,263	\$	8,191	\$	9,665
Selected information Earnings per share (EPS) – basic – diluted Return on common equity (ROE) (2), (3) Average common equity (2) Net interest margin (NIM) – on average earning assets (4)	\$ \$	2.20 2.20 15.7% 79,350 1.49%	\$ \$	1.00 1.00 7.3% 79,100 1.61%	\$ \$	2.23 2.22 16.7% 75,800 1.61%	\$ \$	5.61 5.60 13.6% 78,750 1.56%	\$ \$	6.59 6.57 17.0% 74,450 1.61%
PCL on loans as ā % of average net loans and ācceptances PCL on performing loans as a % of average net loans		0.40%		1.65%		0.27%		0.77%		0.30%
and acceptances PCL on impaired loans as a % of average net loans and acceptances Gross impaired loans (GIL) as a % of loans and acceptances Liquidity coverage ratio (LCR) (5)		0.17% 0.23% 0.57% 154%		1.28% 0.37% 0.51% 130%		0.02% 0.25% 0.47% 122%		0.50% 0.27% 0.57% 154%		0.03% 0.27% 0.47% 122%
Capital ratios and Leverage ratio Common Equity Tier 1 (CET1) ratio Tier 1 capital ratio Total capital ratio Leverage ratio		12.0% 13.3% 15.3% 4.8%		11.7% 12.7% 14.6% 4.5%		11.9% 13.0% 15.0% 4.4%		12.0% 13.3% 15.3% 4.8%		11.9% 13.0% 15.0% 4.4%
Selected balance sheet and other information (6) Total assets (7) Securities, net of applicable allowance Loans, net of allowance for loan losses Derivative related assets Deposits (4) Common equity (7) Total capital risk-weighted assets Assets under management (AUM) Assets under administration (AUA) (8)	1	,683,134 290,513 655,941 157,378 ,017,158 78,821 551,421 841,200 ,872,900	1	1,675,682 269,941 673,448 140,807 1,009,447 79,236 558,412 789,000 5,381,800		1,406,902 240,661 612,393 98,774 880,239 76,550 510,664 744,800 5,588,600	2 6 1 1,0 5 8	83,134 90,513 55,941 57,378 17,158 78,821 51,421 41,200 72,900		,406,902 240,661 612,393 98,774 880,239 76,550 510,664 744,800 ,588,600
Common share information Shares outstanding (000s) – average basic – average diluted – end of period Dividends declared per common share Dividend yield (9) Dividend payout ratio Common share price (RY on TSX) (10) Market capitalization (TSX) (10)	1	,422,705 ,427,777 ,422,200 1.08 4.8% 49% 92.40 131,411	1	1,422,754 1,427,871 1,422,566 1.08 4.7% 108% 85.63 121,814		1,434,276 1,440,130 1,433,954 1.02 3.9% 46% 104.22 149,447	1,4 1,4 \$	24,364 29,543 22,200 3.21 4.7% 57% 92.40 31,411	1	,435,485 ,441,499 ,433,954 3.02 4.1% 46% 104.22 149,447
Business information (number of) Employees (full-time equivalent) (FTE) Bank branches Automated teller machines (ATMs)		83,734 1,330 4,561		82,499 1,329 4,564		84,087 1,328 4,586		83,734 1,330 4,561		84,087 1,328 4,586
Period average US\$ equivalent of C\$1.00 (11) Period-end US\$ equivalent of C\$1.00	\$ \$	0.737 0.747	\$ \$	0.725 0.718	\$ \$	0.754 0.757	\$ \$	0.740 0.747	\$ \$	0.751 0.757

Effective November 1, 2019, we adopted IFRS 16 Leases. Results from periods prior to November 1, 2019 are reported in accordance with IAS 17 Leases in this Q3 2020 Report to Shareholders. For further details on the impacts of the adoption of IFRS 16 including the description of accounting policies selected, refer to Note 2 of our Condensed Financial (1) Statements.

Average amounts are calculated using methods intended to approximate the average of the daily balances for the period. This includes average common equity used in the calculation of ROE. For further details, refer to the Key performance and non-GAAP measures section. (2)

These measures may not have a standardized meaning under generally accepted accounting principles (GAAP) and may not be comparable to similar measures disclosed by other financial institutions. For further details, refer to the Key performance and non-GAAP measures section. Commencing Q4 2019, the interest component and the accrued interest payable recorded on certain deposits carried at Fair Value Through Profit and Loss (FVTPL) previously presented in trading revenue and deposits, respectively, are presented in net interest income and other liabilities, respectively. Comparative amounts have been reclassified to (3)

(4)conform with this presentation.

LCR is the average for the three months ended for each respective period and is calculated in accordance with the Office of the Superintendent of Financial Institutions' (OSFI) (5) Liquidity Adequacy Requirements (LAR) guidance as updated in accordance with the regulatory guidance issued in Q2 2020. For further details, refer to the Liquidity and funding risk section.

Represents period-end spot balances. (6)

Effective Q4 2019, the transition adjustment related to the adoption of IFRS 15 Revenue from Contracts with Customers was revised. The comparative amounts have been Ì7 revised from those previously presented. AUA includes \$16.2 billion and \$6.7 billion (April 30, 2020 – \$16.1 billion and \$6.7 billion; July 31, 2019 – \$15.7 billion and \$8.3 billion) of securitized residential mortgages and credit

(8) card loans, respectively.

Defined as dividends per common share divided by the average of the high and low share price in the relevant period. (10)

Based on TSX closing market price at period-end. Average amounts are calculated using month-end spot rates for the period. (11)

Economic, market and regulatory review and outlook – data as at August 25, 2020

The predictions and forecasts in this section are based on information and assumptions from sources we consider reliable. If this information or these assumptions are not accurate, actual economic outcomes may differ materially from the outlook presented in this section.

Economic and market review and outlook

Economic activity began to recover across most advanced economies as COVID-19 containment measures were eased through the second calendar quarter of 2020. Significant fiscal and monetary policy stimulus has helped to support the partial recovery to date. However, a resurgence of virus spread in some countries alongside the tapering off of fiscal support, has raised uncertainty about the sustainability of the initial bounce back, and weakness in labour markets will likely persist beyond the conclusion of many of the fiscal and monetary measures. The trajectory of the economic recovery going forward remains highly uncertain.

Canada

An easing of containment measures which began in May 2020 has allowed a partial recovery in economic activity. Based on recent projections, GDP is expected to rebound 33%¹ in the third calendar quarter of 2020 after declining roughly 40%¹ in the second calendar quarter. To-date, household spending has been leading the recovery with indicators suggesting that home resale activity and retail sales have both rebounded above their respective year-ago levels in July 2020. Business sentiment has also improved but remains low. While the unemployment rate declined to 10.9% by July 2020 after rising to 13.7% in May 2020, it remains significantly elevated. The federal government continued to support the economy with income measures including extension of unemployment support for households losing work, wage subsidies, as well as loans and tax deferrals for businesses. The large increase in government spending prompted Fitch to downgrade Canada's credit rating to AA+ from AAA in June 2020, although other rating agencies still give the country's debt a top-tier rating. The Bank of Canada (BoC) held its policy rate steady at 0.25% in July 2020, but challenges remain in the sector as drilling activity continues to be muted. Although the initial rebound in economic activity has been somewhat stronger than expected, weak business and consumer confidence is expected to keep GDP well-below year-ago levels by the end of the calendar year.

U.S.

Extensive containment measures put in place at the end of the first calendar quarter of 2020 led to a sharp contraction in the U.S. economy through April 2020. Although containment measures began to ease in May 2020, GDP still declined by 32.9%¹ in the second calendar quarter, led by sharp declines in consumer spending and business investment, albeit with greater weakness at the beginning of the quarter than at the end. Reopening of the U.S. economy has been accompanied by a resurgence in the spread of COVID-19, resulting in some regions either pausing the pace of easing, or reintroducing containment measures. As of July 2020, overall employment has retraced more than 40% of the jobs lost since the contraction in March and April 2020. However, the recent resurgence in confirmed COVID-19 cases has likely slowed the pace of recovery. The negative impact on household income from job losses to-date has been cushioned by significant government support, including higher unemployment benefits and incentives for businesses to maintain payrolls. Federal supplemental unemployment insurance payments have now expired although negotiations are ongoing to provide additional support. The Federal Reserve (Fed) maintained its policy rate at a range of 0-0.25% in June 2020 and will continue to support the flow of credit to households and businesses through quantitative easing. We expect GDP will remain well below 2019 levels through the remainder of the calendar year, and the unemployment rate to remain elevated.

Europe

Despite the easing of containment measures in the latter half of the second calendar quarter of 2020, Euro area GDP declined 12.1%² during the same period. In the United Kingdom (U.K.), GDP contracted 2.2%² in the first calendar quarter of 2020 as the initial containment measures were implemented later than other regions, followed by a decline of 20.4%² in the second calendar quarter. Throughout the second calendar quarter of 2020, the European Central Bank (ECB) continued to hold interest rates below zero, and the Bank of England (BOE) close to zero. Economic activity is expected to partially rebound in the second half of calendar 2020, with the expansion of fiscal and monetary policy stimulus boosting consumer and business sentiment. However, GDP is expected to remain well below 2019 levels through the remainder of the calendar year.

Financial markets

Equity markets bounced back by mid-August 2020, with the S&P 500 retracing all of the initial decline experienced at the onset of the global spread of the COVID-19 pandemic. Pessimism eased with hopes surrounding possible vaccine and treatment plans, and substantial fiscal and monetary policy support. Benchmark yields on government bonds remain low reflecting market expectations that the central banks will maintain rates at current low levels for an extended period. Oil prices have recovered partially after falling sharply at the beginning of the second calendar quarter of 2020 while credit spreads narrowed considerably in response to central banks' measures implemented early in the crisis to support credit markets.

1 Annualized Rate

2 Non-annualized Rate

Regulatory environment

We continue to monitor and prepare for regulatory developments and changes in a manner that seeks to ensure compliance with new requirements while mitigating any adverse business or financial impacts. Such impacts could result from new or amended laws and regulations and the expectations of those who enforce them. A high level summary of the key regulatory changes that have the potential to increase or decrease our costs and the complexity of our operations is included in the Legal and regulatory environment risk section of our 2019 Annual Report, as updated below. A summary of the additional regulatory changes instituted by governments globally and by OSFI during 2020 in response to the COVID-19 pandemic are included in the Significant developments: COVID-19, Liquidity and funding risk and Capital management sections of this Q3 2020 Report to Shareholders.

Global uncertainty

Significant uncertainty about the impacts of the COVID-19 pandemic, trade policy and geopolitical tensions continue to pose risks to the global economic outlook. In June 2020, the International Monetary Fund (IMF) projected global growth in calendar 2020 to decrease from -3% in April to -4.9% as the impacts of the pandemic in the first half of 2020 were larger than anticipated and the projected recovery period is expected to be more gradual than previously forecasted. Estimates around the expected recovery beyond calendar 2020 remain similarly uncertain, as the timelines for economic recovery are largely dependent on the duration of the pandemic, including the possibility of subsequent waves, and the effectiveness of the fiscal and monetary policy measures introduced in response to the pandemic. Trade policy also remains a source of uncertainty, as the deadline for the United Kingdom (U.K.) and European Union (EU) to extend the December 31, 2020 Brexit transition period has now passed and significant areas of negotiation remain unresolved. On July 1, 2020 the Canada-United States-Mexico Agreement became effective, reducing uncertainty about trade within North America, but the post-pandemic future of global trade remains uncertain as countries may look to decrease reliance on the global supply chain. Finally, global financial markets remain vulnerable to geopolitical tensions, such as those between the U.S. and China, Canada and China, and the U.K. and China, many of which centre around trade and technology. Additionally, the U.S. has re-imposed tariffs on aluminum from Canada and Mexico, to which Canada has responded by announcing counter-tariffs on U.S. aluminum. These imposed tariffs could signal heightened tensions and may increase the level of uncertainty about trade relations and possible impacts to certain businesses. Our diversified business model, as well as our product and geographic diversification, continue to help mitigate the risks posed by global uncertainty.

United States regulatory initiatives

Policymakers continue to evaluate and implement reforms to various U.S. financial regulations, which could result in either expansion of or reductions to U.S. regulatory requirements and associated changes in compliance costs. In June 2020, the financial regulatory agencies responsible for implementing the Volcker Rule finalized revisions to the covered fund provisions which become effective October 1, 2020. The final rule adds certain exclusions from the definition of covered funds, provides additional flexibility to engage in fund investments and simplifies certain restrictions on inter-affiliate relationships with covered funds. We are currently assessing the impacts of the final rule and we do not anticipate any significant challenges in meeting the revised rule by the effective date. Additionally, in May 2020, the Office of the Comptroller of the Currency (OCC) released revisions to the regulation implementing the Community Reinvestment Act (CRA). The CRA is intended to increase bank lending, investment, and services in low- and moderate-income communities. While the changes to the CRA offer additional incentives to banks, there are additional compliance requirements in order to realize any benefits. These requirements are effective on January 1, 2023 and we are currently assessing the impacts.

For a discussion on risk factors, including our framework and activities to manage these risks and other regulatory developments which may affect our business and financial results, refer to the Risk management – Top and emerging risks and Legal and regulatory environment risk sections of our 2019 Annual Report and the Risk and Capital management sections of our Q1 2020, Q2 2020 and this Q3 2020 Report to Shareholders.

Significant developments: COVID-19

On March 11, 2020, the World Health Organization declared the outbreak of a strain of novel coronavirus disease, COVID-19, a global pandemic. The breadth and depth of the impact of COVID-19 on the global economy and financial markets has continued to evolve with disruptive effects in countries in which we operate and beyond, while also contributing to increased market volatility and changes to the macroeconomic environment. In addition, COVID-19 has continued to affect our employees, some of our clients and communities, with resultant impacts on our operations, financial results and present and future risks to our business. For further details on these risks, refer to the Impact of pandemic risk factor section below.

Measures to contain the spread of COVID-19, including business closures, social distancing protocols, travel restrictions and school closures were widespread. Although staged and full reopening plans have begun across most regions, these measures are continuing to have extensive implications for the global economy, including the pace and magnitude of recovery, as well as on related market functions, unemployment rates, and fiscal and monetary policies. The easing of containment measures and reopening plans have been accompanied by a resurgence in the spread of COVID-19 in some regions, resulting in the re-imposition of restrictions in some cases and further uncertainty about the timing of a complete recovery. The pandemic, the containment measures and the phased reopening approach in several regions could have longerterm effects on economic and commercial activity and consumer behaviour after the pandemic recedes and containment measures are fully lifted. In conjunction with the COVID-19 pandemic containment measures, governments, regulatory bodies, central banks and private organizations around the globe have continued to provide unprecedented relief programs and temporary measures to facilitate the continued operation of the global economy and financial system which are intended to provide support to individuals and businesses. Commencing in Q2 2020, regulatory guidance from the Government of Canada and OSFI was implemented to facilitate the continued strength of the Canadian financial systems, including the expansion of existing facilities, the introduction of new funding programs and capital modifications to support the programs implemented in response to COVID-19. In addition, the BoC, the Fed and other central banks took further steps to stimulate the economy through reductions in benchmark interest rates. These programs remain in place or have continued to be expanded to support the overall economy. Despite these measures and programs, the extent and duration of the impact of COVID-19 continues to be uncertain.

For further details on these measures and their impact on us, refer to Impact of pandemic risk factor and Relief program sections outlined below as well as the Liquidity and funding risk and Capital management sections of this Q3 2020 Report to Shareholders.

In addition to the broad impacts of COVID-19 on our employees, clients, communities and operations, COVID-19 also continues to impact financial results across all of our business segments to varying degrees. The impact on our consolidated results has been primarily reflected in higher PCL and fair value changes due to the impact of market volatility, including movements in Other comprehensive income (OCI). Results across all of our business segments have also been and continue to be impacted by downstream implications from the changes in the macroeconomic environment, including lower interest rates, modest consumer spending relative to pre-pandemic levels, fluctuations in credit spreads, as well as other impacts including increased client-driven volumes and changes in operating costs. Notwithstanding these challenges, our financial results and condition amid these challenges demonstrate the resilience of our capital and liquidity positions, which have been bolstered by our position of strength at the time of entering this crisis and throughout the period.

Given the uncertainty in the extent and duration of the COVID-19 pandemic and the impacts it has on the economy and society as a whole, as well as the timeline of the transition to a fully reopened economy, the future impact on our businesses and our financial results and condition remains uncertain.

Commencing in Q2 2020, in response to the COVID-19 pandemic, we instituted various measures and programs to protect and support our employees, clients and communities, while also striving to ensure continued customer service to our clients. Coinciding with the gradual and phased reopening approach across most regions, we continue to evaluate these measures and programs and have adapted them accordingly.

Impact of pandemic risk factor

Pandemics, epidemics or outbreaks of an infectious disease in Canada or worldwide could have an adverse impact on our business, including changes to the way we operate, and on our financial results and condition. Commencing in Q2 2020, the spread of the COVID-19 pandemic, given its severity and scale, continues to adversely affect our business, some of our clients and also continues to pose risks to the global economy. Governments and regulatory bodies in affected areas have imposed a number of measures designed to contain the pandemic, including widespread business closures, travel restrictions, quarantines, and restrictions on gatherings and events. While a number of containment measures have been gradually eased or lifted across most regions, additional safety precautions and operating protocols aimed at containing the spread of COVID-19 have been and continue to be instituted. Notwithstanding the gradual easing of containment measures, the remaining measures continue to impact global economic activity, including the pace and magnitude of recovery as well as contributing to increased market volatility and changes to the macroeconomic environment. As the impacts of the COVID-19 pandemic continue to materialize, the effects of the disruption on our business strategies and initiatives have been and continue to be adversely impacted, resulting in ongoing effects to our financial results, including the realization of credit, market or operational risk losses.

Governments, monetary authorities, regulators and financial institutions, including us, have taken and continue to take actions in support of the economy and financial system. These actions include fiscal, monetary and other financial measures to increase liquidity, and provide financial aid to individual, small business, commercial and corporate clients. Additionally, regulatory relief measures in support of financial institutions have also been provided. For more information on these programs, refer to the Relief programs, Liquidity and funding risk and Capital management sections below.

We are closely monitoring the potential continued effects and impacts of the COVID-19 pandemic, which is a rapidly evolving situation. Uncertainty remains as to the full impacts of COVID-19 on the global economy, financial markets, and us, including on our financial results, regulatory capital and liquidity ratios and ability to meet regulatory and other requirements. The ultimate impacts will depend on future developments that are highly uncertain and cannot be predicted, including the scope, severity, duration and the possibility of subsequent waves of the pandemic, as well as the effectiveness of actions and measures taken by government, monetary and regulatory authorities and other third parties. With respect to client relief programs, we may face challenges, including increased risk of client disputes, litigation, government and regulatory scrutiny as a result of the effects of the COVID-19 pandemic on market and economic conditions and actions government authorities take in response to those actions. We may also face increased operational and reputational risk and financial losses, including higher credit losses amongst other things, depending on the effectiveness of these client relief programs for our individual, small business, commercial and corporate clients. The effectiveness of these programs will depend on the duration and scale of COVID-19 and will differ by region and industry, with varying degrees of benefit to our clients.

The COVID-19 pandemic has and may continue to result in disruptions to our clients and the way in which we conduct our business, including the closure of certain branches, prolonged duration of staff working from home, and changes to our operations due to higher volumes of client requests, as well as disruptions to key suppliers of our goods and services. These factors have adversely impacted, and may continue to adversely impact, our business operations and the quality and

continuity of service to customers. To date, we have taken proactive measures through our business continuity plans, carefully planning the return to premise for some of our employees, and our crisis management teams have increased their efforts to preserve the well-being of our employees and our ability to serve clients. Additionally, we have launched various relief programs beyond the available government programs to further support our clients in financial need. For more information on our relief programs, refer to the Relief programs section below.

In addition to the impact that the COVID-19 pandemic has had and continues to have on our business, it may also continue to increase financial stress on our clients. This, 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, could lead to increased pressure on our individual clients as well as on the financial performance of our small business, commercial and corporate clients, which could result in higher than expected credit losses for us.

If the COVID-19 pandemic is prolonged, including the possibility of subsequent waves, or further diseases emerge that give rise to similar effects, the adverse impact on the economy could deepen and result in further volatility and declines in financial markets. Moreover, it remains uncertain how the macroeconomic environment, and societal and business norms will be impacted following this pandemic. Unexpected developments in financial markets, regulatory environments, or consumer behaviour and confidence may also have adverse impacts on our financial results and condition, business operations and reputation, for a substantial period of time.

In virtually all aspects of our operations, our view of risks is not static. Consistent with our Enterprise Risk Management Framework (ERMF), we continue to evaluate top and emerging risks arising from the impacts of the COVID-19 pandemic, including:

- Information Technology (IT) and Cyber risks have increased as malicious activities are creating more threats for cyberattacks including COVID-19 phishing emails, malware-embedded mobile apps that purport to track infection rates, and targeting of vulnerabilities in remote access platforms as companies continue to operate with work from home arrangements. Our IT and cyber controls are operating effectively and we are continuing to monitor the threat landscape.
- Privacy, Data and Third Party risks have also been heightened as the use of work from home arrangements have become common practice. As the majority of our employees continue to work from home, we are continuously monitoring and enforcing best practices as we seek to maintain the privacy and confidentiality of all sensitive information. Our security awareness program is required to be completed by each employee annually and includes cyber awareness training on managing risks while working remotely. Third party providers critical to our operations are being monitored for any impact on their ability to deliver services, including vendors of our third party providers.
- Canadian Housing and Household Indebtedness risks have increased as a result of a rise in unemployment and decline in labour participation. While interest rate cuts, government support programs and relief programs offered by financial institutions have helped and will continue to help many households, concerns related to housing affordability in certain markets and levels of Canadian household debt that were already elevated before the additional challenges brought on by the COVID-19 pandemic, could continue to rise if the COVID-19 pandemic worsens, resulting in, among other things, higher credit losses.

Our business activities expose us to a wide variety of risks and as a global financial institution with a diversified business model, we actively manage risks to help protect and enable our businesses. As described in our 2019 Annual Report, our ERMF provides an overview of our enterprise-wide programs for managing risk, including identifying, assessing, measuring, controlling, monitoring and reporting on significant risks that face the organization. Our ERMF has continuously evolved, well positioning us to manage through adverse economic and market conditions and providing us with a strong foundation to allow us to navigate through these periods of heightened risk.

For further details on how we manage our risks, refer to the risk sections in our 2019 Annual Report.

Relief programs

In response to the COVID-19 pandemic, several government programs have been and continue to be developed to provide financial aid to individuals and businesses, which include wage replacement for individuals, wage subsidies and rent relief for businesses, and lending programs for businesses, which we are administering for our clients. To further support our clients in financial need, we also launched various relief programs beyond available government programs.

RBC relief programs

During the second quarter of 2020, we announced the RBC Client Relief program which aimed to provide immediate and longterm relief for clients impacted by the COVID-19 pandemic. Through this program, we are helping our clients by implementing various relief measures, including payment deferrals, reduced credit card charges and refinancing or credit restructuring, fee waivers and temporary limit increases across various retail, small business and commercial products. The RBC Client Relief program for commercial and small business clients ended on June 30, 2020 and loan deferrals within the program will end for retail clients on September 30, 2020; clients who are already participating in this program may have payment deferrals or other relief that extends past these dates. We will continue to support clients on a case by case basis.

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As at July 31, 2020, more than 278,400 clients (April 30, 2020 – 492,500 clients) globally are benefitting from our payment deferral program, including clients that have continued to make payments, and the following table summarizes the number of loans and their associated gross carrying amounts outstanding.

	As at Ju	ly 31, 2020	As at April 30, 2020			
		Gross carrying amount of	Gross carrying amount of			
(Millions of Canadian dollars, except number of loan amounts)	Number of loans	loans outstanding	Number of loans	loans outstanding		
Residential mortgages	138,827	\$ 41,270	198,843	\$ 54,064		
Personal	74,115	2,592	118,434	3,477		
Credit cards (1)	96,542	1,012	224,243	1,480		
Small business	8,465	1,134	8,310	1,142		
Wholesale (1)	26,592	16,810	30,169	18,140		
Total (1)	344,541	\$ 62,818	579,999	\$ 78,303		

(1) Amounts have been revised from those previously presented.

Government programs in response to the COVID-19 pandemic

Government of Canada

Throughout the second and third quarter of 2020, the Department of Finance Canada announced new programs and revisions to existing programs to help support the functioning of markets and finance businesses while ensuring the financial sector remains sound, well-capitalized and resilient, in light of the impact of the COVID-19 pandemic. To support businesses experiencing cash flow challenges during this unprecedented time, the Canadian Federal government established the following significant programs:

- The Canada Emergency Business Account (CEBA) Under this program, Canadian banks are able to provide interestfree loans of up to \$40,000 to existing eligible small business clients as a source of liquidity for immediate operating costs. The loans are funded by the Government of Canada, with the Canadian banks retaining no credit risk.
- The Business Credit Availability Program (BCAP) This program is comprised of the Export Development Canada (EDC) BCAP Guarantee and the Business Development Bank of Canada (BDC) Co-Lending Program.
 - Export Development Canada (EDC) BCAP Guarantee Under this program, Canadian banks are able to provide existing eligible mid-sized and large business clients, focused on both export oriented and domestic sales-based businesses, with loans of up to \$6.25 million to support short-term liquidity needs. These loans must be used for certain operating costs and are 80% guaranteed by the EDC.
 - Business Development Bank of Canada (BDC) Co-Lending Program Under this program, the BDC and Canadian banks jointly provide loans, which are funded based on a 80/20 split, respectively, to eligible business clients of up to \$6.25 million to meet their operational and liquidity needs. The maximum loan varies by the size of the business and may be structured with an interest-only payment obligation for the first year.
 - BDC Mid-Market Financing Program Under this program, the BDC and Canadian banks provide loans, which are funded based on a 90/10 split, respectively, to eligible mid-sized business clients ranging between \$12.5 million and \$60 million to meet their operational and liquidity needs.

As at July 31, 2020, we have facilitated the administration of relief to more than 158,100 clients (April 30, 2020 - 115,250) who have enrolled in these programs, with a corresponding total of \$6.4 billion (April 30, 2020 - \$4.5 billion) relief approved, of which \$4.2 billion (April 30, 2020 - \$1.3 billion) was funded. For further details, refer to Note 2 of our Condensed Financial Statements.

In addition to this, the Government of Canada and other governing bodies have provided guidance in other areas including but not limited to the extension of regulatory and tax filings, none of which are considered material for us.

United States Government

On March 27, 2020, the Coronavirus Aid, Relief and Economic Security (CARES) Act was signed into law, which is in addition to other programs that have been enacted by the United States Federal Government. As part of the CARES Act, the Paycheck Protection Program (PPP) offers small businesses with loans, guaranteed by the United States Federal Government, to support the payment of payroll costs, interest on mortgages, rent, and utilities. Through this program, we have provided loans directly to our clients based on their assessment of certain eligibility requirements and failure to meet these requirements will result in recourse actions for the borrower. In some cases, the United States Small Business Administration may forgive all or a portion of the loan. On June 5, 2020, the Paycheck Protection Program Flexibility Act of 2020 (Flexibility Act) was signed into law, which amends the CARES Act and is intended to provide additional relief from the original terms of the PPP, including but not limited to, the extension of the period available for support payments from 8 to 24 weeks after PPP loan origination, the extension of the maturity of PPP loans granted from two to five years and the modification of eligibility requirements. As at July 31, 2020, we have provided \$5,804 million (US\$4,334 million) of funding to 15,533 clients through these programs. As at April 30, 2020, we provided \$5,119 million (US\$3,678 million) of funding to 8,850 clients through these programs. For further details, refer to Note 2 of our Condensed Financial Statements.

Separately, the U.S. Department of the Treasury provided guidance deferring due dates for various tax returns, other tax filings and tax payments, none of which are considered material for us.

Programs in support of liquidity and funding

Commencing in Q2 2020, governments and federal agencies expanded the eligibility criteria to their existing funding programs and announced new programs to provide further liquidity to banks as well as providing additional sources to access funding with which we can support our clients during this time of uncertainty, including:

- Existing funding programs The BoC has increased funding available and broadened eligibility requirements for existing term repo facilities and the revised insured mortgage purchase programs through the Canada Mortgage and Housing Corporation (CMHC). These programs also include central banks' programs in other jurisdictions, such as the BoE's U.S. dollar swap facility.
- New funding programs The BoC added the Banker's Acceptance Purchase Facility and the Standing Term Liquidity Facility. Additionally, the Fed introduced the Primary Dealer Credit Facility.

For further details on how we are managing our liquidity and funding profile, refer to the Liquidity and funding risk section of this Q3 2020 Report to Shareholders.

We will continue to monitor and provide updates on new programs or further interpretations and guidance announced by us, governments and federal agencies. In order to support all of the aforementioned programs, central banks and domestic and global regulators have provided guidance on regulatory capital, liquidity and reporting requirements. For a discussion on these initiatives, refer to the Risk and Capital management sections of this Q3 2020 Report to Shareholders.

Financial performance

Overview

Q3 2020 vs. Q3 2019

Net income of \$3,201 million was down \$62 million or 2% from a year ago. Diluted earnings per share (EPS) of \$2.20 was down \$0.02 or 1% and return on common equity (ROE) of 15.7% was down from 16.7% last year. Our Common Equity Tier 1 (CET1) ratio of 12.0% was up 10 bps from a year ago.

Our results reflected lower earnings in Personal & Commercial Banking, Wealth Management, and Investor & Treasury Services, largely offset by higher earnings in Capital Markets, Corporate Support, and Insurance.

Personal & Commercial Banking earnings decreased primarily attributable to lower spreads and higher PCL. These factors were partially offset by average volume growth of 11% in Canadian Banking.

Wealth Management results were down, largely due to a decline in net interest income as average volume growth was more than offset by the impact of lower interest rates. Higher PCL also contributed to the decrease. These factors were partially offset by higher average fee-based client assets and an increase in transaction and other revenue.

Investor & Treasury Services earnings decreased mainly due to lower funding and liquidity revenue, partially offset by improved results in our asset services business.

Capital Markets results were up primarily driven by higher revenue in Global Markets, partially offset by higher compensation on improved results and higher taxes mainly due to an increase in the proportion of earnings from higher tax rate jurisdictions.

Corporate Support net income was \$31 million in the current quarter, primarily due to asset/liability management activities, partially offset by net unfavourable tax adjustments and residual unallocated costs. Net loss was \$15 million in the prior year, mainly due to net unfavourable tax adjustments, largely offset by asset/liability management activities.

Insurance results increased mainly due to higher favourable investment-related experience and improved claims experience. These factors were partially offset by the impact of longevity reinsurance contracts in the prior year.

For further details on our business segment results and CET1 ratio, refer to the Business segment results and Capital management sections, respectively.

Q3 2020 vs. Q2 2020

Net income of \$3,201 million was up \$1,720 million or 116% from the prior quarter. Diluted EPS of \$2.20 was up \$1.20 or 120% and ROE of 15.7% was up from 7.3% in the prior quarter. Our CET1 ratio of 12.0% was up 30 bps from the prior quarter.

Our results reflected higher earnings in Capital Markets, Personal & Commercial Banking, Wealth Management, and Insurance, partially offset by lower results in Investor & Treasury Services.

Capital Markets earnings were up largely due to lower PCL as the prior quarter reflected the impact of the onset of the COVID-19 pandemic. Higher fixed income trading revenue primarily from the reversal of loan underwriting markdowns in the U.S. and Europe driven by the improvement in market conditions compared to the prior quarter, as well as higher equity trading revenue across all regions, also contributed to the increase. These factors were partially offset by higher taxes due to an increase in the proportion of earnings from higher tax rate jurisdictions and higher compensation on improved results.

Personal & Commercial Banking results were higher primarily due to lower PCL as the prior quarter reflected the impact of the onset of the COVID-19 pandemic. Two more days in the current quarter and average volume growth of 4% in Canadian Banking also contributed to the increase. These factors were partially offset by lower spreads.

Wealth Management earnings increased primarily from the reversal of unfavourable changes in the fair value of interest rate derivatives, seed capital investments and the net impact of our U.S. share-based compensation plans driven by the improvement of market conditions in the current quarter. Lower staff-related costs also contributed to the increase. These factors were partially offset by lower client transactional activity, including the impact of elevated market volatility on volumes in the prior quarter. Net interest income also declined as the benefit from average volume growth was more than offset by the impact of lower interest rates.

Insurance results were up primarily due to improved travel and disability claims experience in the current quarter and higher favourable investment-related experience. These factors were partially offset by the impact of longevity reinsurance contracts in the prior quarter.

Investor & Treasury Services results decreased primarily driven by lower funding and liquidity revenue as the prior quarter benefitted from the impact of interest rate movements, as well as lower gains from the disposition of securities.

Q3 2020 vs. Q3 2019 (Nine months ended)

Net income of \$8,191 million decreased \$1,474 million or 15% from a year ago. Nine month diluted EPS of \$5.60 was down \$0.97 or 15% and ROE of 13.6% was down from 17.0% in the prior year.

Our results reflected lower earnings in Personal & Commercial Banking, Wealth Management, and Capital Markets, partially offset by solid earnings in Insurance and Investor & Treasury Services.

Personal & Commercial Banking earnings decreased largely reflecting higher PCL, lower spreads and higher staff-related costs. These factors were partially offset by average volume growth of 9% in Canadian Banking.

Wealth Management results were lower primarily due to lower net interest income, higher staff and technology-related costs, and higher PCL. The change in the fair value of seed capital investments, and the impact of a favourable accounting adjustment in Canadian Wealth Management in the prior year also contributed to the decrease. These factors were partially offset by an increase in revenue from higher average fee-based client assets, net of the associated variable compensation costs.

Capital Markets results decreased primarily due to higher PCL. This factor was partially offset by an increase in fixed income trading revenue in Global Markets, net of higher compensation.

Insurance earnings were up primarily due to higher favourable investment-related experience and longevity reinsurance contracts. These factors were partially offset by lower benefits from favourable reinsurance contract renegotiations.

Investor & Treasury Services results were up largely driven by higher revenue from our asset services business and lower staff-related costs. These factors were partially offset by lower client deposit revenue.

Impact of foreign currency translation

The following table reflects the estimated impact of foreign currency translation on key income statement items:

		For the three months ended				For the nine months ended		
(Millions of Canadian dollars, except per share amounts)	Q3	2020 vs. Q3 2019	Q3	8 2020 vs. Q2 2020		Q3 2020 vs. Q3 2019		
Increase (decrease):								
Total revenue	\$	107	\$	(67)	\$	140		
PCL		5		(2)		33		
Non-interest expense		76		(44)		104		
Income taxes		4		(3)		(3)		
Net income		22		(18)		6		
Impact on EPS								
Basic	\$	0.02	\$	(0.01)	\$	-		
Diluted		0.02		(0.01)		_		

The relevant average exchange rates that impact our business are shown in the following table:

	For the	three months e	For the nine months ende		
	July 31	April 30	July 31	July 31	
(Average foreign currency equivalent of C\$1.00) (1)	2020	2020	2019	2020	2019
U.S. dollar	0.737	0.725	0.754	0.740	0.751
British pound	0.585	0.575	0.603	0.579	0.586
Euro	0.648	0.659	0.673	0.663	0.665

(1) Average amounts are calculated using month-end spot rates for the period.

	 For th	e thr	ee months e	nde	d	For the nine n	nonth	ns ended
(Millions of Canadian dollars)	July 31 2020		April 30 2020		July 31 2019	July 31 2020		July 31 2019
Interest and dividend income Interest expense (1)	\$ 7,956 2,817	\$	9,226 3,761	\$	10,610 5,592	\$ 27,420 11,595	\$	30,891 16,253
Net interest income (1) NIM (1)	\$ 5,139 1.49%	\$	5,465 1.61%	\$	5,018 1.61%	\$ 15,825 1.56%	\$	14,638 1.61%
Insurance premiums, investment and fee income Trading revenue (1)	\$ 2,212 623	\$	197 (66)	\$	1,463 170	\$ 1,015	\$	4,557 879
Investment management and custodial fees Mutual fund revenue	1,489 915		1,500 890		1,440 924	4,524 2,751		4,271 2,696
Securities brokerage commissions Service charges Underwriting and other advisory fees	341 430 570		460 468 544		324 480 488	1,119 1,386 1,741		982 1,414 1,387
Foreign exchange revenue, other than trading Card service revenue	246 259		280 212		252 272	779		744
Credit fees Net gains on investment securities	296 11		304 45		322 26	960 67		92. 10
Share of profit in joint ventures and associates Other	20 369		15 19		21 344	57 704		5) 1,16
Non-interest income	\$ 7,781	\$	4,868	\$	6,526	\$ 20,264	\$	19,994
Total revenue	\$ 12,920	\$	10,333	\$	11,544	\$ 36,089	\$	34,632
Additional information Total trading revenue								
Net interest income (1) Non-interest income (1)	\$ 967 623	\$	1,064 (66)	\$	543 170	\$ 2,731 1,015	\$	1,66 87
Total trading revenue	\$ 1,590	\$	998	\$	713	\$ 3,746	\$	2,54

(1) Commencing Q4 2019, the interest component of the valuation of certain deposits carried at FVTPL previously presented in trading revenue is presented in Net interest income. Comparative amounts have been reclassified to conform with this presentation.

Q3 2020 vs. Q3 2019

Total revenue increased \$1,376 million or 12% from last year, mainly due to an increase in insurance premiums, investment and fee income (Insurance revenue), higher trading revenue as well as higher net interest income. The impact of foreign exchange translation also increased total revenue by \$107 million.

Net interest income increased \$121 million or 2%, largely due to volume growth in Wealth Management and Canadian Banking, and higher trading revenue in Capital Markets mainly driven by increased client activity. These factors were partially offset by lower spreads in Canadian Banking and Wealth Management.

NIM was down 12 bps compared to last year, mainly due to lower spreads in Canadian Banking and Wealth Management primarily driven by the impact of lower interest rates.

Insurance revenue increased \$749 million or 51%, primarily due to the change in fair value of investments backing policyholder liabilities and business growth in International and Canadian Insurance, both of which are largely offset in PBCAE.

Trading revenue increased \$453 million, largely attributable to higher fixed income trading mainly in the U.S. and Europe, higher commodities trading in Canada and higher equity trading in the U.S. and Europe. These factors were partially offset by lower equity trading in Canada.

Q3 2020 vs. Q2 2020

Total revenue increased \$2,587 million or 25% from the prior quarter, mainly due to higher Insurance revenue, trading revenue and other revenue. These factors were partially offset by lower net interest income and lower securities brokerage commissions.

Net interest income was down \$326 million or 6%, mainly driven by lower spreads in Canadian Banking and Wealth Management, lower fixed income trading revenue in Capital Markets primarily in repo and rates products, as well as asset/ liability management activities. These factors were partially offset by volume growth in Wealth Management and Canadian Banking, higher equity trading revenue in Capital Markets due to increased client activity, and two more days in the current quarter.

Insurance revenue increased \$2,015 million, primarily due to the change in fair value of investments backing policyholder liabilities which is largely offset in PBCAE.

Trading revenue increased \$689 million, mainly attributable to higher fixed income trading primarily in the U.S., including the reversal of loan underwriting markdowns reflecting the improvement in market conditions compared to the prior quarter. Higher equity trading across most regions and higher commodities trading in Canada, also contributed to the increase.

Security brokerage commissions decreased \$119 million or 26%, mainly due to lower revenue in cash equities due to lower client activity in Capital Markets and lower client transactional activity in Wealth Management, including the impact of market volatility on volumes in the prior quarter.

Other revenue increased \$350 million, largely reflecting the change in the fair value of the hedges of our U.S. share-based compensation plans, which was largely offset in Non-interest expense.

Q3 2020 vs. Q3 2019 (Nine months ended)

Total revenue increased \$1,457 million or 4%, primarily driven by higher net interest income, underwriting and other advisory fees and investment management and custodial fees. The impact of foreign exchange translation also increased total revenue by \$140 million. These factors were partially offset by lower other revenue.

Net interest income increased \$1,187 million or 8%, largely due to volume growth in Canadian Banking and Wealth Management, and higher trading revenue primarily from fixed income trading in Capital Markets. Higher funding and liquidity revenue within our Investor & Treasury Services business also contributed to the increase. These factors were partially offset by lower spreads in Wealth management and Canadian Banking. The impact associated with higher funding and liquidity revenue within our Investor & Treasury Services business was more than offset by lower related gains on non-trading derivatives in Other revenue.

Investment management and custodial fees increased \$253 million or 6%, largely driven by higher average fee-based client assets primarily reflecting net sales and market appreciation, partially offset by the impact of a favourable accounting adjustment in Canadian Wealth Management in the prior year.

Underwriting and other advisory fees increased \$354 million or 26%, mainly due to higher debt and equity origination across most regions.

Other revenue decreased \$456 million or 39%, primarily reflecting lower gains on non-trading derivatives in our Investor & Treasury Services business, which were largely offset in Net interest income.

Provision for credit losses

Q3 2020 vs. Q3 2019

Total PCL increased \$250 million from the prior year.

PCL on loans of \$678 million increased \$249 million from the prior year, largely due to the evolving impact of the COVID-19 pandemic on performing loans, resulting in higher provisions in Personal & Commercial Banking and Wealth Management. The PCL on loans ratio of 40 bps increased 13 bps.

Q3 2020 vs. Q2 2020

Total PCL decreased \$2,155 million from the prior quarter.

