

Second Quarter 2021



Royal Bank of Canada second quarter 2021 results

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

Net Income \$4.0 Billion <i>Up \$2.5 Billion YoY</i>	Diluted EPS⁽¹⁾ \$2.76 <i>Up from \$1.00 in Q2 2020</i>	PCL⁽²⁾ \$(96) Million <i>PCL on loans ratio down 12 bps⁽³⁾ QoQ</i>	ROE⁽⁴⁾ 19.4% <i>Up from 7.3% last year</i>	CET1 Ratio 12.8% <i>Well above regulatory requirements</i>
--------------------------------------------------------------------------	---------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------	--------------------------------------------------------------------------------

TORONTO, May 27, 2021 — Royal Bank of Canada (RY on TSX and NYSE) today reported net income of \$4.0 billion for the quarter ended April 30, 2021, up \$2.5 billion from the prior year. Diluted EPS was \$2.76, up significantly over the same period. Our results this quarter included releases of provisions on performing loans of \$260 million compared to elevated provisions on performing loans of \$2.1 billion in the prior year.

Pre-provision, pre-tax earnings⁵ of \$5.1 billion were up 11% from a year ago, mainly reflecting constructive markets and strong volume growth, partially offset by the impact of low interest rates, and higher expenses largely due to higher variable compensation on improved results and higher stock-based compensation. Personal & Commercial Banking and Capital Markets generated solid earnings growth, with Capital Markets reporting record earnings this quarter. Higher results in Wealth Management and Insurance also contributed to the increase. These factors were partially offset by lower results in Investor & Treasury Services.

Compared to last quarter, net income was up \$168 million with higher results in Personal & Commercial Banking, Wealth Management and Capital Markets. These results were partially offset by lower earnings in Insurance and Investor & Treasury Services.

The PCL on loans ratio of (5) bps was down 12 bps from last quarter primarily due to lower provisions in Personal & Commercial Banking and Capital Markets, partially offset by higher recoveries in Wealth Management in the prior quarter. The PCL on impaired loans ratio of 11 bps decreased 2 bps from last quarter.

Our capital position remained robust, with a Common Equity Tier 1 (CET1) ratio of 12.8% supporting strong client-driven volume growth and \$1.5 billion in common share dividends paid. We also had a strong average Liquidity Coverage Ratio (LCR) of 133%.

"I'm tremendously proud of how our employees continue to demonstrate resilience, and bring our Purpose to life to deliver for our clients, communities and shareholders. The strong momentum we've achieved in the first half of 2021 reflects our focused strategy to deliver exceptional experiences and create more value for clients. RBC brings this to life through the combination of our powerful scale, strong market share growth, prudent risk management, and significant multi-year investments in talent and technology. While there is reason for optimism as recovery continues to take hold, we know the pandemic's path forward still poses challenges. We remain firmly committed to helping our clients thrive and communities prosper, and to being an enabler of a more inclusive and sustainable future."

- Dave McKay, RBC President and Chief Executive Officer

Q2 2021 Compared to Q2 2020	<ul style="list-style-type: none"> • Net income of \$4,015 million • Diluted EPS of \$2.76 • ROE of 19.4% • CET1 ratio of 12.8% 	<ul style="list-style-type: none"> ↑ 171% ↑ 176% ↑ 1,210 bps ↑ 110 bps
Q2 2021 Compared to Q1 2021	<ul style="list-style-type: none"> • Net income of \$4,015 million • Diluted EPS of \$2.76 • ROE of 19.4% • CET1 ratio of 12.8% 	<ul style="list-style-type: none"> ↑ 4% ↑ 4% ↑ 80 bps ↑ 30 bps
YTD 2021 Compared to YTD 2020	<ul style="list-style-type: none"> • Net income of \$7,862 million • Diluted EPS of \$5.42 • ROE of 19.0% 	<ul style="list-style-type: none"> ↑ 58% ↑ 59% ↑ 650 bps

(1) Earnings per share (EPS).

(2) Provision for credit losses (PCL).

(3) Basis points (bps).

(4) 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 Q2 2021 Report to Shareholders.

(5) Pre-provision, pre-tax earnings is calculated as income before income taxes plus PCL. This is a non-GAAP measure. For further information, refer to the Key Performance and Non-GAAP Measures section of our Q2 2021 Earnings Release.

Table of contents

1	Second quarter highlights	12	Key performance and non-GAAP measures	45	Capital management
2	Management's Discussion and Analysis	14	Personal & Commercial Banking	50	Accounting and control matters
2	Caution regarding forward-looking statements	15	Wealth Management	50	Summary of accounting policies and estimates
2	Overview and outlook	16	Insurance	50	Changes in accounting policies and disclosures
2	About Royal Bank of Canada	17	Investor & Treasury Services	50	Controls and procedures
3	Selected financial and other highlights	18	Capital Markets	50	Related party transactions
4	Economic, market and regulatory review and outlook	20	Corporate Support	51	Enhanced Disclosure Task Force recommendations index
6	Impact of COVID-19 pandemic	21	Quarterly results and trend analysis	52	Interim Condensed Consolidated Financial Statements (unaudited)
8	Financial performance	23	Financial condition	58	Notes to the Interim Condensed Consolidated Financial Statements (unaudited)
8	Overview	23	Condensed balance sheets	83	Shareholder Information
12	Business segment results	24	Off-balance sheet arrangements		
12	How we measure and report our business segments	24	Risk management		
		24	Credit risk		
		31	Market risk		
		36	Liquidity and funding risk		

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 six month periods ended or as at April 30, 2021, compared to the corresponding periods in the prior fiscal year and the three month period ended January 31, 2021. This MD&A should be read in conjunction with our unaudited Interim Condensed Consolidated Financial Statements for the quarter ended April 30, 2021 (Condensed Financial Statements) and related notes and our 2020 Annual Report. This MD&A is dated May 26, 2021. All amounts are in Canadian dollars, unless otherwise specified, and are based on financial statements presented 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 2020 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 Q2 2021 Report to Shareholders, in other filings with Canadian regulators or the SEC, in other reports to shareholders, and in other communications. 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 credit risk, liquidity and funding risk, expectations with respect to our CET1 ratio, and the potential continued impacts of the coronavirus (COVID-19) pandemic on our business operations, financial results, condition and objectives and on the global economy and financial market conditions and includes our President and Chief Executive Officer's statements. 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 (which could lead to us being subject to various legal and regulatory proceedings, the potential outcome of which could include regulatory restrictions, penalties and fines), strategic, reputation, legal and regulatory environment, competitive and systemic risks and other risks discussed in the risk sections and Significant developments: COVID-19 section of our 2020 Annual Report and the Risk management and Impact of COVID-19 pandemic sections of this Q2 2021 Report to Shareholders; including business and economic conditions, information technology and cyber risks, Canadian housing and household indebtedness, geopolitical uncertainty, privacy, data and third-party related risks, regulatory changes, environmental and social risk (including climate change), and digital disruption and innovation, culture and conduct, 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, 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, and financial results, condition and objectives.

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 Q2 2021 Report to Shareholders are set out in the Economic, market and regulatory review and outlook section and for each business segment under the Strategic priorities and Outlook headings in our 2020 Annual Report, as updated by the Economic, market and regulatory review and outlook and Impact of COVID-19 pandemic sections of this Q2 2021 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 and Significant developments: COVID-19 section of our 2020 Annual Report and the Risk management and Impact of COVID-19 pandemic sections of this Q2 2021 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 leverage their imaginations and insights to 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 27 other countries. Learn more at rbc.com.