PCL on loans of \$678 million decreased \$2,056 million as the prior quarter reflected the impact of the onset of the COVID-19 pandemic, resulting in lower provisions in Personal & Commercial Banking and Capital Markets. The PCL on loans ratio decreased 125 bps.

Q3 2020 vs. Q3 2019 (Nine months ended)

Total PCL increased \$2,559 million from the prior year.

PCL on loans of \$3,833 million increased \$2,447 million from the prior year, largely due to the impact of the COVID-19 pandemic on performing loans, resulting in higher provisions in Personal & Commercial Banking, Capital Markets and Wealth Management. The PCL on loans ratio of 77 bps increased 47 bps.

For further details on PCL, refer to Credit quality performance in the Credit risk section.

Insurance policyholder benefits, claims and acquisition expense (PBCAE) Q3 2020 vs. Q3 2019

PBCAE increased \$739 million or 71% from the prior year, primarily reflecting the change in fair value of investments backing policyholder liabilities and business growth in International and Canadian Insurance, both of which were largely offset in revenue. The impact of longevity reinsurance contracts in the prior year also contributed to the increase. These factors were partially offset by higher favourable investment-related experience and lower claims costs as the increase in claims associated with the COVID-19 pandemic, primarily travel-related, was more than offset by improved life retrocession experience.

Q3 2020 vs. Q2 2020

PBCAE increased \$1,962 million from the prior quarter, mainly reflecting the change in fair value of investments backing policyholder liabilities, which was largely offset in revenue, and the impact of longevity reinsurance contracts in the prior quarter. These factors were partially offset by improved travel and disability claims experience in the current quarter and higher favourable investment-related experience.

Q3 2020 vs. Q3 2019 (Nine months ended)

PBCAE decreased \$209 million or 6% from the prior year, mainly reflecting the change in fair value of investments backing policyholder liabilities, which was largely offset in revenue, the impact of higher favourable longevity reinsurance contracts and higher favourable investment-related experience. These factors were partially offset by business growth, which was largely offset in revenue, and the lower impact from reinsurance contract renegotiations.

Non-interest expense

	For the three months ended			For the nine months ended		
(Millions of Canadian dollars, except percentage amounts)		July 31 2020	April 30 2020	July 31 2019	July 31 2020	July 31 2019
Salaries	\$	1,723	\$ 1,671	\$ 1,647	\$ 5,046	\$ 4,862
Variable compensation		1,653	1,370	1,413	4,669	4,231
Benefits and retention compensation		498	508	468	1,547	1,431
Share-based compensation		158	24	87	403	356
Human resources	\$	4,032	\$ 3,573	\$ 3,615	\$ 11,665	\$ 10,880
Equipment		469	468	449	1,399	1,325
Occupancy		415	417	409	1,229	1,211
Communications		233	252	281	735	794
Professional fees		337	324	328	945	923
Amortization of other intangibles		325	315	299	943	888
Other		569	593	611	1,784	1,799
Non-interest expense	\$	6,380	\$ 5,942	\$ 5,992	\$ 18,700	\$ 17,820
Efficiency ratio (1)		49.4%	57.5%	51.9%	51.8%	51.5%
Efficiency ratio adjusted (2)		53.5%	52.6%	53.7%	52.6%	53.0%

(1) Efficiency ratio is calculated as Non-interest expense divided by Total revenue.

(2) Measures have been adjusted by excluding the change in fair value of investments backing policyholder liabilities. These are non-GAAP measures. For further details, refer to the Key performance and non-GAAP measures section.

Q3 2020 vs. Q3 2019

Non-interest expense increased \$388 million or 6% from the prior year, largely due to higher variable compensation on increased revenue, and the change in the fair value of our U.S. share-based compensation plans which was largely offset in Other revenue. Additional compensation for certain employees, primarily those client-facing amidst the COVID-19 pandemic, as well as other incremental COVID-19 related costs, and the impact of foreign exchange translation, also contributed to the increase. These factors were partially offset by lower marketing and other discretionary spend.

Our efficiency ratio of 49.4% decreased 250 bps from 51.9% last year. Excluding the change in fair value of investments backing policyholder liabilities, our efficiency ratio of 53.5% decreased 20 bps from 53.7% last year.

Q3 2020 vs. Q2 2020

Non-interest expense increased \$438 million or 7% from the prior quarter, primarily due to the change in the fair value of our U.S. share-based compensation plans which was largely offset in Other revenue, and higher compensation on improved results.

Our efficiency ratio of 49.4% decreased 810 bps from 57.5% last quarter. Excluding the change in fair value of investments backing policyholder liabilities, our efficiency ratio of 53.5% increased 90 bps from 52.6% last quarter.

Q3 2020 vs. Q3 2019 (Nine months ended)

Non-interest expense increased \$880 million or 5% from the prior year, primarily attributable to higher variable compensation on increased revenue, higher staff-related costs, including additional compensation for certain employees, primarily those client-facing amidst the COVID-19 pandemic, as well as other incremental COVID-19 related costs. The impact of foreign currency translation and an increase in technology and related costs, including digital initiatives, also contributed to the increase. These factors were partially offset by lower marketing and other discretionary spend.

Our efficiency ratio of 51.8% increased 30 bps from 51.5% last year. Excluding the change in fair value of investments backing policyholder liabilities, our efficiency ratio of 52.6% decreased 40 bps from 53.0% last year.

Efficiency ratio excluding the change in fair value of investments backing policyholder liabilities is a non-GAAP measure. For further details, including a reconciliation, refer to the Key performance and non-GAAP measures section.

Income taxes

	For the	For the three months ended			nonths ended
(Millions of Canadian dollars, except percentage amounts)	July 31 2020	April 30 2020	July 31 2019	July 31 2020	July 31 2019
Income taxes	\$ 879	\$ 257	\$ 818	\$ 2,052	\$ 2,351
Income before income taxes	\$ 4,080	\$ 1,738	\$ 4,081	\$ 10,243	\$ 12,016
Effective income tax rate	21.5%	14.8%	20.0%	20.0%	19.6%

Q3 2020 vs. Q3 2019

Income tax expense increased \$61 million or 7% and the effective income tax rate of 21.5% increased 150 bps from last year, primarily due to a decrease in income from lower tax rate jurisdictions in the current quarter.

Q3 2020 vs. Q2 2020

Income tax expense increased \$622 million from last quarter, primarily due to higher income before income taxes in the current quarter.

The effective income tax rate of 21.5% increased 670 bps, mainly due to a decline in the proportion of income from lower tax rate jurisdictions and tax-exempt income relative to higher earnings in the current quarter.

Q3 2020 vs. Q3 2019 (Nine months ended)

Income tax expense decreased \$299 million or 13% from last year, primarily due to lower income before income taxes, partially offset by a decrease in income from lower tax rate jurisdictions in the current year.

The effective income tax rate of 20.0% increased 40 bps, mainly due to a decrease in income from lower tax rate jurisdictions and the net impact of tax adjustments, partially offset by higher tax-exempt income in the current year.

Business segment results

How we measure and report our business segments

The key methodologies and assumptions used in our management reporting framework are periodically reviewed by management to ensure they remain valid. They remain unchanged from October 31, 2019.

For further details on our key methodologies and assumptions used in our management reporting framework, refer to the How we measure and report our business segments section of our 2019 Annual Report.

Key performance and non-GAAP measures

Performance measures

Return on common equity

We measure and evaluate the performance of our consolidated operations and each business segment using a number of financial metrics, such as net income and ROE. We use ROE, at both the consolidated and business segment levels, as a measure of return on total capital invested in our business. Management views the business segment ROE measure as a useful measure for supporting investment and resource allocation decisions because it adjusts for certain items that may affect comparability between business segments and certain competitors. ROE does not have a standardized meaning under GAAP and may not be comparable to similar measures disclosed by other financial institutions. For further details, refer to the Key performance and non-GAAP measures section of our 2019 Annual Report.

The following table provides a summary of our ROE calculations:

		For the three months ended									
				July 31				April 30	July 31		
				2020				2020	2019		
	Personal &			Investor &							
(Millions of Canadian dollars,	Commercial	Wealth		Treasury	Capital	Corporate					
except percentage amounts)	Banking	Management	Insurance	Services	Markets	Support	Total	Total	Total		
Net income available to											
common shareholders	\$ 1,345	\$ 549	\$ 214	\$ 72	\$ 930	\$ 22	\$ 3,132	\$ 1,420	\$ 3,197		
Total average common equity (1), (2)	22,850	16,450	2,400	3,450	23,650	10,550	79,350	79,100	75,800		
ROE (3)	23.4%	13.3%	35.9%	8.4%	15.7%	n.m.	15.7%	7.3%	16.7%		

		For the nine months ended								
		July 31								
		2020								
	Personal &			Investor &						
(Millions of Canadian dollars,	Commercial	Wealth		Treasury	Capital	Corporate				
except percentage amounts)	Banking	Management	Insurance	Services	Markets	Support	Total	Total		
Net income available to										
common shareholders	\$ 3,524	\$ 1,570	\$ 571	\$ 434	\$ 1,879	\$ 13	\$ 7,991	\$ 9,454		
Total average common equity (1), (2)	23,200	15,950	2,250	3,250	23,250	10,850	78,750	74,450		
ROE (3)	20.3%	13.1%	33.9%	17.9%	10.8%	n.m.	13.6%	17.0%		

(1) Total average common equity represents rounded figures.

(2) The amounts for the segments are referred to as attributed capital.

(3) ROE is based on actual balances of average common equity before rounding.

n.m. not meaningful

Non-GAAP measures

We believe that certain non-GAAP measures described below are more reflective of our ongoing operating results and provide readers with a better understanding of management's perspective on our performance. These measures enhance the comparability of our financial performance for the three and nine months ended July 31, 2020 with the corresponding periods in the prior year and the three months ended April 30, 2020. Non-GAAP measures do not have a standardized meaning under GAAP and may not be comparable to similar measures disclosed by other financial institutions.

The following discussion describes the non-GAAP measures we use in evaluating our operating results.

Efficiency ratio excluding the change in fair value of investments in Insurance

Our efficiency ratio is impacted by the change in fair value of investments backing our policyholder liabilities, which is reported in revenue and largely offset in PBCAE.

The following table provides calculations of our consolidated efficiency ratio excluding the change in fair value of investments backing our policyholder liabilities:

		For the three months ended							
	July 31 2020	April 30 2020	July 31 2019						
	Item excluded	Item excluded	Item excluded						
(Millions of Canadian dollars, except percentage amounts)	Change in fair value of investments backing As reported policyholder liabilities Adjusted	Change in fair value of investments backing As reported policyholder liabilities Adjusted	Change in fair value of investments backing As reported policyholder liabilities Adjusted						
Total revenue Non-interest expense	\$ 12,920 \$ (997) \$ 11,923 6,380 - 6,380	\$ 10,333 \$ 953 \$ 11,286 5,942 - 5,942	\$ 11,544 \$ (385) \$ 11,159 5,992 - 5,992						
Efficiency ratio	49.4% 53.5%	57.5% 52.6%	51.9% 53.7%						

	For the nine months ended								
	July 31	July 31							
	2020	2019							
	Item excluded	Item excluded							
(Millions of Canadian dollars, except percentage amounts)	Change in fair value of investments backing As reported policyholder liabilities Adjuste	Change in fair value of investments backing d As reported policyholder liabilities Adjusted							
Total revenue Non-interest expense	\$ 36,089 \$ (512) \$ 35,57 18,700 - 18,70								
Efficiency ratio	51.8% 52.6%	6 51.5% 53.0%							

Personal & Commercial Banking

		As at or f	or th	e three month	ns en	ded	As	at or for the nir	ne mo	onths ended
(Millions of Canadian dollars, except percentage amounts and as otherwise noted)		July 31 2020		April 30 2020		July 31 2019		July 31 2020		July 31 2019
Net interest income	\$	3,079	\$	3,149	\$	3,221	\$	9,454	\$	9,415
Non-interest income		1,269		1,251		1,325		3,904		3,882
Total revenue		4,348		4,400		4,546		13,358		13,297
PCL on performing assets		247		1,370		15		1,683		59
PCL on impaired assets		280		336		326		892		1,002
PCL		527		1,706		341		2,575		1,061
Non-interest expense		1,985		1,947		1,959		5,916		5,761
Income before income taxes		1,836		747		2,246		4,867		6,475
Netincome	\$	1,367	\$	532	\$	1,664	\$	3,585	\$	4,784
Revenue by business										
Canadian Banking	\$	4,135	\$	4,170	\$	4,304	\$	12,673	\$	12,573
Caribbean & U.S. Banking		213		230		242		685		724
Selected balance sheet and other information										
ROE		23.4%		9.0%		28.0%		20.3%		27.3%
NIM		2.60%		2.73%		2.86%		2.70%		2.85%
Efficiency ratio		45.7%		44.3%		43.1%		44.3%		43.3%
Operating leverage		(5.7)%		(1.7)%		3.5%		(2.2)%		1.9%
Average total earning assets, net	\$ 4	470,300	\$	468,400	\$	447,200	\$	467,400	\$	441,600
Average loans and acceptances, net	4	473,400		471,300		449,500		470,500		443,200
Average deposits	4	465,100		428,700		396,300		435,900		389,200
AUA (1)	2	293,100		275,700		282,200		293,100		282,200
Average AUA	2	286,000		275,900		280,600		284,200		274,100
PCL on impaired loans as a % of average net loans and		,		,		,		,		,
acceptances		0.24%		0.28%		0.29%		0.25%		0.30%
Other selected information – Canadian Banking										
Net income	\$	1,330	\$	649	\$	1,609	\$	3,603	\$	4,613
NIM		2.58%		2.70%		2.80%		2.66%		2.80%
Efficiency ratio		43.9%		42.7%		41.5%		42.6%		41.7%
Operating leverage		(5.5)%		(1.8)%		1.7%		(2.2)%		1.1%

(1) AUA represents period-end spot balances and includes securitized residential mortgages and credit card loans as at July 31, 2020 of \$16.2 billion and \$6.7 billion, respectively (April 30, 2020 – \$16.1 billion and \$6.7 billion; July 31, 2019 – \$15.7 billion and \$8.3 billion).

Financial performance Q3 2020 vs. Q3 2019

Net income decreased \$297 million or 18% from last year, primarily attributable to lower spreads and higher PCL. These factors were partially offset by average volume growth of 11% in Canadian Banking.

Total revenue decreased \$198 million or 4%.

Canadian Banking revenue decreased \$169 million or 4%, largely reflecting lower spreads and lower service charges. These factors were partially offset by average volume growth of 5% in loans and 18% in deposits.

Caribbean & U.S. Banking revenue decreased \$29 million or 12%, primarily reflecting lower spreads.

Net interest margin was down 26 bps, mainly due to lower interest rates and the impact of competitive pricing pressures. PCL increased \$186 million or 55%, largely reflecting higher provisions on performing loans in our Canadian Banking retail portfolios due to the evolving impact of the COVID-19 pandemic. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense increased \$26 million or 1%, mainly attributable to higher staff-related costs, including additional compensation for certain employees, primarily those client-facing amidst the COVID-19 pandemic, as well as other incremental COVID-19 related costs. These factors were partially offset by lower marketing and other discretionary spend.

Q3 2020 vs. Q2 2020

Net income increased \$835 million or 157% from last quarter, primarily due to lower PCL as the prior quarter reflected the impact of the onset of the COVID-19 pandemic. Two more days in the current quarter and average volume growth of 4% in Canadian Banking also contributed to the increase. These factors were partially offset by lower spreads.

Net interest margin was down 13 bps, mainly due to the impact of lower interest rates.

Q3 2020 vs. Q3 2019 (Nine months ended)

Net income decreased \$1,199 million or 25% from last year, largely reflecting higher PCL, lower spreads and higher staffrelated costs. These factors were partially offset by average volume growth of 9% in Canadian Banking.

Total revenue increased \$61 million, mainly driven by average volume growth in Canadian Banking of 6% in loans and 13% in deposits, partially offset by lower spreads.

PCL increased \$1,514 million, largely reflecting higher provisions on performing loans in our Canadian Banking portfolios primarily due to the impact of the COVID-19 pandemic. Higher provisions on impaired loans in our Canadian Banking retail portfolios were more than offset by lower provisions on impaired loans in our Canadian Banking commercial and Caribbean Banking portfolios, as the prior year reflected higher provisions taken in a couple of sectors. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense increased \$155 million or 3%, mainly attributable to higher staff-related costs, including additional compensation for certain employees, primarily those client-facing amidst the COVID-19 pandemic, as well as other incremental COVID-19 related costs. An increase in technology and related costs, including digital initiatives also contributed to the increase.

		As at or	for th	e three months	s end	ed	A	s at or for the nir	ne mor	nths ended
(Millions of Canadian dollars, except number of,		July 31		April 30		July 31		July 31		July 31
percentage amounts and as otherwise noted)		2020		2020		2019		2020		2019
Net interest income	\$	699	\$	737	\$	773	\$	2,174	\$	2,248
Non-interest income								,		
Fee-based revenue		1,796		1,774		1,740		5,417		5,117
Transaction and other revenue		669		311		516		1,561		1,591
Total revenue		3,164		2,822		3,029		9,152		8,956
PCL on performing assets		31		76		10		106		38
PCL on impaired assets		43		15		17		57		45
PCL		74		91		27		163		83
Non-interest expense		2,361		2,169		2,183		6,900		6,551
Income before income taxes		729		562		819		2,089		2,322
Net income	\$	562	\$	424	\$	639	\$	1,609	\$	1,821
Revenue by business										
Canadian Wealth Management	\$	806	\$	835	\$	821	\$	2,484	\$	2,471
U.S. Wealth Management (including City National)	Ť	1,659	Ť	1.384	Ŷ	1,546	Ť	4,667	Ť	4.556
U.S. Wealth Management (including City National)		.,		.,		.,		1,007		.,
(US\$ millions)		1,222		1,003		1,168		3,459		3,426
Global Asset Management		606		500		567		1,700		1,648
International Wealth Management		93		103		95		301		281
Selected balance sheet and other information			-			,,,			-	
ROE		13.3%		10.4%		17.2%		13.1%		16.7%
NIM				2.97%		3.59%				
		2.58% 23.0%						2.89%		3.63%
Pre-tax margin (1)				19.9%		27.0%		22.8%		25.9%
Number of advisors (2)	÷	5,376	÷	5,333	ċ	5,222	÷	5,376	ć	5,222
Average total earning assets, net	\$	107,800	\$	100,900	\$	85,500	\$	100,400	\$	82,700
Average loans and acceptances, net		81,300		75,100		64,400		75,300		62,600
Average deposits		131,100		119,100		95,300		118,600		94,200
AUA (3)		1,097,100		1,053,700		1,050,800		1,097,100	- · ·	,050,800
U.S. Wealth Management (including City National) (3)		584,500		559,200		538,800		584,500		538,800
U.S. Wealth Management (including City National)		426 400		401 700		400 100		126 100		400 100
(US\$ millions) (3)		436,400		401,700		408,100		436,400		408,100
AUM (3)		834,100		782,100		738,300		834,100		738,300
Average AUA		1,082,000		1,040,200		1,039,700		1,073,300	1	,017,800
Average AUM		815,000		770,400		729,300		788,700		705,500
PCL on impaired loans as a % of average net loans		0.040		0.000		0 4 4 6 /		0.400		0.100
and acceptances		0.21%		0.08%		0.11%		0.10%		0.10%

Estimated impact of U.S. dollar, British pound		For the months	e three s endec	I	For the months	
and Euro translation on key income statement items (Millions of Canadian dollars, except percentage amounts)	Q3 20 Q3	20 vs. 3 2019		020 vs. 2 2020	-	020 vs. 03 2019
Increase (decrease):						
Total revenue	\$	45	\$	(31)	\$	67
PCL		1		(2)		5
Non-interest expense		36		(24)		55
Net income		6		(4)		5
Percentage change in average U.S. dollar equivalent of C\$1.00	((2)%		2%		(1)%
Percentage change in average British pound equivalent of C\$1.00	((3)%		2%		(1)%
Percentage change in average Euro equivalent of C\$1.00	i	(4)%		(2)%		` <i>-</i> %

(1) Pre-tax margin is defined as Income before income taxes divided by Total revenue.

(2) Represents client-facing advisors across all our Wealth Management businesses.

(3) Represents period-end spot balances.

Financial performance

Q3 2020 vs. Q3 2019

Net income decreased \$77 million or 12% from last year, largely due to a decline in net interest income as average volume growth was more than offset by the impact of lower interest rates. Higher PCL also contributed to the decrease. These factors were partially offset by higher average fee-based client assets and an increase in transaction and other revenue.

Total revenue increased \$135 million or 4%.

Canadian Wealth Management revenue decreased \$15 million or 2%, primarily due to lower client transactional activity, and lower interest rates resulting in a decline in net interest income. These factors were partially offset by higher average fee-based client assets reflecting net sales and market appreciation.

U.S. Wealth Management (including City National) revenue increased \$113 million or 7%. In U.S. dollars, revenue increased \$54 million or 5%, primarily attributable to favourable changes in the fair value of the hedges related to our U.S. share-based

compensation plans, which was largely offset in non-interest expense. This was partially offset by a decline in net interest income as average volume growth of 32% was more than offset by the impact of lower interest rates.

Global Asset Management revenue increased \$39 million or 7%, mainly due to the change in fair value of seed capital investments. Higher average fee-based client assets reflecting net sales and market appreciation, and the impact of foreign exchange translation also contributed to the increase.

PCL increased \$47 million or 174%, largely due to higher provisions on impaired loans in U.S. Wealth Management (including City National), mainly in the industrial products sector, resulting in an increase of 10 bps in the impaired loans ratio. Higher provisions on performing loans, primarily in U.S. Wealth Management (including City National) due to the evolving impact of the COVID-19 pandemic, also contributed to the increase. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense increased \$178 million or 8%, primarily due to the change in the fair value of our U.S. share-based compensation plans, which was largely offset in revenue, and the impact of foreign exchange translation.

Q3 2020 vs. Q2 2020

Net income increased \$138 million or 33% from last quarter, primarily from the reversal of unfavourable changes in the fair value of interest rate derivatives, seed capital investments and the net impact of our U.S. share-based compensation plans driven by the improvement of market conditions in the current quarter. Lower staff-related costs also contributed to the increase. These factors were partially offset by lower client transactional activity, including the impact of elevated market volatility on volumes in the prior quarter. Net interest income also declined as the benefit from average volume growth was more than offset by the impact of lower interest rates.

Q3 2020 vs. Q3 2019 (Nine months ended)

Net income decreased \$212 million or 12% from a year ago, primarily due to lower net interest income, higher staff and technology-related costs, and higher PCL. The change in the fair value of seed capital investments, and the impact of a favourable accounting adjustment in Canadian Wealth Management in the prior year also contributed to the decrease. These factors were partially offset by an increase in revenue from higher average fee-based client assets, net of the associated variable compensation costs.

Total revenue increased \$196 million or 2%, largely due to higher average fee-based client assets primarily reflecting net sales and market appreciation. The impact of foreign exchange translation also contributed to the increase. These factors were partially offset by lower net interest income as the benefit from average volume growth was more than offset by lower interest rates, as well as the impact of changes in the fair value of seed capital investments. The prior year also included the impact of a favourable accounting adjustment in Canadian Wealth Management.

PCL increased \$80 million, largely reflecting higher provisions on performing loans in U.S. Wealth Management (including City National) mainly due to the impact of the COVID-19 pandemic. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense increased \$349 million or 5%, primarily due to higher staff-related costs in support of business growth, and higher variable compensation commensurate with increased commissionable revenue. Higher technology and related costs and the impact of foreign exchange translation also contributed to the increase.

Insurance

	As at or fo	r the three months end	ded	As at or for the r	ine months ended
(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	July 31 2020	April 30 2020	July 31 2019	July 31 2020	July 31 2019
Non-interest income Net earned premiums Investment income, gains/(losses) on assets supporting insurance	\$ 974	\$ 957 \$	914	\$ 3,281	\$ 3,040
policyholder liabilities (1) Fee income	1,196 42	(796) 36	505 44	1,009 113	1,401 116
Total revenue PCL	2,212	1	1,463	4,403	4,557
Insurance policyholder benefits and claims (1) Insurance policyholder acquisition expense Non-interest expense	1,715 70 140	(257) 80 148	971 75 149	2,993 229 441	3,177 254 453
Income before income taxes Net income	287	225 \$ 180 \$	268 204	577	673 \$ 524
Revenue by business			-		
Canadian Insurance International Insurance	\$ 1,636 576	\$ (344) \$ 541	991 472	\$ 2,675 1,728	\$ 3,034 1,523
Selected balances and other information					
ROE Premiums and deposits (2) Fair value changes on investments backing policyholder liabilities (1)	35.9% \$ 1,131 997		9.2% 1,079 385	33.9% \$ 3,821 512	35.6% \$ 3,499 1,015

(1) Includes unrealized gains and losses on investments backing policyholder liabilities attributable to fluctuation of assets designated as FVTPL. The investments which support actuarial liabilities are predominantly fixed income assets designated as FVTPL. Consequently, changes in the fair values of these assets are recorded in Insurance premiums, investment and fee income in the Consolidated Statements of Income and are largely offset by changes in the fair value of the actuarial liabilities, the impact of which is reflected in Insurance policyholder benefits, claims and acquisition expense.

(2) Premiums and deposits include premiums on risk-based insurance and annuity products, and individual and group segregated fund deposits, consistent with insurance industry practices.

Financial performance Q3 2020 vs. Q3 2019

Net income increased \$12 million or 6% from a year ago, mainly due to higher favourable investment-related experience and improved claims experience. These factors were partially offset by the impact of longevity reinsurance contracts in the prior year.

Total revenue increased \$749 million or 51%, mainly due to the change in fair value of investments backing policyholder liabilities, which is largely offset in PBCAE as indicated below. The change in fair value is largely related to tightening credit spreads and the impact of lower Canadian interest rates.

Canadian Insurance revenue increased \$645 million or 65%, primarily due to the change in fair value of investments backing policyholder liabilities and business growth, both of which are largely offset in PBCAE as indicated below.

International Insurance revenue increased \$104 million or 22%, primarily due to business growth in longevity reinsurance and the change in fair value of investments backing policyholder liabilities, both of which are largely offset in PBCAE as indicated below.

PBCAE increased \$739 million or 71%, primarily reflecting the change in fair value of investments backing policyholder liabilities and business growth in both International and Canadian Insurance. The impact of longevity reinsurance contracts in the prior year also contributed to the increase. These factors were partially offset by higher favourable investment-related experience and lower claims costs as the increase in claims associated with the COVID-19 pandemic, primarily travel-related, was more than offset by improved life retrocession experience.

Non-interest expense decreased \$9 million or 6%, largely reflecting efficiencies driven by technology investments.

Q3 2020 vs. Q2 2020

Net income increased \$36 million or 20% from last quarter, primarily due to improved travel and disability claims experience in the current quarter and higher favourable investment-related experience. These factors were partially offset by the impact of longevity reinsurance contracts in the prior quarter.

Q3 2020 vs. Q3 2019 (Nine months ended)

Net income increased \$53 million or 10% from a year ago, primarily due to higher favourable investment-related experience and longevity reinsurance contracts. These factors were partially offset by lower benefits from favourable reinsurance contract renegotiations.

Total revenue decreased \$154 million or 3%, mainly reflecting the change in fair value of investments backing policyholder liabilities, which is largely offset in PBCAE as indicated below, as well as the lower impact from reinsurance contract renegotiations. These factors were partially offset by business growth in longevity reinsurance and group annuities, both of which are largely offset in PBCAE as indicated below, as well as higher realized investment gains.

PBCAE decreased \$209 million or 6%, mainly reflecting the change in fair value of investments backing policyholder liabilities, the impact of higher favourable longevity reinsurance contracts and higher favourable investment-related experience. These factors were partially offset by business growth and the lower impact from reinsurance contract renegotiations.

Non-interest expense decreased \$12 million or 3%, largely reflecting efficiencies driven by technology investments.

Investor & Treasury Services

	As at or	for th	ne three month	s ende	ed	A	s at or for the ni	ne me	onths ended
(Millions of Canadian dollars, except	July 31		April 30		July 31		July 31		July 31
percentage amounts and as otherwise noted)	2020		2020		2019		2020		2019
Net interest income	\$ 89	\$	74	\$	(16)	\$	221	\$	(81)
Non-interest income	395		635		577		1,569		1,860
Total revenue	484		709		561		1,790		1,779
PCL on performing assets	(4)		14		1		10		1
PCL on impaired assets	_		-		_		-		-
PCL	(4)		14		1		10		1
Non-interest expense	388		392		411		1,182		1,217
Net income before income taxes	100		303		149		598		561
Net income	\$ 76	\$	226	\$	118	\$	445	\$	430
Selected balance sheet and other information									
ROE	8.4%		28.4%		13.2%		17.9%		16.0%
Average deposits	\$ 195,700	\$	194,700	\$	179,300	\$	188,300	\$	175,100
Average client deposits	65,800		64,900		60,100		62,800		59,200
Average wholesale funding deposits	129,900		129,800		119,200		125,500		115,900
AUA (1)	4,468,100		4,037,700		4,242,100		4,468,100		4,242,100
Average AUA	4,375,800		4,292,800		4,290,900	4	4,318,400		4,250,800

(1) Represents period-end spot balances

Financial performance

Q3 2020 vs. Q3 2019

Net income decreased \$42 million or 36% from a year ago, mainly due to lower funding and liquidity revenue, partially offset by improved results in our asset services business.

Total revenue decreased \$77 million or 14%, primarily driven by lower funding and liquidity revenue mainly due to the impact of interest rate movements and elevated enterprise liquidity.

Non-interest expense decreased \$23 million or 6%, largely driven by lower staff-related costs including the benefit from prior investments in technology and efficiency initiatives.

Q3 2020 vs. Q2 2020

Net income decreased \$150 million or 66% from last quarter, primarily driven by lower funding and liquidity revenue as the prior quarter benefitted from the impact of interest rate movements, as well as lower gains from the disposition of securities.

Q3 2020 vs. Q3 2019 (Nine months ended)

Net income increased \$15 million or 3% from a year ago, largely driven by higher revenue from our asset services business and lower staff-related costs. These factors were partially offset by lower client deposit revenue.

Total revenue increased \$11 million or 1%, primarily attributable to higher revenue from increased client activity in our asset services business mainly due to elevated market volatility in the second quarter of 2020. Higher funding and liquidity revenue also contributed to the increase, driven by higher gains from the disposition of securities and the favourable impact of interest rate movements and market volatility, partially offset by elevated enterprise liquidity. These factors were largely offset by lower client deposit revenue as the growth in client deposit volumes was more than offset by margin compression.

Non-interest expense decreased \$35 million or 3%, mainly driven by lower staff-related costs including the benefit from prior investments in technology and efficiency initiatives.

Capital Markets

	 As at or	for th	ne three months	ende	ed	A	s at or for the ni	ne mo	nths ended
(Millions of Canadian dollars, except	July 31		April 30		July 31		July 31		July 31
percentage amounts and as otherwise noted)	2020		2020		2019		2020		2019
Net interest income (1), (2)	\$ 1,335	\$	1,456	\$	1,018	\$	3,952	\$	2,980
Non-interest income (1), (2)	1,413		857		1,016		3,657		3,321
Total revenue (1)	2,748		2,313		2,034		7,609		6,301
PCL on performing assets	12		723		3		753		18
PCL on impaired assets	66		294		53		421		203
PCL	78		1,017		56		1,174		221
Non-interest expense	1,471		1,291		1,269		4,197		3,788
Net income before income taxes	1,199		5		709		2,238		2,292
Net income	\$ 949	\$	105	\$	653	\$	1,936	\$	2,082
Revenue by business									
Corporate and Investment Banking	\$ 1,080	\$	722	\$	962	\$	2,943	\$	2,858
Global Markets	1,774		1,694		1,106		4,918		3,568
Other	(106)		(103)		(34)		(252)		(125)
Selected balance sheet and other information									
ROE	15.7%		1.5%		11.1%		10.8%		11.8%
Average total assets	\$ 777,400	\$	820,700	\$	676,700	\$	771,000	\$	656,500
Average trading securities	102,700		108,100		101,400		108,900		101,600
Average loans and acceptances, net	116,400		117,600		101,100		111,100		100,400
Average deposits (2)	77,200		79,300		75,900		77,700		78,300
PCL on impaired loans as a % of average net loans	,		- ,		- ,		,		- /
and acceptances	0.25%		0.94%		0.21%		0.49%		0.27%

Estimated impact of U.S. dollar, British pound		the three ths ended	For the nine months ended
and Euro translation on key income statement items	Q3 2020 v		Q3 2020 vs.
(Millions of Canadian dollars, except percentage amounts)	Q3 201		Q3 2019
Increase (decrease): Total revenue PCL Non-interest expense Net income	\$ 5 2 1	6 (17)	\$59 26 36 -
Percentage change in average U.S. dollar equivalent of C\$1.00	(2)9	6 2%	(1)%
Percentage change in average British pound equivalent of C\$1.00	(3)9		(1)%
Percentage change in average Euro equivalent of C\$1.00	(4)9		-%

(1) The taxable equivalent basis (teb) adjustment for the three months ended July 31, 2020 was \$126 million (April 30, 2020 – \$132 million; July 31, 2019 – \$111 million) and for the nine months ended July 31, 2020 was \$386 million (July 31, 2019 – \$338 million). For further discussion, refer to the How we measure and report our business segments section of our 2019 Annual Report.

(2) Commencing Q4 2019, the interest component and the accrued interest payable recorded on certain deposits carried at FVTPL previously presented in trading revenue and deposits, respectively, are presented in net interest income and other liabilities, respectively. Comparative amounts have been reclassified to conform with this presentation.

Financial performance Q3 2020 vs. Q3 2019

Net income increased \$296 million or 45% from last year, primarily driven by higher revenue in Global Markets, partially offset by higher compensation on improved results and higher taxes mainly due to an increase in the proportion of earnings from higher tax rate jurisdictions.

Total revenue increased \$714 million or 35%.

Corporate and Investment Banking revenue increased \$118 million or 12%, mainly due to the reversal of loan underwriting markdowns in the U.S. and Europe reflecting the improvement in market conditions in the current quarter, and higher debt origination primarily in the U.S. These factors were partially offset by lower M&A activity in North America.

Global Markets revenue increased \$668 million or 60%, largely driven by higher fixed income trading revenue across all regions primarily due to tightening credit spreads and increased client activity in rates and repo products. Higher equity trading revenue primarily in the U.S. reflecting favourable market conditions and increased client activity also contributed to the increase.

Other revenue decreased \$72 million mainly reflecting higher residual funding costs.

PCL increased \$22 million or 39%, largely reflecting higher provisions on impaired loans, resulting in an increase of 4 bps in the impaired loans ratio. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense increased \$202 million or 16%, primarily driven by higher compensation on improved results.

Q3 2020 vs. Q2 2020

Net income increased \$844 million from last quarter, largely due to lower PCL as the prior quarter reflected the impact of the onset of the COVID-19 pandemic. Higher fixed income trading revenue primarily from the reversal of loan underwriting markdowns in the U.S. and Europe driven by the improvement in market conditions compared to the prior quarter, as well as higher equity trading revenue across all regions, also contributed to the increase. These factors were partially offset by higher taxes due to an increase in the proportion of earnings from higher tax rate jurisdictions and higher compensation on improved results.

Q3 2020 vs. Q3 2019 (Nine months ended)

Net income decreased \$146 million or 7% from a year ago, primarily due to higher PCL. This factor was partially offset by an increase in fixed income trading revenue in Global Markets, net of higher compensation.

Total revenue increased \$1,308 million or 21%, mainly due to higher fixed income trading revenue across all regions driven by increased client activity, as well as higher debt origination across all regions.

PCL increased \$953 million, largely reflecting higher provisions on performing assets due to the impact of the COVID-19 pandemic. Higher provisions on impaired loans also contributed to the increase, resulting in an increase of 22 bps in the impaired loans ratio, largely due to provisions taken in the oil & gas sector reflecting pressure on oil prices in the second quarter of 2020. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense increased \$409 million or 11%, primarily driven by higher compensation on increased revenue.

Corporate Support

	 For the	three n	nonths e	ended	1	For	the nine m	nonths	s ended
	July 31	Ap	pril 30		July 31		July 31		July 31
(Millions of Canadian dollars)	2020	2	2020		2019		2020		2019
Net interest income (loss) (1)	\$ (63)	\$	49	\$	22	\$	24	\$	76
Non-interest income (loss) (1)	27	((157)		(111)		(247)		(334)
Total revenue (1)	(36)	((108)		(89)		(223)		(258)
PCL	-		່ 1໌		-		<u> </u>		(1)
Non-interest expense	35		(5)		21		64		50
Net income (loss) before income taxes (1)	(71)	((104)		(110)		(288)		(307)
Income taxes (recoveries) (1)	(102)	((118)		(95)		(327)		(331)
Net income (loss)	\$ 31	\$	`14´	\$	(15)	\$	<u>`</u> 39́	\$	24

(1) Teb adjusted.

Due to the nature of activities and consolidation adjustments reported in this segment, we believe that a comparative period analysis is not relevant. The following identifies material items affecting the reported results in each period.

Total revenue and Income taxes (recoveries) in each period in Corporate Support include the deduction of the teb adjustments related to the gross-up of income from Canadian taxable corporate dividends and the U.S. tax credit investment business recorded in Capital Markets. The amount deducted from revenue was offset by an equivalent increase in Income taxes (recoveries).

The teb amount for the three months ended July 31, 2020 was \$126 million, as compared to \$132 million in the prior quarter and \$111 million last year. The teb amount for the nine months ended July 31, 2020 was \$386 million, as compared to \$338 million in the prior year.

The following identifies the material items, other than the teb impacts noted previously, affecting the reported results in each period.

Q3 2020

Net income was \$31 million, primarily due to asset/liability management activities, partially offset by net unfavourable tax adjustments and residual unallocated costs.

Q2 2020

Net income was \$14 million, largely due to asset/liability management activities, partially offset by net unfavourable tax adjustments.

Q3 2019

Net loss was \$15 million, mainly due to net unfavourable tax adjustments, largely offset by asset/liability management activities.

Q3 2020 (Nine months ended)

Net income was \$39 million, mainly due to asset/liability management activities, partially offset by net unfavourable tax adjustments and residual unallocated costs.

Q3 2019 (Nine months ended)

Net income was \$24 million, largely due to asset/liability management activities, partially offset by net unfavourable tax adjustments.

Quarterly results and trend analysis

Our quarterly results are impacted by a number of trends and recurring factors, which include seasonality of certain businesses, general economic and market conditions, and fluctuations in the Canadian dollar relative to other currencies. The following table summarizes our results for the last eight quarters (the period):

Quarterly results (1)

		2020				20	19					2018
(Millions of Canadian dollars, except per share and percentage amounts)	Q3	Q2		Q1	Q4	Q3		Q2		Q1		Q4
Personal & Commercial Banking	\$ 4,348	\$ 4,400	\$	4,610	\$ 4,568	\$ 4,546	\$	4,333	\$	4,418	\$	4,364
Wealth Management	3,164	2,822		3,166	3,187	3,029		2,979		2,948		2,740
Insurance	2,212	197		1,994	1,153	1,463		1,515		1,579		1,039
Investor & Treasury Services	484	709		597	566	561		587		631		624
Capital Markets (2)	2,748	2,313		2,548	1,987	2,034		2,169		2,098		2,056
Corporate Support (2)	(36)	(108)		(79)	(91)	(89)		(84)		(85)		(154)
Total revenue	\$ 12,920	\$ 10,333	\$	12,836	\$ 11,370	\$ 11,544	\$	11,499	\$	11,589	\$	10,669
PCL	675	2,830		419	499	425		426		514		353
PBCAE	1,785	(177)		1,614	654	1,046		1,160		1,225		494
Non-interest expense	6,380	5,942		6,378	6,319	5,992		5,916		5,912		5,882
Income before income taxes	\$ 4,080	\$ 1,738	\$	4,425	\$ 3,898	\$ 4,081	\$	3,997	\$	3,938	\$	3,940
Income taxes	879	257		916	692	818		767		766		690
Net income	\$ 3,201	\$ 1,481	\$	3,509	\$ 3,206	\$ 3,263	\$	3,230	\$	3,172	\$	3,250
EPS – basic	\$ 2.20	\$ 1.00	\$	2.41	\$ 2.19	\$ 2.23	\$	2.20	\$	2.15	\$	2.21
– diluted	2.20	1.00	-	2.40	2.18	2.22		2.20	-	2.15	-	2.20
Effective income tax rate	21.5%	14.8%		20.7%	17.8%	20.0%		19.2%		19.5%		17.5%
Period average US\$ equivalent of C\$1.00	\$ 0.737	\$ 0.725	\$	0.760	\$ 0.755	\$ 0.754	\$	0.751	\$	0.749	\$	0.767

(1) Fluctuations in the Canadian dollar relative to other foreign currencies have affected our consolidated results over the period.

(2) Teb adjusted. For further discussion, refer to the How we measure and report our business segments section of our 2019 Annual Report.

Seasonality

Seasonal factors may impact our results in certain quarters. The first quarter has historically been stronger for our Capital Markets businesses. The second quarter has fewer days than the other quarters, which generally results in a decrease in net interest income and certain expense items. The third and fourth quarters include the summer months which generally results in lower client activity and may negatively impact the results of our Capital Markets brokerage business.

Trend analysis

Earnings have generally trended upward over the period. However, earnings in the second quarter of 2020 reflected the impact of the onset of the COVID-19 pandemic across all of our business segments which resulted in a significant increase in PCL and fluctuations in revenue from the impact of market volatility, including interest rates and credit spreads, as well as client activity. While market conditions improved during the third quarter of 2020, our earnings continued to be impacted by the COVID-19 pandemic and its associated downstream implications, including PCL which remains elevated relative to pre-pandemic levels. Results in the first quarter of 2019 were impacted by the impact of the quarter. Quarterly earnings are also affected by the impact of foreign exchange translation.

Personal & Commercial Banking revenue has benefitted from solid volume growth over the period. Spreads in the early part of the period reflected higher interest rates, whereas the latter part of the period reflected spread compression in a lower interest rate environment. The ongoing impact of competitive pricing pressures has negatively impacted spreads throughout the majority of the period. Net interest margin in Canadian Banking has generally declined over the latter part of the period, largely reflecting the impact of lower interest rates, including cumulative BoC rate cuts of 150 bps in the second quarter of 2020 also saw lower card service revenue driven by a significant decrease in purchase volumes.

Wealth Management revenue has generally trended upwards primarily due to growth in average fee-based client assets which benefitted from net sales and market appreciation. Net interest income generally increased throughout the early part of the period largely driven by volume growth and the impact of higher interest rates, and generally declined in the latter part of the period as continued volume growth was more than offset by lower spreads, mainly reflecting the impact of the U.S. Fed rate cuts. A gain on the sale of the private debt business of BlueBay contributed to the increase in revenue in the fourth quarter of 2019. Changes in the fair value of hedges related to our U.S. share-based compensation plans, which are largely offset in Non-interest expense, have contributed to fluctuations in revenue over the period. The market volatility in the second quarter of 2020 and subsequent improvement in market conditions in the third quarter of 2020 resulted in heightened fluctuations in these hedges, as well as in average fee-based client assets and the fair value of interest rate derivatives and seed capital investments.

Insurance revenue has fluctuated over the period, primarily due to the impact of changes in the fair value of investments backing policyholder liabilities which is largely offset in PBCAE. Revenue has benefitted from business growth in Canadian and International Insurance over the majority of the period, with the exception of lower group annuity sales impacting the majority of the latter part of the period.

Investor & Treasury Services revenue has been impacted by fluctuations in market conditions and client activity across the period. Revenue from our funding and liquidity business has fluctuated throughout the latter part of the period due in part to changes in money market opportunities. During the first half of 2019 our asset services business was impacted by challenging market conditions, whereas the latter half of the period was generally impacted by lower client activity and lower client deposit margins. The fluctuation in the second and third quarter of 2020 reflects the impact of interest rate movements and market volatility in Q2 2020, with the second quarter benefitting from declining interest rates and market volatility, including gains on the disposition of securities. Revenue in the third quarter of 2020 experienced a partial offset of the impact of short-term interest rate movements in Q2 2020.

Capital Markets revenue is influenced, to a large extent, by market conditions that impact client activity in our Corporate and Investment Banking and Global Markets businesses, with the first quarter results generally stronger than those in the remaining quarters. Client activity in 2019 was impacted by challenging market conditions resulting in lower investment banking fee revenues experienced across the industry. The impact of challenging market conditions also resulted in lower equity trading revenue across much of the latter part of the period. The first quarter of 2020 saw more favourable market conditions and increased client activity resulting in higher fixed income trading revenue and M&A activity. Elevated market volatility in the second quarter of 2020 resulted in increased client activity being more than offset by lower fixed income trading revenue primarily driven by the reversal of loan underwriting markdowns and higher equity trading revenue, reflecting an improvement in market conditions as well as increased client activity.

PCL on performing assets has fluctuated over the period as it is impacted by macroeconomic conditions, changes in portfolio balances and credit quality, and model changes, with the impact of the COVID-19 pandemic resulting in a significant increase in provisions in 2020, largely in the second quarter. PCL on impaired assets were impacted by the restructuring of portfolios in Barbados in the fourth quarter of 2018. After relatively benign credit conditions, we returned to a more normalized level of credit losses towards the end of 2019, though the first quarter of 2020 saw lower provisions on impaired loans in Personal & Commercial Banking and Wealth Management. The second and third quarters of 2020 saw higher provisions on impaired loans in Capital Markets in the oil & gas sector. The impact of government support and payment deferral programs contributed to lower provisions on impaired loans in our Canadian Banking retail portfolios in the third quarter of 2020.

PBCAE has fluctuated quarterly as it includes the impact of changes in the fair value of investments backing policyholder liabilities and business growth, including the impact of group annuity sales, both of which are largely offset in Revenue. PBCAE has also fluctuated due to investment-related experience and claims costs over the period, and reflects higher travel claims costs beginning in the second quarter of 2020 associated with the COVID-19 pandemic. PBCAE has been positively impacted by favourable reinsurance contract renegotiations over the period. Actuarial adjustments, which generally occur in the fourth quarter of each year, also impact PBCAE.

While we continue to focus on efficiency management activities, Non-interest expense trended upwards over majority of the period. Growth mainly reflects higher costs in support of business growth and our ongoing investments in technology and related costs, including digital initiatives, and higher staff-related costs, including variable compensation. The increase in the fourth quarter of 2019 reflected severance and related costs associated with the repositioning of our Investor & Treasury Services business. The second quarter of 2020 was impacted by elevated market volatility that resulted in unfavourable changes in the fair value of our U.S. share-based compensation plans, which subsequently reversed in the third quarter of 2020 as market conditions improved, as well as lower variable compensation on decreased results. The change in the fair value of our U.S. share-based compensation plans is largely offset in Revenue. The second and third quarter of 2020 were also impacted by additional compensation for certain employees, primarily those client-facing amidst the COVID-19 pandemic, as well as other incremental COVID-19 related costs, which were largely offset by lower marketing and other discretionary spend.

Our effective income tax rate has fluctuated over the period, mostly due to varying levels of tax adjustments and changes in earnings mix. The first quarter of 2019 included a write-down of deferred tax assets resulting from a change in the corporate tax rate in Barbados. The second quarter of 2020 saw a decrease mainly due to a higher proportion of tax exempt income and income from lower tax rate jurisdictions relative to lower earnings in that quarter.

Financial condition

Condensed balance sheets

	As	s at
	July 31	October 31
(Millions of Canadian dollars)	2020	2019
Assets		
Cash and due from banks	\$ 119,181	\$ 26,310
Interest-bearing deposits with banks	40,640	38,345
Securities, net of applicable allowance (1)	290,513	249,004
Assets purchased under reverse repurchase agreements and securities borrowed	308,215	306,961
Loans		
Retail	443,845	426,086
Wholesale	217,605	195,870
Allowance for loan losses	(5,509)	(3,100)
Other – Derivatives	157,378	101,560
– Other (2)	111,266	87,899
Total assets	\$ 1,683,134	\$ 1,428,935
Liabilities		
Deposits	\$ 1,017,158	\$ 886,005
Other – Derivatives	155,479	98,543
– Other (2)	414,224	350,947
Subordinated debentures	9,899	9,815
Total liabilities	1,596,760	1,345,310
Equity attributable to shareholders	86,268	83,523
Non-controlling interests	106	102
Total equity	86,374	83,625
Total liabilities and equity	\$ 1,683,134	\$ 1,428,935

(1) Securities are comprised of Trading and Investment securities.

(2) Other – Other assets and liabilities include Segregated fund net assets and liabilities, respectively.

Q3 2020 vs. Q4 2019

Total assets increased \$254 billion or 18% from October 31, 2019. Foreign exchange translation increased total assets by \$24 billion.

Cash and due from banks was up \$93 billion or 353%, primarily due to higher deposits with central banks reflecting our short term cash and liquidity management activities.

Interest-bearing deposits with banks increased \$2 billion or 6%, due to the impact of foreign exchange translation and higher deposits, reflecting our cash management and liquidity activities.

Securities, net of applicable allowance, were up \$42 billion or 17%, primarily due to higher government debt securities, largely driven by our liquidity management activities and the impact of foreign exchange translation.

Loans (net of Allowances for loan losses) were up \$37 billion or 6%, largely due to volume growth in residential mortgages. Higher wholesale loans, in part to support our clients during this unprecedented time, also contributed to the increase.

Derivative assets were up \$56 billion or 55%, primarily attributable to higher fair values on foreign exchange contracts and interest rate contracts. The impact of foreign exchange translation also contributed to this increase.

Other assets were up \$23 billion or 27%, largely reflecting higher cash collateral balances and an increase in premises and equipment as a result of adopting IFRS 16. Higher margin requirements and an increase in precious metals inventory also contributed to the increase.

Total liabilities increased \$251 billion or 19%. Foreign exchange translation increased total liabilities by \$24 billion. Deposits increased \$131 billion or 15%, mainly as a result of higher business and retail deposits driven by increased client

activities. Higher bank deposits and the impact of foreign exchange translation also contributed to the increase. Derivative liabilities were up \$57 billion or 58%, primarily attributable to higher fair values on foreign exchange contracts

and interest rate contracts.

Other liabilities increased \$63 billion or 18%, mainly attributable to higher obligations related to repurchase agreements reflecting increased funding activities and lower financial netting. The impact of foreign currency translation, higher cash collateral requirements and higher lease liabilities as a result of adopting IFRS 16 also contributed to the increase.

Total equity increased \$3 billion or 3%, reflecting earnings, net of dividends and share repurchases and the issuance of Limited Recourse Capital Notes during the quarter, partially offset by a decrease in our cash flow hedge balances.

Off-balance sheet arrangements

In the normal course of business, we engage in a variety of financial transactions that, for accounting purposes, are not recorded on our Consolidated Balance Sheets. Off-balance sheet transactions are generally undertaken for risk, capital and funding management purposes which benefit us and our clients. These include transactions with structured entities and may also include the issuance of guarantees. These transactions give rise to, among other risks, varying degrees of market, credit, and liquidity and funding risk, which are discussed in the Risk management section of this Q3 2020 Report to Shareholders.

The following provides an update to our significant off-balance sheet transactions, which are described on pages 45 to 47 of our 2019 Annual Report.

Involvement with unconsolidated structured entities

RBC-administered multi-seller conduits

We administer multi-seller conduits which are used primarily for the securitization of our clients' financial assets. Our maximum exposure to loss under these transactions primarily relates to backstop liquidity and partial credit enhancement facilities extended to the conduits. As at July 31, 2020, the total assets of the multi-seller conduits were \$41.0 billion (October 31, 2019 – \$37.2 billion) and our maximum exposure to loss was \$42.1 billion (October 31, 2019 – \$37.9 billion). The change reflects an increase in securitization activities since October 31, 2019, largely in the Auto loans and leases and Equipment receivables asset classes, as well as the impact of foreign exchange translation.

As at July 31, 2020, the total asset-backed commercial paper (ABCP) issued by the conduits amounted to \$23.8 billion (October 31, 2019 – \$23.8 billion). The rating agencies that rate the ABCP rated 100% of the total amount issued within the top ratings category (October 31, 2019 – 100%).

Risk management

Credit risk

Credit risk is the risk of loss associated with an obligor's potential inability or unwillingness to fulfill its contractual obligations on a timely basis. Credit risk may arise directly from the risk of default of a primary obligor, indirectly from a secondary obligor, through off-balance sheet exposures, contingent credit risk and/or transactional risk.

Our Credit Risk Framework (CRF) and supporting credit policies are designed to clearly define roles and responsibilities, acceptable practices, limits and key controls. There have been no material changes to our CRF as described in our 2019 Annual Report.

Credit risk exposure by portfolio, sector and geography

The following table presents our credit risk exposures under the Basel regulatory defined classes and reflects exposures at default (EAD). The classification of our sectors aligns with our view of credit risk by industry.

				As at				
				uly 31				April 30
			2	2020				2020
		Credit risk (1)		Counterparty	credit risk (2)			
	On-balance	Off-balance sh	eet amount (3)	_ Repo-style		Total		Total
(Millions of Canadian dollars)	sheet amount	Undrawn	Other (4)	transactions	Derivatives	exposure		exposure
Retail								
Residential secured (5)	\$ 329,819	\$ 87,720	\$ –	\$ –	\$ -	\$ 417,539	\$	411,050
Qualifying revolving (6)	24,561	68,196	-	-	-	92,757		92,247
Other retail	65,453	13,675	69	-	_	79,197		76,548
Total retail	\$ 419,833	\$ 169,591	\$ 69	\$ -	\$ -	\$ 589,493	\$	579,845
Wholesale								
Agriculture	\$ 9,538	\$ 1,830	\$ 49	\$ -	\$ 102	\$ 11,519	\$	11,494
Automotive	10,417	6,679	285	_	887	18,268		20,165
Banking	41,756	1,848	565	43,176	20,400	107,745		105,103
Consumer discretionary	15,812	10,236	523		750	27,321		28,026
Consumer staples	5,619	7,278	539	_	1,329	14,765		15,463
Oil & gas	8,766	10,700	1,568	_	2,014	23,048		23,584
Financial services	32,043	22,920	2,836	113,488	19,310	190,597		190,182
Financing products	3,693	754	525	162	1,137	6,271		6,207
Forest products	1,345	775	121		39	2,280		2,419
Governments	252,062	11,126	1,551	55,654	7,639	328,032		281,473
Industrial products	8,256	8,402	746		928	18,332		19,464
Information technology	5,642	5,275	247	47	3,451	14,662		15,675
Investments	17,616	3,030	427	14	262	21,349		21,311
Mining & metals	2,560	3,666	848	-	327	7,401		7,624
Public works & infrastructure	1,555	1,907	354	-	243	4,059		4,200
Real estate & related				-				
	68,996	13,555	1,616	-	1,295	85,462		84,493
Other services	25,542	11,577	1,004	12	2,145	40,280		41,719
Telecommunication & media	5,312	7,567	86	-	1,657	14,622		16,609
Transportation	8,072	5,205	1,644	-	1,856	16,777		18,048
Utilities	10,281	17,958	3,972	-	4,212	36,423		39,471
Other sectors	1,268	522	1	178	9,727	11,696		17,393
Total wholesale	\$ 536,151	\$ 152,810	\$ 19,507	\$ 212,731	\$ 79,710	\$ 1,000,909	\$	970,123
Total exposure (7)	\$ 955,984	\$ 322,401	\$ 19,576	\$ 212,731	\$ 79,710	\$ 1,590,402	\$ 1	,549,968
By geography (8)								
Canada	\$ 664,105	\$ 250,692	\$ 10,498	\$ 95,990	\$ 31,425	\$ 1,052,710	\$	998,963
U.S.	196,061	53,202	8,030	51,461	22,517	331,271	Ŧ	339,566
Europe	60,511	15,969	921	51,203	20,110	148,714		154,757
Other International	35,307	2,538	127	14,077	5,658	57,707		56,682
	\$ 955,984	\$ 322,401	\$ 19,576	\$ 212,731	\$ 79,710	\$ 1,590,402	¢ 1	,549,968
Total exposure (7)	ə 555,564	\$ 322,401	ş 19,370	ə 212,731	ş / 9 ,/10		Ş I	,547,708

(1) EAD for standardized exposures are reported net of allowance for impaired assets and EAD for internal ratings based (IRB) exposures are reported gross of all allowance for credit losses and partial write-offs as per regulatory definitions.

(2) Counterparty credit risk EAD reflects exposure amounts after netting. Collateral is included in EAD for repo-style transactions to the extent allowed by regulatory guidelines. Exchange traded derivatives are included in Other sectors.

(3) EAD for undrawn credit commitments and other off-balance sheet amounts are reported after the application of credit conversion factors.

(4) Includes other off-balance sheet exposures such as letters of credit and guarantees.

(5) Includes residential mortgages and home equity lines of credit.

(6) Includes credit cards, unsecured lines of credit and overdraft protection products.

(7) Excludes securitization, banking book equities and other assets not subject to the standardized or IRB approach as well as exposures from the Paycheck Protection Program (PPP) instituted by the U.S. government in Q2 2020. For further details on the PPP, refer to the Significant developments: COVID-19 section of this Q3 2020 Report to Shareholders.

(8) Geographic profile is based on the country of residence of the borrower.

Q3 2020 vs. Q2 2020

Total credit risk exposure increased \$40.4 billion or 3% from the prior quarter, largely due to higher repo-style transactions, deposits with central banks and securities, partially offset by the unfavourable impact of foreign exchange translation.

Retail exposure increased \$9.6 billion or 2%, largely driven by volume growth in the residential secured and other retail portfolios.

Wholesale exposure increased \$30.8 billion or 3%, largely from higher repo-style transactions, deposits with central banks and government debt securities, all largely driven by our liquidity management activities. This was partially offset by the unfavourable impact of foreign exchange translation.

The geographic mix of our credit risk exposure remained largely consistent to the prior quarter. Our exposure in Canada, the U.S., Europe and Other International was 66%, 21%, 9% and 4%, respectively (April 30, 2020 – 64%, 22%, 10% and 4%, respectively).

Net European exposure by country, asset type and client type (1), (2)

										As at						
									ly 31 0 20							April 30 2020
				Asset	type	•					C	lient type		_		
(Millions of Canadian dollars)	0	Loans utstanding	Se	curities (3)		Repo-style nsactions	De	erivatives		Financials		Sovereign	Corporate		Total	Total
U.K. Germany France	\$	9,715 2,646 1,480	\$	18,707 9,073 6,825	\$	1,662 10 70	\$	6,284 289 431	\$	15,165 6,426 1,149	\$	11,812 2,729 6,635	\$ 9,391 2,863 1,022	\$	36,368 12,018 8,806	\$ 35,221 10,932 13,897
Total U.K., Germany, France	\$	13,841	\$	34,605	\$	1,742	\$	7,004	\$	22,740	\$	21,176	\$ 13,276	\$	57,192	\$ 60,050
Greece Ireland Italy Portugal Spain	\$	- 886 200 - 363	\$	2 48 140 4 228	\$	- 360 - - 7	\$	- 58 - 5 47	\$	- 622 132 9 176	\$	- 29 84 - 12	\$ 2 701 124 - 457	\$	2 1,352 340 9 645	\$ - 1,447 205 20 790
Total peripheral	\$	1,449	\$	422	\$	367	\$	110	\$	939	\$	125	\$ 1,284	\$	2,348	\$ 2,462
Luxembourg Netherlands Norway Sweden Switzerland Other	\$	2,876 1,728 122 329 908 2,113	\$	9,085 735 1,521 1,333 4,291 2,554	\$	78 86 3 1 93 58	\$	71 142 33 20 183 196	\$	2,093 624 1,462 636 605 1,616	\$	8,600 1 57 695 4,097 1,521	\$ 1,417 2,066 160 352 773 1,784	\$	12,110 2,691 1,679 1,683 5,475 4,921	\$ 11,120 3,302 2,166 1,963 5,470 4,498
Total other Europe	\$	8,076	\$	19,519	\$	319	\$	645	\$	7,036	\$	14,971	\$ 6,552	\$	28,559	\$ 28,519
Net exposure to Europe (4), (5)	\$	23,366	\$	54,546	\$	2,428	\$	7,759	\$	30,715	\$	36,272	\$ 21,112	\$	88,099	\$ 91,031

(1) Geographic profile is based on country of risk, which reflects our assessment of the geographic risk associated with a given exposure. Typically, this is the residence of the borrower.

(2) Exposures are calculated on a fair value basis and net of collateral, which includes \$145.3 billion against repo-style transactions (April 30, 2020 – \$149.6 billion) and \$15.6 billion against derivatives (April 30, 2020 – \$13.0 billion).

(3) Securities include \$4.5 billion of trading securities (April 30, 2020 – \$5.9 billion), \$31.5 billion of deposits (April 30, 2020 – \$33.1 billion), and \$18.5 billion of debt securities carried at fair value through other comprehensive income (FVOCI) (April 30, 2020 – \$17.5 billion).

(4) Excludes \$3.2 billion (April 30, 2020 – \$2.7 billion) of exposures to supranational agencies, predominantly in Luxembourg.

(5) Reflects \$1.6 billion of mitigation through credit default swaps, which are largely used to hedge single name exposures and market risk (April 30, 2020 – \$2.0 billion).

Q3 2020 vs. Q2 2020

Net credit risk exposure to Europe decreased \$2.9 billion or 3% from last quarter, mainly driven by lower deposits with the Bank of France, partially offset by higher deposits with the Bank of England. Lower trading securities, largely in France and Germany, partially offset by higher debt securities, largely in Germany, also contributed to the decrease.

Our European corporate loan book is managed on a global basis with underwriting standards reflecting the same approach to the use of our balance sheet as we have applied in both Canada and the U.S. The PCL on loans during the quarter was \$21 million. GIL was \$210 million with a GIL ratio of 90 bps, down 33 bps from last quarter, mainly due to write-offs in the industrial products and other services sectors.

Residential mortgages and home equity lines of credit (insured vs. uninsured)

Residential mortgages and home equity lines of credit are secured by residential properties. The following table presents a breakdown by geographic region.

					As at July	31, 2020								
(Millions of Canadian dollars,		Residential mortgages												
except percentage amounts)	Insured (1) Uninsured Total									Total				
Region (2) Canada Atlantic provinces Quebec	\$	8,029 13,321	52% 37	\$	7,517 23,129	48% 63	\$	15,546 36,450	\$	1,713 3,241				
Ontario Alberta Saskatchewan and Manitoba B.C. and territories		37,805 21,093 9,184 14,634	27 53 48 26		102,984 18,814 9,884 41,195	73 47 52 74		140,789 39,907 19,068 55,829		16,058 5,962 2,193 7,906				
Total Canada (3) U.S. (4) Other International (4)	\$	104,066 _ _	34% _ _	\$	203,523 19,748 3,003	66% 100 100	\$	307,589 19,748 3,003	\$	37,073 1,644 1,342				
Total International	\$	-	-%	\$	22,751	100%	\$	22,751	\$	2,986				
Total	\$	104,066	32%	\$	226,274	68%	\$	330,340	\$	40,059				

				As at April	30, 2020							
(Millions of Canadian dollars,	Residential mortgages											
except percentage amounts)	Insured (1)	Uninsured				Total		Total			
Region (2)												
Canada												
Atlantic provinces	\$ 7,819	52%	\$	7,321	48%	\$	15,140	\$	1,749			
Quebec	12,966	37		22,519	63		35,485		3,347			
Ontario	37,360	28		98,325	72		135,685		16,228			
Alberta	20,811	53		18,540	47		39,351		6,075			
Saskatchewan and Manitoba	9,068	48		9,731	52		18,799		2,238			
B.C. and territories	14,635	27		39,794	73		54,429		8,023			
Total Canada (3)	\$ 102,659	34%	\$	196,230	66%	\$	298,889	\$	37,660			
U.S. (4)	1	-		19,926	100		19,927		1,815			
Other International (4)	1	-		3,107	100		3,108		1,374			
Total International	\$ 2	-%	\$	23,033	100%	\$	23,035	\$	3,189			
Total	\$ 102,661	32%	\$	219,263	68%	\$	321,924	\$	40,849			

(1) Insured residential mortgages are mortgages whereby our exposure to default is mitigated by insurance through CMHC or other private mortgage default insurers.

Region is based upon the address of the property mortgaged. The Atlantic provinces are comprised of Newfoundland and Labrador, Prince Edward (2) Island, Nova Scotia and New Brunswick, and B.C. and territories are comprised of British Columbia, Nunavut, Northwest Territories and Yukon.

Total consolidated residential mortgages in Canada of \$308 billion (April 30, 2020 – \$299 billion) was largely comprised of \$281 billion (April 30, 2020 – \$294 billion) was largely comprised of \$281 billion (April 30, 2020 – \$294 billion) of residential mortgages and \$9 billion (April 30, 2020 – \$7 billion) of mortgages with commercial clients, of which \$6 billion (April 30, 2020 – \$4 billion) are insured mortgages, both in Canadian Banking, and \$18 billion (April 30, 2020 – \$18 billion) of residential mortgages in Capital (3) Markets held for securitization purposes. Home equity lines of credit include term loans collateralized by residential mortgages.

(4)

Home equity lines of credit are uninsured and reported within the personal loan category. As at July 31, 2020, home equity lines of credit in Canadian Banking were \$37 billion (April 30, 2020 - \$38 billion).

Residential mortgages portfolio by amortization period

The following table provides a summary of the percentage of residential mortgages that fall within the remaining amortization periods based upon current customer payment amounts, which incorporate payments larger than the minimum contractual amount and/or higher frequency of payments.

	As at											
	July 31 April 30											
		2020	2020									
		U.S. and other			U.S. and other							
	Canada	International	Total	Canada	International	Total						
Amortization period												
≤25 years	78%	35%	75%	78%	35%	75%						
> 25 years ≤ 30 years	21	65	24	22	65	25						
> 30 years ≤ 35 years	1	-	1	_	-	-						
> 35 years	-	-	-	-	-	-						
Total	100%	100%	100%	100%	100%	100%						

Average loan-to-value (LTV) ratios

The following table provides a summary of our average LTV ratio for newly originated and acquired uninsured residential mortgages and RBC Homeline Plan® products by geographic region.

		For the three	months ended		For the nin	e months ended		
		uly 31 2020		pril 30 2020	July 31 2020			
	υ	ninsured	U	ninsured	U	ninsured		
	ResidentialRBC Homelinemortgages (1)Plan® products (2)		Residential mortgages (1)	RBC Homeline Plan® products (2)	Residential mortgages (1)	RBC Homeline Plan® products (2)		
Region (3)								
Atlantic provinces	75%	75%	74%	76%	74%	75%		
Quebec	73	74	72	73	72	73		
Ontario	71	68	71	68	71	68		
Alberta	73	72	73	72	73	72		
Saskatchewan and Manitoba	74	75	74	75	74	75		
B.C. and territories	69	67	68	66	69	66		
U.S.	72	n.m.	72	n.m.	72	n.m.		
Other International	70	n.m.	67	n.m.	69	n.m.		
Average of newly originated and acquired for the period (4), (5)	71%	69%	71%	69%	71%	69%		
Total Canadian Banking residential mortgages portfolio (6)	57%	49%	58%	50%	57%	49%		

(1)

(2)

(3)

Residential mortgages exclude residential mortgages within the RBC Homeline Plan® products. RBC Homeline Plan® products are comprised of both residential mortgages and home equity lines of credit. Region is based upon the address of the property mortgaged. The Atlantic provinces are comprised of Newfoundland and Labrador, Prince Edward Island, Nova Scotia and New Brunswick, and B.C. and territories are comprised of British Columbia, Nunavut, Northwest Territories and Yukon. The average LTV ratios for newly originated and acquired uninsured residential mortgages and RBC Homeline Plan® products are calculated on a weichted besic hum entergone provide a content of the product of the products are calculated on a (4) weighted basis by mortgage amounts at origination.

For newly originated mortgages and RBC Homeline Plan® products, LTV is calculated based on the total facility amount for the residential mortgage and (5) RBC Homeline Plan® product divided by the value of the related residential property.

Weighted by mortgage balances and adjusted for property values based on the Teranet – National Bank National Composite House Price Index. (6)n.m. not meaningful

Credit quality performance

The following credit quality performance tables and analysis provide information on loans, which represents loans, acceptances and commitments, and other financial assets.

Provision for credit losses

	 Fort	he three	e months en	ded		For the nine months ended					
(a):!!!	July 31 2020		April 30 2020		July 31 2019		July 31 2020		July 31 2019		
(Millions of Canadian dollars, except percentage amounts) Personal & Commercial Banking Wealth Management Capital Markets	\$ 526 76 80	\$	1,687 87 950	\$	345 27 56	\$	2,556 161 1,110	\$	1,077 83 226		
Corporate Support and other	(4)		10		1		6		- 220		
PCL – Loans PCL – Other financial assets	\$ 678 (3)	\$	2,734 96	\$	429 (4)	\$	3,833 91	\$	1,386 (21)		
Total PCL	\$ 675	\$	2,830	\$	425	\$	3,924	\$	1,365		
PCL on loans is comprised of: Retail Wholesale	\$ 252 28	\$	725 1,396	\$	23 7	\$	1,011 1,473	\$	86 43		
PCL on performing loans	\$ 280	\$	2,121	\$	30	\$	2,484	\$	129		
Retail Wholesale	\$ 227 171	\$	281 332	\$	275 124	\$	779 570	\$	802 455		
PCL on impaired loans	\$ 398	\$	613	\$	399	\$	1,349	\$	1,257		
PCL – Loans	\$ 678	\$	2,734	\$	429	\$	3,833	\$	1,386		
PCL on loans as a % of average net loans and acceptances	0.40%		1.65%		0.27%		0.77%		0.30%		
PCL on impaired loans as a % of average net loans and acceptances	0.23%		0.37%		0.25%		0.27%	0.27%			
Additional information by geography (1)											
Canada Residential mortgages Personal Credit cards Small business	\$ 6 84 106 14	\$	9 138 139 14	\$	7 118 128 11	\$	25 351 382 40	\$	23 355 366 25		
Retail Wholesale	210 70		300 76		264 62		798 152		769 216		
PCL on impaired loans	\$ 280	\$	376	\$	326	\$	950	\$	985		
U.S. Retail Wholesale	\$ 3 92	\$	2 178	\$	4 16	\$	3 325	\$	7 174		
PCL on impaired loans	\$ 95	\$	180	\$	20	\$	328	\$	181		
Other International Retail Wholesale	\$ 14 9	\$	(21) 78	\$	7 46	\$	(22) 93	\$	26 65		
PCL on impaired loans	\$ 23	\$	57	\$	53	\$	71	\$	91		
PCL on impaired loans	\$ 398	\$	613	\$	399	\$	1,349	\$	1,257		

(1) Geographic information is based on residence of borrower.

Q3 2020 vs. Q3 2019

Total PCL was \$675 million. PCL on loans of \$678 million increased \$249 million from the prior year, primarily due to higher provisions in Personal & Commercial Banking, Wealth Management and Capital Markets. The PCL on loans ratio of 40 bps increased 13 bps.

PCL on performing loans of \$280 million increased \$250 million, primarily reflecting higher provisions in Personal & Commercial Banking and Wealth Management due to the evolving impact of the COVID-19 pandemic.

PCL on impaired loans of \$398 million was flat, reflecting lower provisions in Personal & Commercial Banking, offset by higher provisions in Wealth Management and Capital Markets.

PCL on loans in Personal & Commercial Banking increased \$181 million, largely reflecting higher provisions on performing loans in our Canadian Banking retail portfolios resulting from unfavourable changes in our credit quality outlook, partially offset by lower outstanding balances in certain portfolios, both due to the evolving impact of the COVID-19 pandemic.

PCL on loans in Wealth Management increased \$49 million, largely due to higher provisions on impaired loans in U.S. Wealth Management (including City National) mainly in the industrial products sector. Higher provisions on performing loans, primarily in U.S. Wealth Management (including City National), due to the evolving impact of the COVID-19 pandemic, also contributed to the increase.

PCL on loans in Capital Markets increased \$24 million, largely reflecting higher provisions on impaired loans in the real estate and related and transportation sectors, partially offset by a provision taken in the industrial products sector in the prior year.

Q3 2020 vs. Q2 2020

PCL on loans of \$678 million decreased \$2,056 million from the prior quarter, primarily due to lower provisions in Personal & Commercial Banking and Capital Markets. The PCL on loans ratio of 40 bps decreased 125 bps.

PCL on performing loans of \$280 million, reflecting unfavourable changes in our credit outlook as a result of the evolving impact of the COVID-19 pandemic, decreased \$1,841 million from the prior quarter. The decrease was primarily due to lower provisions in Personal & Commercial Banking and Capital Markets as the prior quarter reflected the impact of the onset of the COVID-19 pandemic.

PCL on impaired loans of \$398 million decreased \$215 million, largely reflecting lower provisions in Capital Markets and Personal & Commercial Banking.

PCL on other financial assets of \$(3) million decreased \$99 million, largely reflecting lower provisions in Capital Markets as the prior quarter reflected the impact of the onset of the COVID-19 pandemic.

PCL on loans in Personal & Commercial Banking decreased \$1,161 million, largely reflecting lower provisions on performing loans in Canadian Banking as described above. Lower provisions on impaired loans in our Canadian Banking retail portfolios, mainly due to the impact of government support and payment deferral programs, partially offset by higher provisions on impaired loans in our Caribbean Banking and Canadian Banking commercial portfolios also contributed to the decrease.

PCL on loans in Capital Markets decreased \$870 million, largely due to lower provisions on performing loans as described above. Lower provisions on impaired loans also contributed to the decrease, primarily due to higher provisions in the oil & gas and consumer discretionary sectors in the prior quarter.

Q3 2020 vs. Q3 2019 (Nine months ended)

Total PCL was \$3,924 million. PCL on loans of \$3,833 million increased \$2,447 million from the prior year, primarily due to higher provisions in Personal & Commercial Banking, Capital Markets and Wealth Management. The PCL on loans ratio of 77 bps increased 47 bps.

PCL on performing loans of \$2,484 million increased \$2,355 million, primarily reflecting higher provisions in Personal & Commercial Banking, Capital Markets and Wealth Management due to the impact of the COVID-19 pandemic.

PCL on impaired loans of \$1,349 million increased \$92 million, largely reflecting higher provisions in Capital Markets, partially offset by lower provisions in Personal & Commercial Banking.

PCL on other financial assets of \$91 million increased \$112 million, largely reflecting higher provisions in Capital Markets primarily due to the impact of the COVID-19 pandemic.

PCL on loans in Personal & Commercial Banking increased \$1,479 million, reflecting higher provisions on performing loans in our Canadian Banking portfolios as described above. Higher provisions on impaired loans in our Canadian Banking retail portfolios were more than offset by lower provisions in our Canadian Banking commercial and Caribbean Banking portfolios, as the prior year reflected higher provisions taken in the public works & infrastructure and information technology sectors.

PCL on loans in Wealth Management increased \$78 million, largely reflecting higher provisions on performing loans in U.S. Wealth Management (including City National) as described above.

PCL on loans in Capital Markets increased \$884 million, largely reflecting higher provisions on performing loans as described above. Higher provisions on impaired loans also contributed to the increase, largely due to provisions taken in the oil & gas sector, reflecting pressure on oil prices in the second quarter of 2020, and a few other sectors in the current year. This was partially offset by provisions taken in a few sectors in the prior year.

Gross impaired loans

		As at	
(Nillions of Considion dellars, except according amounts)	July 31 2020	April 30 2020	July 31 2019
(Millions of Canadian dollars, except percentage amounts) Personal & Commercial Banking Wealth Management Capital Markets Corporate Support and other	\$ 1,746 487 1,624	\$ 1,637 329 1,563	\$ 1,704 258 1,028
Total GIL	\$ 3,857	\$ 3,529	\$ 2,990
Canada (1) Retail Wholesale	\$ 850 754	\$ 832 625	\$ 727 664
GIL	1,604	1,457	1,391
U.S. (1) Retail Wholesale	\$ 27 1,570	\$ 31 1,311	\$ 31 929
GIL	1,597	1,342	960
Other International (1) Retail Wholesale	\$ 206 450	\$ 211 519	\$ 302 337
GIL	656	730	639
Total GIL	\$ 3,857	\$ 3,529	\$ 2,990
Impaired loans, beginning balance Classified as impaired during the period (new impaired) (2) Net repayments (2) Amounts written off Other (2), (3)	\$ 3,529 1,265 (381) (465) (91)	\$ 2,936 1,308 (253) (423) (39)	\$ 3,042 686 (223) (437) (78)
Impaired loans, balance at end of period	\$ 3,857	\$ 3,529	\$ 2,990
GIL as a % of related loans and acceptances Total GIL as a % of related loans and acceptances Personal & Commercial Banking Canadian Banking Caribbean Banking Wealth Management Capital Markets	0.57% 0.36% 0.30% 4.04% 0.60% 1.51%	0.51% 0.34% 0.28% 3.84% 0.40% 1.19%	0.47% 0.37% 0.28% 5.72% 0.39% 1.02%

(1) Geographic information is based on residence of the borrower.

(2) Certain GIL movements for Canadian Banking retail and wholesale portfolios are generally allocated to new impaired, as return to performing status, Net repayments, sold, and foreign exchange translation and other movements amounts are not reasonably determinable. Certain GIL movements for Caribbean Banking retail and wholesale portfolios are generally allocated to Net repayments and new impaired, as return to performing status, sold, and foreign exchange translation and other movements amounts are not reasonably determinable.

(3) Includes return to performing status during the period, recoveries of loans and advances previously written off, sold, and foreign exchange translation and other movements.

Q3 2020 vs. Q3 2019

Total GIL of \$3,857 million increased \$867 million or 29% from the prior year and the total GIL ratio of 57 bps increased 10 bps, reflecting higher impaired loans in Capital Markets, Wealth Management and Personal & Commercial Banking.

GIL in Personal & Commercial Banking increased \$42 million or 2% due to higher impaired loans in our Canadian Banking retail and commercial portfolios, partially offset by lower impaired loans in our Caribbean Banking portfolios.

GIL in Wealth Management increased \$229 million or 89%, reflecting higher impaired loans in U.S. Wealth Management (including City National) and International Wealth Management largely in the investments sector.

GIL in Capital Markets increased \$596 million or 58%, largely in the U.S., mainly due to higher impaired loans in a few sectors, including the oil & gas, consumer discretionary and transportation sectors, partially offset by lower impaired loans in the utilities sector.

Q3 2020 vs. Q2 2020

Total GIL increased \$328 million or 9% from the prior quarter, and the total GIL ratio of 57 bps increased 6 bps, reflecting higher impaired loans in Wealth Management, Personal & Commercial Banking and Capital Markets.

GIL in Personal & Commercial Banking increased \$109 million or 7%, reflecting higher impaired loans in our Canadian Banking commercial and retail portfolios.

GIL in Wealth Management increased \$158 million or 48%, reflecting higher impaired loans in U.S. Wealth Management (including City National) and International Wealth Management primarily in the investments sector.

GIL in Capital Markets increased \$61 million or 4%, mainly due to higher impaired loans in the oil & gas and transportation sectors, partially offset by lower impaired loans in a few sectors.

		As at								
(Millions of Canadian dollars)	July 20		April 30 2020		July 31 2019					
Personal & Commercial Banking Wealth Management Capital Markets Corporate Support and other	\$ 4,3 3 1,3	5	5 4,102 336 1,415 12	\$	2,671 243 405 2					
ACL on loans ACL on other financial assets	\$ 6,00 1		5 5,865 118	\$	3,321 51					
Total ACL	\$ 6,1	3 \$	5,983	\$	3,372					
ACL on loans is comprised of: Retail Wholesale	\$ 2,8 2,1		5 2,635 2,158	\$	1,839 678					
ACL on performing loans ACL on impaired loans	\$ 5,0 1,0		5 4,793 1,072	\$	2,517 804					
Additional information by geography (1)										
Canada Retail Wholesale	\$ 11 23	00 \$	5 216 207	\$	174 163					
ACL on impaired loans	\$ 42	2 6 \$	\$ 423	\$	337					
U.S. Retail Wholesale	\$ 33	2 \$ 25	5 2 279	\$	2 137					
ACL on impaired loans	\$ 32	27 \$	\$ 281	\$	139					
Other International Retail Wholesale	\$ 1 10	8 52	5 117 251	\$	168 160					
ACL on impaired loans	\$ 23	30 \$	368	\$	328					
ACL on impaired loans	\$ 1,03	3 \$	\$ 1,072	\$	804					

(1) Geographic information is based on residence of borrower.

Q3 2020 vs. Q3 2019

Total ACL of \$6,183 million increased \$2,811 million or 83% from the prior year, largely reflecting an increase of \$2,744 million in ACL on loans.

ACL on performing loans of \$5,032 million increased \$2,515 million from the prior year, primarily reflecting higher ACL in Personal & Commercial Banking, Capital Markets and Wealth Management due to the impact of the COVID-19 pandemic.

ACL on impaired loans of \$1,033 million increased \$229 million from the prior year, primarily due to higher ACL in Capital Markets, partially offset by lower ACL in Personal & Commercial Banking. Higher ACL on impaired loans in our Canadian Banking retail and commercial portfolios were more than offset by lower ACL in our Caribbean Banking portfolios.

ACL on other financial assets of \$118 million increased \$67 million from the prior year, largely reflecting higher ACL in Capital Markets, primarily due to the impact of the COVID-19 pandemic.

Q3 2020 vs. Q2 2020

Total ACL of \$6,183 million increased \$200 million or 3% from the prior quarter, reflecting an increase in ACL on loans.

ACL on performing loans of \$5,032 million increased \$239 million from the prior quarter, primarily reflecting higher ACL in Personal & Commercial Banking due to the evolving impact of the COVID-19 pandemic.

ACL on impaired loans of \$1,033 million decreased \$39 million from the prior quarter, largely due to lower ACL in Capital Markets.

For further details, refer to Note 5 of our Condensed Financial Statements.

Market risk

Market risk is defined to be the impact of market prices upon our financial condition. This includes potential gains or losses due to changes in market determined variables such as interest rates, credit spreads, equity prices, commodity prices, foreign exchange rates and implied volatilities. There have been no material changes to our Market Risk Framework from the framework described in our 2019 Annual Report. We continue to manage the controls and governance procedures that ensure that our market risk exposure is consistent with risk appetite constraints set by the Board of Directors. These controls include limits on probabilistic measures of potential loss in trading positions, such as Value-at-Risk (VaR) and Stressed Value-at-Risk (SVaR).

Market risk controls are also in place to manage structural interest rate risk (SIRR) arising from traditional banking products. Factors contributing to SIRR include the mismatch between future asset and liability repricing dates, relative

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changes in asset and liability rates, and product features that could affect the expected timing of cash flows, such as options to pre-pay loans or redeem term deposits prior to contractual maturity. To monitor and control SIRR, we assess two primary financial metrics, Net Interest Income (NII) risk and Economic Value of Equity (EVE) risk, under a range of market shocks and scenarios. For further details of our approach to the management of market risk, refer to the Market risk section of our 2019 Annual Report. There has been no material change to the SIRR measurement methodology, controls, or limits from those described in our 2019 Annual Report.