Selected financial and other highlights

(Millions of Canadian dollars, except per share, number of and percentage amounts)	As at or for the three months ended			As at or for the six months ended	
	April 30 2021	January 31 2021	April 30 2020	April 30 2021	April 30 2020
Total revenue	\$ 11,618	\$ 12,943	\$ 10,333	\$ 24,561	\$ 23,169
Provision for credit losses (PCL)	(96)	110	2,830	14	3,249
Insurance policyholder benefits, claims and acquisition expense (PBCAE)	149	1,406	(177)	1,555	1,437
Non-interest expense	6,379	6,542	5,942	12,921	12,320
Income before income taxes	5,186	4,885	1,738	10,071	6,163
Net income	\$ 4,015	\$ 3,847	\$ 1,481	\$ 7,862	\$ 4,990
Segments – net income					
Personal & Commercial Banking	\$ 1,908	\$ 1,793	\$ 532	\$ 3,701	\$ 2,218
Wealth Management	691	649	424	1,340	1,047
Insurance	187	201	180	388	361
Investor & Treasury Services	120	123	226	243	369
Capital Markets	1,071	1,067	105	2,138	987
Corporate Support	38	14	14	52	8
Net income	\$ 4,015	\$ 3,847	\$ 1,481	\$ 7,862	\$ 4,990
Selected information					
Earnings per share (EPS) – basic	\$ 2.76	\$ 2.66	\$ 1.00	\$ 5.42	\$ 3.41
– diluted	2.76	2.66	1.00	5.42	3.40
Return on common equity (ROE) (1), (2)	19.4%	18.6%	7.3%	19.0%	12.5%
Average common equity (1)	\$ 83,450	\$ 80,750	\$ 79,100	\$ 82,050	\$ 78,450
Net interest margin (NIM) – on average earning assets, net PCL on loans as a % of average net loans and acceptances	1.50%	1.50%	1.61%	1.50%	1.60%
PCL on performing loans as a % of average net loans and acceptances	(0.05)%	0.07%	1.65%	0.01%	0.96%
PCL on impaired loans as a % of average net loans and acceptances	(0.16)%	(0.06)%	1.28%	(0.11)%	0.67%
Gross impaired loans (GIL) as a % of loans and acceptances	0.11%	0.13%	0.37%	0.12%	0.29%
Liquidity coverage ratio (LCR) (3)	0.40%	0.41%	0.51%	0.40%	0.51%
Net stable funding ratio (NSFR) (4)	133%	141%	130%	133%	130%
	118%	118%	n.a.	118%	n.a.
Capital ratios and Leverage ratio					
Common Equity Tier 1 (CET1) ratio	12.8%	12.5%	11.7%	12.8%	11.7%
Tier 1 capital ratio	14.1%	13.8%	12.7%	14.1%	12.7%
Total capital ratio	15.8%	15.5%	14.6%	15.8%	14.6%
Leverage ratio	5.0%	4.8%	4.5%	5.0%	4.5%
Selected balance sheet and other information (5)					
Total assets	\$ 1,615,316	\$ 1,671,151	\$ 1,675,682	\$ 1,615,316	\$ 1,675,682
Securities, net of applicable allowance	255,152	287,482	269,941	255,152	269,941
Loans, net of allowance for loan losses	673,511	672,563	673,448	673,511	673,448
Derivative related assets	97,236	110,917	140,807	97,236	140,807
Deposits	1,033,323	1,054,597	1,009,447	1,033,323	1,009,447
Common equity	85,544	82,934	79,236	85,544	79,236
Total risk-weighted assets	555,607	557,519	558,412	555,607	558,412
Assets under management (AUM)	929,800	897,400	789,000	929,800	789,000
Assets under administration (AUA) (6)	6,111,000	6,133,600	5,381,800	6,111,000	5,381,800
Common share information					
Shares outstanding (000s) – average basic	1,424,889	1,423,350	1,422,754	1,424,107	1,425,203
– average diluted	1,427,107	1,425,280	1,427,871	1,426,183	1,430,468
– end of period	1,424,727	1,424,083	1,422,566	1,424,727	1,422,566
Dividends declared per common share	\$ 1.08	\$ 1.08	\$ 1.08	\$ 2.16	\$ 2.13
Dividend yield (7)	3.9%	4.3%	4.7%	4.1%	4.7%
Dividend payout ratio	39%	41%	108%	40%	62%
Common share price (RY on TSX) (8)	\$ 117.31	\$ 103.50	\$ 85.63	\$ 117.31	\$ 85.63
Market capitalization (TSX) (8)	167,135	147,393	121,814	167,135	121,814
Business information (number of)					
Employees (full-time equivalent) (FTE)	83,709	84,030	82,499	83,709	82,499
Bank branches	1,307	1,328	1,329	1,307	1,329
Automated teller machines (ATMs)	4,469	4,523	4,564	4,469	4,564
Period average US\$ equivalent of C\$1.00 (9)	0.798	0.779	0.725	0.789	0.742
Period-end US\$ equivalent of C\$1.00	0.813	0.782	0.718	0.813	0.718