Market risk measures – FVTPL positions

VaR and SVaR

The following table presents our Market risk VaR and Market risk SVaR figures.

		July 31, 2020							April 30, 2020					July 31, 2019				
		For the three months ended								r the three nths ended				the three ths ended				
(Millions of Canadian dollars)		As at	Αv	rage		High	Low	As at		Average		As at		Average				
Equity	\$	28	\$	43	\$	62	\$ 28	\$ 55	\$	39	\$	18	\$	17				
Foreign exchange		4		3		6	2	3		3		3		4				
Commodities		5		5		7	3	5		3		3		1				
Interest rate (1)		44		95		143	44	132		61		14		14				
Credit specific (2)		6		7		7	5	6		6		4		4				
Diversification (3)		(25)		(30)		n.m.	n.m.	(15)		(20)		(16)		(17)				
Market risk VaR (4)	\$	62	\$	123	\$	191	\$ 61	\$ 186	\$	92	\$	26	\$	23				
Market risk Stressed VaR (4)	\$	65	\$	130	\$	193	\$ 65	\$ 139	\$	147	\$	113	\$	106				

	July 31, 2020									July 31, 2019				
	For the nine months ended										r the nine hths ended			
(Millions of Canadian dollars)	As at	Av	rage		High		Low		As at		Average			
Equity	\$ 28	\$	34	\$	64	\$	13	\$	18	\$	18			
Foreign exchange	4		3		6		1		3		5			
Commodities	5		3		7		1		3		2			
Interest rate (1)	44		57		178		11		14		14			
Credit specific (2)	6		6		7		4		4		5			
Diversification (3)	(25)		(23)		n.m.	r	ı.m.		(16)		(18)			
Market risk VaR (5)	\$ 62	\$	80	\$	232	\$	18	\$	26	\$	26			
Market risk Stressed VaR (5)	\$ 65	\$	120	\$	228	\$	65	\$	113	\$	109			

(1) General credit spread risk and funding spread risk associated with uncollateralized derivatives are included under interest rate VaR.

(2) Credit specific risk captures issuer-specific credit spread volatility.

(3) Market risk VaR is less than the sum of the individual risk factor VaR results due to portfolio diversification.

(4) The average market risk VaR and average SVaR for the three months ended July 31, 2020 includes \$60 million and \$61 million, respectively (April 30, 2020 – \$41 million and \$41 million; July 31, 2019 – \$1 million and \$2 million), related to loan underwriting commitments, with the remainder related to our core trading portfolio.

(5) The average market risk VaR and average SVaR for the nine months ended July 31, 2020 includes \$34 million and \$35 million, respectively (July 31, 2019 – \$1 million and \$3 million), related to loan underwriting commitments, with the remainder related to our core trading portfolio.

n.m. not meaningful

The historical period used to compute VaR is comprised of the last two years of equally weighted market data, and is rolled forward on at least a monthly basis. Starting in April 2020, the period used for VaR began to incorporate the market turmoil from March 2020. The SVaR period was updated early in Q3 2020 to reflect the market volatility observed during Q2 2020 rather than the 2008 global financial crisis.

Q3 2020 vs. Q3 2019

Average market risk VaR of \$123 million increased \$100 million and average SVaR of \$130 million increased \$24 million from the prior year. This is primarily due to the impact of credit spreads widening and significant market volatility experienced in Q2 2020 being included in both the VaR and SVaR historical periods in Q3 2020. These factors impacted loan underwriting commitments, as well as fixed income and equity portfolios. The increase in VaR was greater than that of SVaR, as the historical period for SVaR previously reflected the turmoil from the 2008 global financial crisis.

Q3 2020 vs. Q2 2020

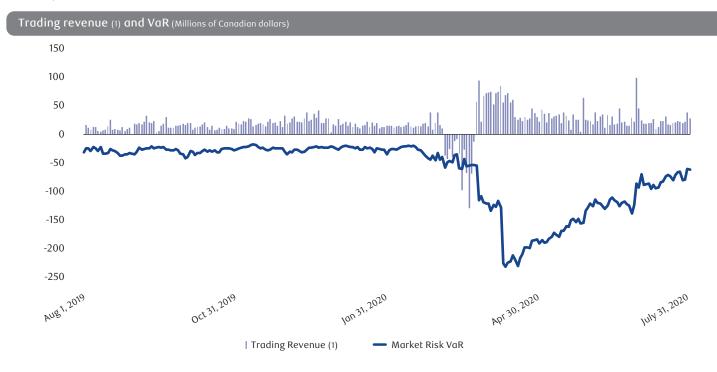
In Q3 2020, overall market volatility and credit spreads improved. The impact of these factors on fixed income and equity portfolios, combined with a reduction of loan underwriting commitments resulted in a consistent decline in VaR throughout the current quarter. VaR decreased from \$186 million at the end of Q2 2020 to \$62 million at the end of Q3 2020. In contrast to the declines observed in quarter end VaR levels, average market risk VaR levels increased from the prior quarter as the impact from significant market turmoil in March 2020 was only reflected in average VaR for the latter part of Q2 2020, whereas Q3 2020 average VaR reflected the impact throughout the entire quarter.

Average SVaR of \$130 million decreased \$17 million from the prior quarter as the increase to SVaR from the change in historical period in Q3 2020 was more than offset by market volatility and credit spread improvements as well as reductions in loan underwriting commitments.

Q3 2020 vs. Q3 2019 (Nine months ended)

Average market risk VaR of \$80 million increased \$54 million and average SVaR of \$120 million increased \$11 million from the prior year, both mainly due to the combined effects noted above.

The following chart displays a bar graph of our daily trading profit and loss and a line graph of our daily market risk VaR. We incurred no net trading losses in the three months ended July 31, 2020 and 13 days with net trading losses in the three months ended April 30, 2020.



(1) Includes loan underwriting commitments.

Market risk measures for assets and liabilities of RBC Insurance®

We offer a range of insurance products to clients and hold investments to meet the future obligations to policyholders. The investments which support actuarial liabilities are predominantly fixed income assets designated as FVTPL. Consequently, changes in the fair values of these assets are recorded in the Consolidated Statements of Income and are largely offset by changes in the fair value of the actuarial liabilities, the impact of which is reflected in Insurance policyholder benefits, claims and acquisition expense. As at July 31, 2020, we held assets in support of \$12.4 billion of liabilities with respect to insurance obligations (April 30, 2020 – \$11.4 billion).

Market risk measures – Structural Interest Rate Sensitivities

The following table shows the potential before-tax impact of an immediate and sustained 100 bps increase or decrease in interest rates on projected 12-month NII and EVE for our structural balance sheet, assuming no subsequent hedging. Rate floors are applied within the declining rates scenarios, with floor levels set based on lower rate bound experience globally. Interest rate risk measures are based upon interest rate exposures at a specific time, which over time, can change in response to business activities and management actions.

			July 31 2020	Apri 20		July 20				
		EVE risk			NII risk (1)					
(Millions of Canadian dollars)	Canadian dollar impact	U.S. dollar impact (2)	Total	Canadian dollar impact	U.S. dollar impact (2)	Total	EVE risk	NII risk (1)	EVE risk	NII risk (1)
Before-tax impact of: 100 bps increase in rates 100 bps decrease in rates	\$ (1,502) 1,127	\$ (261) 253	\$ (1,763) 1,380	\$ 640 (485)	\$ 142 (85)	\$ 782 (570)	\$ (1,708) 1,459	\$ 701 (726)	\$ (1,285) 606	\$ 387 (548)

(1) Represents the 12-month NII exposure to an instantaneous and sustained shift in interest rates.

(2) Represents the impact on the SIRR portfolios held in our City National and U.S. banking operations.

As at July 31, 2020, an immediate and sustained -100 bps shock would have had a negative impact to our NII of \$570 million, down from \$726 million last quarter. An immediate and sustained +100 bps shock at the end of July 31, 2020 would have had a negative impact to the bank's EVE of \$1,763 million, up from \$1,708 million reported last quarter. The quarter-over-quarter change in NII sensitivity was attributed to deposit growth along with lower prevailing rates which reduced risk in the down shock scenario, while the quarter-over-quarter change in EVE sensitivity was primarily the result of balance sheet growth. During the third quarter of 2020, SIRR NII and EVE risks remained within approved limits.

Market risk measures for other material non-trading portfolios

Investment securities carried at FVOCI

We held \$95.6 billion of investment securities carried at FVOCI as at July 31, 2020, compared to \$89.0 billion in the prior quarter. We hold debt securities carried at FVOCI primarily as investments, as well as to manage liquidity risk and hedge interest rate risk in our non-trading banking balance sheet. As at July 31, 2020, our portfolio of investment securities carried at FVOCI is interest rate sensitive and would impact OCI by a pre-tax change in value of \$9 million as measured by the change in the value of the securities for a one basis point parallel increase in yields. The portfolio also exposes us to credit spread risk of a pre-tax change in value of \$25 million, as measured by the change in value for a one basis point widening of credit spreads. The value of the investment securities carried at FVOCI included in our SIRR measure as at July 31, 2020 was \$11.1 billion. Our investment securities carried at FVOCI also include equity exposures of \$0.5 billion as at July 31, 2020, compared to \$0.5 billion in the prior quarter.

Non-trading foreign exchange rate risk

Foreign exchange rate risk is the potential adverse impact on earnings and economic value due to changes in foreign currency rates. Our revenue, expenses and income denominated in currencies other than the Canadian dollar are subject to fluctuations as a result of changes in the value of the average Canadian dollar relative to the average value of those currencies. Our most significant exposure is to the U.S. dollar, due to our operations in the U.S. and other activities conducted in U.S. dollars. Other significant exposures are to the British pound and the Euro, due to our activities conducted internationally in these currencies. A strengthening or weakening of the Canadian dollar compared to the U.S. dollar, British pound and the Euro could reduce or increase, as applicable, the translated value of our foreign currency denominated revenue, expenses and earnings and could have a significant effect on the results of our operations. We are also exposed to foreign exchange rate risk arising from our investments in foreign operations. For unhedged equity investments, when the Canadian dollar appreciates against other currencies, the unrealized translation losses on net foreign investments decreases our shareholders' equity through the other components of equity and decreases the translated value of the risk-weighted assets (RWA) of the foreign currency-denominated asset. The reverse is true when the Canadian dollar depreciates against other consider these impacts in selecting an appropriate level of our investments in foreign operations to be hedged.

Derivatives related to non-trading activity

Derivatives are also used to hedge market risk exposure unrelated to our trading activity. Hedge accounting is elected where applicable. These derivatives are included in our SIRR measure and other internal non-trading market risk measures. We use interest rate swaps to manage our SIRR, funding and investment activities. Interest rate swaps are also used to hedge changes in the fair value of certain fixed-rate instruments. We also use foreign exchange derivatives to manage our exposure to equity investments in subsidiaries that are denominated in foreign currencies, particularly the U.S. dollar, British Pound, and Euro.

For further details on the application of hedge accounting and the use of derivatives for hedging activities, refer to Notes 2 and 8 of our 2019 Annual Consolidated Financial Statements.

Linkage of market risk to selected balance sheet items

The following tables provide the linkages between selected balance sheet items with positions included in our trading market risk and non-trading market risk disclosures, which illustrates how we manage market risk for our assets and liabilities through different risk measures:

	As at July 31, 2020										
		Market r	isk measure	_							
(Millions of Canadian dollars)	Balance sheet amount	Traded risk (1)	Non-traded risk (2)	Non-traded risk primary risk sensitivity							
Assets subject to market risk	dillount	indeed fisk (i)	115K (2)	printery risk sensitivity							
Cash and due from banks	\$ 119,181	\$ -	\$ 119,181	Interest rate							
Interest-bearing deposits with banks	40,640	23,813	16,827	Interest rate							
Securities	10,010	23,013	10,027	interestrate							
Trading	145,533	133,930	11,603	Interest rate, credit spread							
Investment, net of applicable allowance	144,980	_	144,980	Interest rate, credit spread, equity							
Assets purchased under reverse repurchase	,		,								
agreements and securities borrowed	308,215	254,124	54,091	Interest rate							
Loans											
Retail	443,845	9,450	434,395	Interest rate							
Wholesale	217,605	6,588	211,017	Interest rate							
Allowance for loan losses	(5,509)	-	(5,509)								
Segregated fund net assets	1,908	-	1,908	Interest rate							
Other											
Derivatives	157,378	152,207	5,171	Interest rate, foreign exchange							
Other assets	98,054	7,677	90,377	Interest rate							
Assets not subject to market risk (3)	11,304										
Total assets	\$ 1,683,134	\$ 587,789	\$ 1,084,041								
Liabilities subject to market risk											
Deposits	\$ 1,017,158	\$ 109,192	\$ 907,966	Interest rate							
Segregated fund liabilities	1,908	-	1,908	Interest rate							
Other											
Obligations related to securities sold short	36,841	36,841	-								
Obligations related to assets sold											
under repurchase agreements and											
securities loaned	273,768	255,493	18,275	Interest rate							
Derivatives Other liabilities	155,479	153,138	2,341	Interest rate, foreign exchange							
	85,205	8,943	76,262	Interest rate							
Subordinated debentures Liabilities not subject to market risk (4)	9,899 16,502	_	9,899	Interest rate							
	,										
Total liabilities	\$ 1,596,760	\$ 563,607	\$ 1,016,651								
Total equity	\$ 86,374										
Total liabilities and equity	\$ 1,683,134										

Traded risk includes positions that are classified or designated as FVTPL and positions whose revaluation gains and losses are reported in revenue. Market risk measures of (1) VaR and SVaR and stress testing are used as risk controls for traded risk.

Non-traded risk includes positions used in the management of the SIRR and other non-trading portfolios. Other material non-trading portfolios include positions from RBC Insurance® and investment securities, net of applicable allowance, not included in SIRR. Assets not subject to market risk include \$11,304 million of physical and other assets. (2)

(3)

Liabilities not subject to market risk include \$16,502 million of payroll related and other liabilities. (4)

	As at April 30, 2020											
		Market ri	sk measure									
	Balance sheet		Non-traded	Non-traded risk								
(Millions of Canadian dollars)	amount	Traded risk (1)	risk (2)	primary risk sensitivity								
Assets subject to market risk												
Cash and due from banks	\$ 98,777		\$ 98,777	Interest rate								
Interest-bearing deposits with banks	48,398	33,794	14,604	Interest rate								
Securities												
Trading	135,778	125,087	10,691	Interest rate, credit spread								
Investment, net of applicable allowance	134,163	-	134,163	Interest rate, credit spread, equity								
Assets purchased under reverse repurchase												
agreements and securities borrowed	325,534	271,679	53,855	Interest rate								
Loans												
Retail	435,409	8,045	427,364	Interest rate								
Wholesale	243,269	8,258	235,011	Interest rate								
Allowance for loan losses	(5,230)	-	(5,230)	Interest rate								
Segregated fund net assets	1,743	-	1,743	Interest rate								
Other												
Derivatives	140,807	136,597	4,210	Interest rate, foreign exchange								
Other assets (3)	101,439	6,112	95,327	Interest rate								
Assets not subject to market risk (3), (4)	15,595											
Total assets	\$ 1,675,682	\$ 589,572	\$ 1,070,515									
Liabilities subject to market risk												
Deposits	\$ 1,009,447	\$ 123,955	\$ 885,492	Interest rate								
Segregated fund liabilities	1,743	-	1,743	Interest rate								
Other												
Obligations related to securities sold short	40,347	40,347	-									
Obligations related to assets sold												
under repurchase agreements and												
securities loaned	278,605	265,708	12,897	Interest rate								
Derivatives	144,710	141,353	3,357	Interest rate, foreign exchange								
Other liabilities (3)	85,990	11,049	74,941	Interest rate								
Subordinated debentures	9,774	-	9,774	Interest rate								
Liabilities not subject to market risk (3), (5)	20,026		,									
Total liabilities	\$ 1,590,642	\$ 582,412	\$ 988,204									
Total equity	\$ 85,040											
Total liabilities and equity	\$ 1,675,682											

(1) Traded risk includes positions that are classified or designated as FVTPL and positions whose revaluation gains and losses are reported in revenue. Market risk measures of VaR and SVaR and stress testing are used as risk controls for traded risk.

(2) Non-traded risk includes positions used in the management of the SIRR and other non-trading portfolios. Other material non-trading portfolios include positions from RBC Insurance® and investment securities, net of applicable allowance, not included in SIRR.

(3) Amounts have been revised from those previously presented.

(4) Assets not subject to market risk include \$15,595 million of physical and other assets.

(5) Liabilities not subject to market risk include \$20,026 million of payroll related and other liabilities.

Liquidity and funding risk

Liquidity and funding risk (liquidity risk) is the risk that we may be unable to generate sufficient cash or its equivalents in a timely and cost-effective manner to meet our commitments as they come due. Liquidity risk arises from mismatches in the timing and value of on-balance sheet and off-balance sheet cash flows.

Our Liquidity Risk Management Framework (LRMF) is designed to ensure that we have sufficient liquidity to satisfy current and prospective commitments in both normal and stressed conditions. There have been no material changes to our LRMF as described in our 2019 Annual Report.

We continue to maintain liquidity and funding that is appropriate for the execution of our strategy. Liquidity risk remains well within our risk appetite.

On January 1, 2020, the OSFI regulatory minimum for the Net Stable Funding Ratio (NSFR) of 100% became effective, in accordance with the revised LAR guidelines. The NSFR is determined based on the liquidity characteristics and maturity profile of our assets, liabilities, and off-balance sheet exposures and is intended to reduce structural funding risk by requiring banks to maintain a surplus of available stable funding over the required stable funding. We are in compliance with this requirement. The requirement to disclose consolidated NSFR and its major components will become effective for Canadian domestic systemically important banks (D-SIB) on January 31, 2021.

Commencing in Q2 2020, governments and federal agencies instituted and also expanded the eligibility criteria to their existing funding programs and announced new programs to provide further liquidity to banks. In addition to these measures, OSFI announced a series of regulatory measures and provided additional guidance to allow banks to focus on their resilience efforts and to enhance the financial system's stability. These measures continue to provide additional flexibility in lending activities permitting banks to fall below the regulatory minimum through the use of available buffers above the regulatory authorized minimum for the Liquidity Coverage Ratio (LCR) and temporary modifications in limits, including those used for covered bonds, and adjustments to other liquidity metrics.

Liquidity reserve

Our liquidity reserve consists of available unencumbered liquid assets as well as uncommitted and undrawn central bank borrowing facilities that could be accessed under extraordinary circumstances subject to satisfying certain preconditions as set by various Central Banks (e.g., BoC, the Fed, Bank of England, and Bank of France).

To varying degrees, unencumbered liquid assets represent a ready source of funding. Unencumbered assets are the difference between total and encumbered assets from both on- and off-balance sheet sources. Encumbered assets, in turn, are not considered a source of liquidity in measures of liquidity risk.

Although unused wholesale funding capacity, which is regularly assessed, could be another potential source of liquidity to mitigate stressed conditions, it is excluded in the determination of the liquidity reserve.

			As at July 31, 2020		
(Millions of Canadian dollars)	Bank-owned liquid assets	Securities received as collateral from securities financing and derivative transactions	Total liquid assets	Encumbered liquid assets	Unencumbered liquid assets
Cash and due from banks	\$ 119,181	\$ –	\$ 119,181	\$ 3,581	\$ 115,600
Interest-bearing deposits with banks	40,640	-	40,640	_	40,640
Securities issued or guaranteed by sovereigns, central					
banks or multilateral development banks (1)	257,202	308,725	565,927	358,693	207,234
Other securities	87,299	105,625	192,924	90,365	102,559
Undrawn credit lines granted by central banks (2)	14,456	-	14,456	-	14,456
Other assets eligible as collateral for discount (3), (4)	118,170	-	118,170	-	118,170
Other liquid assets (5)	37,237	-	37,237	34,115	3,122
Total liquid assets	\$ 674,185	\$ 414,350	\$ 1,088,535	\$ 486,754	\$ 601,781

					As	at April 30, 2020						
(Millions of Canadian dollars)	Securities received as collateral from securities financing and Bank-owned derivative Total liquid Encumbered liquid assets transactions assets liquid assets											
Cash and due from banks	\$	98,777	\$	-	\$	98,777	\$	3,178	\$	95,599		
Interest-bearing deposits with banks		48,398		_		48,398		348		48,050		
Securities issued or guaranteed by sovereigns, central												
banks or multilateral development banks (1)		242,169		345,253		587,422		385,690		201,732		
Other securities		87,640		107,169		194,809		98,721		96,088		
Undrawn credit lines granted by central banks (2)		24,692		-		24,692		_		24,692		
Other assets eligible as collateral for discount (3), (4)		117,122		_		117,122		-		117,122		
Other liquid assets (5)		39,139		-		39,139		36,647		2,492		
Total liquid assets	\$	657,937	\$	452,422	\$	1,110,359	\$	524,584	\$	585,775		

	Α	s at
(Millions of Canadian dollars)	July 31 2020	April 30 2020
Royal Bank of Canada Foreign branches Subsidiaries	\$ 351,859 71,212 178,710	\$ 309,677 96,843 179,255
Total unencumbered liquid assets	\$ 601,781	\$ 585,775

(1) Includes liquid securities issued by provincial governments and U.S. government-sponsored entities working under U.S. Federal government's conservatorship (e.g., Federal National Mortgage Association and Federal Home Loan Mortgage Corporation).

(2) Includes loans that qualify as eligible collateral for the discount window facility available to us at the Federal Reserve Bank of New York (FRBNY). Amounts are face value and would be subject to collateral margin requirements applied by the FRBNY to determine collateral value/borrowing capacity. Access to the discount window borrowing program is conditional on meeting requirements set by the FRBNY and borrowings are typically expected to be infrequent and due to uncommon occurrences requiring temporary accommodation.

(3) Represents our unencumbered Canadian dollar non-mortgage loan book (at face value) that could, subject to satisfying conditions precedent to borrowing and application of prescribed collateral margin requirements, be pledged to the Boc for advances under its Emergency Lending Assistance (ELA) program. ELA is not considered a source of available liquidity in our normal liquidity risk profile but could in extraordinary circumstances, where normal market liquidity is seriously impaired, allow us and other banks to monetize assets eligible as collateral to meet requirements and mitigate further market liquidity disruption. The balance also includes our unencumbered mortgage loans that qualify as eligible collateral at Federal Home Loan Bank (FHLB).

(4) Excludes mortgage loans eligible for pledging to BoC in accordance with the expanded eligibility criteria announced in Q2 2020. For further details, refer to the Significant developments: COVID-19 section of this Q3 2020 Report to Shareholders.

(5) Encumbered liquid assets amount represents cash collateral and margin deposit amounts pledged related to over-the-counter (OTC) and exchange-traded derivative transactions.

The liquidity reserve is typically most affected by routine flows of client banking activity where liquid asset portfolios adjust to the change in cash balances, and additionally from capital markets activities where business strategies and client flows may also affect the addition or subtraction of liquid assets in the overall calculation of the liquidity reserve. Corporate Treasury also affects liquidity reserves through the management of funding issuances where reserves absorb timing mismatches between debt issuances and deployment into business activities.

Q3 2020 vs. Q2 2020

Total liquid assets decreased \$22 billion or 2%, primarily due to a decrease in securities financing transactions, including securities received as collateral.

Total unencumbered liquid assets increased by \$16 billion or 3%, primarily driven by growth in bank-owned securities.

Asset encumbrance

The table below provides a summary of our on- and off-balance sheet amounts for cash, securities and other assets, distinguishing between those that are encumbered or available for sale or use as collateral in secured funding transactions. Other assets, such as mortgages and credit card receivables, can also be monetized, albeit over longer timeframes than those required for marketable securities. As at July 31, 2020, our unencumbered assets available as collateral comprised 33% of total assets (April 30, 2020 – 31%).

Asset encumbrance

					As	at				
			July 31					April 30		
			2020					2020		
	Encumb	ered	Unencumb	ered		Encumb	ered	Unencumbe	red	
	Pledged as		Available as			Pledged as		Available as		
(Millions of Canadian dollars)	collateral	Other (1)	collateral (2), (3)	Other (4)	Total	collateral	Other (1)	collateral (2), (3)	Other (4)	Total
Cash and due from banks	\$ - :	\$ 3,581	\$ 115,600	\$ –	\$ 119,181	\$ –	\$ 3,178	\$ 95,599 \$	\$ - \$	98,777
Interest-bearing deposits										
with banks	-	-	40,640	-	40,640	-	348	48,050	-	48,398
Securities										
Trading	47,517	-	95,476	2,540	145,533	49,125	-	84,214	2,439	135,778
Investment, net of										
applicable allowance	13,974	-	130,957	49	144,980	19,024	-	115,090	49	134,163
Assets purchased under										
reverse repurchase										
agreements and										
securities borrowed (5)	403,236	17,367	33,846	5,133	459,582	429,018	17,100	35,908	5,136	487,162
Loans										
Retail										
Mortgage securities	31,235	-	44,827	-	76,062	30,233	-	44,508	-	74,741
Mortgage loans	70,260	-	37,079	146,939	254,278	64,629	-	32,783	149,771	247,183
Non-mortgage loans	5,742	-	64,072	43,691	113,505	5,967	-	74,009	33,509	113,485
Wholesale	-	-	32,487	185,118	217,605	-	-	35,874	207,395	243,269
Allowance for loan losses	-	-	-	(5,509)	(5,509)	-	-	-	(5,230)	(5,230)
Segregated fund net assets	-	-	-	1,908	1,908	-	-	-	1,743	1,743
Other										
Derivatives	-	-	-	157,378	157,378	-	-	-	140,807	140,807
Others (6)	34,115	-	3,122	72,121	109,358	36,647	-	2,492	77,895	117,034
Total assets	\$ 606,079	\$ 20,948	\$ 598,106	\$ 609,368	\$ 1,834,501	\$ 634,643	\$ 20,626	\$ 568,527 \$	\$ 613,514 \$	1,837,310

(1) Includes assets restricted from use to generate secured funding due to legal or other constraints.

(2) Includes loans that could be used to collateralize central bank advances. Our unencumbered Canadian dollar non-mortgage loan book (at face value) could, subject to satisfying conditions for borrowing and application of prescribed collateral margin requirements, be pledged to the BoC for advances under its ELA program. It also includes our unencumbered mortgage loans that qualify as eligible collateral at FHLB. We also lodge loans that qualify as eligible collateral for the discount window facility available to us at the FRBNY. ELA and other central bank facilities are not considered sources of available liquidity in our normal liquidity risk profile. However, banks could monetize assets meeting collateral criteria during periods of extraordinary and severe disruption to market-wide liquidity.

(3) Excludes mortgage loans eligible for pledging to BoC in accordance with the expanded eligibility criteria announced in Q2 2020. For further details, refer to the Significant developments: COVID-19 section of this Q3 2020 Report to Shareholders.

(4) Other unencumbered assets are not subject to any restrictions on their use to secure funding or as collateral but would not be considered readily available since they may not be acceptable at central banks or for other lending programs.

(5) Includes bank-owned liquid assets and securities received as collateral from off-balance sheet securities financing, derivative transactions, and margin lending. Includes \$17.4 billion (April 30, 2020 – \$17.1 billion) of collateral received through reverse repurchase transactions that cannot be rehypothecated in its current legal form.

(6) The Pledged as collateral amount represents cash collateral and margin deposit amounts pledged related to OTC and exchange-traded derivative transactions.

Funding

Funding strategy

Core funding, comprising capital, longer-term wholesale liabilities and a diversified pool of personal and, to a lesser extent, commercial and institutional deposits, is the foundation of our structural liquidity position.

Deposit and funding profile

As at July 31, 2020, relationship-based deposits, which are the primary source of funding for retail loans and mortgages, were \$691 billion or 52% of our total funding (April 30, 2020 – \$673 billion or 50%). The remaining portion is comprised of short- and long-term wholesale funding.

Funding for highly liquid assets consists primarily of short-term wholesale funding that reflects the monetization period of those assets. Long-term wholesale funding is used mostly to fund less liquid wholesale assets and to support liquidity asset buffers.

On April 18, 2018, the Department of Finance published bail-in regulations under the Canada Deposit Insurance Corporation (CDIC) Act and the Bank Act, which 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 he or she is 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 July 31, 2020, the notional value of issued and outstanding long-term debt subject to conversion under the Bail-in regime was \$34,501 million (April 30, 2020 – \$31,074 million).

For further details on our wholesale funding, refer to the Composition of wholesale funding tables below.

Long-term debt issuance

Our wholesale funding activities are well-diversified by geography, investor segment, instrument, currency, structure and maturity. We maintain an ongoing presence in different funding markets, which allows us to continuously monitor market developments and trends, identify opportunities and risks, and take appropriate and timely actions. We operate long-term debt issuance registered programs. The following table summarizes these programs with their authorized limits by geography.

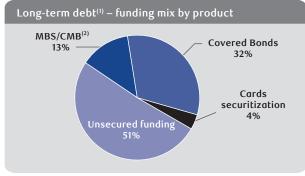
 Canada
 U.S.
 Europe/Asia

 • Canadian Shelf Program – \$25 billion
 • U.S. Shelf Program – US\$40 billion
 • European Debt Issuance Program – US\$40 billion

 • Global Covered Bond Program – €60 billion
 • Japanese Issuance Programs – ¥1 trillion

We also raise long-term funding using Canadian Senior Notes, Canadian National Housing Act MBS, Canada Mortgage Bonds, credit card receivable-backed securities, Kangaroo Bonds (issued in the Australian domestic market by foreign firms) and Yankee Certificates of Deposit (issued in the U.S. domestic market by foreign firms). We continuously evaluate opportunities to expand into new markets and untapped investor segments since diversification expands our wholesale funding flexibility, minimizes funding concentration and dependency, and generally reduces financing costs. As presented in the following charts, our current long-term debt profile is well-diversified by both currency and product. Maintaining competitive credit ratings is also critical to cost-effective funding.





(1) Based on original term to maturity greater than 1 year

(2) Mortgage-backed securities and Canada Mortgage Bonds

The following table provides our composition of wholesale funding based on remaining term to maturity:

Composition of wholesale funding (1)

	As at July 31, 2020													
	Le	ess than 1	1 to 3		3 to 6	6 to 12		Less than 1		1 year	2	years and		
(Millions of Canadian dollars)		month	months		months	months	ye	ear sub-total		to 2 years		greater		Total
Deposits from banks (2)	\$	5,057 \$	48	\$	- \$	73	\$	5,178	\$	-	\$	-	\$	5,178
Certificates of deposit and commercial paper		8,173	18,645		3,289	26,279		56,386		-		-		56,386
Asset-backed commercial paper (3)		1,752	4,643		2,778	3,484		12,657		-		-		12,657
Senior unsecured medium-term notes (4)		2,025	7,506		4,101	14,130		27,762		10,506		35,231		73,499
Senior unsecured structured notes (5)		51	812		306	1,381		2,550		1,541		5,566		9,657
Mortgage securitization		-	377		1,166	1,996		3,539		2,562		11,860		17,961
Covered bonds/asset-backed securities (6)		3,155	2,344		3,729	7,896		17,124		8,199		25,581		50,904
Subordinated liabilities		-	-		1,491	-		1,491		1,207		6,863		9,561
Other (7)		7,370	1,525		498	1,981		11,374		762		7,337		19,473
Total	\$	27,583 \$	35,900	\$	17,358 \$	57,220	\$	138,061	\$	24,777	\$	92,438	\$	255,276
Of which:														
– Secured	\$	12,025 \$	7,607	\$	7,874 \$	13,533	\$	41,039	\$	10,761	\$	38,016	\$	89,816
– Unsecured		15,558	28,293		9,484	43,687		97,022		14,016		54,422		165,460

					As at A	pril	30, 2020					
(Millions of Canadian dollars)	Les	ss than 1 month	1 to 3 months	3 to 6 months	6 to 12 months	ye	Less than 1 ar sub-total	t	1 year to 2 years	2 y	ears and greater	Total
Deposits from banks (2)	\$	4,719	\$ 278	\$ 80	\$ 906	\$	5,983	\$	-	\$	-	\$ 5,983
Certificates of deposit and commercial paper		4,920	15,165	21,920	24,817		66,822		445		-	67,267
Asset-backed commercial paper (3)		3,017	3,844	3,438	6,423		16,722		-		-	16,722
Senior unsecured medium-term notes (4)		18	5,107	9,728	14,589		29,442		14,466		31,920	75,828
Senior unsecured structured notes (5)		274	176	764	1,498		2,712		1,758		5,329	9,799
Mortgage securitization		-	371	355	1,406		2,132		3,753		11,475	17,360
Covered bonds/asset-backed securities (6)		-	-	5,486	9,733		15,219		6,751		28,574	50,544
Subordinated liabilities		-	-	1,000	1,500		2,500		1,000		5,937	9,437
Other (7)		11,687	3,615	1,777	1,746		18,825		776		7,820	27,421
Total	\$ 2	24,635	\$ 28,556	\$ 44,548	\$ 62,618	\$	160,357	\$	28,949	\$	91,055	\$ 280,361
Of which:												
– Secured	\$	11,700	\$ 5,329	\$ 9,359	\$ 17,747	\$	44,135	\$	10,504	\$	40,049	\$ 94,688
– Unsecured		12,935	23,227	35,189	44,871		116,222		18,445		51,006	185,673

(1) Excludes bankers' acceptances and repos.

Excludes bunkers acceptances and repos. Excludes deposits associated with services we provide to banks (e.g., custody, cash management). Only includes consolidated liabilities, including our collateralized commercial paper program. (2)

(3)

(4)

Includes notes where the payout is tied to movements in foreign exchange, commodities and equities. (5)

(6) Includes credit card and mortgage loans.

Includes tender option bonds (secured) of \$8,280 million (April 30, 2020 – \$8,529 million), bearer deposit notes (unsecured) of \$2,057 million (April 30, 2020 – \$6,825 million), (7)

other long-term structured deposits (unsecured) of \$9,122 million (April 30, 2020 - \$10,536 million), and FHLB advances (secured) of \$14 million (April 30, 2020 - \$1,531 million).

Credit ratings

Our ability to access unsecured funding markets and to engage in certain collateralized business activities on a cost-effective basis are primarily dependent upon maintaining competitive credit ratings. Credit ratings and outlooks provided by rating agencies reflect their views and methodologies. Ratings are subject to change, based on a number of factors including, but not limited to, our financial strength, competitive position, liquidity and other factors not completely within our control.

Other than as noted below, there have been no changes to our major credit ratings as disclosed in our 2019 Annual Report.

Credit ratings (1)

		As at August 25, 2020										
	Short-term debt	Legacy senior long-term debt (2)	Senior long- term debt (3)	Outlook								
Moody's (4)	P-1	Aa2	A2	stable								
Standard & Poor's (5)	A-1+	AA-	А	stable								
Fitch Ratings (6)	F1+	AA+	AA	negative								
DBRS (7)	R-1(high)	AA (high)	AA	stable								

(1) Credit ratings are not recommendations to purchase, sell or hold a financial obligation inasmuch as they do not comment on market price or suitability for a particular investor. Ratings are determined by the rating agencies based on criteria established from time to time by them, and are subject to revision or withdrawal at any time by the rating organization.

Includes senior long-term debt issued on a function and any time of and taking arguing atom.
 Includes senior long-term debt issued on or after September 23, 2018 which is excluded from the Bail-in regime.

(3) Includes senior long-term debt issued on or after September 23, 2018 which is subject to conversion under the Bail-in regime.

(4) On August 1, 2019, Moody's affirmed our ratings with a stable outlook.

(5) On June 24, 2020, Standard & Poor's affirmed our ratings with a stable outlook.

(6) On April 3, 2020, Fitch Ratings upgraded our rating for legacy senior long-term debt to AA+ from AA and revised our outlook to negative from stable.

(7) On June 11, 2020, DBRS affirmed our ratings with a stable outlook.

Additional contractual obligations for rating downgrades

We are required to deliver collateral to certain counterparties in the event of a downgrade to our current credit rating. The following table provides the additional collateral obligations required at the reporting date in the event of a one-, two- or three-notch downgrade to our credit ratings. These additional collateral obligations are incremental requirements for each successive downgrade and do not represent the cumulative impact of multiple downgrades. The amounts reported change periodically as a result of several factors, including the transfer of trading activity to centrally cleared financial market infrastructures and exchanges, the expiration of transactions with downgrade triggers, the imposition of internal limitations on new agreements to exclude downgrade triggers, as well as normal course mark-to-market. There is no outstanding senior debt issued in the market that contains rating triggers that would lead to early prepayment of principal.

Additional contractual obligations for rating downgrades

	As at											
		July 31 2020										
		ne-notch	Two	o-notch	Three-notch			ne-notch	2020 Two-notch		Three-notch	
(Millions of Canadian dollars)	do	wngrade	dow	ngrade		vngrade	00	wngrade	dow	ngrade	00\	vngrade
Contractual derivatives funding or margin requirements Other contractual funding or margin requirements (1)	Ş	246 196	Ş	65 -	Ş	115	Ş	272 209	Ş	84 -	Ş	127

(1) Includes Guaranteed Investment Certificates (GICs) issued by our municipal markets business out of New York.

Liquidity Coverage Ratio (LCR)

The LCR is a Basel III metric that measures the sufficiency of high-quality liquid assets (HQLA) available to meet liquidity needs over a 30-day period in an acute stress scenario. The Basel Committee on Banking Supervision (BCBS) and OSFI regulatory minimum coverage level for LCR is 100%. However, in accordance with OSFI's announcement released during Q2 2020, addressing concerns around the impact of the COVID-19 pandemic, Canadian banks remain temporarily permitted to fall below the regulatory minimum level of 100% by using their HQLA buffer.

OSFI requires Canadian banks to disclose the LCR using the standard Basel disclosure template and calculated using the average of daily LCR positions during the quarter.

Liquidity coverage ratio common disclosure template (1)

	For the three months ended										
	July 202				April 202						
(Millions of Canadian dollars, except percentage amounts)	Total unweighted value (average) (2)		tal weighted ue (average)		unweighted verage) (2)		otal weighted lue (average)				
	vulue (uveluge) (2)	vui	ue (uveruge)	vulue (u	veruge) (2)	vu	ue (uveruge)				
High-quality liquid assets Total high-quality liquid assets (HQLA)	n.a.	ć	262 107		n.a.	ć	288,979				
	II.U.	\$	363,107		n.u.	Ş	200,979				
Cash outflows											
Retail deposits and deposits from small business customers, of which:	\$ 315,366	\$	30,611	\$	289,867	\$	27,113				
Stable deposits (3)	105,342		3,160		108,519		3,256				
Less stable deposits	210,024		27,451		181,348		23,857				
Unsecured wholesale funding, of which:	362,969		161,583		338,508		156,041				
Operational deposits (all counterparties) and deposits in											
networks of cooperative banks (4)	157,399		37,514		145,260		34,793				
Non-operational deposits	173,445		91,944		160,358		88,358				
Unsecured debt	32,125		32,125		32,890		32,890				
Secured wholesale funding	n.a.		25,635		n.a.		30,596				
Additional requirements, of which:	252,341		61,042		255,490		62,145				
Outflows related to derivative exposures and other											
collateral requirements	50,398		20,632		51,944		21,136				
Outflows related to loss of funding on debt products	9,154		9,154		11,723		11,723				
Credit and liquidity facilities	192,789		31,256		191,823		29,286				
Other contractual funding obligations (5)	19,408		19,408		26,143		26,143				
Other contingent funding obligations (6)	592,465		8,488		502,821		8,243				
Total cash outflows	n.a.	\$	306,767		n.a.	\$	310,281				
Cash inflows											
Secured lending (e.g., reverse repos)	\$ 261,600	\$	41,235	\$	302,560	\$	47,866				
Inflows from fully performing exposures	10,689		6,232		12,937		7,558				
Other cash inflows	23,108		23,108		32,029		32,029				
Total cash inflows	n.a.	\$	70,575		n.a.	\$	87,453				
		Тс	otal adjusted value			Т	otal adjusted value				
Total HQLA		\$	363,107		-	Ś	288,979				
Total net cash outflows		Ť	236,192			Ŷ	222,828				
Liquidity coverage ratio			154%				130%				

(1) The LCR is calculated in accordance with OSFI's LAR guideline, which, in turn, reflects liquidity-related requirements issued by the BCBS as updated in accordance with the regulatory guidance issued in Q2 2020. The LCR for the quarter ended July 31, 2020 is calculated as an average of 64 daily positions.

(2) With the exception of other contingent funding obligations, unweighted inflow and outflow amounts are items maturing or callable in 30 days or less. Other contingent funding obligations also include debt securities with remaining maturity greater than 30 days.

(3) As defined by the BCBS, stable deposits from retail and small business customers are deposits that are insured and are either held in transactional accounts or the bank has an established relationship with the client making the withdrawal unlikely.

(4) Operational deposits from customers other than retail and small and medium-sized enterprises (SMEs), are deposits which clients need to keep with the bank in order to facilitate their access and ability to use payment and settlement systems primarily for clearing, custody and cash management activities.

(5) Other contractual funding obligations primarily include outflows from unsettled securities trades and outflows from obligations related to securities sold short.

(6) Other contingent funding obligations include outflows related to other off-balance sheet facilities that carry low LCR runoff factors (0% – 5%).

n.a. not applicable

We manage our LCR position within a target range that reflects our liquidity risk tolerance and takes into account business mix, asset composition and funding capabilities. The range is subject to periodic review in light of changes to internal requirements and external developments. Our LCR is currently above our normal target range as a result of the ongoing COVID-19 pandemic. Our increased liquidity levels in the current quarter are largely driven by customer deposit inflows resulting from industry-wide impacts of the pandemic and corresponding central bank actions.

We maintain HQLAs in major currencies with dependable market depth and breadth. Our treasury management practices ensure that the levels of HQLA are actively managed to meet target LCR objectives. Our Level 1 assets, as calculated according to OSFI LAR and the BCBS LCR requirements, represent 89% of total HQLA. These assets consist of cash, placements with central banks and highly rated securities issued or guaranteed by governments, central banks and supranational entities.

LCR captures cash flows from on- and off-balance sheet activities that are either expected or could potentially occur within 30 days in an acute stress scenario. Cash outflows result from the application of withdrawal and non-renewal factors to demand and term deposits, differentiated by client type (wholesale, retail and small- and medium-sized enterprises). Cash outflows also arise from business activities that create contingent funding and collateral requirements, such as repo funding, derivatives, short sales of securities and the extension of credit and liquidity commitments to clients. Cash inflows arise primarily from maturing secured loans, interbank loans and non-HQLA securities.

LCR does not reflect any market funding capacity that we believe would be available in a stress situation. All maturing wholesale debt is assigned 100% outflow in the LCR calculation.

Q3 2020 vs. Q2 2020

The average LCR for the quarter ended July 31, 2020 was 154%, which translates into a surplus of approximately \$127 billion, compared to 130% and a surplus of approximately \$66 billion in the prior quarter. Average LCR increased from the previous quarter as the drivers of improvement of our liquidity position in the latter part of Q2 2020 continued to have an impact on average LCR throughout the current quarter. The increase in the LCR is primarily due to continuing growth of business and retail deposits as well as pay downs of credit facilities by clients.

Contractual maturities of financial assets, financial liabilities and off-balance sheet items

The following tables provide remaining contractual maturity profiles of all our assets, liabilities, and off-balance sheet items at their carrying value (e.g., amortized cost or fair value) at the balance sheet date. Off-balance sheet items are allocated based on the expiry date of the contract.

Details of contractual maturities and commitments to extend funds are a source of information for the management of liquidity risk. Among other purposes, these details form a basis for modelling a behavioural balance sheet with effective maturities to calculate liquidity risk measures. For further details, refer to the Risk measurement section within the Liquidity and funding risk section of our 2019 Annual Report.

	As at July 31, 2020										
	Less than	1 to 3	3 to 6	6 to 9	9 to 12	1 year	2 years	5 years	With no specific		
(Millions of Canadian dollars)	1 month	months	months	months	months	to 2 years	to 5 years	and greater	maturity	Total	
Assets Cash and deposits with banks	\$157,083	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,738	\$ 159,821	
Securities Trading (1) Investment, net of	95,209	35	70	45	21	78	102	10,138	39,835	145,533	
applicable allowance Assets purchased under reverse	4,622	4,949	4,346	8,931	14,268	29,434	27,090	50,866	474	144,980	
repurchase agreements and											
securities borrowed Loans, net of applicable allowance	159,449 21,929	66,807 21,786	28,753 27,692	24,175 24,298	14,344 31,577	174 131,286	- 261,478	- 55,329	14,513 80,566	308,215 655,941	
Other Customers' liability	21,929	21,780	27,092	24,290	51,577	131,280	201,478	33,329	80,500	055,741	
under acceptances	11,687	6,539	112	-	-	-	5	-	(104)	18,239	
Derivatives	10,294	11,150	9,933	5,462	4,161	16,626	32,136	67,611	5	157,378	
Other financial assets	40,135	2,214	1,012	275	72	239	247	2,041	2,775	49,010	
Total financial assets Other non-financial assets	\$500,408 5,938	\$113,480 1,310	\$ 71,918 303	\$ 63,186 89	\$ 64,443 388	\$177,837 2,851	\$ 321,058 1,729	\$185,985 6,321	\$140,802 25,088	\$1,639,117 44,017	
Total assets	\$506,346	\$114,790	\$ 72,221	\$ 63,275	\$ 64,831	\$180,688	\$ 322,787	\$192,306	\$165,890	\$1,683,134	
Liabilities and equity											
Deposits (2)											
Unsecured borrowing	· · · · ·						\$ 56,297		\$564,740	\$ 915,515	
Secured borrowing	2,097	5,336	8,520	2,664	4,384	8,396	18,516	5,697	-	55,610	
Covered bonds Other	3,155	2,349	1,979	5,482	1,315	6,281	13,943	11,529	-	46,033	
Acceptances	11,691	6,539	108	_	_	_	_	_	10	18,348	
Obligations related to securities	,	-)									
sold short	36,841	-	-	-	-	-	-	-	-	36,841	
Obligations related to assets sold											
under repurchase agreements and securities loaned	205 528	21 927	2 0 2 6	10 706	2	6 436			7 1 4 2	272 768	
Derivatives	205,528 10,360	31,827 11,910	3,036 10,313	19,796 5,606	4,549	6,436 14,240	31,788	66,598	7,143 115	273,768 155,479	
Other financial liabilities	34,758	3,147	988	512	507	838	2,222	11,097	484	54,553	
Subordinated debentures	-	-	-	-	-	207	 110	9,582	-	9,899	
Total financial liabilities	\$390,900	\$110,323	\$ 59,997	\$ 82,937	\$ 45,324	\$ 58,164	\$ 122,876	\$123,033	\$572,492	\$1,566,046	
Other non-financial liabilities	1,321	989	4,015	217	269	839	853	12,237	9,974	30,714	
Equity	-	-	-	-	-	-	-	-	86,374	86,374	
Total liabilities and equity	\$392,221	\$111,312	\$ 64,012	\$ 83,154	\$ 45,593	\$ 59,003	\$ 123,729	\$135,270	\$668,840	\$1,683,134	
Off-balance sheet items											
Financial guarantees	\$ 1,167	\$ 1,494	\$ 2,239	\$ 2,013	\$ 2,937	\$ 1,028	\$ 4,955	\$ 1,374	\$ 49	\$ 17,256	
Commitments to extend credit	2,285	5,222	8,833	15,272	20,665	44,650	156,304	17,340	4,974	275,545	
Other credit-related commitments	515	880	1,384	1,629	1,746	233	613	4	84,372	91,376	
Other commitments	8	11	17	16	16	60	184	358	529	1,199	
Total off-balance sheet items	\$ 3,975	\$ 7,607	\$ 12,473	\$ 18,930	\$ 25,364	\$ 45,971	\$ 162,056	\$ 19,076	\$ 89,924	\$ 385,376	

Trading debt securities classified as FVTPL have been included in the less than 1 month category as there is no expectation to hold these assets to their contractual maturity.
 A major portion of relationship-based deposits are repayable on demand or at short notice on a contractual basis while, in practice, these customer balances form a core base

for our operations and liquidity needs, as explained in the preceding Deposit and funding profile section.

										As at	Арг	ril 30, 2020								
(Millions of Canadian dollars)		Less than 1 month		1 to 3 months		3 to 6 months		6 to 9 months		9 to 12 months		1 year to 2 years		2 years to 5 years	a	5 years nd greater	I	With no specific maturity		Total
Assets																				
Cash and deposits with banks	\$	144,577	\$	3	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	2,595	\$	147,175
Securities		01.07(20		27		10		4.1		0.0		105		0.254		24.147		125 770
Trading (1)		91,976		20		27		19		41		89		105		9,354		34,147		135,778
Investment, net of applicable allowance		5,670		6,684		4,873		3,739		8,340		28,100		24,258		52,000		499		12/ 162
Assets purchased under reverse repurchase agreements and		5,670		0,084		4,875		5,759		8,340		28,100		24,258		52,000		499		134,163
securities borrowed		151,988		95,167		39,179		12,582		16,679		227		-		-		9,712		325,534
Loans, net of applicable allowance Other		25,038		17,605		28,979		29,465		29,177		132,605		270,196		57,226		83,157		673,448
Customers' liability																				
under acceptances		13,967		5,422		145		4				-		5		-		(105)		19,438
Derivatives		8,788		13,267		7,406		8,544		4,226		12,729		25,059		60,784		4		140,807
Other financial assets		44,931		2,438		2,034		154		224		241		333		1,963		3,707		56,025
Total financial assets	\$	486,935	\$	140,606	\$	82,643	\$	54,507	\$	58,687	\$	173,991	\$	319,956	\$	181,327	\$	133,716	\$	1,632,368
Other non-financial assets		4,622		1,569		541		(31)		499		3,010		1,909		6,188		25,007		43,314
Total assets	\$	491,557	\$	142,175	\$	83,184	\$	54,476	\$	59,186	\$	177,001	\$	321,865	\$	187,515	\$	158,723	\$	1,675,682
Liabilities and equity																				
Deposits (2)																				
Unsecured borrowing	\$	69,061	\$	49,596	\$	65,099	\$	31,398	\$	50,060	\$	24,397	\$	53,348	\$	19,339	\$	543,005	\$	905,303
Secured borrowing		2,930		5,762		6,830		6,738		2,289		10,289		17,645		6,351		-		58,834
Covered bonds		-		-		5,504		1,914		5,490		4,833		16,419		11,150		-		45,310
Other																				
Acceptances		13,967		5,423		145		-		-		-		-		-		13		19,548
Obligations related to securities																				
sold short Obligations related to assets sold under repurchase agreements and securities		40,347		_		-		-		-		-		-		-		-		40,347
loaned		207,115		31,627		12,683		1,004		19,229		500		_		_		6,447		278,605
Derivatives		9.347		14,337		7,890		9.045		4,486		12,545		26,423		60,537		100		144,710
Other financial liabilities		37,305		3,531		1,706		517		578		882		2,374		13,242		432		60,567
Subordinated debentures		-		-		-		-		-		-		326		9,448		-		9,774
Total financial liabilities	Ś	380,072	Ś	110.276	Ś	99.857	Ś	50.616	Ś	82.132	Ś	53,446	Ś	116,535	Ś	120.067	Ś	549,997	Ś	1,562,998
Other non-financial liabilities		904		949	,	178	'	3,125		446	'	761	'	764		11,070		9,447		27,644
Equity		-		-		-		· –		-		-		-		, –		85,040		85,040
Total liabilities and equity	\$	380,976	\$	111,225	\$	100,035	\$	53,741	\$	82,578	\$	54,207	\$	117,299	\$	131,137	\$	644,484	\$	1,675,682
Off-balance sheet items																				
Financial guarantees	\$	493	\$	2,375	\$	2,437	\$	2,432	\$	2,023	\$	785	\$	5,102	\$	1,303	\$	81	\$	17,031
Commitments to extend credit		5,783		5,210		7,513		9,049		18,406		38,212		154,369		18,064		2,451		259,057
Other credit-related commitments		946		1,367		1,324		1,555		1,567		238		539		9		86,189		93,734
Other commitments		88		12		19		18		18		66		188		370		538		1,317
Total off-balance sheet items	\$	7,310	\$	8,964	\$	11,293	\$	13,054	\$	22,014	\$	39,301	\$	160,198	\$	19,746	\$	89,259	\$	371,139

Trading debt securities classified as FVTPL have been included in the less than 1 month category as there is no expectation to hold these assets to their contractual maturity.
 A major portion of relationship-based deposits are repayable on demand or at short notice on a contractual basis while, in practice, these customer balances form a core base for our operations and liquidity needs, as explained in the preceding Deposit and funding profile section.

Capital management

We continue to manage our capital in accordance with our Capital Management Framework as described in our 2019 Annual Report. In addition, we continue to monitor for new regulatory capital developments, including the recent announcements relating to the BCBS Basel III reforms, in order to ensure timely and accurate compliance with these requirements as disclosed in the Capital management and Capital, liquidity and other regulatory developments sections in our 2019 Annual Report, as updated below.

OSFI expects Canadian banks to meet the Basel III targets for CET1, Tier 1 and Total capital ratios. Under Basel III, banks select from two main approaches, the Standardized Approach (SA) or the IRB approach, to calculate their minimum regulatory capital required to support credit, market and operational risks. Effective November 1, 2019, we adopted the Standardized Approach (SA) for consolidated regulatory reporting of operational risk as the use of the Advanced Measurement Approach was discontinued by OSFI.

On March 13, 2020, OSFI announced a decrease in the Domestic Stability Buffer (DSB) from 2.25% to 1.0% of total RWA, with the buffer decrease effective immediately, in response to the disruption related to the COVID-19 pandemic and in support of the banks' ability to supply additional credit to the economy. At that time, OSFI also committed to not increasing the DSB for a period of 18 months and announced its expectation that all banks should not increase their dividend payments and should stop any share buybacks. On June 23, 2020, OSFI reaffirmed the DSB at 1.0% of total RWA.

Similarly, on March 27, 2020, OSFI announced a series of regulatory adjustments and guidance, and continues to release regulations implementing and/or clarifying certain aspects on a rolling basis, to further support the financial and operational resilience of the banking sector in response to the COVID-19 pandemic, including:

• Regulatory adjustments to RWA:

- Delaying the past due treatment of all loan deferrals for a period of six months from the grant date, thereby alleviating any increase to RWA when clients request payment deferrals for their loans including, but not limited to, mortgages, credit cards, auto loans, small business loans or commercial loans; and
- Temporary measures until at least April 2021 to reduce stressed VaR multipliers from three to one and the permanent exclusion of Funding Valuation Adjustment hedges from market risk.
- Modifications for increases in expected credit loss provisions on CET1 capital by applying a 70% after-tax exclusion rate for growth in Stage 1 and Stage 2 allowances between Q1 2020 and the respective quarter for the remainder of fiscal 2020. Thereafter, the exclusion rate will be reduced to 50% and 25% in fiscal 2021 and 2022, respectively. These modifications are not available for a financial institution's IRB portfolio in any quarter in which the financial institution has a shortfall in allowances.
- Permitting the use of available buffers above the regulatory authorized minimum for the leverage ratio.

In relation to the relief programs launched by the Government of Canada and described in the Significant developments: COVID-19 section in this Q3 2020 Report to Shareholders, on March 30, 2020, OSFI provided guidance on the associated capital treatment of these programs:

- Loans issued under the CEBA program are to be excluded from risk-based capital and leverage ratios as they are fully guaranteed by the government.
- The appropriate risk-weighting for both the guaranteed and unsecured portion of the loans issued as part of the EDC BCAP Guarantee program should be in accordance with existing regulatory guidelines. However, the full amount of the loan is required to be included in the leverage ratio calculation.
- Risk-based capital and leverage ratio calculations should reflect only the financial institutions' own proportion of new loans issued under the BDC lending programs.

Further regulatory guidance was provided by OSFI on April 9, 2020 and April 16, 2020, in support of capital and liquidity measures, which became effective immediately:

- Leverage ratio exposure amounts are to exclude central bank reserves and sovereign-issued securities that qualify as high quality liquid assets (HQLA) for a period of one year ending April 30, 2021.
- Reduction in the current regulatory capital floor for financial institutions using the IRB approach from 75% to 70% of RWA under the SA. The reduced floor factor will remain in place until the adoption of the Basel III reforms in Q1 2023.
- Exclusion of exposures acquired through the Paycheck Protection Program (PPP) instituted by the U.S. government from RWA and leverage exposure amounts.

We have incorporated the above adjustments and guidance, as applicable, into our results and in our on-going capital planning activities.

The following table provides a summary of OSFI's current regulatory target ratios under Basel III and Pillar 2 requirements. We are in compliance with all current capital and leverage requirements imposed by OSFI:

Basel III	OSFI regulo	atory target	requiremen	ts for large ba	nks under Basel III	RBC capital and	Domestic	Minimum including Capital Buffers,
capital and leverage ratios	Minimum	Capital Buffers (1)	Minimum including Capital Buffers	D-SIB/G-SIB Surcharge (2)	Minimum including Capital Buffers and D-SIB/G-SIB surcharge (2)	leverage ratios as at July 31, 2020	Stability Buffer (3)	D-SIB/G-SIB surcharge and Domestic Stability Buffer
Common Equity Tier 1	4.5%	2.5%	7.0%	1.0%	8.0%	12.0%	1.0%	9.0%
Tier 1 capital	6.0%	2.5%	8.5%	1.0%	9.5%	13.3%	1.0%	10.5%
Total capital	8.0%	2.5%	10.5%	1.0%	11.5%	15.3%	1.0%	12.5%
Leverage ratio	3.0%	n.a.	3.0%	n.a.	3.0%	4.8%	n.a.	3.0%

(1) The capital buffers include the capital conservation buffer and the countercyclical capital buffer as prescribed by OSFI.

A capital surcharge, equal to the higher of our D-SIB surcharge and the BCBS's G-SIB surcharge, is applicable to risk-weighted capital.

(3) Effective March 13, 2020, in accordance with the revised guidance noted above, OSFI lowered the level for the DSB to 1.0% of RWA from 2.25%. On June 23, 2020, OSFI reaffirmed the DSB at 1.0% of total RWA.

n.a. not applicable

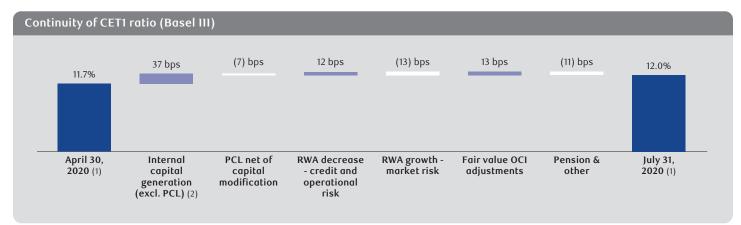
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The following table provides details on our regulatory capital, RWA, and capital and leverage ratios. Our capital position remains strong and our capital and leverage ratios remain well above OSFI regulatory targets.

		As at	
	July 31	April 30	October 31
(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	2020	2020	2019
Capital (1)			
CET1 capital	\$ 66,132	\$ 65,198	\$ 62,184
Tier 1 capital	73,536	70,854	67,861
Total capital	84,546	81,469	77,888
Risk-weighted Assets (RWA) used in calculation of capital ratios (1)			
Credit risk	\$ 449,798	\$ 463,567	\$ 417,835
Market risk	32,276	26,900	28,917
Operational risk	69,347	67,945	66,104
Total RWA	\$ 551,421	\$ 558,412	\$ 512,856
Capital ratios and Leverage ratio (1)			
CET1 ratio	12.0%	11.7%	12.1%
Tier 1 capital ratio	13.3%	12.7%	13.2%
Total capital ratio	15.3%	14.6%	15.2%
Leverage ratio	4.8%	4.5%	4.3%
Leverage ratio exposure (billions)	\$ 1,544	\$ 1,578	\$ 1,570

(1) Capital, RWA, and capital ratios are calculated using OSFI's Capital Adequacy Requirements (CAR) guideline and the Leverage ratio is calculated using OSFI Leverage Requirements Guideline as updated in accordance with the regulatory guidance issued in Q2 2020. Both the CAR guideline and Leverage Requirements Guideline are based on the Basel III framework.

Q3 2020 vs. Q2 2020



(1) Represents rounded figures.

(2) Internal capital generation of \$2.1 billion which represents Net income available to shareholders excluding PCL, less common and preferred shares dividends.

Our CET1 ratio was 12.0%, up 30 bps from last quarter, mainly reflecting internal capital generation, lower RWA mainly driven by credit risk due to the pay down of credit facilities by clients, and the favourable impact of fair value OCI adjustments. These factors were partially offset by higher market risk RWA, as well as the impact of lower discount rates in determining our pension and other post-employment benefit obligations. Market risk RWA increased as the impact of heightened market volatility in Q2 2020 was only reflected in VaR for the latter part of the prior quarter, while Q3 2020 reflects the impact on VaR throughout the entire quarter, as well as reflecting the change in the historical SVaR period.

Our Tier 1 capital ratio of 13.3% was up 60 bps, reflecting the favourable impact of the issuance of Limited Recourse Capital Notes, as well as the factors noted above under the CET1 ratio.

Our Total capital ratio of 15.3% was up 70 bps, reflecting the factors noted above under the Tier 1 capital ratio.

RWA decreased by \$7 billion, mainly driven by the impacts of the pay down of credit facilities by clients and foreign exchange translation. These factors were partially offset by higher market risk as noted above, business growth mainly in derivatives and lending and the impact of net credit downgrades. The impact of foreign exchange translation on RWA is largely mitigated with economic hedges in our CET1 ratio.

Our Leverage ratio of 4.8% was up 30 bps from last quarter, mainly reflecting internal capital generation, the issuance of Limited Recourse Capital Notes in the current quarter, the favourable impact of fair value OCI adjustments and lower leverage exposures partially offset by the impact of higher PCL net of capital modifications for expected loss provisioning.

Leverage exposures decreased mainly due to the impacts of foreign exchange translation, regulatory modifications from central bank reserves and sovereign-issued securities qualifying as HQLA, the pay down of credit facilities by clients and a decrease in repos, partially offset by growth in cash, interest-bearing deposits and securities.

Selected capital management activity

The following table provides our selected capital management activity:

		e months ended 31, 2020		For the nine mo July 31, 2		
(Millions of Canadian dollars, except number of shares)	Issuance or redemption date	Number of shares (000s)	Amount	Number of shares (000s)		Amount
Tier 1 capital						
Common shares activity						
Issued in connection with share-based						
compensation plans (1)		235	\$ 18	782	\$	62
Purchased for cancellation		-	-	(7,860)		(97)
Issuance of Limited Recourse Capital						
Notes (LRCNs) Series 1 (2), (3), (4)		1,750	\$ 1,750	1,750	\$	1,750
Tier 2 capital						
Redemption of December 6, 2024						
subordinated debentures (3)	December 6, 2019		\$ -		\$	(2,000)
Issuance of December 23, 2029						
subordinated debentures (3), (4)	December 23, 2019		-			1,500
Redemption of June 4, 2025 subordinated						
debentures (3), (4)	June 4, 2020		(1,000)		((1,000)
Issuance of June 30, 2030 subordinated						
debentures (3), (4)	June 23, 2020		1,250			1,250
Other						
Purchase and cancellation of preferred						
shares Series C-2 (3)	December 17, 2019		\$ -	(5)	\$	(8)

(1) Amounts include cash received for stock options exercised during the period and includes fair value adjustments to stock options.

(2) For the LRCNs, the number of shares represent the number of notes issued.

(3) For further details, refer to Note 9 of our Condensed Financial Statements.

(4) Non-Viability Contingent Capital (NVCC) instruments.

On February 27, 2019, we announced a normal course issuer bid (NCIB) to purchase up to 20 million of our common shares, commencing on March 1, 2019 and continuing until February 29, 2020, or such earlier date as we complete the repurchase of all shares permitted under the bid.

On February 27, 2020, we announced an NCIB program to purchase up to 20 million of our common shares, commencing on March 2, 2020 and continuing until March 1, 2021, or such earlier date as we complete the repurchase of all shares permitted under the bid. Since the inception of this NCIB, the total number of common shares repurchased and cancelled was approximately 0.4 million, at a cost of approximately \$39 million. In accordance with OSFI's announcement of its expectation that share buybacks should be stopped, we ceased the repurchase of our common shares effective March 13, 2020.

For the three-months ended July 31, 2020, we did not repurchase any common shares.

For the nine-months ended July 31, 2020, the total number of common shares repurchased and cancelled under our NCIB programs was approximately 7.9 million. The total cost of the shares repurchased was \$814 million.

We determine the amount and timing of the purchases under the NCIB, subject to prior consultation with OSFI. Purchases may be made through the TSX, the NYSE and other designated exchanges and alternative Canadian trading systems. The price paid for repurchased shares is the prevailing market price at the time of acquisition.

On July 28, 2020, we issued \$1,750 million of LRCN Series 1 at a price of \$1,000 per note. The LRCN Series 1 bear interest at a fixed rate of 4.5% per annum until November 24, 2025, and thereafter at a rate per annum equal to the 5-Year Government of Canada Yield plus 4.137% until maturity on November 24, 2080.

On December 6, 2019, we redeemed all \$2,000 million of our outstanding 2.99% subordinated debentures due on December 6, 2024 for 100% of their principal amount plus interest accrued to, but excluding, the redemption date.

On December 17, 2019, we purchased for cash 200,000 depositary shares, each representing a one-fortieth interest in a share of our Fixed Rate/Floating Rate Non-Cumulative First Preferred Shares, Series C-2 (C-2 Preferred Shares), for aggregate total consideration, including accrued dividends, of US\$6 million. The purchased depositary and underlying C-2 Preferred Shares were subsequently cancelled. The C-2 Preferred Shares do not qualify as Tier 1 regulatory capital.

On December 23, 2019, we issued \$1,500 million of NVCC subordinated debentures. The notes bear interest at a fixed rate of 2.88% per annum until December 23, 2024, and at the three-month Canadian Dollar Offered Rate (CDOR) plus 0.89% thereafter until their maturity on December 23, 2029.

On June 4, 2020, we redeemed all \$1,000 million of our outstanding NVCC 2.48% subordinated debentures due on June 4, 2025 for 100% of their principal amount plus interest accrued to, but excluding, the redemption date.

On June 23, 2020, we issued \$1,250 million of NVCC subordinated debentures. The notes bear interest at a fixed rate of 2.088% per annum until June 30, 2025, and at the three-month Canadian Dollar Offered Rate (CDOR) plus 1.31% thereafter until their maturity on June 30, 2030.

Selected Share Data (1)

		As	at July 31, 202	20	
(Millions of Canadian dollars, except number of shares and as otherwise noted)	Number of shares (000s)		Amount		Dividends clared per share
Common shares issued Treasury shares – common shares	1,423,600 (1,400)	\$	17,610 (129)	\$	1.08
Common shares outstanding	1,422,200	\$	17,481		
Stock options and awards Outstanding Exercisable	8,000 3,583				
First preferred shares issued Non-cumulative Series W (2) Non-cumulative Series AA Non-cumulative Series AC Non-cumulative Series AF Non-cumulative Series AG Non-cumulative Series AG Non-cumulative Series BB (3), (4) Non-cumulative Series BD (3), (4) Non-cumulative Series BF (3), (4) Non-cumulative Series BF (3), (4) Non-cumulative Series BH (4) Non-cumulative Series BH (4) Non-cumulative Series BI (4) Non-cumulative Series BJ (4) Non-cumulative Series BJ (4) Non-cumulative Series BM (3), (4) Non-cumulative Series BM (3), (4) Non-cumulative Series BO (3), (4) Non-cumulative Series C-2 (5) Other equity instruments issued	$\begin{array}{c} 12,000\\ 12,000\\ 8,000\\ 10,000\\ 8,000\\ 10,000\\ 20,000\\ 20,000\\ 24,000\\ 12,000\\ 6,000\\ 6,000\\ 6,000\\ 6,000\\ 29,000\\ 30,000\\ 14,000\\ 15\end{array}$	\$	300 300 200 250 500 500 600 300 150 150 150 725 750 350 23	US\$	\$0.31 0.28 0.29 0.28 0.28 0.23 0.23 0.20 0.23 0.20 0.23 0.31 0.31 0.31 0.33 0.34 0.34 0.30 16.88
Limited Recourse Capital Notes Series 1 (3), (4), (6) Preferred shares and other equity instruments issued	1,750 228,765	\$ \$	1,750 7,448		_
Treasury instruments – preferred shares and other equity instruments (7)	8		(1)		
Preferred shares and other equity instruments outstanding	228,773	\$	7,447		
Dividends on common shares Dividends on preferred shares and distributions on other equity instruments (8)		\$	1,538 65		
1 / 1					

(1) For further details about our capital management activity, refer to Note 9 of our Condensed Financial Statements.

(2) Effective February 24, 2010, we have the right to convert these shares into common shares at our option, subject to certain restrictions.

(3) Dividend rate will reset every five years.

(4) NVCC instruments.

(5) Represents 615,400 depositary shares relating to preferred shares Series C-2. Each depositary share represents one-fortieth interest in a share of Series C-2.

(6) For LRCNs, the number of shares represent the number of notes issued and the dividends declared per share represent the interest rate percentage applicable to the notes issued as at the reporting date. In connection with the issuance of LRCN Series 1, on July 28, 2020, we issued \$1,750 million of First Preferred Shares, Series BQ at a price of \$1,000 per Series BQ Preferred Share. The Series BQ Preferred Shares were issued to a consolidated Limited Recourse Trust to be held as trust assets in connection with the LRCN structure.

(7) Positive amounts represent a short position in treasury instruments.

(8) Excludes distributions to non-controlling interests.

As at August 21, 2020, the number of outstanding common shares was 1,422,589,243, net of treasury shares held of 1,046,436, and the number of stock options and awards was 7,964,484.

NVCC provisions require the conversion of the capital instrument into a variable number of common shares in the event that OSFI deems a bank to be non-viable or a federal or provincial government in Canada publicly announces that a bank has accepted or agreed to accept a capital injection. If a NVCC trigger event were to occur, our NVCC capital instruments, which are the preferred shares Series AZ, BB, BD, BF, BH, BI, BJ, BK, BM, BO, LRCN Series 1 and subordinated debentures due on September 29, 2026, January 20, 2026, January 27, 2026, July 25, 2029, December 23, 2029 and June 30, 2030 would be converted into common shares pursuant to an automatic conversion formula with a conversion price based on the greater of: (i) a contractual floor price of \$5.00, and (ii) the current market price of our common shares at the time of the trigger event (10-day weighted average). Based on a floor price of \$5.00 and including an estimate for accrued dividends and interest, these NVCC capital instruments would convert into a maximum of 3,873 million common shares, in aggregate, which would represent a dilution impact of 73.14% based on the number of common shares outstanding as at July 31, 2020.

Total loss absorbing capacity (TLAC)

On April 18, 2018, OSFI released its final guideline on Total Loss Absorbing Capacity (TLAC), which applies to Canadian D-SIBs as part of the Federal Government's Bail-in regime. The guideline is consistent with the TLAC standard released on November 9, 2015 by the Financial Stability Board (FSB) for institutions designated as G-SIBs, but tailored to the Canadian

context. The TLAC requirement is intended to address the sufficiency of a systemically important bank's loss absorbing capacity in supporting its recapitalization in the event of its failure. TLAC is defined as the aggregate of Tier 1 capital, Tier 2 capital, and other TLAC instruments, which allow conversion in whole or in part into common shares under the CDIC Act and meet all of the eligibility criteria under the guideline.

TLAC requirements established two minimum standards, which are required to be met effective November 1, 2021: the riskbased TLAC ratio, which builds on the risk-based capital ratios described in the CAR guideline, and the TLAC leverage ratio, which builds on the leverage ratio described in OSFI's Leverage Requirements guideline. On April 16, 2020, OSFI notified systemically important banks of the requirement to maintain a minimum TLAC ratio of 22.5%, which includes the revised DSB of 1.0% as noted above. OSFI continues to require a TLAC leverage ratio of 6.75%. We began issuing bail-in eligible debt in the fourth quarter of 2018 and this has contributed to increasing our TLAC ratio. We expect our TLAC ratio to increase through normal course refinancing of maturing unsecured term debt.

Regulatory developments

Basel III reforms – Credit valuation adjustment (CVA)

On July 8, 2020, BCBS revised its standard on the regulatory capital treatment of CVA risk for derivatives and securities financing transactions. The revised standard reflects recalibrated risk weights, guidance on the treatment of certain client cleared derivatives and permits recalibration between the two CVA framework methodologies allowed. These changes bring the CVA frameworks more in alignment with the updated *Minimum capital requirement for market risk*. While the BCBS effective date for this standard is January 1, 2023, OSFI has allowed deferral of the implementation date to January 1, 2024 to align with the OSFI implementation date of the market risk framework. We are currently assessing the impact of the guidelines and do not anticipate any issues with meeting OSFI's effective implementation date.

Accounting and control matters

Summary of accounting policies and estimates

Our Condensed Financial Statements are presented in compliance with International Accounting Standard (IAS) 34 Interim Financial Reporting. Our significant accounting policies are described in Note 2 of our audited 2019 Annual Consolidated Financial Statements and our Q3 2020 Condensed Financial Statements.

Application of critical accounting judgments, estimates and assumptions

The COVID-19 pandemic has continued to evolve and the economic environment in which we operate could be subject to sustained volatility, which could continue to impact our financial results, as the duration of the pandemic, including the possibility of subsequent waves, and the effectiveness of steps undertaken by governments and central banks remains uncertain. Certain critical judgments relating to allowance for credit losses and goodwill are particularly complex in the current uncertain environment and significantly different amounts could be reported under different conditions or assumptions. We continue to monitor and assess the impacts of the COVID-19 pandemic on our critical accounting judgments, estimates and assumptions, which are described in Note 2 of our Annual Consolidated Financial Statements and Note 2 of our Q3 2020 Condensed Financial Statements.

Changes in accounting policies and disclosures

Changes in accounting policies

During the first quarter of 2020, we adopted IFRS 16 *Leases* (IFRS 16). As permitted by the transition provisions of IFRS 16, we elected not to restate comparative period results; accordingly, all comparative period information prior to the first quarter of 2020 is presented in accordance with our previous accounting policies, as described in our 2019 Annual Report. As a result of the adoption of IFRS 16, we recognized right-of-use assets, lease liabilities and an adjustment to opening retained earnings as at November 1, 2019. Refer to Note 2 of our Condensed Financial Statements for details of these changes.

During the first quarter of 2020, we early adopted amendments to IFRS 9 *Financial Instruments*, IAS 39 *Financial Instruments: Recognition and Measurement* and IFRS 7 *Financial Instruments: Disclosures* (Amendments). Refer to Note 2 of our Condensed Financial Statements for details of these changes.

Future changes in accounting policies and disclosures

In May 2017, the IASB issued IFRS 17 *Insurance Contracts* (IFRS 17) to establish a comprehensive global insurance standard which provides guidance on the recognition, measurement, presentation and disclosures of insurance contracts. IFRS 17 requires entities to measure insurance contract liabilities at their current fulfillment values using one of three approaches. In June 2020, the IASB issued amendments to IFRS 17, including deferral of the effective date by two years. This new standard will be effective for us on November 1, 2023 and will be applied retrospectively with restatement of comparatives unless impracticable. We are currently assessing the impact of adopting this standard and the amendments on our Consolidated Financial Statements.

Other future changes in accounting policies and disclosures that are not yet effective for us are described in Note 2 of our audited 2019 Annual Consolidated Financial Statements.

Controls and procedures

Disclosure controls and procedures

As of July 31, 2020, management evaluated, under the supervision of and with the participation of the President and Chief Executive Officer and the Chief Financial Officer, the effectiveness of our disclosure controls and procedures as defined under rules adopted by the U.S. SEC. Based on that evaluation, the President and Chief Executive Officer and the Chief Financial Officer concluded that our disclosure controls and procedures were effective as of July 31, 2020.

Internal control over financial reporting

No changes were made in our internal control over financial reporting during the quarter ended July 31, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Related party transactions

In the ordinary course of business, we provide normal banking services and operational services, and enter into other transactions with associated and other related corporations, including our joint venture entities, on terms similar to those offered to non-related parties. We grant loans to directors, officers and other employees at rates normally accorded to preferred clients. In addition, we offer deferred share and other plans to non-employee directors, executives and certain other key employees. For further information, refer to Notes 12 and 27 of our audited 2019 Annual Consolidated Financial Statements.

EDTF recommendations index

We aim to present transparent, high-quality risk disclosures by providing disclosures in our 2019 Annual Report, Q3 2020 Report to Shareholders (RTS), Supplementary Financial Information package (SFI), and Pillar 3 Report, in accordance with recommendations from the Financial Stability Board's (FSB) Enhanced Disclosure Task Force (EDTF). Information within the SFI and Pillar 3 Report is not and should not be considered incorporated by reference into our Q3 2020 Report to Shareholders.

The following index summarizes our disclosure by EDTF recommendation:

			Loco	tion of disclosu	ге
Type of Risk	Recommendation	Disclosure	RTS page	Annual Report page	SFI page
	1	Table of contents for EDTF risk disclosure	53	110	1
	2	Define risk terminology and measures		49-54,	-
General				213-214	
	3	Top and emerging risks		47-48	-
	4	New regulatory ratios	46-48	90-94	-
Risk governance,	5	Risk management organization		49-54	-
risk management	6	Risk culture		50-54	-
and business	7	Risk in the context of our business activities		97	-
model	8	Stress testing		51-52, 66	-
	9	Minimum Basel III capital ratios and Domestic	47	90-94	-
	10	systemically important bank surcharge Composition of capital and reconciliation of the		-	20-23
		accounting balance sheet to the regulatory balance sheet			
Capital adequacy	11	Flow statement of the movements in regulatory capital		-	24
and risk-weighted	12	Capital strategic planning		90-94	-
assets (RWA)	13	RWA by business segments		-	25
	14	Analysis of capital requirement, and related measurement model information		55-58	*
	15	RWA credit risk and related risk measurements		-	*
	16	Movement of risk-weighted assets by risk type		-	25
	17	Basel back-testing		51, 55	37
Liquidity	18	Quantitative and qualitative analysis of our liquidity reserve	39-40	72-74, 78-79	-
	19	Encumbered and unencumbered assets by balance sheet category, and contractual obligations for rating downgrades	40, 43	74,77	-
Funding	20	Maturity analysis of consolidated total assets, liabilities and off-balance sheet commitments analyzed by remaining contractual maturity at the balance sheet date	45-46	79-80	-
	21	Sources of funding and funding strategy	41-42	74-76	_
	22	Relationship between the market risk measures for trading and non-trading portfolios and the balance sheet	37-38	70-71	_
Market risk	23	Decomposition of market risk factors	33-36	66-69	-
	24	Market risk validation and back-testing		66	-
	25	Primary risk management techniques beyond reported risk measures and parameters		66-69	-
	26	Bank's credit risk profile	26-33	54-65, 156-163	26-37,*
		Quantitative summary of aggregate credit risk exposures that reconciles to the balance sheet	74-79	104-109	*
Credit risk	27	Policies for identifying impaired loans		56-58, 99-100,	-
	20			129-132	20.22
	28	Reconciliation of the opening and closing balances of impaired loans and impairment allowances		-	28,33
	29	during the year Quantification of gross notional exposure for OTC derivatives or exchange traded derivatives		59	39
	30	derivatives or exchange-traded derivatives Credit risk mitigation, including collateral held for all sources of credit risk		57-58	36
	31	Other risk types		82-89	_
Other	32	Publicly known risk events		85-86, 201-202	-

* These disclosure requirements are satisfied or partially satisfied by disclosures provided in our Pillar 3 Report for the quarter ended July 31, 2020 and for the year ended October 31, 2019.