- (1) 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) This measure 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.
- (3) 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) Liquidity Adequacy Requirements (LAR) guidance as updated in accordance with the regulatory guidance issued in fiscal 2020. For further details, refer to the Liquidity and funding risk section.
- (4) Beginning in Q1 2021, OSFI requires Canadian Domestic Systemically Important Banks (D-SIBs) to disclose the NSFR on a prospective basis. The NSFR is calculated in accordance with OSFI's LAR guideline, which, in turn, reflects liquidity related requirements issued by the Basel Committee on Banking Supervision (BCBS). For further details, refer to the Liquidity and funding risk section.
- (5) Represents period-end spot balances.
- (6) AUA includes \$15.0 billion and \$2.9 billion (January 31, 2021 – \$15.3 billion and \$4.1 billion; April 30, 2020 – \$16.1 billion and \$6.7 billion) of securitized residential mortgages and credit card loans, respectively.
- (7) Defined as dividends per common share divided by the average of the high and low share price in the relevant period.
- (8) Based on TSX closing market price at period-end.
- (9) Average amounts are calculated using month-end spot rates for the period.
- n.a. not applicable

Economic, market and regulatory review and outlook – data as at May 26, 2021

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

A resurgence in the spread of COVID-19 in some regions, including the emergence and progression of new variants of COVID-19, has resulted in certain regions re-imposing or increasing the level of containment measures. This continues to restrain the pace of near-term economic activity. However, containment measures have generally been more targeted by region and industry since the initial shutdowns in the spring of 2020, and the economic impact from subsequent shutdowns has been less severe. Vaccine distribution has been uneven across jurisdictions, but continues to increase, which is expected to allow for more significant and sustainable easing of containment measures over the summer of 2021 in many economies. Government support programs have maintained household purchasing power and are expected to support a recovery in spending as containment measures ease. Despite these positive developments, uncertainty remains regarding vaccine efficacy against new variants of COVID-19 and vaccine supply and availability which could impact the timing and extent of a full recovery.

Canada

The Canadian economy grew sharply in spite of a resurgence in the spread of COVID-19 in the latter part of 2020 that was accompanied by increased containment measures, which extended into 2021 and continued to weigh heavily on activity in the travel and hospitality sectors. GDP rose 9.6%¹ in the final calendar quarter of 2020 and is expected to have grown another 6.5%¹ in the first calendar quarter of 2021. The unemployment rate fell to 7.5% in March 2021, down from 8.8% in December 2020, but rose back to 8.1% in April 2021 as re-imposed containment measures led to another round of job losses. Substantial government support for households and businesses remains in place, and extensions have already been announced to previously expanded employment insurance programs as well as business wage and rent subsidies. The Bank of Canada (BoC) recently announced a plan to slow the pace of monthly asset purchases and indicated that interest rates are likely to begin to rise earlier than the BoC previously expected, although still not until the second half of calendar 2022. Further resurgence in virus spread remains a significant headwind for the economy in the second calendar quarter of 2021, but rising vaccination rates are expected to ease pressure on healthcare services and allow for a more significant and sustainable easing of containment measures over the summer.

U.S.

Growth in the U.S. economy has accelerated alongside a rapid rollout of vaccines and large government stimulus spending. GDP grew 4.3%¹ in the final calendar quarter of 2020, and 6.4%¹ in the first calendar quarter of 2021. While employment rose with 1.8 million jobs added in the first four months of calendar 2021, the remaining shortfall in jobs relative to pre-pandemic levels is still substantial at 8.2 million, with more than one third concentrated in the leisure and hospitality sectors where containment measures are the most stringent. The recovery of the labour market is expected to accelerate as containment measures ease more significantly and sustainably. Household incomes continue to be supported by exceptionally large government stimulus spending including additional support that was made available as part of the stimulus package passed in March 2021. The Federal Reserve has committed to maintaining extraordinary policy support by keeping benchmark interest rates low and continuing with asset purchases until the labour market has recovered. Supportive fiscal and monetary policy is expected to help to accelerate growth in spending in calendar 2021, alongside the expectation that rising vaccination rates will enable a more substantial and sustainable easing of containment measures.