Interim Condensed Consolidated Financial Statements (unaudited)

Interim Condensed Consolidated Balance Sheets (unaudited)

		As	at
		July 31	October 31
(Millions of Canadian dollars)	-	2020	2019
Assets Cash and due from banks	\$	119,181	\$ 26,310
Interest-bearing deposits with banks		40,640	38,345
Securities			
Trading		145,533 144,980	146,534
Investment, net of applicable allowance (Note 4)	-	290,513	102,470
Assets purchased under reverse repurchase agreements and securities borrowed		308,215	306,961
`	_		
Loans (Note 5) Retail		443,845	426,086
Wholesale		217,605	195,870
Allowance for loan losses (Note 5)		661,450 (5,509)	621,956 (3,100)
		655,941	618,856
Segregated fund net assets		1,908	1,663
Other		1,900	1,005
Customers' liability under acceptances		18,239	18,062
Derivatives		157,378	101,560
Premises and equipment Goodwill		8,175 11,356	3,191 11,236
Other intangibles		4,640	4,674
Other assets		66,948	49,073
	-	266,736	187,796
Total assets	\$	1,683,134	\$ 1,428,935
Liabilities and equity			
Deposits (Note 6) Personal	\$	337,196	\$ 294,732
Business and government	Ŷ	640,284	565,482
Bank		39,678	25,791
		1,017,158	886,005
Segregated fund net liabilities		1,908	1,663
Other			
Acceptances Obligations related to securities sold short		18,348 36,841	18,091 35,069
Obligations related to assets sold under repurchase agreements and securities loaned		273,768	226,586
Derivatives		155,479	98,543
Insurance claims and policy benefit liabilities		12,421	11,401
Other liabilities		70,938	58,137
		567,795	447,827
Subordinated debentures (Note 9)		9,899	9,815
Total liabilities	1	1,596,760	1,345,310
Equity attributable to shareholders			
Preferred shares and other equity instruments (Note 9)		7,447	5,707
Common shares (Note 9)		17,481	17,587
Retained earnings Other components of equity		57,805 3,535	55,981 4,248
1 1 1 1 1 1 1 1 1 1 1 1		86,268	83,523
Non-controlling interests		106	102
Total equity		86,374	83,625
Total liabilities and equity	\$	1,683,134	\$ 1,428,935

Interim Condensed Consolidated Statements of Income (unaudited)

	For the three	months ended	For the nine r	nonths ended
	July 31 2020	July 31 2019	July 31 2020	July 31 2019
(Millions of Canadian dollars, except per share amounts)	2020	2019	2020	2019
Interest and dividend income (Note 3) Loans	\$ 5,603	\$ 6,394	\$ 17,898	\$ 18,677
Securities	1,681	1,770	5,153	5,168
Assets purchased under reverse repurchase agreements	.,	.,	-,	
and securities borrowed	617	2,353	4,118	6,692
Deposits and other	55	93	251	354
	7,956	10,610	27,420	30,891
Interest expense (Note 3)				
Deposits and other	1,838	3,284	7,195	9,813
Other liabilities	917	2,218	4,174	6,165
Subordinated debentures	62	90	226	275
	2,817	5,592	11,595	16,253
Net interest income	5,139	5,018	15,825	14,638
Non-interest income				
Insurance premiums, investment and fee income	2,212	1,463	4,403	4,557
Trading revenue	623	170	1,015	879
Investment management and custodial fees	1,489	1,440	4,524	4,271
Mutual fund revenue	915	924	2,751	2,696
Securities brokerage commissions	341 430	324	1,119	982
Service charges Underwriting and other advisory fees	430 570	480 488	1,386 1,741	1,414 1,387
Foreign exchange revenue, other than trading	246	252	779	744
Card service revenue	259	272	758	820
Credit fees	296	322	960	925
Net gains on investment securities	11	26	67	109
Share of profit in joint ventures and associates	20	21	57	50
Other	369	344	704	1,160
	7,781	6,526	20,264	19,994
Total revenue	12,920	11,544	36,089	34,632
Provision for credit losses (Notes 4 and 5)	675	425	3,924	1,365
Insurance policyholder benefits, claims and acquisition expense	1,785	1,046	3,222	3,431
Non-interest expense				
Human resources (Note 7)	4,032	3,615	11,665	10,880
Equipment	469	449	1,399	1,325
Occupancy Communications	415	409	1,229	1,211 794
Professional fees	233 337	281 328	735 945	923
Amortization of other intangibles	325	299	943	888
Other	569	611	1,784	1,799
	6,380	5,992	18,700	17,820
Income before income taxes	4,080	4,081	10,243	12,016
Income taxes	879	818	2,052	2,351
Net income	\$ 3,201	\$ 3,263	\$ 8,191	\$ 9,665
Net income attributable to:				
Shareholders	\$ 3,197	\$ 3,263	\$ 8,185	\$ 9,659
Non-controlling interests	4	-	6	6
	\$ 3,201	\$ 3,263	\$ 8,191	\$ 9,665
Basic earnings per share (in dollars) (Note 10)	\$ 2.20	\$ 2.23	\$ 5.61	\$ 6.59
Diluted earnings per share (in dollars) (Note 10)	2.20	2.22	5.60	6.57
Dividends per common share (in dollars)	1.08	1.02	3.21	3.02

Interim Condensed Consolidated Statements of Comprehensive Income (unaudited)

	Fc	or the three	mont	hs ended	Fo	r the nine r	nonth	s ended
(Millions of Canadian dollars)		July 31 2020		July 31 2019		July 31 2020		July 31 2019
Net income	\$	3,201	\$	3,263	\$	8,191	\$	9,665
Other comprehensive income (loss), net of taxes Items that will be reclassified subsequently to income: Net change in unrealized gains (losses) on debt securities and loans at fair value through other comprehensive income								
Net unrealized gains (losses) on debt securities and loans at fair value through other comprehensive income Provision for credit losses recognized in income Reclassification of net losses (gains) on debt securities and loans at fair		749 (1)		79 (2)		(57) 22		218 (12)
value through other comprehensive income to income		(48)		(15)		(121)		(75)
		700		62		(156)		131
Foreign currency translation adjustments Unrealized foreign currency translation gains (losses) Net foreign currency translation gains (losses) from hedging activities Reclassification of losses (gains) on foreign currency translation to income Reclassification of losses (gains) on net investment hedging activities to income		(2,112) 716 (21) 21 (1,396)		(1,246) 590 - - (656)		1,236 (588) (21) 21 648		(115) 126 2 2 15
Net change in cash flow hedges Net gains (losses) on derivatives designated as cash flow hedges Reclassification of losses (gains) on derivatives designated as cash flow hedges to income		88 (113)		(118)		(1,189) (13)		(616) (88)
0		(25)		(107)		(1,202)		(704)
Items that will not be reclassified subsequently to income: Remeasurements of employee benefit plans (Note 7) Net fair value change due to credit risk on financial liabilities designated as fair value		(554)		(581)		(566)		(1,067)
through profit or loss Net gains (losses) on equity securities designated at fair value through other		(664)		118		(111)		92
comprehensive income		3		(10)		24		27
		(1,215)		(473)		(653)		(948)
Total other comprehensive income (loss), net of taxes		(1,936)		(1,174)		(1,363)		(1,506)
Total comprehensive income (loss)	\$	1,265	\$	2,089	\$	6,828	\$	8,159
Total comprehensive income attributable to: Shareholders Non-controlling interests	\$	1,264 1	\$	2,090 (1)	\$	6,819 9	\$	8,153 6
	\$	1,265	\$	2,089	\$	6,828	\$	8,159

The income tax effect on the Interim Condensed Consolidated Statements of Comprehensive Income is shown in the table below.

	For the three	months ended	For the nine r	months ended
(Millions of Canadian dollars)	July 31 2020	July 31 2019	July 31 2020	July 31 2019
Income taxes on other comprehensive income				
Net unrealized gains (losses) on debt securities and loans at fair value through				
other comprehensive income	\$ 164	\$ 17	\$ 72	\$ 61
Provision for credit losses recognized in income	2	-	5	-
Reclassification of net losses (gains) on debt securities and loans				
at fair value through other comprehensive income to income	(16)	(7)	(42)	(39)
Unrealized foreign currency translation gains (losses)	4	-	5	2
Net foreign currency translation gains (losses) from hedging activities	241	207	(205)	47
Reclassification of losses (gains) on net investment hedging activities to income	7	-	7	1
Net gains (losses) on derivatives designated as cash flow hedges	31	(40)	(426)	(219)
Reclassification of losses (gains) on derivatives designated as cash flow				
hedges to income	(40)	4	(4)	(32)
Remeasurements of employee benefit plans	(196)	(208)	(198)	(378)
Net fair value change due to credit risk on financial liabilities designated as fair value		. ,		. ,
through profit or loss	(237)	43	(39)	33
Net gains (losses) on equity securities designated at fair value through other			. ,	
comprehensive income	4	12	9	5
Total income tax expenses (recoveries)	\$ (36)	\$ 28	\$ (816)	\$ (519)

Interim Condensed Consolidated Statements of Changes in Equity (unaudited)

						For th	For the three months ended July 31, 2020	ths ended J	uly 31, 2020					
							Ot	her compor	Other components of equity	ity				
(Millions of Canadian dollare)	Preferred shares and other equity		ommon	Treasury – preferred shares and Common other equity	Treasury – common	Retained	FVOCI securities	Foreign currency	Cash flow	Total other components	Equity attributable to	y o Non-controlling	,	Total
Balance at beginning of period	\$ 5,6	5,698 \$ 17,592		\$ 1		\$ 57,466		6,259	\$ (1,183)	ŝ	\$ 84,935	ŝ	\$	85,040
Changes in equity Issues of share capital and other equity														
instruments	1,1	1,750	18	I	I	(4)	I	I	I	I	1,764	4		1,764
Common shares purchased for cancellation		I	T	Ι	T	1	T	Ι	I	Ι		1		I
Redemption of preferred shares and other														
equity instruments Salas of transmusischaras and other equity		I	I	I	I	I	I	I	I	I		1		I
justruments		I	I	25	839	I	I	I	I	Ι	864	4		864
Purchases of treasury shares and other														
equity instruments		I	I	(27)	(863)	Ι	I	Ι	I	I	(920	- (0		(920)
Share-based compensation awards		I	I	1	I	(1)	I	Ι	I	I		1) –		(1)
Dividends on common shares		I	I	I	I	(1,538)	I	I	I	I	(1,538	8) -		(1,538)
Dividends on preferred shares and														
distributions on other equity instruments		I	I	I	I	(65)	I	I	I	I	(65)			(65)
Other		I	I	I	I	(35)	I	T	I	I	(35)	- 2		(35)
Net income		I	I	I	I	3,197	I	I	I	I	3,197	7 4		3,201
Total other comprehensive income (loss),														
net of taxes		I	I	I	I	(1, 215)	700	(1, 393)	(25)	(718)	(1,933	3) (3)		(1, 936)
Balance at end of period	\$ 7,4	7,448 \$	\$ 17,610	\$ (1)	\$ (129) \$	57,805	\$ (123) \$	4,866	\$ (1,208)	\$ 3,535	\$ 86,268	8 \$ 106	ŝ	86,374
						For th	For the three months ended July 31, 2019	ths ended J	uly 31, 2019					
							ot	her compor	Other components of equity	ity				
								-	-					

	Pr	Preferred shares and		Treasury – preferred shares and	Treasury –		FVOCI	Foreign		Total other	Equity		
(Millions of Canadian dollars)	othe instr	other equity instruments	Common shares	Common other equity shares instruments	common shares	Retained earnings			Cash flow hedges	components of equity	attributable tó shareholders	attributable to Non-controlling shareholders interests	Total equity
Balance at beginning of period	Ş	5,706	5,706 \$ 17,638 \$	۱ د	\$ (104) \$	(104) \$ 53,615 \$	\$ 57 \$	4,817	\$ 91 \$	\$ 4,965	\$ 81,820	\$ 101 \$	81,921
Changes in equity													
Issues of share capital and other equity													
instruments		I	38	I	I	I	I	I	I	Ι	38	I	38
Common shares purchased for cancellation		I	(24)	I	I	(173)	I	I	I	I	(197)	I	(197)
Redemption of preferred shares and other													
equity instruments		I	I	Ι	I	I	I	I	I	I	I	I	I
Sales of treasury shares and other equity													
instruments		I	I	20	1,039	I	I	I	I	I	1,059	I	1,059
Purchases of treasury shares and other													
equity instruments		I	I	(21)	(664)	I	I	I	I	I	(1,015)	I	(1,015)
Share-based compensation awards		I	I	1	1	(6)	I	I	I	I	(6)	I	(6)
Dividends on common shares		I	I	I	I	(1, 464)	I	I	I	I	(1,464)	I	(1, 464)
Dividends on preferred shares and													
distributions on other equity instruments		I	I	I	I	(99)	I	I	I	I	(99)	(1)	(67)
Other		Ι	I	I	I	(1)	I	I	I	I	(1)	I	(1)
Net income		Ι	I	I	I	3,263	I	I	I	I	3,263	I	3,263
Total other comprehensive income (loss),													
net of taxes		I	I	I	I	(473)	62	(655)	(107)	(200)	(1,173)	(1)	(1,174)
Balance at end of period	Ş	5,706	5,706 \$ 17,652 \$	\$ (1) \$	\$ (59) \$	54,692 \$; 119 \$	4,162 \$	\$ (16) \$	\$ 4,265 \$	\$ 82,255	\$ 66 \$	82,354

					Forth	ie nine mont	For the nine months ended July 31, 2020	y 31, 2020				
						Oth	Other components of equity	nts of equity				
(Millions of Canadian dollars)	Preferred shares and other equity instruments	ed nd ty Common ts shares	Treasury – preferred shares and 1 other equity instruments	Treasury – common shares	Retained s earnings	FVOCI Foreign securities currency and loans translation		T Cash flow cc hedges	Total other components of equity	Equity attributable to shareholders	Non-controlling interests	Total equity
Balance at beginning of period Transition adjustment (Note 2)	\$ 5,706 -	16 \$ 17,645 	\$ - 1	\$ (58) _	\$ 55,981 (107)	\$ 33 \$ -	4,221 \$ _	- \$ (9)		\$ 83,523 (107)	\$ 102 \$	\$ 83,625 (107)
Adjusted balance at beginning of period	\$ 5,706	6 \$ 17,645	\$ 1	\$ (58)	\$ 55,874 \$	\$ 33 \$	4,221 \$	\$(9)	4,248	\$ 83,416	\$ 102 \$	\$ 83,518
Changes in equity Issues of share capital and other equity	i T				141					4		4
Common shares purchased for cancellation	- -	- (97) - (97)	1 1		(4) (717)	11	1 1	1 1	1 1	1,808 (814)	1 1	(814)
kedemption of preferred shares and other equity instruments	-	- (8)	I	I	I	I	I	I	I	(8)	I	(8)
sures of treasury situres and other equity instruments Durchares and other equity		I	88	4,010	I	I	I	I	I	4,098	I	4,098
i dictudades or dictaguity situates and other equity instruments		I	(06)	(4,081)	- 1	I	I	I	I	(4,171)	I	(4,171)
Dividends on common shares		1 1	11		(4,572)					(1) (4,572)	1 1	(1) (4,572)
Universities on pretenced shares and discriptions on other equity instruments			1	I	(194)	I	I	L	I	(194)	(4)	(198)
Net income					8,185					8,185	9	8,191
Total other comprehensive income (loss), net of taxes		1	I	I	(653)	(156)	645	(1,202)	(713)	(1,366)	3	(1,363)
Balance at end of period	\$ 7,448	18 \$ 17,610	\$ (1)	\$ (129)	\$ 57,805	\$ (123) \$	4,866 \$	(1,208) \$	3,535	\$ 86,268	\$ 106 \$	\$ 86,374
					For t	he nine mon	For the nine months ended July 31, 2019	y 31, 2019				
						Oth	Other components of equity	nts of equity				
	Preferred shares and	be be	Treasury – preferred shares and	Treasury – common	Retrined	FVOCI	Foreign	Cash flow co	Total other	Equity Attributable to	Non-controlling	Τοίσ
(Millions of Canadian dollars)	instruments		instruments	shares					of equity	shareholders	interests	equity
Balance at beginning of period (Note 2) Changes in equity	\$ 6,306)6 \$ 17,635	Ş A	\$ (18)	\$ 51,018 \$	\$ (12) \$	4,147 \$	688 \$	4,823	\$ 79,767	\$ 94 §	\$ 79,861
Issues of share capital and other equity	10											107
Common shares purchased for cancellation Redemption of preferred shares and other equity	Ċ.	70) – (70) –			_ (486)	1 1	1 1			(556)	1 1	437 (556)
instruments Sales of treasury shares and other equity	(026)	- (05	I	I	I	I	I	I	I	(950)	I	(950)
instruments		I	145	3,840	I	I	I	I	I	3,985	I	3,985
Purchases of treasury shares and other equity instruments		1	(149)	(3.881)	I	I	I	I	I	(4.030)	I	(4.030)
Share-based compensation awards		I			(15)	I	I	I	I	(15)	I	(15)
Dividends on common snares Dividends on preferred shares and distributions on			I	I	(4,337)	I	I	I	I	(4,337)	I	(4,337)
other equity instruments			I	I	(205)	I	I	I	I	(205)	(1)	(206)
Uther Net income		1 1	1 1	1 1	ь 9,659	1 1	1 1	1 1		659,9	- 9	0 9,665
Total other comprehensive income (loss), net of taxes		1	I	I	(948)	131	15	(704)	(558)	(1,506)	I	(1,506)
Balance at end of period	\$ 5,706)6 \$ 17,652	\$ (1)	\$ (59)	\$ 54,692 \$	\$ 119 \$	4,162 \$	(16) \$	4,265	\$ 82,255	\$ 66 \$	\$ 82,354
		i 										

Interim Condensed Consolidated Statements of Cash Flows (unaudited)

	For the three r		For the nine m	
(Millions of Canadian dollars)	July 31 2020	July 31 2019	July 31 2020	July 31 2019
Cash flows from operating activities	2020	2019	2020	2019
Net income	\$ 3,201	\$ 3,263	\$ 8,191	\$ 9,665
Adjustments for non-cash items and others	÷ 3,201	ų <i>3,203</i>	<i>ч</i> 0,151	ų 9,003
Provision for credit losses	675	425	3,924	1,365
Depreciation	326	157	985	464
Deferred income taxes	(266)	(218)	(680)	(513)
Amortization and impairment of other intangibles	326	301	953	894
Net changes in investments in joint ventures and associates	(19)	(21)	(54)	(49)
Losses (Gains) on investment securities Losses (Gains) on disposition of businesses	(65)	(27)	(163) 8	(123)
Adjustments for net changes in operating assets and liabilities	_	_	0	_
Insurance claims and policy benefit liabilities	1,038	474	1,020	1,480
Net change in accrued interest receivable and payable	301	46	(28)	276
Current income taxes	484	458	(470)	(77)
Derivative assets	(16,571)	(13,962)	(55,818)	(4,735)
Derivative liabilities	10,769	14,689	56,936	6,619
Trading securities	(9,377)	(1,505)	915	(12,163)
Loans, net of securitizations Assets purchased under reverse repurchase agreements and	17,258	(10,485)	(40,469)	(36,240)
securities borrowed	17,319	(120)	(1,254)	(15,038)
Obligations related to assets sold under repurchase agreements and	17,515	(120)	(1,231)	(15,050)
securities loaned	(4,837)	(3,953)	47,182	13,213
Obligations related to securities sold short	(3,506)	(447)	1,772	1,355
Deposits, net of securitizations	7,692	17,103	132,148	44,042
Brokers and dealers receivable and payable	188	(485)	2,541	(801)
Other	3,836	(2,558)	(16,962)	(6,446)
Net cash from (used in) operating activities	28,772	3,135	140,677	3,188
Cash flows from investing activities	40	(4.025)	(2,202)	1010
Change in interest-bearing deposits with banks Proceeds from sales and maturities of investment securities	7,749 27,712	(4,835) 15,214	(2,303) 80,293	4,918 46,368
Purchases of investment securities	(41,642)	(15,291)	(120,375)	(52,177)
Net acquisitions of premises and equipment and other intangibles	(540)	(483)	(120,373)	(1,619)
Cash used in acquisitions	((27)	(_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(27)
Net cash from (used in) investing activities	(6,721)	(5,422)	(44,428)	(2,537)
Cash flows from financing activities				
Issuance of subordinated debentures	1,250	1,500	2,750	1,500
Repayment of subordinated debentures	(1,000)	(1,000)	(3,000)	(1,000)
Issue of common shares, net of issuance costs	16	29	55	68
Common shares purchased for cancellation	-	(197)	(814)	(556)
Issue of preferred shares and other equity instruments, net of issuance	1 746		1,746	350
costs Redemption of preferred shares and other equity instruments	1,746	_	(8)	(950)
Sales of treasury shares and other equity instruments	864	1,059	4,098	3,985
Purchases of treasury shares and other equity instruments	(920)	(1,015)	(4,171)	(4,030)
Dividends paid on shares and distributions paid on other equity				
instruments	(1,602)	(1,531)	(4,730)	(4,495)
Dividends/distributions paid to non-controlling interests	-	(1)	(4)	(1)
Change in short-term borrowings of subsidiaries	(1,518)	(2,293)	13	793
Repayment of lease liabilities	(142)		(438)	
Net cash from (used in) financing activities	(1,306)	(3,449)	(4,503)	(4,336)
Effect of exchange rate changes on cash and due from banks	(341)	(442)	1,125	339
Net change in cash and due from banks Cash and due from banks at beginning of period (1)	20,404 98,777	(6,178) 33,041	92,871 26,310	(3,346) 30,209
Cash and due from banks at end of period (1)	\$ 119,181	\$ 26,863	\$ 119,181	\$ 26,863
Cash flows from operating activities include:				
Amount of interest paid	\$ 2,303	\$ 5,207	\$ 10,871	\$ 14,987
			,	
Amount of interest received	7,634	10,135	26,288	29,612
	7,634 831 655	10,135 651 625	26,288 2,135 2,372	29,612 1,632 2,374

(1) We are required to maintain balances with central banks and other regulatory authorities. The total balances were \$2.7 billion as at July 31, 2020 (April 30, 2020 – \$2.6 billion; October 31, 2019 – \$2.6 billion; July 31, 2019 – \$2.3 billion; October 31, 2018 – \$2.4 billion).

Note 1 General information

Our unaudited Interim Condensed Consolidated Financial Statements (Condensed Financial Statements) are presented in compliance with International Accounting Standard (IAS) 34 Interim Financial Reporting. The Condensed Financial Statements do not include all the information and disclosures required in the annual financial statements and should be read in conjunction with our audited 2019 Annual Consolidated Financial Statements and the accompanying notes included on pages 111 to 211 in our 2019 Annual Report. Tabular information is stated in millions of Canadian dollars, except per share amounts and percentages. On August 25, 2020, the Board of Directors authorized the Condensed Financial Statements for issue.

Note 2 Summary of significant accounting policies, estimates and judgments

Except as indicated below, the Condensed Financial Statements have been prepared using the same accounting policies and methods used in preparation of our audited 2019 Annual Consolidated Financial Statements. Our significant accounting policies are described in Note 2 of our audited 2019 Annual Consolidated Financial Statements.

Changes in accounting policies

Leases

During the first quarter, we adopted IFRS 16 *Leases* (IFRS 16), which sets out principles for the recognition, measurement, presentation and disclosure of leases, replacing the previous accounting standard for leases, IAS 17 *Leases* (IAS 17). As a result of the application of IFRS 16, we changed our accounting policy for leasing as outlined below, applicable from November 1, 2019. As permitted by the transition provisions of IFRS 16, we elected not to restate comparative period results; accordingly, all comparative information is presented in accordance with our previous accounting policies, as described in our 2019 Annual Report.

As a result of the adoption of IFRS 16, we increased total assets by \$5,084 million and total liabilities by \$5,191 million, primarily representing leases of premises and equipment previously classified as operating leases, and reduced retained earnings by \$107 million, net of taxes. The adoption of IFRS 16 reduced our CET1 capital ratio by 14 bps.

Leasing

At inception of a contract, we assess whether a contract is or contains a lease. A contract is, or contains, a lease if the contract conveys the right to obtain substantially all of the economic benefits from, and direct the use of, an identified asset for a period of time in return for consideration.

When we are the lessee in a lease arrangement, we initially record a right-of-use asset and corresponding lease liability, except for short-term leases and leases of low-value assets. Short-term leases are leases with a lease term of 12 months or less. Low-value assets are unspecialized, common, technologically unsophisticated, widely available, and widely used non-infrastructure assets. For short-term leases and leases of low-value assets, we record the lease payments as an operating expense on a straight-line basis over the lease term.

Where we are reasonably certain to exercise extension and termination options, they are included in the lease term.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted at our incremental borrowing rate. The lease liability is subsequently measured at amortized cost using the effective interest method, recorded in Interest expense.

The right-of-use asset is initially measured based on the initial amount of the lease liability, adjusted for lease payments made on or before the commencement date, initial direct costs incurred, and an estimate of costs to dismantle, remove, or restore the asset, less any lease incentives received.

The right-of-use asset is depreciated to the earlier of the lease term and the useful life, unless ownership will transfer to RBC or we are reasonably certain to exercise a purchase option, in which case the useful life of the right-of-use asset is used. We apply IAS 36 *Impairment of assets* to determine whether a right-of-use asset is impaired and account for any identified impairment loss as described in the premises and equipment accounting policies in our 2019 Annual Report.

Impact of adoption of IFRS 16 – Leases previously classified as operating leases

At transition, lease liabilities were measured at the present value of the remaining lease payments, discounted at our incremental borrowing rate as at November 1, 2019. We applied a weighted-average incremental borrowing rate of 2.3%. Rightof-use assets are generally measured at an amount equal to the lease liability, adjusted by any prepaid or accrued lease payments. For a select number of properties, the right-of-use assets were measured as if IFRS 16 had been applied since the commencement date of the lease, discounted using our incremental borrowing rate as at November 1, 2019. The following practical expedients were adopted when applying IFRS 16 to leases previously classified as operating leases under IAS 17:

- Election to not separate lease and non-lease components, applied to our real estate leases; and
- · Exemption from recognition for short-term and low value leases.

The following table reconciles our operating lease commitments at October 31, 2019, as previously disclosed in our 2019 Annual Consolidated Financial Statements, to the lease obligations recognized on initial application of IFRS 16 at November 1, 2019.

(Millions of Canadian dollars)	
Lease commitments disclosed as at October 31, 2019	\$ 6,175
Less: commitments related to non-recoverable tax	(360)
Less: commitments for contracts not yet commenced	(240)
Less: recognition exemption adopted for short-term and low-value leases	(83) 977
Plus: commitments for renewal options reasonably certain to be exercised	977
Other	(26)
Adjusted operating lease commitments as at October 31, 2019	6,443
Discounted as at November 1, 2019	5,557
Finance lease liabilities recognized as at October 31, 2019	49
Lease liability recognized as at November 1, 2019	\$ 5,606

Impact of adoption of IFRS 16 – Leases previously classified as finance leases

The carrying amount of the right-of-use asset and lease liability at November 1, 2019 for leases previously classified as finance leases under IAS 17 *Leases* was determined to be equal to the carrying amount of the lease asset and liability under IAS 17 immediately before the transition date.

Interest rate benchmark reform

During the first quarter, we early adopted amendments to IFRS 9 *Financial Instruments*, IAS 39 *Financial Instruments*: *Recognition and Measurement* and IFRS 7 *Financial Instruments*: *Disclosures* (Amendments), applicable from November 1, 2019. These amendments modify certain hedge accounting requirements to provide relief from the effect of uncertainty caused by interest rate benchmark reform (the Reform) prior to the transition to alternative interest rates. The adoption of the Amendments had no impact to our consolidated financial statements.

We will cease to apply these Amendments as interbank offered rate (IBOR) based cash flows transition to new risk free rates or when the hedging relationships to which the relief is applied are discontinued.

Hedge Accounting

Our accounting policies relating to hedge accounting are described in Note 2 and Note 8 of our 2019 Annual Report. We apply hedge accounting when designated hedging instruments are 'highly effective' in offsetting changes in the fair value or cash flows of the hedged items at inception and on an ongoing basis. We perform retrospective assessments to demonstrate that the relationship has been effective since designation of the hedge and prospective assessments to evaluate whether the hedge is expected to be effective over the remaining term of the hedge. While uncertainty due to IBOR reform exists, our prospective effectiveness testing is based on existing hedged cash flows or hedged risks. Any ineffectiveness arising from retrospective testing is recognized in net income.

In addition to potential sources of ineffectiveness outlined in Note 8 of our 2019 Annual Report, the Reform may result in ineffectiveness as the transition of hedged items and related hedging instruments from IBORs to new risk free rates may occur at different times. This may result in different impacts on the valuation or cash flow variability of hedged items and related hedging instruments.

Cash flow hedges

We apply hedge accounting for cash flow hedges when the cash flows giving rise to the risk being hedged have a high probability of occurring. While uncertainty due to IBOR reform exists, we apply the relief provided by the Amendments that the IBOR benchmarks, on which the highly probable hedged cash flows are based, are not altered as a result of the Reform. In addition, associated cash flow hedge reserves are not recycled into net income solely due to changes related to the transition from IBOR to new risk free rates.

Fair value hedges

We apply hedge accounting to IBOR rates which may not be contractually specified when that rate is separately identifiable and reliably measurable at inception of the hedge relationship.

Note 2 Summary of significant accounting policies, estimates and judgments (continued)

Hedging relationships impacted by interest rate benchmark reform

The following table presents the notional amount of our hedging instruments which reference IBOR that will expire after 2021 and will be affected by the Reform. The notional amounts of our hedging instruments also approximates the extent of the risk exposure we manage through hedging relationships:

	As at November 1, 2019
(Millions of Canadian dollars)	Notional/Principal amounts (1)
Interest rate contracts	
USD LIBOR	\$ 26,709
EURO Interbank Offered Rate	5,589
GBP LIBOR	618
Non-derivative instruments	
USD LIBOR	888
GBP LIBOR	682
	\$ 34,486

(1) Excludes interest rate contracts and non-derivative instruments which reference rates in multi-rate jurisdictions, including the Canadian Dollar Offered Rate (CDOR) and Australian Bank Bill Swap Rate (BBSW).

IFRS Interpretations Committee Interpretation 23 Uncertainty over income tax treatments (IFRIC 23)

During the first quarter, we adopted IFRIC 23 which provides guidance on the recognition and measurement of tax assets and liabilities under IAS 12 *Income taxes* when there is uncertainty over income tax treatments, replacing our application of IAS 37 *Provisions, contingent liabilities and contingent assets* for uncertain tax positions. We are subject to income tax laws in various jurisdictions where we operate, and the complex tax laws are potentially subject to different interpretations by us and the relevant taxation authorities. Significant judgment is required in the interpretation of the relevant tax laws, and in assessing the probability of acceptance of our tax positions, which includes our best estimate of tax positions that are under audit or appeal by the relevant taxation authorities. We perform a review on a quarterly basis to incorporate our best assessment based on information available, but additional liability and income tax expense could result based on the acceptance of our positions by the relevant tax authorities. The adoption of IFRIC 23 had no impact to our consolidated financial statements.

IFRS 15 Revenue from Contracts with Customers (IFRS 15)

On November 1, 2018, we adopted IFRS 15 and reduced our opening retained earnings. In the fourth quarter of 2019, we amended our opening reduction to retained earnings to \$94 million on an after-tax basis. Comparative amounts have been revised from those previously presented.

Future changes in accounting policies and disclosures

IFRS 17 Insurance Contracts (IFRS 17)

In May 2017, the IASB issued IFRS 17 to establish a comprehensive global insurance standard which provides guidance on the recognition, measurement, presentation and disclosures of insurance contracts. IFRS 17 requires entities to measure insurance contract liabilities at their current fulfillment values using one of three approaches. In June 2020, the IASB issued amendments to IFRS 17, including deferral of the effective date by two years. This new standard will be effective for us on November 1, 2023 and will be applied retrospectively with restatement of comparatives unless impracticable. We are currently assessing the impact of adopting this standard and the amendments on our Consolidated Financial Statements.

For further details on future changes in accounting policies and disclosures that are not yet effective for us, refer to Note 2 of our audited 2019 Annual Consolidated Financial Statements.

Significant judgments, estimates, and assumptions

The COVID-19 pandemic continues to evolve and the economic environment in which we operate could be subject to sustained volatility, which could continue to negatively impact our financial results, as the duration of the pandemic, including the possibility of subsequent waves, and the effectiveness of steps undertaken by governments and central banks in response to the pandemic remains uncertain. The current environment required particularly complex judgments and estimates, and we are closely monitoring the changing conditions and their impact to the following areas.

Allowance for credit losses

Our estimation of expected credit losses in stage 1 and stage 2 continues to be a discounted probability-weighted estimate that considers five distinct macroeconomic scenarios. These include our base macroeconomic forecast, upside and downside scenarios based on reasonably possible alternative macroeconomic conditions, and additional and more severe downside scenarios designed to capture a broader range of potential credit losses in the energy and real estate sectors. Our process involves significant judgment to design and weigh macroeconomic scenarios, forecast macroeconomic variables, and assess for significant increases in credit risk.

To reflect certain characteristics not already considered in our modelled, scenario-weighted ACL, we applied expert credit judgment in determining the final expected credit losses. This included adjustments for the impact of the pandemic on our portfolios, including particularly vulnerable sectors affected by COVID-19 and the temporary effects of the bank and government led payment support programs.

Use of forward looking information

The emergence of the COVID-19 global pandemic significantly impacted our economic outlook, which is reflected in the macroeconomic variables used to estimate our stage 1 and stage 2 credit loss allowances. The environment, including government support measures continues to evolve and as a result, our macroeconomic outlook has a higher than usual degree of uncertainty and is inherently subject to change, which may materially change our estimate of stage 1 and stage 2 credit loss allowances. We are closely monitoring changes in conditions and their impact on our expected credit losses, and will continue to update our macroeconomic variables as the impact of COVID-19 progresses.

Assessment of significant increase in credit risk

To support our clients during this time, we have launched various relief programs. Utilization of a payment deferral program does not, all else being equal, automatically trigger a significant increase in credit risk. Our assessment of significant increases in credit risk continues to be primarily based on quantitative lifetime probability of default (PD) thresholds and, for our wholesale portfolios, changes in the borrower's risk rating. Additional qualitative reviews and a 30 days past due backstop are also applied. Risk ratings and the broader macroeconomic impacts of the pandemic are largely reflected in an instrument's lifetime PD. To the extent the impacts of COVID-19 are not already reflected within the lifetime PD model, they are reflected through the application of our expert credit judgment to assess the staging results and adjustments are made as necessary.

RBC Client relief programs

We have established relief programs to help personal and business banking clients manage the challenges of COVID-19 through payment deferrals, interest rate reductions, covenant waivers, and refinancing or credit restructuring. In some cases, the original terms of the associated financial asset were renegotiated or otherwise modified, resulting in changes to the contractual terms of the financial asset that affect the contractual cash flows. Where there was a substantial change in terms from the original financial asset, we derecognized the financial asset and recognized a new financial asset. If the modification of contractual terms did not result in derecognition of the financial asset, the carrying amount of the financial asset was recalculated as the present value of the renegotiated or modified contractual cash flows, discounted at the original effective interest rate and a gain or loss was recognized.

Government programs

To support our clients through unprecedented times, we are participating in government relief programs in Canada and in the U.S. For these programs, we have assessed whether we transferred substantially all the risks and rewards associated with the financial assets, relinquished control, or retained the rights to receive the cash flows of the financial assets but assumed an obligation to pay the cash flows to a third party subject to certain pass-through requirements.

Under the Canadian Emergency Business Account program, we have provided interest-free loans to existing eligible small business clients funded by the Export Development Bank of Canada (EDC). As we do not retain substantially all of the risks and rewards of the financial assets, and all cash flows are passed through to the EDC, these loans are not recognized on our Consolidated Balance Sheets.

Under the Business Development Bank of Canada (BDC) Co-Lending and the BDC Mid-Market Financing programs, we provide loans to eligible clients and recognize 20% and 10% of the financial assets on our balance sheet, respectively, reflective of the risks and rewards retained by the bank. Loans issued under the Export Development Canada BCAP Guarantee program are 80% guaranteed by the EDC and as we retain substantially all of the other risk and rewards of the loans, we recognize the financial assets on balance sheet. Business Credit Availability Programs (BCAP) loans are primarily presented as Wholesale loans at amortized cost.

We have also provided loans to support certain U.S. based clients, guaranteed by the United States Federal Government, as part of the Paycheck Protection Program (PPP) CARES Act. Although these loans are guaranteed by the United States Federal Government, we retain substantially all of the other risk and rewards of the loans. Accordingly, loans provided under this program have been presented in Wholesale loans at amortized cost.

Goodwill

As at July 31, 2020, \$1,737 million of goodwill (October 31, 2019 – \$1,727 million) was allocated to the Caribbean Banking cash generating unit (CGU). As a result of the economic disruptions triggered by COVID-19, the recoverable amount of our Caribbean Banking CGU has declined.

We estimated the recoverable amount using a fair value less costs of disposal methodology and corroborated the results using market comparable transactions. Under reasonably possible alternative scenarios, our estimated recoverable amount ranges from approximating the carrying amount to an immaterial deficit. In determining the recoverable amount, forecast future cash flows were discounted using a pre-tax rate of 11.4% (August 1, 2019 – 11.9%), reflecting a lower interest rate environment, and the terminal growth rate used was 3.7% (August 1, 2019 – 4.2%), reflecting lower inflation and uncertainty due to the pandemic. A 50 bps change in the discount rate would increase and decrease the recoverable amount by \$333 million and \$287 million, respectively. A 50 bps change in the terminal growth rate would increase and decrease the recoverable amount by \$264 million and \$227 million, respectively. A reduction in the forecasted cash flows of 10% per annum would reduce the recoverable amount by \$392 million. Changes in these assumptions have been applied holding other individual factors constant. However, changes in one factor may be magnified or offset by related changes in other assumptions as impacts to the recoverable amount are highly interdependent and changes in assumptions may not have a linear effect on the recoverable value of the CGU. In aggregate, the range of reasonably possible outcomes would not materially affect the recoverable amount of the CGU.

Due to the COVID-19 impacts on the cash flow outlook for our businesses, we completed sensitivity analysis on certain other CGUs significantly impacted by the pandemic. This included updating certain key assumptions and judgments used in

Note 2 Summary of significant accounting policies, estimates and judgments (continued)

estimating the recoverable amount of certain CGUs through completing sensitivity testing on our discount rates and forecast future cash flows to determine whether the CGUs' recoverable amounts continue to exceed their carrying amounts. We determined that no impairment existed.

The environment is rapidly evolving and as a result, our economic outlook has a higher than usual degree of uncertainty, which may materially change the estimated recoverable amount of our CGUs and result in an impairment charge in future periods. Actual experience may differ materially from current expectations, including in relation to the duration and severity of the economic contraction and the ultimate timing and extent of a future recovery. We will continue to monitor the impact of changes in key assumptions and judgments underpinning our estimated recoverable amounts as information emerges over future quarters.

For further details on our significant estimates and judgments, refer to Note 2 of our audited Annual Consolidated Financial Statements.

Note 3 Fair value of financial instruments

Carrying value and fair value of financial instruments

The following tables provide a comparison of the carrying and fair values for each classification of financial instruments. Embedded derivatives are presented on a combined basis with the host contracts. Refer to Note 2 and Note 3 of our audited 2019 Annual Consolidated Financial Statements for a description of the valuation techniques and inputs used in the fair value measurement of our financial instruments. There have been no significant changes to our determination of fair value during the quarter.

				As at	July 31, 2020			
		Carrying value	and fair value	!	Carrying value	Fair value		
(Millions of Canadian dollars)	Financial instruments classified as FVTPL	Financial instruments designated as FVTPL	Financial instruments classified as FVOCI	Financial instruments designated as FVOCI	Financial instruments measured at amortized cost		Total carrying amount	Total fair value
Financial assets								
Interest-bearing deposits with banks	\$ –	\$ 23,808	\$ –	\$ –	\$ 16,832	\$ 16,832	\$ 40,640	\$ 40,640
Securities Trading Investment, net of applicable allowance	135,043	10,490	- 95,101	- 503	- 49,376	- 50,392	145,533 144,980	145,533 145,996
	135,043	10,490	95,101	503	49,376	50,392	290,513	291,529
Assets purchased under reverse repurchase agreements and securities borrowed	254,124	-			54,091	54,091	308,215	308,215
Loans, net of applicable allowance Retail Wholesale	- 5,891	256 2,433	257 741	-	440,378 205,985	446,709 207,479	440,891 215,050	447,222 216,544
	5,891	2,689	998	_	646,363	654,188	655,941	663,766
Other Derivatives Other assets (1)	157,378 3,285	_ 20	-	-	- 62,949	62,948	157,378 66,254	157,378 66,253
Financial liabilities Deposits Personal Business and government (2) Bank (3)	\$ 73 282 - 355	\$ 16,576 120,328 10,202 147,106			\$ 320,547 519,674 29,476 869,697	\$ 319,822 521,776 29,489 871,087	\$ 337,196 640,284 39,678 1,017,158	\$ 336,471 642,386 39,691 1,018,548
Other Obligations related to securities sold short Obligations related to assets sold under repurchase agreements	36,841	-			-	-	36,841	36,841
and securities loaned Derivatives Other liabilities (4) Subordinated debentures	- 155,479 46 -	255,493 - 61 -			18,275 - 66,272 9,899	18,275 - 66,282 9,989	273,768 155,479 66,379 9,899	273,768 155,479 66,389 9,989

				As at O	ctober 31, 2019			
		Carrying value	e and fair value		Carrying value	Fair value	_	
(Millions of Canadian dollars)	Financial instruments classified as FVTPL	Financial instruments designated as FVTPL	Financial instruments classified as FVOCI	Financial instruments designated as FVOCI	Financial instruments measured at amortized cost	Financial instruments measured at amortized cost	Total carrying amount	Total fair value
Financial assets								
Interest-bearing deposits with banks	\$ –	\$ 22,283	\$ –	\$ –	\$ 16,062	\$ 16,062	\$ 38,345	\$ 38,345
Securities Trading Investment, net of applicable	137,600	8,934	-	_	-	-	146,534	146,534
allowance	-	-	57,223	463	44,784	45,104	102,470	102,790
	137,600	8,934	57,223	463	44,784	45,104	249,004	249,324
Assets purchased under reverse repurchase agreements and securities borrowed	246,068	_	-	_	60,893	60,894	306,961	306,962
Loans, net of applicable allowance								
Retail Wholesale	275 7,055	242 1,856	95 451	-	423,469 185,413	424,416 184,645	424,081 194,775	425,028 194,007
	7,330	2,098	546	-	608,882	609,061	618,856	619,035
Other								-
Derivatives Other assets (1)	101,560 3,156	-	-	-	_ 50,375	_ 50,375	101,560 53,531	101,560 53,531
Financial liabilities Deposits								
Personal Business and government (2) Bank (3)	\$ 140 151 -	\$ 17,394 111,389 3,032			\$ 277,198 453,942 22,759	\$ 277,353 452,536 22,773	\$ 294,732 565,482 25,791	\$ 294,887 564,076 25,805
	291	131,815			753,899	752,662	886,005	884,768
Other Obligations related to securities sold short Obligations related to assets sold	35,069						35,069	35,069
under repurchase agreements and securities loaned Derivatives Other liabilities (4) Subordinated debentures		218,612 _ 91 _			7,974 - 61,039 9,815	7,974 - 61,024 9,930	226,586 98,543 59,921 9,815	226,586 98,543 59,906 9,930

Includes Customers' liability under acceptances and financial instruments recognized in Other assets. (1)

Business and government deposits include deposits from regulated deposit-taking institutions other than banks. (2)

Bank deposits refer to deposits from regulated banks and central banks. Includes Acceptances and financial instruments recognized in Other liabilities.

(3) (4)

Financial assets designated as fair value through profit or loss

For our financial assets designated as FVTPL, we measure the change in fair value attributable to changes in credit risk as the difference between the total change in the fair value of the instrument during the period and the change in fair value calculated using the appropriate risk-free yield curves. For the nine months ended July 31, 2020, a loss of \$462 million was attributable to changes in credit risk for positions still held and there were no significant changes in the extent to which credit derivatives or similar instruments mitigate the maximum exposure to credit risk.

Note 3 Fair value of financial instruments (continued)

Fair value of assets and liabilities measured at fair value on a recurring basis and classified using the fair value hierarchy

					As	at					
		J	uly 31, 202	0				tober 31,	2019		
	Fair value i	measuremen	ts using	Netting		Fair value m	easurement	ts using	. N	letting	
(Millions of Canadian dollars)	Level 1	Level 2	Level 3	adjustments	Fair value	Level 1	Level 2	Level 3	adjust	ments	Fair value
Financial assets Interest-bearing deposits with banks	\$ - \$	\$ 23,808	\$ –	\$ \$	5 23,808	\$ - \$	22,283	\$	\$	\$	22,283
Securities											
Trading Debt issued or guaranteed by:											
Canadian government (1)											
Federal	19,785	5,714	-		25,499	14,655	5,474	-			20,129
Provincial and municipal	_	12,603	-		12,603		11,282	-			11,282
U.S. state, municipal and agencies (1) Other OECD government (2)	1,227 5,251	37,265 2,819	46		38,538 8,070	2,050 2,786	39,584 3,710	58			41,692 6,496
Mortgage-backed securities (1)	5,251	2,819	_		59	2,780	482	_			482
Asset-backed securities											
Non-CDO securities (3)	-	382	2		384	-	1,333	2			1,335
Corporate debt and other debt	-	20,514	31		20,545	1	23,643	21			23,665
Equities	36,398	2,199	1,238		39,835	38,309	1,925	1,219			41,453
	62,661	81,555	1,317		145,533	57,801	87,433	1,300			146,534
Investment Debt issued or guaranteed by:											
Canadian government (1)											
Federal	227	1,279	-		1,506	-	657	-			657
Provincial and municipal	-	5,149	-		5,149	-	2,898	-			2,898
U.S. state, municipal and agencies (1) Other OECD government	2,028 654	41,833 8,674	_		43,861 9,328	210	20,666 4,251	-			20,876 4,251
Mortgage-backed securities (1)	0	2,476	24		2,500	_	2,675	27			2,702
Asset-backed securities		·			<i>,</i>		,				
CDO	-	7,455	-		7,455	-	7,300	-			7,300
Non-CDO securities Corporate debt and other debt	_	869 24,270	_ 162		869 24,432	-	849 17,537	- 153			849 17,690
Equities	39	128	337		504	42	127	294			463
	2,948	92,133	523		95,604	252	56,960	474			57,686
Assets purchased under reverse repurchase	/						,				. ,
agreements and securities borrowed	-	254,124	-		254,124	-	246,068	-			246,068
Loans	-	8,363	1,215		9,578	-	9,294	680			9,974
Other											
Derivatives Interest rate contracts	_	62,384	610		62,994	1	46,095	349			46,445
Foreign exchange contracts	_	75,892	85		75,977	-	40,768	48			40,816
Credit derivatives	-	490	-		490	-	169	-			169
Other contracts	3,682	16,454	39		20,175	2,852	12,674	11			15,537
Valuation adjustments	-	(1,220)	2		(1,218)		(712)	15			(697
Total gross derivatives Netting adjustments	3,682	154,000	736	(1,040)	158,418 (1,040)	2,853	98,994	423		(710)	102,270 (710
Total derivatives				(1)212)	157,378					()	101,560
Other assets	1,256	1,997	52		3,305	1,119	1,960	77			3,156
	\$ 70,547 \$	\$ 615,980	\$ 3,843	\$ (1,040) \$	689,330	\$ 62,025 \$	522,992	\$ 2,954	\$	(710)\$	587,261
Financial Liabilities											
Deposits			÷ 100				17 270		~	<i>.</i>	17.504
Personal Business and government	\$ - \$	\$ 16,457 120,610	\$ 192	\$ \$	5 16,649 120,610	\$ - \$	17,378 ± 111,540	\$ 156	\$	\$	17,534 111,540
Bank	_	10,202	_		10,202	_	3,032	_			3,032
Other					,		-,				-,
Obligations related to securities sold short	21,217	15,624	-		36,841	20,512	14,557	-			35,069
Obligations related to assets sold under repurchase agreements and securities											
loaned	_	255,493	_		255,493	-	218,612	_			218,612
Derivatives		233,175			233,173		210,012				210,012
Interest rate contracts	-	54,967	1,175		56,142	-	39,165	934			40,099
Foreign exchange contracts	-	76,430	40		76,470	-	40,183	27			40,210
Credit derivatives Other contracts	5,007	579 18,214	268		579 23,489	2,675	282 15,776	206			282 18,657
Valuation adjustments	5,007	(151)	(10)		(161)		13,770	(7))		18,037
Total gross derivatives	5,007	150,039	1,473		156,519	2,675	95,418	1,160			99,253
Netting adjustments	5,007	,	.,	(1,040)	(1,040)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,		(710)	(710
Total derivatives					155,479						98,543
Other liabilities	46	23	38		107	102	(1,280)	60			(1,118
	\$ 26,270 \$	\$ 568,448	\$ 1,703	\$ (1,040) \$	595,381	\$ 23,289 \$	459,257	\$ 1,376	\$	(710)\$	483,212

As at July 31, 2020, residential and commercial mortgage-backed securities (MBS) included in all fair value levels of trading securities were \$17,635 million and \$1 million (October 31, 2019 – \$22,365 million and \$1), respectively, and in all fair value levels of Investment securities were \$9,814 million and \$2,153 million (October 31, 2019 – \$6,474 million and \$2,046 million), respectively. (1)

OECD stands for Organisation for Economic Co-operation and Development. CDO stands for collateralized debt obligations. (2)

(3)

Fair value measurements using significant unobservable inputs (Level 3 Instruments)

A financial instrument is classified as Level 3 in the fair value hierarchy if one or more of its unobservable inputs may significantly affect the measurement of its fair value. In preparing the financial statements, appropriate levels for these unobservable input parameters are chosen so that they are consistent with prevailing market evidence or management judgment. Due to the unobservable nature of the prices or rates, there may be uncertainty about the valuation of these Level 3 financial instruments.

During the three months ended July 31, 2020, there were no significant changes made to the valuation techniques and ranges and weighted averages of unobservable inputs used in the determination of fair value of Level 3 financial instruments. As at July 31, 2020, the impacts of adjusting one or more of the unobservable inputs by reasonably possible alternative assumptions did not change significantly from the impacts disclosed in our 2019 Annual Consolidated Financial Statements.

Changes in fair value measurement for instruments measured on a recurring basis and categorized in Level 3

			Foi	the three mo	onths ended	July 31, 2020)		
(Millions of Canadian dollars)	Fair value at beginning of period		included in	Purchases (issuances)	(sales) and	into	out of	Fair value at end of period	
Assets									
Securities									
Trading									
Debt issued or guaranteed by:									
U.S. state, municipal and agencies	\$ 54	\$ -	\$ (2)	\$ -	\$ (6)\$ –	\$ -	\$ 46	\$ –
Asset-backed securities									
Non-CDO securities	2		-	-	-	-	-	2	-
Corporate debt and other debt	19		-	-	-	12	-	31	-
Equities	1,256	(23	(32	55	(21) 2	1	1,238	(2)
	1,331	(23) (34	55	(27) 14	1	1,317	(2)
Investment									
Mortgage-backed securities	28	-	(4		-	-	-	24	n.a.
Corporate debt and other debt	165	-	(3	- (-	-	-	162	n.a.
Equities	333	-	4	-	-	-	-	337	n.a.
	526	-	(3)	- (-	-	-	523	n.a.
Loans	994	58	9	62	(11) 176	(73) 1,215	21
Other									
Net derivative balances (3)									
Interest rate contracts	(596		(1)	11	-	-	(2		
Foreign exchange contracts	66	(23) –	6	-	(5)			(22)
Other contracts	(326) 58	5	(53)) 14	(25)) 98	· · ·) 89
Valuation adjustments	10		-	-	2		-	12	-
Other assets	49	9	(2		(4) –	_	52	9
	\$ 2,054	\$ 102	\$ (26	\$ 81	\$ (26)\$ 162	\$ 23	\$ 2,370	\$ 116
Liabilities									
Deposits									
Personal	\$ (163)\$ (17	\$ 2	\$ (40)\$ 4	\$ (28))\$ 50	\$ (192)\$ (16)
Business and government	-	-	-	-	-	-	-	-	-
Other									
Other liabilities	(36) (5) 1	-	2	-	-	(38) (5)
	\$ (199)\$ (22	\$ 3	\$ (40)\$ 6	\$ (28))\$ 50	\$ (230))\$ (21)

Note 3 Fair value of financial instruments (continued)

			Fo	r the three m	onths ended J	uly 31, 2019			
(Millions of Canadian dollars)	Fair value at beginning of period	Gains (losses) included in earnings	Gains (losses) included in OCI (1)	Purchases (issuances)	Settlement (sales) and other (2)	Transfers into Level 3	Transfers out of Level 3	Fair value at end of period	Gains (losses) included in earnings for positions still held
Assets									
Securities									
Trading									
Debt issued or guaranteed by:									
U.S. state, municipal and agencies	\$ 67	\$ –	\$ (1	\$ -	\$ (2)	\$ -	\$ -	\$ 64	\$ –
Asset-backed securities									
Non-CDO securities	4	-	-	-	(2)		-	2	1
Corporate debt and other debt	21	-	-	-	-	-	-	21	-
Equities	1,107	(20)	(12	76	(34)	20	(1)	1,136	(9)
	1,199	(20)	(13	76	(38)	20	(1)	1,223	(8)
Investment									
Mortgage-backed securities	28	-	(1	-	-	-	-	27	n.a.
Corporate debt and other debt	146	-	5	-	1	-	-	152	n.a.
Equities	296	-	(6	5	(2)		-	293	n.a.
	470	-	(2	5	(1)) –	_	472	n.a.
Loans	759	9	-	276	(474)	2	(4)	568	(3)
Other									
Net derivative balances (3)									
Interest rate contracts	(585		-	(2) (5)	(9)	4	(581)	(4)
Foreign exchange contracts	17	(14)	(20		-	2	-	(12)	
Other contracts	(190) 10	4	(48) 12	2	7	(203)	5
Valuation adjustments	6	-	-	-	1	-	-	7	-
Other assets	66	13	(1	-	(3)	-	-	75	13
	\$ 1,742	\$ 14	\$ (32	\$ 309	\$ (507)	\$ 17	\$ 6	\$ 1,549	\$ 7
Liabilities									
Deposits									
Personal	\$ (192)\$ (5)	\$ 1	\$ (16)\$ 16	\$ (13)	\$ 149	\$ (60)	\$ 4
Business and government	-	-	-	-	-	-	-	-	-
Other									
Other liabilities	(56) (7)	1	-	3			(59)	(7)
	\$ (248)\$ (12)	\$ 2	\$ (16)\$ 19	\$ (13)	\$ 149	\$ (119)	\$ (3)

			Fo	or the nine mo	nths ended J	uly 31, 2020			
(Millions of Canadian dollars)	Fair value at beginning of period		included in	Purchases (issuances)	Settlement (sales) and other (2)	Transfers into Level 3		at end of	Gains (losses) included in earnings for positions still held
Assets									
Securities									
Trading									
Debt issued or guaranteed by:									
U.S. state, municipal and agencies	\$ 58	\$ -	\$ 2	\$ -	\$ (14))\$ -	\$ -	\$ 46	\$ -
Asset-backed securities									
Non-CDO securities	2	-	-	-	-	-	-	2	-
Corporate debt and other debt	21	(1)		-	(1)		-	31	-
Equities	1,219	(101) 15	173	(68)) 2	(2)) 1,238	(41)
	1,300	(102) 17	173	(83)) 14	(2)) 1,317	(41)
Investment									
Mortgage-backed securities	27	-	(3) –	-	-	-	24	n.a.
Corporate debt and other debt	153	-	8	´1	-	-	-	162	n.a.
Equities	294	-	40	4	(1)) –	-	337	n.a.
	474	-	45	5	(1)) –	-	523	n.a.
Loans	680	77	9	552	(510)) 516	(109)) 1,215	(46)
Other									
Net derivative balances (3)									
Interest rate contracts	(585) (87) (3) (28)) 8	34	96	(565)	(30)
Foreign exchange contracts	21	17	1			(8)	(8)		9
Other contracts	(195) (36) (2) (127) 21	(58)	168	(229)	12
Valuation adjustments	22	-	-	-	(10)) –	-	12	-
Other assets	77	(10) 2	-	(17)) –	-	52	(11)
	\$ 1,794	\$ (141)\$ 69	\$ 597	\$ (592)	\$ 498	\$ 145	\$ 2,370	\$ (107)
Liabilities									
Deposits									
Personal	\$ (156)\$ 69	\$ (2)\$ (253))\$ 22	\$ (110)	\$ 238	\$ (192)	\$ 67
Business and government	-	-	-	-	-	-	-	-	-
Other									
Other liabilities	(60) 7	(2) 4	13	-	-	(38)	7
	\$ (216)\$ 76	\$ (4)\$ (249))\$ 35	\$ (110)	\$ 238	\$ (230)	\$ 74
	•	•				, ,		, , ,	

Note 3 Fair value of financial instruments (continued)

			F	or the nine mo	onths ended J	uly 31, 2019			
(Millions of Canadian dollars)	Fair value at beginning of period	Gains (losses) included in earnings	Gains (losses) included in OCI (1)	Purchases	Settlement (sales) and other (2)	Transfers into Level 3	Transfers out of Level 3	Fair value at end of period	Gains (losses) included in earnings for positions still held
Assets									
Securities Trading Debt issued or guaranteed by:									
U.S. state, municipal and agencies Asset-backed securities	\$ 66	\$ (1))\$1	\$	\$ (2)	\$ -	\$ -	\$ 64	Ş –
Non-CDO securities	110	15	-	-	(123)		-	2	3
Corporate debt and other debt	21	1	-	-	(1)	-	-	21	-
Equities	1,148	(67) 4	226	(212)	38	(1)	1,136	(26)
	1,345	(52) 5	226	(338)	38	(1)	1,223	(23)
Investment									
Mortgage-backed securities	-	-	-	27	-	-	-	27	n.a.
Corporate debt and other debt	192	(3)) 18	-	(55)	-	-	152	n.a.
Equities	237	-	14	5	37	-	-	293	n.a.
	429	(3)) 32	32	(18)	-	-	472	n.a.
Loans	551	38	2	588	(478)	55	(188)	568	18
Other									
Net derivative balances (3)									
Interest rate contracts	(504	· · ·		(/	(6)	(16)	· · ·	(41)
Foreign exchange contracts	21	(20)	· · · · · ·	/		1	(7)	(12)	4
Other contracts	(84		1	(,	(37)	(112)	```	79
Valuation adjustments	1	-	-	-	0	-	-	7	-
Other assets	65	23	-	-	(13)	-	-	75	23
	\$ 1,824	\$ (3)	\$ 29	\$ 591	\$ (619)	\$ 51	\$ (324)	\$ 1,549	\$ 60
Liabilities									
Deposits	ć /200	10	۱¢	č (40		ć (120)	¢ 500	¢ ((0)	Č (1)
Personal	\$ (390)\$ (39)) > –	\$ (49)\$ 27	,		\$ (60)	\$ (1)
Business and government Other	5	-	-	-	-	-	(5)	-	-
Other liabilities	(68) (12)) (1) 1	21	_	_	(59)	(10)
	\$ (453)\$ (51))\$ (48)\$ 48	\$ (138)	\$ 524	\$ (119)	
			(.	/	,	. (. ()	()

(1) These amounts include the foreign currency translation gains or losses arising on consolidation of foreign subsidiaries relating to the Level 3 instruments, where applicable. The unrealized gains on Investment securities recognized in OCI were \$1 million for the three months ended July 31, 2020 (July 31, 2019 – gains of \$6 million) and gains of \$30 million for the nine months ended July 31, 2020 (July 31, 2019 – gains of \$35 million), excluding the translation gains or losses arising on consolidation.

(2) Other includes amortization of premiums or discounts recognized in net income.

(3) Net derivatives as at July 31, 2020 included derivative assets of \$736 million (July 31, 2019 – \$476 million) and derivative liabilities of \$1,473 million (July 31, 2019 – \$1,265 million). n.a. not applicable

Transfers between fair value hierarchy levels for instruments carried at fair value on a recurring basis

Transfers between Level 1 and Level 2, and transfers into and out of Level 3 are assumed to occur at the end of the period. For an asset or a liability that transfers into Level 3 during the period, the entire change in fair value for the period is excluded from the Gains (losses) included in earnings for positions still held column of the above reconciliation, whereas for transfers out of Level 3 during the period, the entire change in fair value for the period is included in the same column of the above reconciliation.

Transfers between Level 1 and 2 are dependent on whether fair value is obtained on the basis of quoted market prices in active markets (Level 1).

During the three months ended July 31, 2020, transfers out of Level 1 to Level 2 included Investment U.S. state, municipal and agencies debt of \$268 million.

During the three months ended July 31, 2020, transfers out of Level 2 to Level 1 included Investment U.S. state, municipal and agencies debt of \$937 million.

Transfers between Level 2 and Level 3 are primarily due to either a change in the market observability for an input, or a change in an unobservable input's significance to a financial instrument's fair value.

During the three months ended July 31, 2020, transfers out of Level 2 to Level 3 include:

- \$176 million in Loans, due to changes in the significance of the unobservable inputs.
- During the three months ended July 31, 2020, transfers out of Level 3 to Level 2 include:
- \$98 million of Other contracts, comprised of \$5 million of derivative related assets and \$103 million of derivative related liabilities, due to changes in the significance of the unobservable inputs.

Net interest income from financial instruments

Interest and dividend income arising from financial assets and financial liabilities and the associated costs of funding are reported in Net interest income.

	For the three	months ended	For the nine i	months ended
	July 31	July 31	July 31	July 31
(Millions of Canadian dollars)	2020	2019	2020	2019
Interest and dividend income (1), (2)				
Financial instruments measured at fair value through profit or loss	\$ 1,663	\$ 3,210	\$ 7,084	\$ 8,997
Financial instruments measured at fair value through other comprehensive income	213	298	827	857
Financial instruments measured at amortized cost	6,080	7,102	19,509	21,037
	7,956	10,610	27,420	30,891
Interest expense (1)				
Financial instruments measured at fair value through profit or loss (3)	\$ 1,112	\$ 2,808	\$ 5,107	\$ 7,905
Financial instruments measured at amortized cost (4)	1,705	2,784	6,488	8,348
	2,817	5,592	11,595	16,253
Net interest income (3)	\$ 5,139	\$ 5,018	\$15,825	\$ 14,638

(1) Excludes the following amounts related to our insurance operations and included in Insurance premiums, investment and fee income in the Interim Consolidated Statements of Income. For the three months ended July 31, 2020, Interest income of \$133 million (July 31, 2019 – \$123 million), and Interest expense of \$2 million (July 31, 2019 – \$1 million). For the nine months ended July 31, 2020, Interest income of \$388 million (July 31, 2019 – \$366 million), and Interest expense of \$5 million (July 31, 2019 – \$3 million).

(2) Includes dividend income for the three months ended July 31, 2020 of \$811 million (July 31, 2019 – \$614 million) and for the nine months ended July 31, 2020 of \$2,033 million

(July 31, 2019 – \$1,508 million), which is presented in Interest and dividend income in the Interim Consolidated Statements of Income.

(3) Commencing Q4 2019, the interest component of the valuation of certain deposits carried at FVTPL previously presented in trading revenue is presented in net interest income. Comparative amounts have been reclassified to conform with this presentation.

(4) Includes interest expense on lease liabilities for the three months ended July 31, 2020 of \$31 million and for the nine months ended July 31, 2020 of \$94 million, due to the adoption of IFRS 16.

Note 4 Securities

Unrealized gains and losses on securities at FVOCI (1), (2)

	As at													
		July 3	1, 2020		October 31, 2019									
	Cost/	Gross	Gross		Cost/	Gross	Gross							
	Amortized		unrealized		Amortized	unrealized	unrealized							
(Millions of Canadian dollars)	cost	gains	losses	Fair value	cost	gains	losses	Fair value						
Debt issued or guaranteed by:														
Canadian government														
Federal (3)	\$ 1,501	\$ 5	\$ -	\$ 1,506	\$ 655	\$ 3	\$ (1)	\$ 657						
Provincial and municipal	4,971	178	_	5,149	2,878	43	(23)	2,898						
U.S. state, municipal and agencies (3)	43,918	376	(433)	43,861	20,787	215	(126)	20,876						
Other OECD government	9,323	10	(5)	9,328	4,254	2	(5)	4,251						
Mortgage-backed securities (3)	2,567	9	(76)	2,500	2,709	1	(8)	2,702						
Asset-backed securities														
CDO	7,607	8	(160)	7,455	7,334	1	(35)	7,300						
Non-CDO securities	888	-	(19)	869	847	4	(2)	849						
Corporate debt and other debt	24,361	81	(10)	24,432	17,655	45	(10)	17,690						
Equities	252	256	(4)	504	248	218	(3)	463						
	\$95,388	\$ 923	\$ (707)	\$95,604	\$ 57,367	\$ 532	\$ (213)	\$ 57,686						

Excludes \$49,376 million of held-to-collect securities as at July 31, 2020 that are carried at amortized cost, net of allowance for credit losses (October 31, 2019 – \$44,784 million).
 Gross unrealized gains and losses includes \$17 million of allowance for credit losses on debt securities at FVOCI as at July 31, 2020 (October 31, 2019 – \$(3) million) recognized in

income and Other components of equity.
(3) The majority of the MBS are residential. Cost/Amortized cost, Gross unrealized gains, Gross unrealized losses and Fair value related to commercial MBS are \$2,224 million, \$nil,

\$71 million and \$2,153 million, respectively as at July 31, 2020 (October 31, 2019 – \$2,051 million, \$1 million, \$6 million and \$2,046 million, respectively).

Allowance for credit losses on investment securities

The following tables reconcile the opening and closing allowance for debt securities at FVOCI and amortized cost by stage. Reconciling items include the following:

- Transfers between stages, which are presumed to occur before any corresponding remeasurement of the allowance.
- Purchases, which reflect the allowance related to assets newly recognized during the period, including those assets that were derecognized following a modification of terms.
- Sales and maturities, which reflect the allowance related to assets derecognized during the period without a credit loss being incurred, including those assets that were derecognized following a modification of terms.
- Changes in risk, parameters and exposures, which comprise the impact of changes in model inputs or assumptions, including changes in forward-looking macroeconomic conditions; partial repayments; changes in the measurement following a transfer between stages; and unwinding of the time value discount due to the passage of time.

Note 4 Securities (continued)

Allowance for credit losses – securities at FVOCI (1)

					For	the three m	onths	ende	d				
			July	31, 2020		July 31, 2019							
	Performing			Impo	ired			Perfo	rming		lmp	aired	
(Millions of Canadian dollars)	Stage 1 Stage 2 S		Stage 3 (2)		Total	Stage 1		Stage 2		Stage 3 (2)		Total	
Balance at beginning of period	\$ 23	\$	-	\$	-	\$ 23	\$	5	\$	_	\$	(4)	\$1
Provision for credit losses													
Transfers to stage 1	-		-		-	-		-		-		-	_
Transfers to stage 2	-		-		-	-		-		-		-	-
Transfers to stage 3	-		-		-	-		-		-		-	-
Purchases	4		-		_	4		1		_		-	1
Sales and maturities	(7)		-		-	(7)		(1)		-		_	(1)
Changes in risk, parameters and exposures	(1)		1		(2)	(2)		`-´		-		(2)	(2)
Exchange rate and other	(1)		-		`-´	(1)		-		-		`-´	`_'
Balance at end of period	\$ 18	\$	1	\$	(2)	\$ 17	\$	5	\$	-	\$	(6)	\$ (1)

	For the nine months ended															
				July	31, 202	0		July 31, 2019								
			rming	r S	Imp	oaired				Perfo	orming		Impaired			
(Millions of Canadian dollars)	Stage 1 Sta		ge 2	Stage 3 (2)		Тс	otal	Stage 1		Stage 2		Stage 3 (2)		Total		
Balance at beginning of period Provision for credit losses	\$	4	\$	-	\$	(7)	\$	(3)	\$	4	\$	7	\$	-	\$ 11	
Transfers to stage 1 Transfers to stage 2		_		_		_		_		_		_		-	_	
Transfers to stage 3		_		-		-		-		_		-		-	_	
Purchases Sales and maturities		15 (9)		_		_		15 (9)		4 (2)		(7)		_	4 (9)	
Changes in risk, parameters and exposures Exchange rate and other		8 -		1 -		6 (1)		15 (1)		(1) _		_		(6)	(7)	
Balance at end of period	\$	18	\$	1	\$	(2)	\$	17	\$	5	\$	-	\$	(6)	\$ (1)	

Expected credit losses on debt securities at FVOCI are not separately recognized on the balance sheet as the related securities are recorded at fair value. The cumulative amount of credit losses recognized in income is presented in Other components of equity. Reflects changes in the allowance for purchased credit impaired securities. (1)

(2)

Allowance for credit losses – securities at amortized cost

	For the three months ended														
-				July 3	31, 20	020		July 31, 2019							
		Perfo	rmin	g	Ir	mpaired			Perfo	rmir	ming Impaired				
(Millions of Canadian dollars)	Stage 1 Stag		age 2	Stage 3		Total	Stage 1		Stage 2		Stage 3		Total		
Balance at beginning of period Provision for credit losses	\$	9	\$	20	\$	_	\$ 29	\$	7	\$	23	\$	_	\$ 30	
Provision for credit losses															
Transfers to stage 1		-		_		-	-		-		_		-	_	
Transfers to stage 2		-		-		-	-		-		-		-	-	
Transfers to stage 3		-		_		-	-		-		_		-	_	
Purchases		1		-		-	1		2		-		-	2	
Sales and maturities		(1)		-		-	(1)		(1)		-		-	(1)	
Changes in risk, parameters and exposures		1		_		-	1		_		(3)		-	(3)	
Exchange rate and other		-		(1)		-	(1)		(1)		1		-		
Balance at end of period	\$	10	\$	19	\$	-	\$ 29	\$	7	\$	21	\$	-	\$ 28	

	For the nine months ended															
				July 3	31, 20	020			July 31, 2019							
		Perfo	rmin	g	lr	npaired				Perfo	rmin	ıg	lmp	aired		
(Millions of Canadian dollars)	Stage 1 St		Stage 2		Stage 3		To	otal	Stage 1		Stage 2		Stage 3		- Total	
Balance at beginning of period	\$	5	\$	19	\$	-	\$	24	\$	6	\$	32	\$	_	\$ 38	
Provision for credit losses																
Transfers to stage 1		-		-		-		-		-		-		_	-	
Transfers to stage 2		-		_		-		-		-		-		_	-	
Transfers to stage 3		-		_		-		-		-		-		_	-	
Purchases		6		-		-		6		6		-		-	6	
Sales and maturities		(2)		_		-		(2)		(1)		-		_	(1)	
Changes in risk, parameters and exposures		1		1		-		2		(3)		(13)		_	(16)	
Exchange rate and other		-		(1)		-		(1)		(1)		2		-	1	
Balance at end of period	\$	10	\$	19	\$	-	\$	29	\$	7	\$	21	\$	-	\$ 28	

Credit risk exposure by internal risk rating

The following table presents the fair value of debt securities at FVOCI and gross carrying amount of securities at amortized cost. Risk ratings are based on internal ratings used in the measurement of expected credit losses, as at the reporting date as outlined in the internal ratings maps in the Credit risk section of our 2019 Annual Report.

				As	at			
		July 3	31, 2020			Octob	er 31, 2019	
	Perform	ning	Impaired		Perform	ning	Impaired	
(Millions of Canadian dollars)	Stage 1	Stage 2	Stage 3 (1)	Total	Stage 1	Stage 2	Stage 3 (1)	Total
Investment securities Securities at FVOCI Investment grade	\$ 94,419	\$89	\$ -	\$ 94,508	\$ 56,671	\$ 1	\$ -	\$ 56,672
Non-investment grade Impaired	433	1	- 159	434 159	400 -	1	150	401 150
Items not subject to impairment (2)	\$ 94,852	\$ 90	\$ 159	\$ 95,101 503	\$ 57,071	\$ 2	\$ 150	\$ 57,223 463
				95,604				57,686
Securities at amortized cost Investment grade Non-investment grade	\$ 48,435 605	\$ – 365	\$ – –	\$ 48,435 970	\$ 43,681 695	\$ 46 386	\$ – –	\$ 43,727 1,081
Allowance for credit losses	\$ 49,040 10	\$ 365 19	\$ -	\$ 49,405 29	\$ 44,376 5	\$ 432 19	\$ – –	\$ 44,808 24
Amortized cost	\$ 49,030	\$ 346	\$ –	\$ 49,376	\$ 44,371	\$ 413	\$ -	\$ 44,784

(1) Includes \$159 million of purchased credit impaired securities (October 31, 2019 – \$150 million).

(2) Investment securities at FVOCI not subject to impairment represent equity securities designated as FVOCI.

Note 5 Loans and allowance for credit losses

Allowance for credit losses

	For the three months ended													
			July 31, 2020					July 31, 2019						
(Millions of Canadian dollars)	Balance at beginning of period	Provision for credit losses	Net write-offs	Exchange rate and other	Balance at end of period	Balance at beginning of period	Provision for credit losses	Net write-offs	Exchange rate and other	Balance at end of period				
Retail														
Residential mortgages	\$ 484	\$ 62	\$ (7)	\$ (8)	\$ 531	\$ 395	\$ 29	\$ (10)	\$ (5)	\$ 409				
Personal	1,258	166	(111)	(12)	1,301	922	127	(116)	(1)	932				
Credit cards	1,121	238	(111)) (1)	1,247	790	130	(130)	(1)	789				
Small business	107	13	(7)	(4)	109	49	12	(7)	(1)	53				
Wholesale	2,790	200	(151)	(66)	2,773	1,108	133	(89)	(37)	1,115				
Customers' liability under														
acceptances	105	(1)	-	-	104	26	(2)	-	(1)	23				
	\$ 5,865	\$ 678	\$ (387)	\$ (91)	\$ 6,065	\$ 3,290	\$ 429	\$ (352)	\$ (46)	\$ 3,321				
Presented as:														
Allowance for loan losses	\$ 5,230				\$ 5,509	\$ 3,093				\$ 3,131				
Other liabilities – Provisions	529				445	171				167				
Customers' liability under														
acceptances	105				104	26				23				
Other components of equity	1				7	-				-				

					For the nine m	onths ended				
			July 31, 2020					July 31, 2019		
(Millions of Canadian dollars)	Balance at beginning of period	Provision for credit losses	Net write-offs	Exchange rate and other	Balance at end of period	Balance at beginning of period	Provision for credit losses	Net write-offs	Exchange rate and other	Balance at end of period
Retail Residential mortgages Personal Credit cards Small business Wholesale Customers' liability under acceptances	\$ 402 935 832 61 1,165 24	\$ 181 724 808 77 1,962 81	\$ (23) (341) (392) (24) (259)	\$ (29) (17) (1) (5) (95) (1)	\$ 531 1,301 1,247 109 2,773 104	\$ 382 895 760 51 979 21	\$ 60 398 405 25 495 3	\$ (30) (346) (375) (20) (305)	\$ (3) (15) (1) (3) (54) (1)	\$ 409 932 789 53 1,115 23
	\$ 3,419	\$ 3,833	\$(1,039)	,		\$ 3,088	\$1,386	\$(1,076)		\$ 3,321
Presented as: Allowance for loan losses Other liabilities – Provisions Customers' liability under acceptances Other components of equity	\$ 3,100 295 24	¥ 5,655		• (110)	\$ 5,509 445 104 7	\$ 2,912 154 21 1			<u> </u>	\$ 3,131 167 23

The following tables reconcile the opening and closing allowance for each major product of loans and commitments as determined by our modelled, scenario-weighted allowance and the application of expert credit judgment as applicable. Reconciling items include the following:

• Transfers between stages, which are presumed to occur before any corresponding remeasurements of the allowance.

• Originations, which reflect the allowance related to assets newly recognized during the period, including those assets that were derecognized following a modification of terms.

• Maturities, which reflect the allowance related to assets derecognized during the period without a credit loss being incurred, including those assets that were derecognized following a modification of terms.

• Changes in risk, parameters and exposures, which comprise the impact of changes in model inputs or assumptions, including changes in forward-looking macroeconomic conditions; partial repayments and additional draws on existing facilities; changes in the measurement following a transfer between stages; and unwinding of the time value discount due to the passage of time in stage 1 and stage 2.

Allowance for credit losses – Retail and wholesale loans

	For the three months ended															
				July 31								July 3				
(Millions of Canadian dollars)		Perfo		<u> </u>		paired		Total		Perfo				paired		Total
(Millions of Canadian dollars) Residential mortgages	_	Stage 1		Stage 2		Stage 3		Total		Stage 1		Stage 2		Stage 3		Total
Balance at beginning of period	\$	114	\$	223	\$	147	\$	484	\$	140	\$	63	\$	192	\$	395
Provision for credit losses		50		(50)						21		(1c)		(5)		
Transfers to stage 1 Transfers to stage 2		56 (5)		(50) 8		(6) (3)		_		21 (4)		(16) 4		(5)		_
Transfers to stage 3		(3)		(11)		11		-		(1)		(6)		7		_
Originations		24		_		-		24		12		-		-		12
Maturities Changes in risk, parameters and exposures		(4) (26)		(4) 61		- 11		(8) 46		(4) (19)		(3) 28		- 15		(7) 24
Write-offs		()		-		(9)		(9)		(,		_		(12)		(12)
Recoveries		- (2)		-		2		2		- (1)		_		2		2
Exchange rate and other Balance at end of period	\$	(2) 157	\$	(4) 223	\$	(2)	\$	(8) 531	\$	(1) 144	\$	70	\$	(4) 195	\$	(5) 409
· · · · · · · · · · · · · · · · · · ·	Ŷ	157	Ŷ	225	- Y	151	Ŷ	551	Ŷ	144	Ŷ	70	Ŷ	175	Ŷ	40.7
Personal Balance at beginning of period	\$	343	\$	757	\$	158	\$	1,258	\$	238	\$	555	\$	129	\$	922
Provision for credit losses	*	0.0	Ŧ		*		*	.,	Ŧ	200	Ŧ	000	Ŧ	,	Ŧ	222
Transfers to stage 1		110		(109)		(1)		-		154		(154)		-		-
Transfers to stage 2 Transfers to stage 3		(25)		25 (16)		_ 16		_		(20)		20 (41)		- 41		_
Originations		27		·		_		27		27		` _ ´		-		27
Maturities		(12)		(26)		- 74		(38)		(8) (148)		(30)		_ 76		(38) 138
Changes in risk, parameters and exposures Write-offs		(43)		146		(141)		177 (141)		(148)		210		(148)		(148)
Recoveries		-		-		` 30		` 30´		-		-		`32 [′]		`32 [′]
Exchange rate and other		1		(1)		(12)		(12)		-		-		(1)		(1)
Balance at end of period	\$	401	\$	776	\$	124	\$	1,301	\$	243	\$	560	\$	129	\$	932
Credit cards												60.4				
Balance at beginning of period Provision for credit losses	\$	246	\$	875	\$	-	Ş	1,121	\$	166	\$	624	\$	-	\$	790
Transfers to stage 1		84		(84)		-		-		116		(116)		-		_
Transfers to stage 2		(23)		23		-		-		(19)		19		-		-
Transfers to stage 3 Originations		(1)		(101)		102		- 1		- 1		(88)		88		-
Maturities		(2)		(8)		-		(10)		(2)		(8)		-		(10)
Changes in risk, parameters and exposures		26		212		9		247		(94)		191		42		139
Write-offs Recoveries		_		_		(143) 32		(143) 32		_		_		(167) 37		(167) 37
Exchange rate and other		(1)		-				(1)		1		(2)		-		(1)
Balance at end of period	\$	330	\$	917	\$	-	\$	1,247	\$	169	\$	620	\$	-	\$	789
Small business												. –		. –		
Balance at beginning of period Provision for credit losses	\$	56	\$	21	\$	30	\$	107	\$	15	\$	17	\$	17	\$	49
Transfers to stage 1		5		(5)		_		-		5		(5)		-		_
Transfers to stage 2		(2)		2		_		-		-		-		-		-
Transfers to stage 3 Originations		(1) 4		-		1		- 4		- 2		(3)		3		- 2
Maturities		(2)		(3)		-		(5)		(1)		(2)		-		(3)
Changes in risk, parameters and exposures		(6)		7		13		14		(4)		9		8		13
Write-offs Recoveries		_		_		(9) 2		(9) 2		_		-		(9) 2		(9) 2
Exchange rate and other		(1)		(1)		(2)		(4)		-		-		(1)		(1)
Balance at end of period	\$	53	\$	21	\$	35	\$	109	\$	17	\$	16	\$	20	\$	53
Wholesale	_															
Balance at beginning of period Provision for credit losses	\$	1,246	\$	807	\$	737	\$	2,790	\$	293	\$	358	\$	457	\$	1,108
Transfers to stage 1		6		(5)		(1)		_		35		(34)		(1)		_
Transfers to stage 2		(111)		112		(1)		-		(8)		9		(1)		-
Transfers to stage 3 Originations		(11) 206		(47)		58		206		(2) 55		(15) 12		17		67
Originations Maturities		(233)		(100)		_		(333)		55 (39)		(39)		_		(78)
Changes in risk, parameters and exposures		(38)		250		115		327		(51)		86		109		144
Write-offs Recoveries		_		-		(163)		(163)		-		-		(101)		(101)
Recoveries Exchange rate and other		(19)		(13)		12 (34)		12 (66)		(3)		(2)		12 (32)		12 (37)
Balance at end of period	Ś	1,046	\$	1,004	\$	723	\$	2,773	\$	280	\$	375	\$	460	\$	1,115
r · · · ·		,						, -				-				, -

Note 5 Loans and allowance for credit losses (continued)

							For	the nine n	nonth	is ended						
				July 31,	2020)						July 31	, 2019			
		Perfo		<u> </u>		paired				Perfo	,			paired		
(Millions of Canadian dollars)	_	Stage 1		Stage 2		Stage 3		Total		Stage 1		Stage 2		Stage 3		Total
Residential mortgages Balance at beginning of period Provision for credit losses	\$	146	\$	77	\$	179	\$	402	\$	142	\$	64	\$	176	\$	382
Transfers to stage 1 Transfers to stage 2		116 (31)		(89) 37		(27) (6)		_		64 (9)		(52) 11		(12) (2)		_
Transfers to stage 3		(2)		(26)		28		_		(2)		(24)		26		_
Originations		51		-		-		51		35		-		-		35
Maturities Changes in risk, parameters and exposures		(11) (110)		(11) 249		- 13		(22) 152		(10) (76)		(6) 77		40		(16) 41
Write-offs		-		_		(31)		(31)		-		-		(34)		(34)
Recoveries Exchange rate and other		(2)		- (14)		8 (13)		8 (29)		-		-		4 (3)		4 (3)
Balance at end of period	\$	157	\$	223	\$	151	\$	531	\$	144	\$	70	\$	195	\$	409
Personal											-		-			
Balance at beginning of period	\$	272	\$	520	\$	143	\$	935	\$	242	\$	512	\$	141	\$	895
Provision for credit losses Transfers to stage 1		339		(335)		(4)		_		428		(422)		(6)		_
Transfers to stage 2		(81)		82		(1)		_		(66)		67		(1)		_
Transfers to stage 3		(2) 80		(55)		57		- 80		(1)		(125)		126		_ 74
Originations Maturities		(35)		(73)		_		(108)		73 (20)		1 (87)		_		(107)
Changes in risk, parameters and exposures		(174)		639		287		752		(414)		614		231		`431 [′]
Write-offs Recoveries		_		_		(438) 97		(438) 97		_		_		(440) 94		(440) 94
Exchange rate and other		2		(2)		(17)		(17)		1		-		(16)		(15)
Balance at end of period	\$	401	\$	776	\$	124	\$	1,301	\$	243	\$	560	\$	129	\$	932
Credit cards	_															
Balance at beginning of period Provision for credit losses	\$	173	\$	659	\$	-	\$	832	\$	161	\$	599	\$	-	\$	760
Transfers to stage 1 Transfers to stage 2		319 (70)		(319) 70		_		_		344 (58)		(344) 58		-		-
Transfers to stage 3		(2)		(283)		285		-		(1)		(251)		252		-
Originations Maturities		6		(22)		-		6 (29)		3 (4)		_ (19)		-		3 (23)
Changes in risk, parameters and exposures		(7) (88)		812		107		831		(276)		578		123		425
Write-offs		`_`		-		(490)		(490)		_		-		(478)		(478)
Recoveries Exchange rate and other		(1)		_		98 -		98 (1)		_		(1)		103		103 (1)
Balance at end of period	\$	330	\$	917	\$	-	\$	1,247	\$	169	\$	620	\$	_	\$	789
Small business																
Balance at beginning of period	\$	29	\$	10	\$	22	\$	61	\$	17	\$	16	\$	18	\$	51
Provision for credit losses Transfers to stage 1		10		(10)		_		_		16		(16)		_		_
Transfers to stage 2		(5)		5		-		-		(2)		2		-		-
Transfers to stage 3 Originations		(1) 12		(1)		2		- 12		- 7		(8)		8		- 7
Maturities		(5)		(4)		-		(9)		(3)		(6)		-		(9)
Changes in risk, parameters and exposures Write-offs		14		22		38		74		(18)		28		17		27
Recoveries		_		_		(29) 5		(29) 5		_		_		(26) 6		(26) 6
Exchange rate and other		(1)		(1)		(3)		(5)		-		-		(3)		(3)
Balance at end of period	\$	53	\$	21	\$	35	\$	109	\$	17	\$	16	\$	20	\$	53
Wholesale Balance at beginning of period	\$	281	\$	396	\$	488	ċ	1,165	\$	274	\$	340	\$	365	\$	979
Provision for credit losses	Ş	201	Ş	590	Ş	100	Ş	1,105	Ş	274	Ş	540	Ş	202	Ş	213
Transfers to stage 1		72		(69)		(3)		-		113		(103)		(10)		-
Transfers to stage 2 Transfers to stage 3		(156) (13)		158 (92)		(2) 105		_		(25) (5)		28 (48)		(3) 53		_
Originations		685		-		-		685		182		39		-		221
Maturities Changes in risk, parameters and exposures		(310) 500		(195) 812		- 470		(505) 1,782		(128) (130)		(118) 235		- 415		(246) 520
Write-offs		500		- 012		(299)		(299)		(130)		235		(337)		(337)
Recoveries		-		-		40		40		_ (1)		-		32		32
Exchange rate and other	<u></u>	(13)	ć	(6)	ć	(76)		(95)	ć	(1)	~	2	~	(55)	ć	(54)
Balance at end of period	Ş	1,046	Ş	1,004	\$	723	\$.	2,773	\$	280	\$	375	\$	460	Ş	1,115

Key inputs and assumptions

The following provides an update on the key inputs and assumptions used in the measurement of expected credit losses. For further details, refer to Note 2 of our Condensed Financial Statements, and Note 2 and Note 5 of our 2019 Annual Report.

The COVID-19 global pandemic significantly impacted our economic outlook, which has a higher than usual degree of uncertainty given the rapidly evolving environment. Our allowance for credit losses reflects our economic outlook as at July 31, 2020. Subsequent changes to this forecast and related estimates will be reflected in our allowance for credit losses in future periods.

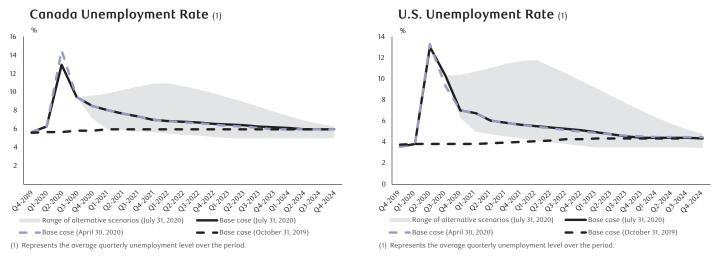
Our base scenario reflects a sharp drop in economic activity in Q2 followed by a partial recovery in the second half of the year as containment measures continue to unwind gradually. The recovery is expected to be gradual with the unemployment rate remaining above pre-shock lows at the end of calendar 2020.

Downside scenarios reflect the possibility of a more prolonged recovery period and the possibility of subsequent waves, with conditions deteriorating further for up to two years, followed by a recovery for the remainder of the period. These scenarios assume a monetary policy response that returns the economy to a long-run, sustainable growth rate within the forecast period.

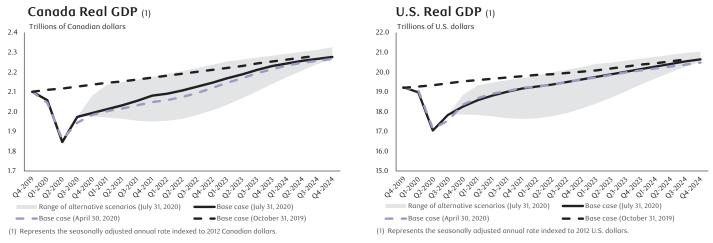
The upside scenario reflects stronger economic growth than the base scenario for the first two years, without further monetary policy responses, followed by a return to a long-run sustainable growth rate within the forecast period.

The following provides additional detail about our forecasts for certain key macroeconomic variables used in the models to estimate ACL:

• Unemployment – Quarterly average Canadian and U.S. unemployment both peaked at 13.0% last quarter. In calendar Q3 2020, unemployment rates are expected to decline to 9.5% in Canada and 10.3% in the U.S. For the remainder of the year, we expect unemployment to remain elevated with continuous improvement thereafter.



• Gross Domestic Product (GDP) – Canadian and U.S. GDP hit historical troughs in calendar Q2 2020 at 12.1% and 11.4% below calendar Q4 2019 peak levels, respectively. We expect GDP in calendar Q3 2020 to be 6.2% below Q4 2019 levels in Canada and 7.2% below such levels in the U.S. We expect GDP to remain below 2019 levels throughout the remainder of the year with continuous improvement thereafter.



• Oil price (West Texas Intermediate in US\$) – In our base forecast, we expect oil prices to recover from trough prices in April 2020 to an average price of \$42 per barrel over the next 12 months and \$48 per barrel in the following 2 to 5 years. The range of average prices in our alternative downside and upside scenarios is \$22 to \$48 per barrel for the next 12 months and \$35 to \$49 per barrel for the following 2 to 5 years. As at October 31, 2019, our base forecast included an average price of \$59 per barrel for the next 12 months and \$68 per barrel for the following 2 to 5 years.

Note 5 Loans and allowance for credit losses (continued)

• Canadian housing price index – In our base forecast, we expect housing prices to contract by 4.1% over the next 12 months, with a compound annual growth rate of 4.8% for the following 2 to 5 years. The range of annual housing price growth (contraction) in our alternative downside and upside scenarios is (29.6)% to 6.1% over the next 12 months and 2.3% to 11.1% for the following 2 to 5 years. As at October 31, 2019, our base forecast included housing price growth of 4.5% for the next 12 months and 4.7% for the following 2 to 5 years.

As described above, our base case scenario reflects a stressed environment as at July 31, 2020, reflective of current market conditions. In determining our IFRS 9 allowance for credit losses, we reassessed our scenario weights to more heavily weight the base case scenario relative to October 31, 2019. The possibility of a more prolonged recovery period, including the potential of subsequent waves has been reflected in our scenario weights, and expert credit judgement has been applied to the weighted modelled results. As the stressed base case scenario remains more heavily weighted relative to October 31, 2019, further downside scenarios did not have a material impact on the allowance for credit losses.

Credit risk exposure by internal risk rating

The following table presents the gross carrying amount of loans measured at amortized cost, and the full contractual amount of undrawn loan commitments subject to the impairment requirements of IFRS 9. Risk ratings are based on internal ratings used in the measurement of expected credit losses as at the reporting date, as outlined in the internal ratings maps for Wholesale and Retail facilities in the Credit risk section of our 2019 Annual Report.

	As at July 31, 2020 October 31, 2019															
				July 31	, 20 2	20						Octobe	r 31, 2	2019		
(Millions of Canadian dollars)		Stage 1		Stage 2		Stage 3		Total		Stage 1		Stage 2		Stage 3		Total
Retail Loans outstanding – Residential mortgages Low risk Medium risk High risk Not rated (1) Impaired	\$	249,099 13,961 3,767 42,624	\$	15,099 1,776 2,141 940 -	\$	- - - 677	\$	264,198 15,737 5,908 43,564 677	\$	238,377 14,033 2,843 40,030	\$	6,764 1,347 2,722 726	\$	- - - 732	\$	245,141 15,380 5,565 40,756 732
•	-	309,451		19,956		677		330,084		295,283		11,559		732		307,574
Items not subject to impairment (2)								256								517
Total								330,340								308,091
Loans outstanding – Personal Low risk Medium risk High risk Not rated (1) Impaired	\$	69,576 3,837 729 7,226 –	\$	2,067 4,669 1,599 131 –	\$	- - - 308	\$	71,643 8,506 2,328 7,357 308	\$	71,619 5,254 843 7,293 –	\$	1,944 3,011 1,874 105 –	\$	- - - 307	\$	73,563 8,265 2,717 7,398 307
Total		81,368		8,466		308		90,142		85,009		6,934		307		92,250
Loans outstanding – Credit cards Low risk Medium risk High risk Not rated (1)	\$	11,703 1,582 122 498	\$	81 2,414 1,222 53	\$	- - -	\$	11,784 3,996 1,344 551	\$	13,840 2,250 137 677	\$	103 1,827 1,432 45	\$	- - -	\$	13,943 4,077 1,569 722
Total		13,905		3,770		-		17,675	-	16,904		3,407		_		20,311
Loans outstanding – Small business Low risk Medium risk High risk Not rated (1) Impaired	\$	2,166 2,006 155 10	\$	198 838 217 –	\$	- - - 98	\$	2,364 2,844 372 10 98	\$	2,200 2,163 138 10	\$	107 563 196 –	\$	- - - 57	\$	2,307 2,726 334 10 57
Total	-	4,337		1,253		98		5,688		4,511		866		57		5,434
Undrawn Ioan commitments – Retail Low risk Medium risk High risk Not rated (1)	\$	211,554 9,588 1,043 5,529	\$	2,817 259 159 128	\$	- - -	\$	214,371 9,847 1,202 5,657	\$	196,743 8,251 851 5,861	\$	1,894 246 208 146	\$	- - -	\$	198,637 8,497 1,059 6,007
Total		227,714		3,363		-		231,077		211,706		2,494		-		214,200
Wholesale – Loans outstanding Investment grade Non-investment grade Not rated (1) Impaired	\$	52,885 116,521 6,914 –	\$	523 29,298 421 –	\$	- - 2,719	\$	53,408 145,819 7,335 2,719	\$	47,133 119,778 5,862 –	\$	97 11,940 320 -	\$	- - 1,829	Ş	47,230 131,718 6,182 1,829
		176,320		30,242		2,719		209,281		172,773		12,357		1,829		186,959
Items not subject to impairment (2)								8,324								8,911
Total								217,605								195,870
Undrawn loan commitments – Wholesale Investment grade Non-investment grade Not rated (1)	\$	83,919 3,556	\$	3,007 23,633 –	\$		\$	243,936 107,552 3,556	\$	222,819 96,191 3,986	\$	18 9,007 –	\$	- - -	Ş	222,837 105,198 3,986
Total		328,404		26,640		-		355,044		322,996		9,025		-		332,021

 In certain cases where an internal risk rating is not assigned, we use other approved credit risk assessment or rating methodologies, policies and tools to manage our credit risk.

(2) Items not subject to impairment are loans held at FVTPL.

Loans past due but not impaired (1)

		As at													
				July 31	, 202	0						October	31, 201	19	
		90 days 1 to 29 days 30 to 89 days and greater Total										90 days			
(Millions of Canadian dollars)	1 to 2	9 days	30 to	o 89 days	and	greater		Total	1 t	o 29 days	30 t	o 89 days	and	greater	 Total
Retail	\$ 2	2,119	\$	686	\$	171	\$	2,976	\$	3,173	\$	1,369	\$	186	\$ 4,728
Wholesale	2	2,332		543		14		2,889		1,543		460		3	2,006
	\$ 4	1,451	\$	1,229	\$	185	\$	5,865	\$	4,716	\$	1,829	\$	189	\$ 6,734

(1) Loans in our payment deferral programs established to help clients manage through the challenges of COVID-19 have been re-aged to current and will not be aged further during the deferral period. Amounts presented may include loans past due as a result of administrative processes, such as mortgage loans on which payments are restrained pending payout due to sale or refinancing. Past due loans arising from administrative processes are not representative of the borrowers' ability to meet their payment obligations.

Loan modifications

We have established relief programs to help clients manage through challenges of COVID-19 through payment deferrals, interest rate reductions, covenant waivers, and refinancing or credit restructuring. In some cases, the original terms of the associated loans were renegotiated or otherwise modified, resulting in changes to the contractual terms of the loans that affect the contractual cash flows. During the nine months ended July 31, 2020, the amortized cost of the loans whose contractual terms were modified while in Stage 2 or Stage 3 at the quarter ended before the modification was \$8,213 million, resulting in no material modification losses. The gross carrying amount of loans transferred to Stage 1 whose contractual terms were previously modified while in Stage 2 or Stage 3 was not material for the nine months ended July 31, 2020.

Note 6 Deposits

	 				As	at					
		July	31,	2020				Octobe	r 31	l, 2019	
(Millions of Canadian dollars)	Demand (1)	Notice (2)		Term (3)	Total		Demand (1)	Notice (2)		Term (3)	Total
Personal	\$ 174,116	\$ 59,138	\$	103,942	\$ 337,196	\$	143,958	\$ 49,806	\$	100,968	\$ 294,732
Business and government	303,596	15,178		321,510	640,284		253,113	13,867		298,502	565,482
Bank	11,658	1,054		26,966	39,678		8,363	920		16,508	25,791
	\$ 489,370	\$ 75,370	\$	452,418	\$ 1,017,158	\$	405,434	\$ 64,593	\$	415,978	\$ 886,005
Non-interest-bearing (4)											
Canada	\$ 116,310	\$ 7,211	\$	279	\$ 123,800	\$	93,163	5,692		137	\$ 98,992
United States	40,280	_		-	40,280		34,632	-		-	34,632
Europe (5)	607	-		-	607		760	-		-	760
Other International	7,295	-		-	7,295		5,225	5		-	5,230
Interest-bearing (4)											
Canada	275,523	18,190		342,387	636,100		228,386	15,306		333,118	576,810
United States	6,835	49,208		54,815	110,858		4,704	39,626		41,776	86,106
Europe (5)	34,983	761		40,238	75,982		33,073	825		30,090	63,988
Other International	7,537	-		14,699	22,236		5,491	3,139		10,857	19,487
	\$ 489,370	\$ 75,370	\$	452,418	\$ 1,017,158	\$	405,434	\$ 64,593	\$	415,978	\$ 886,005

Demand deposits are deposits for which we do not have the right to require notice of withdrawal, which includes both savings and chequing accounts.

(2) Notice deposits are deposits for which we can legally require notice of withdrawal. These deposits are primarily savings accounts.

(3) Term deposits are deposits payable on a fixed date, and include term deposits, guaranteed investment certificates and similar instruments.

(4) The geographical splits of the deposits are based on the point of origin of the deposits and where the revenue is recognized. As at July 31, 2020, deposits denominated in U.S. dollars, British pounds, Euro and other foreign currencies were \$363 billion, \$33 billion, \$54 billion and \$36 billion, respectively (October 31, 2019 – \$321 billion, \$23 billion, \$45 billion and \$31 billion, respectively).

(5) Europe includes the United Kingdom, Luxembourg, the Channel Islands, France and Italy.

Contractual maturities of term deposits

	As	at
	July 31	October 31
(Millions of Canadian dollars)	2020	2019
Within 1 year:		
less than 3 months	\$ 148,622	\$ 94,585
3 to 6 months	45,552	62,814
6 to 12 months	97,289	92,507
1 to 2 years	36,443	50,055
2 to 3 years	28,956	31,852
3 to 4 years	35,142	31,373
4 to 5 years	24,658	21,130
Over 5 years	35,756	31,662
	\$ 452,418	\$ 415,978
Aggregate amount of term deposits in denominations of one hundred thousand dollars or more	\$ 415,000	\$ 379,000

Note 7 Employee benefits – Pension and other post-employment benefits

We offer a number of defined benefit and defined contribution plans which provide pension and post-employment benefits to eligible employees. The following tables present the composition of our pension and other post-employment benefit expense and the effects of remeasurements recorded in other comprehensive income.

Pension and other post-employment benefit expense

		F	or the three	month	s ended		
	Pensio	on plans	5	Other	post-employ	ment b	enefit plans
	July 31		July 31		July 31		July 31
(Millions of Canadian dollars)	2020		2019		2020		2019
Current service costs	\$ 92	\$	74	\$	13	\$	10
Past service costs	-		-		5		-
Net interest expense (income)	4		(5)		14		16
Remeasurements of other long term benefits	-		-		5		4
Administrative expense	4		4		-		-
Defined benefit pension expense	\$ 100	\$	73	\$	37	\$	30
Defined contribution pension expense	56		50		-		-
	\$ 156	\$	123	\$	37	\$	30

		F	or the nine	months	ended		
	Pensio	n plans		Other	post-employ	ment b	enefit plans
	July 31		July 31		July 31		July 31
(Millions of Canadian dollars)	2020		2019		2020		2019
Current service costs	\$ 275	\$	222	\$	36	\$	29
Past service costs	-		-		5		-
Net interest expense (income)	14		(15)		44		49
Remeasurements of other long term benefits	-		-		9		10
Administrative expense	13		12		-		-
Defined benefit pension expense	\$ 302	\$	219	\$	94	\$	88
Defined contribution pension expense	174		161		-		-
	\$ 476	\$	380	\$	94	\$	88

Pension and other post-employment benefit remeasurements (1)

			For the three	months en	ded		
	_	Defined benefit	ment be	enefit plans			
(Millions of Canadian dollars)		July 31 2020	July 31 2019		July 31 2020		July 31 2019
Actuarial (gains) losses: Changes in financial assumptions (2) Experience adjustments		\$ 1,587	\$ 932	\$	147	\$	63 (3)
Return on plan assets (excluding interest based on discount rate)		_ (977)	(203)		(7)		(3)
		\$ 610	\$ 729	\$	140	\$	60

		For the nine	months	ended		
	 Defined benefit	pension plans	Other	enefit plans		
	July 31	July 31		July 31		July 31
(Millions of Canadian dollars)	2020	2019		2020		2019
Actuarial (gains) losses:						
Changes in financial assumptions (2)	\$ 1,625	\$ 2,192	\$	148	\$	180
Experience adjustments	-	-		(9)		(6)
Return on plan assets (excluding interest based on discount rate)	 (1,000)	(921)		-		-
	\$ 625	\$ 1,271	\$	139	\$	174

(1) Market based assumptions, including Changes in financial assumptions and Return on plan assets, are reviewed on a quarterly basis. All other assumptions are updated during our annual review of plan assumptions.

(2) Changes in financial assumptions in our defined benefit pension plans primarily relate to changes in discount rates.

Note 8 Income taxes

Tax examinations and assessments

During the third quarter, we received proposal letters (the Proposals) from the Canada Revenue Agency (CRA), in respect of the 2015 taxation year, which suggests that Royal Bank of Canada owes additional taxes of approximately \$350 million as they have denied the deductibility of certain dividends. This amount represents the maximum additional taxes owing for that year. The Proposals are consistent with the previously received reassessments, which were described in Note 23 of our 2019 Annual Consolidated Financial Statements. It is possible that the CRA will reassess us for significant additional income taxes for subsequent years on the same basis. In all cases, we are confident that our tax filing position was appropriate and intend to defend ourselves vigorously.

Note 9 Significant capital and funding transactions

Preferred shares and other equity instruments

On December 17, 2019, we purchased for cash 200,000 depositary shares, each representing a one-fortieth interest in a share of our Fixed Rate/Floating Rate Non-Cumulative First Preferred Shares, Series C-2 (C-2 Preferred Shares), for aggregate total consideration, including accrued dividends, of US\$6 million. The purchased depositary and underlying C-2 Preferred Shares were subsequently cancelled. The C-2 Preferred Shares do not qualify as Tier 1 regulatory capital.

On July 28, 2020, we issued \$1,750 million of Limited Recourse Capital Notes Series 1 (LRCN Series 1) with recourse limited to assets (Trust Assets) held by a third party trustee in a consolidated trust (Limited Recourse Trust). The Trust Assets consist of \$1,750 million of our First Preferred Shares, Series BQ (Series BQ Preferred Shares) issued concurrently with LRCN Series 1 at a price of \$1,000 per Series BQ Preferred Share.

The price per note is \$1,000 and will bear interest paid semi-annually at a fixed rate of 4.5% per annum until November 24, 2025 and thereafter at a rate per annum equal to the 5-year Government of Canada Yield plus 4.137% until maturity on November 24, 2080. In the event of (i) non-payment of interest on any interest payment date, (ii) non-payment of the redemption price in case of a redemption of LRCN Series 1, (iii) non-payment of principal at the maturity of LRCN Series 1, or (iv) an event of default on the notes, noteholders will have recourse only to the Trust Assets and each noteholder will be entitled to receive its pro rata share of the Trust Assets. In such an event, the delivery of the Trust Assets will represent the full and complete extinguishment of our obligations under LRCN Series 1.

LRCN Series 1 are redeemable on or prior to maturity to the extent we redeem Series BQ Preferred Shares on certain redemption dates as set out in the terms of Series BQ Preferred Shares and subject to the consent and approval of OSFI.

The terms of Series BQ Preferred Shares and LRCN Series 1 include non-viability contingency capital (NVCC) provisions necessary for them to qualify as Tier 1 regulatory capital under Basel III. NVCC provisions require the conversion of the instrument into a variable number of common shares in the event that OSFI deems the Bank non-viable or a federal or provincial government in Canada publicly announces that the Bank has accepted or agreed to accept a capital injection. In such an event, LRCN Series 1 will be automatically redeemed and the redemption price will be satisfied by the delivery of Trust Assets, which will consist of common shares pursuant to an automatic conversion of Series BQ Preferred Shares. The terms of Series BQ Preferred Shares include an automatic conversion formula with a conversion price based on the greater of: (i) a floor price of \$5.00 and (ii) the current market price of our common shares based on the volume weighted average trading price of our common shares on the Toronto Stock Exchange. The number of common shares issued in respect of each Series BQ Preferred Shares will be determined by dividing the share value of Series BQ Preferred Shares (including declared and unpaid dividends) by the conversion price. The number of common shares delivered to each noteholder will be based on such noteholder's pro rata interest in the Trust Assets.

LRCN Series 1 are compound instruments with both equity and liability features as payments of interest and principal in cash are made at our discretion. Non-payment of interest and principal in cash does not constitute an event of default and will trigger a delivery of Series BQ Preferred Shares. The liability component of the notes has a nominal value and, as a result, the full proceeds received have been presented as equity.

Note 9 Significant capital and funding transactions (continued)

Subordinated debentures

On December 6, 2019, we redeemed all \$2,000 million of our outstanding 2.99% subordinated debentures due on December 6, 2024 for 100% of their principal amount plus interest accrued to, but excluding, the redemption date.

On December 23, 2019, we issued \$1,500 million of NVCC subordinated debentures. The notes bear interest at a fixed rate of 2.88% per annum until December 23, 2024, and at the three-month Canadian Dollar Offered Rate plus 0.89% thereafter until their maturity on December 23, 2029.

On June 4, 2020, we redeemed all \$1,000 million of our outstanding NVCC 2.48% subordinated debentures due on June 4, 2025 for 100% of their principal amount plus accrued interest to, but excluding, the redemption date.

On June 30, 2020, we issued \$1,250 million of NVCC subordinated debentures. The notes bear interest at a fixed rate of 2.088% per annum until June 30, 2025, and at the three-month Canadian Dollar Offered Rate plus 1.31% thereafter until their maturity on June 30, 2030.

Common shares issued (1)

		Fc	or the three	months ended			
	July 31	1, 202	0	July 31	uly 31, 2019		
	Number of shares			Number of shares			
(Millions of Canadian dollars, except number of shares)	(thousands)		Amount	(thousands)		Amount	
Issued in connection with share-based compensation plans (2)	235	\$	18	545	\$	38	
Purchased for cancellation (3)	-		-	(1,914)		(24)	
	235	\$	18	(1,369)	\$	14	

		For the nine months ended						
	July 31,	July 31, 2020			July 31, 2019			
(Millions of Canadian dollars, except number of shares)	Number of shares (thousands)		Amount	Number of shares (thousands)		Amount		
Issued in connection with share-based compensation plans (2) Purchased for cancellation (3)	782 (7,860)	\$	62 (97)	1,230 (5,705)	\$	87 (70)		
	(7,078)	\$	(35)	(4,475)	\$	17		

(1) The requirements of our dividend reinvestment plan (DRIP) are satisfied through either open market share purchases or shares issued from treasury. During the three and nine months ended July 31, 2020 and July 31, 2019, our DRIP's requirements were satisfied through open market share purchases.

(2) Amounts include cash received for stock options exercised during the period and the fair value adjustment to stock options.

(3) During the three months ended July 31, 2020, we did not purchase for cancellation any common shares. During the nine months ended July 31, 2020, we purchased for cancellation common shares at a total fair value of \$814 million (average cost of \$103.62 per share), with a book value of \$97 million (book value of \$12.34 per share). During the three months ended July 31, 2019, we purchased for cancellation common shares at a total fair value of \$12.34 per share). During the three months ended July 31, 2019, we purchased for cancellation common shares at a total fair value of \$197 million (average cost of 102.82 per share), with a book value of \$24 million (book value of \$12.28 per share). During the nine months ended July 31, 2019, we purchased for cancellation common shares at a total fair value of \$12.65 per share), with a book value of \$576 million (average cost of \$97.36 per share), with a book value of \$12.26 per share).

Covered bonds

RBC Covered Bond Guarantor Limited Partnership (Guarantor LP) is a consolidated structured entity to which we periodically transfer mortgages to support funding activities and asset coverage requirements under our covered bond program.

During the second quarter, OSFI temporarily increased the limits on covered bond programs and the Bank of Canada temporarily expanded the eligible collateral for its term repo facility to include banks' own covered bonds to provide further liquidity due to the COVID-19 pandemic. As at July 31, 2020, the total amount of mortgages transferred and outstanding in the Guarantor LP was \$112.1 billion (October 31, 2019 – \$53.9 billion), providing further liquidity capacity for the covered bond program and \$46.0 billion of covered bonds were recorded as Deposits on our Consolidated Balance Sheets (October 31, 2019 – \$39.8 billion).

	For the three	months ended	For the nine r	nonths ended
	July 31	July 31	July 31	July 31
(Millions of Canadian dollars, except share and per share amounts)	2020	2019	2020	2019
Basic earnings per share				
Net income	\$ 3,201	\$ 3,263	\$ 8,191	\$ 9,665
Dividends on preferred shares and distributions on other	,			
equity instruments	(65)	(66)	(194)	(205)
Net income attributable to non-controlling interests	(4)	()	(6)	(6)
	. ,	2 107		
Net income available to common shareholders	3,132	3,197	7,991	9,454
Weighted average number of common shares (in thousands)	1,422,705	1,434,276	1,424,364	1,435,485
Basic earnings per share (in dollars)	\$ 2.20	\$ 2.23	\$ 5.61	\$ 6.59
Diluted earnings per share				
Net income available to common shareholders	\$ 3,132	\$ 3,197	\$ 7,991	\$ 9,454
Dilutive impact of exchangeable shares	4	4	11	11
Net income available to common shareholders including dilutive	2.426	2 201	0.000	0.465
impact of exchangeable shares	3,136	3,201	8,002	9,465
Weighted average number of common shares (in thousands)	1,422,705	1,434,276	1,424,364	1,435,485
Stock options (1)	779	2,056	1,091	2,102
Issuable under other share-based compensation plans	757	743	753	740
Exchangeable shares (2)	3,536	3,055	3,335	3,172
Average number of diluted common shares (in thousands)	1,427,777	1,440,130	1,429,543	1,441,499
Diluted earnings per share (in dollars)	\$ 2.20	\$ 2.22	\$ 5.60	\$ 6.57

(1) The dilutive effect of stock options was calculated using the treasury stock method. When the exercise price of options outstanding is greater than the average market price of our common shares, the options are excluded from the calculation of diluted earnings per share. For the three months ended July 31, 2020, an average of 2,941,928 outstanding options with an average price of \$101.06 were excluded from the calculation of diluted earnings per share. For the three months ended July 31, 2019, no outstanding options were excluded from the calculation of diluted earnings per share. For the three months ended July 31, 2019, no outstanding options were excluded from the calculation of diluted earnings per share. For the nine months ended July 31, 2020, an average of 2,764,422 outstanding options with an average price of \$100.82 were excluded from the calculation of diluted earnings per share. For the nine months ended July 31, 2019, an average of 765,267 outstanding options with an average exercise price of \$102.33 were excluded from the calculation of diluted earnings per share.

(2) Includes exchangeable preferred shares.

Note 11 Legal and regulatory matters

We are a large global institution that is subject to many different complex legal and regulatory requirements that continue to evolve. We are and have been subject to a variety of legal proceedings, including civil claims and lawsuits, regulatory examinations, investigations, audits and requests for information by various governmental regulatory agencies and law enforcement authorities in various jurisdictions. Some of these matters may involve novel legal theories and interpretations and may be advanced under criminal as well as civil statutes, and some proceedings could result in the imposition of civil, regulatory enforcement or criminal penalties. We review the status of all proceedings on an ongoing basis and will exercise judgment in resolving them in such manner as we believe to be in our best interest. This is an area of significant judgment and uncertainty and the extent of our financial and other exposure to these proceedings after taking into account current accruals could be material to our results of operations in any particular period.

Our significant legal proceeding and regulatory matters are described in Note 26 of our 2019 Annual Consolidated Financial Statements as updated below.

London interbank offered rate (LIBOR) regulatory investigations and litigation

On March 26, 2020, Royal Bank of Canada and RBC Capital Markets LLC were dismissed from the purported class action in New York alleging violations of the U.S. antitrust laws and common law principles of unjust enrichment in the setting of LIBOR after the Intercontinental Exchange took over administration of the benchmark interest rate from the British Bankers' Association in 2014. On April 24, 2020, the plaintiffs filed a notice of appeal.

Foreign exchange matters

In May 2020, the US District Court dismissed Royal Bank of Canada from the November 2018 lawsuit brought by certain institutional plaintiffs who had previously opted-out of participating in the August 2018 settlement with class plaintiffs. The matter against RBC Capital Markets, LLC remains pending.

Note 12 Results by business segment

	For the three months ended July 31, 2020												
(Millions of Canadian dollars)		ersonal & mmercial Banking	Мс	Wealth Inagement	In	surance	1	nvestor & Treasury Services	м	Capital larkets (1)	orporate pport (1)		Total
Net interest income (2) Non-interest income	\$	3,079 1,269	\$	699 2,465	\$	_ 2,212	\$	89 395	\$	1,335 1,413	\$ (63) 27	\$	5,139 7,781
Total revenue Provision for credit losses Insurance policyholder benefits, claims and		4,348 527		3,164 74		2,212		484 (4)		2,748 78	(36) _		12,920 675
acquisition expense Non-interest expense		- 1,985		- 2,361		1,785 140		- 388		- 1,471	35		1,785 6,380
Net income (loss) before income taxes Income taxes (recoveries)		1,836 469		729 167		287 71		100 24		1,199 250	(71) (102)		4,080 879
Net income	\$	1,367	\$	562	\$	216	\$	76	\$	949	\$ 31	\$	3,201
Non-interest expense includes: Depreciation and amortization	\$	227	\$	223	\$	14	\$	56	\$	131	\$ _	\$	651

				1	For the thr	ee mo	onths ended J	uly 3	1, 2019		
(Millions of Canadian dollars)	ersonal & ommercial Banking	Mo	Wealth	l	nsurance		Investor & Treasury Services	Ν	Capital Narkets (1)	Corporate upport (1)	Total
Net interest income (2), (3) Non-interest income (3)	\$ 3,221 1,325	\$	773 2,256	\$	_ 1,463	\$	(16) 577	\$	1,018 1,016	\$ 22 (111)	\$ 5,018 6,526
Total revenue Provision for credit losses Insurance policyholder benefits, claims and	4,546 341		3,029 27		1,463 _		561 1		2,034 56	(89) _	11,544 425
acquisition expense Non-interest expense	_ 1,959		2,183		1,046 149		411		_ 1,269	21	1,046 5,992
Net income (loss) before income taxes Income taxes (recoveries)	2,246 582		819 180		268 64		149 31		709 56	(110) (95)	4,081 818
Net income	\$ 1,664	\$	639	\$	204	\$	118	\$	653	\$ (15)	\$ 3,263
Non-interest expense includes: Depreciation and amortization	\$ 159	\$	144	\$	12	\$	36	\$	105	\$ _	\$ 456

	For the nine months ended July 31, 2020												
(Millions of Canadian dollars)	-	ersonal & mmercial Banking	Ma	Wealth	In	surance	1	nvestor & Treasury Services	м	Capital arkets (1)	orporate Ipport (1)		Total
Net interest income (2) Non-interest income	\$	9,454 3,904	\$	2,174 6,978	\$	_ 4,403	\$	221 1,569	\$	3,952 3,657	\$ 24 (247)	\$	15,825 20,264
Total revenue Provision for credit losses Insurance policyholder benefits, claims and acquisition expense		13,358 2,575 –		9,152 163 –		4,403 1 3,222		1,790 10 –		7,609 1,174 –	(223) 1 –		36,089 3,924 3,222
Non-interest expense		5,916		6,900		441		1,182		4,197	64		18,700
Net income (loss) before income taxes Income taxes (recoveries)		4,867 1,282		2,089 480		739 162		598 153		2,238 302	(288) (327)		10,243 2,052
Net income	\$	3,585	\$	1,609	\$	577	\$	445	\$	1,936	\$ 39	\$	8,191
Non-interest expense includes: Depreciation and amortization	\$	684	\$	656	\$	43	\$	160	\$	385	\$ -	\$	1,928

	For the nine months ended July 31, 2019													
(Millions of Canadian dollars)		Personal & ommercial Banking	Mo	Wealth Inagement	lr	nsurance		Investor & Treasury Services	N	Capital Narkets (1)		Corporate upport (1)		Total
Net interest income (2), (3) Non-interest income (3)	\$	9,415 3,882	\$	2,248 6,708	\$	_ 4,557	\$	(81) 1,860	\$	2,980 3,321	\$	76 (334)	\$	14,638 19,994
Total revenue Provision for credit losses Insurance policyholder benefits, claims		13,297 1,061		8,956 83		4,557 _		1,779 1		6,301 221		(258) (1)		34,632 1,365
and acquisition expense Non-interest expense		_ 5,761		- 6,551		3,431 453		_ 1,217				_ 50		3,431 17,820
Net income (loss) before income taxes Income taxes (recoveries)		6,475 1,691		2,322 501		673 149		561 131		2,292 210		(307) (331)		12,016 2,351
Net income	\$	4,784	\$	1,821	\$	524	\$	430	\$	2,082	\$	24	\$	9,665
Non-interest expense includes: Depreciation and amortization	\$	469	\$	443	\$	35	\$	105	\$	300	\$	_	\$	1,352

Taxable equivalent basis. Interest revenue is reported net of interest expense as we rely primarily on net interest income as a performance measure. Commencing Q4 2019, the interest component of the valuation of certain deposits carried at FVTPL previously presented in trading revenue is presented in net interest income. Comparative amounts have been reclassified to conform with this presentation. (1) (2) (3)

Total assets and total liabilities by business segment

				As at July 31, 2020	D		
	Personal &			Investor &			
	Commercial	Wealth		Treasury	Capital	Corporate	
(Millions of Canadian dollars)	Banking	Management	Insurance	Services	Markets	Support	Total
Total assets	\$ 497,974	\$ 123,461	\$ 21,627	\$ 259,248	\$ 733,023	\$ 47,801	\$ 1,683,134
Total liabilities	\$ 497,990	\$ 123,423	\$ 21,544	\$ 259,188	\$ 733,550	\$ (38,935)	\$ 1,596,760

				As at October 31, 20)19		
	Personal &			Investor &			
	Commercial	Wealth		Treasury		Corporate	
(Millions of Canadian dollars)	Banking	Management	Insurance	Services	Capital Markets	Support	Total
Total assets	\$ 481,720	\$ 106,579	\$ 19,012	\$ 144,406	\$ 634,313	\$ 42,905 \$	1,428,935
Total liabilities	\$ 481,745	\$ 106,770	\$ 19,038	\$ 144,378	\$ 634,126	\$ (40,747) \$	1,345,310

Note 13 Capital management

Regulatory capital and capital ratios

OSFI formally establishes risk-based capital and leverage targets for deposit-taking institutions in Canada. During the third quarter of 2020, we complied with all capital and leverage requirements, including the domestic stability buffer, imposed by OSFI.

Ac at

	As	at		
	July 31	October 31		
(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	2020	2019		
Capital (1)				
CET1 capital	\$ 66,132	\$ 62,184		
Tier 1 capital	73,536	67,861		
Total capital	84,546	77,888		
Risk-weighted Assets (RWA) used in calculation of capital ratios (1)				
Credit risk	\$ 449,798	\$ 417,835		
Market risk	32,276	28,917		
Operational risk	69,347	66,104		
Total RWA	\$ 551,421	\$ 512,856		
Capital ratios and Leverage ratio (1)				
ČET1 ratio	12.0%	12.1%		
Tier 1 capital ratio	13.3%	13.2%		
Total capital ratio	15.3%	15.2%		
Leverage ratio	4.8%	4.3%		
Leverage ratio exposure (billions)	\$ 1,544	\$ 1,570		

(1) Capital, RWA, and capital ratios are calculated using OSFI's Capital Adequacy Requirements (CAR) guideline and the Leverage ratio is calculated using OSFI Leverage Requirements Guideline as updated in accordance with the regulatory guidance issued in Q2 2020 by OSFI in response to the COVID-19 pandemic. Both the CAR guideline and Leverage Requirements Guideline are based on the Basel III framework.

Shareholder Information

Corporate headquarters

Street address: Royal Bank of Canada 200 Bay Street Toronto, Ontario M5J 2J5 Canada Tel: 1-888-212-5533

Mailing address: P.O. Box 1 Royal Bank Plaza Toronto, Ontario M5J 2J5 Canada website: rbc.com

Transfer Agent and Registrar

Main Agent: Computershare Trust Company of Canada 1500 Robert-Bourassa Blvd. Suite 700 Montreal, Quebec H3A 3S8 Canada Tel: 1-866-586-7635 (Canada and the U.S.) or 514-982-7555 (International) Fax: 514-982-7580 website: computershare.com/rbc

Co-Transfer Agent (U.S.): Computershare Trust Company, N.A. 250 Royall Street Canton, Massachusetts 02021 U.S.A.

Co-Transfer Agent (U.K.): Computershare Investor Services PLC Securities Services – Registrars P.O. Box 82, The Pavilions, Bridgwater Road, Bristol BS99 6ZZ U.K.

Stock exchange listings (Symbol: RY)

Common shares are listed on: Canada – Toronto Stock Exchange (TSX) U.S. – New York Stock Exchange (NYSE) Switzerland – Swiss Exchange (SIX)

All preferred shares are listed on the TSX with the exception of the series C-2. The related depository shares of the series C-2 preferred shares are listed on the NYSE.

Valuation day price

For Canadian income tax purposes, Royal Bank of Canada's common stock was quoted at \$29.52 per share on the Valuation Day (December 22, 1971). This is equivalent to \$7.38 per share after adjusting for the two-for-one stock split of March 1981 and the two-for-one stock split of February 1990. The one-for-one stock dividends in October 2000 and April 2006 did not affect the Valuation Day amount for our common shares.

Shareholder contacts

For dividend information, change in share registration or address, lost stock certificates, tax forms, estate transfers or dividend reinvestment, please contact: Computershare Trust Company of Canada 100 University Avenue, 8th Floor Toronto, Ontario M5J 2Y1 Canada

Tel: 1-866-586-7635 (Canada and
the U.S.) or 514-982-7555cancellation, up to 20 millio
common shares during the
period spanning from Marc
2020 to March 1, 2021, when
bid expires, or such earlier
as we may complete the
purchases pursuant to our

For other shareholder inquiries, please contact: Shareholder Relations Royal Bank of Canada 200 Bay Street South Tower Toronto, Ontario M5J 2J5 Canada Tel: 416-955-7806

Financial analysts, portfolio managers, institutional investors

For financial information inquiries, please contact: Investor Relations Royal Bank of Canada 200 Bay Street South Tower Toronto, Ontario M5J 2J5 Canada Tel: 416-955-7802

or visit our website at rbc.com/investorrelations

Direct deposit service

Shareholders in Canada and the U.S. may have their common share dividends deposited directly to their bank account by electronic funds transfer. To arrange for this service, please contact our Transfer Agent and Registrar, Computershare Trust Company of Canada.

Eligible dividend designation

For purposes of the *Income Tax* Act (Canada) and any corresponding provincial and territorial tax legislation, all dividends (and deemed dividends) paid by RBC to Canadian residents on both its common and preferred shares, are designated as "eligible dividends", unless stated otherwise.

Common share repurchases

We are engaged in a Normal Course Issuer Bid (NCIB) which allows us to repurchase for cancellation, up to 20 million common shares during the period spanning from March 2, 2020 to March 1, 2021, when the bid expires, or such earlier date as we may complete the purchases pursuant to our Notice of Intention filed with the Toronto Stock Exchange.

Dividend dates for 2020

Subject to approval by the Board of Directors

	Record dates	Payment dates
Common and preferred shares series W, AA, AC, AE, AF, AG, AZ, BB, BD, BF, BH, BI, BJ, BK, BM and BO	January 27 April 23 July 27 October 26	February 24 May 22 August 24 November 24
Preferred shares series C-2 (US\$)	January 28 April 27 July 28 October 27	February 7 May 7 August 7 November 6

Governance

Summaries of the significant ways in which corporate governance practices followed by RBC differ from corporate governance practices required to be followed by U.S. domestic companies under the NYSE listing standards are available on our website at rbc.com/governance.

Information contained in or otherwise accessible through the websites mentioned in this report to shareholders does not form a part of this report. All references to websites are inactive textual references and are for your information only.

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We determine the amount and timing of the purchases under the NCIB, subject to prior consultation with the Office of the Superintendent of Financial Institutions Canada. For further details, refer to the Capital management section.

A copy of our Notice of Intention to file a NCIB may be obtained, without charge, by contacting our Corporate Secretary at our Toronto mailing address.

2020 Quarterly earnings release dates

First quarterFebruary 21Second quarterMay 27Third quarterAugust 26Fourth quarterDecember 2

2021 Annual Meeting

The Annual Meeting of Common Shareholders will be held on Thursday, April 8, 2021, in Toronto, Ontario Canada