Europe

A resurgence in virus spread has prompted the re-imposition of containment measures in Euro area countries, and vaccine distribution in the Euro area has progressed more slowly than in many other regions. Euro area GDP declined by 0.6% in the first calendar quarter of 2021 following a 0.7% decline in the fourth calendar quarter of 2020. The economy is expected to return to growth in the second calendar quarter of 2021 and beyond as vaccination rates increase more significantly. In the U.K., GDP declined by 1.5% in the first calendar quarter of 2021 reflecting a resurgence in virus spread and re-imposition of containment measures during that period. A sharp increase in economic output in the U.K. is expected beginning in the second calendar quarter of 2021 as vaccine distribution in the U.K. has been running ahead of other regions and containment measures have begun to ease. Both the European Central Bank (ECB) and the Bank of England have held interest rates low while further expanding the scope and length of their quantitative easing programs. Fiscal stimulus is also expected to continue to support household incomes despite still weak underlying labour market conditions.

Financial markets

Government bond yields remain historically low but have increased on optimism that the economic recovery is poised to accelerate alongside rising vaccination rates and inflation expectations. Major indices rose to all-time highs as equity markets continued to be supported by monetary policy stimulus, massive government income support and positive vaccine developments. Monetary policy is expected to remain accommodative for an extended period.

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 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 2020 Annual Report, as updated below. A summary of the additional regulatory changes and relief instituted by governments globally and by OSFI during 2020 in response to the COVID-19 pandemic is included in the Significant developments: COVID-19, Liquidity and funding risk and Capital management sections of our 2020 Annual Report, with updates provided in the Impact of COVID-19 pandemic, Liquidity and funding risk and Capital management sections of this Q2 2021 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 April 2021, the International Monetary Fund (IMF) projected global growth of 6.0% in 2021, up from its previous forecast of 5.5% in January 2021, reflecting expectations of a stronger recovery in economic activity as rising vaccination rates enable more substantial and sustainable easing of containment measures, supported by additional fiscal support in a few large economies and the continued adaptation of economic activity to subdued mobility. Despite these positive developments, uncertainty remains regarding vaccine efficacy against new variants of COVID-19 and vaccine supply and availability. Trade policy also remains a source of global uncertainty as the impacts of the new U.S. administration's trade agenda and the U.K.'s progress on an international trade policy remain to be seen. Finally, global financial markets remain vulnerable to geopolitical tensions, such as those between the U.S. and China, many of which center around trade and technology. Our diversified business model, as well as our product and geographic diversification, continue to help mitigate the risks posed by global uncertainty.

Minimum qualifying rates for insured and uninsured mortgages in Canada

On May 20, 2021, OSFI announced that effective June 1, 2021, the proposed minimum qualifying rate for uninsured mortgages will be the greater of the mortgage contract rate plus 2% or 5.25%. OSFI also announced that it will review and communicate the qualifying rate at a minimum annually, every December. The Department of Finance Canada, who is responsible for setting the benchmark rate for qualifying insured mortgages, also announced on May 20, 2021 that it would align the rate for insured mortgages with the rate set by OSFI for uninsured mortgages and that this new rate would apply to insured mortgages approved on June 1, 2021 or later. The minimum qualifying rate for insured mortgages will be subject to review and periodic adjustment.

Interest rate benchmark reform

London Interbank Offered Rate (LIBOR) is the most widely referenced benchmark interest rate across the globe for derivatives, bonds, loans and other floating rate instruments; however, there is a regulator-led push to transition the market from LIBOR and certain other benchmark interest rates to alternative risk-free, or nearly risk-free, rates that are based on actual overnight transactions. On March 5, 2021, the Financial Conduct Authority (FCA), the regulator of the ICE Benchmark Administration (IBA) which administers LIBOR, announced the permanent cessation or loss of representativeness of all 35 LIBOR benchmark settings currently published by the IBA. For further details, refer to Note 2 of our Condensed Financial Statements.

U.K. and European regulatory reform

EU Sustainability-Related Disclosures Regulation requires financial services firms to disclose their approaches to considering environmental, social and governance factors as part of their advice and investment decision processes. These requirements were effective on March 10, 2021 and there has been no material impact on us; however, we will continue to monitor future guidance and the impact, if any, on us.

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 Significant developments: COVID-19 section, including the Impact of pandemic risk factor, and the Risk management – Top and emerging risks and Legal and regulatory environment risk sections of our 2020 Annual Report and the Impact of COVID-19 pandemic, Risk and Capital management sections of this Q2 2021 Report to Shareholders.

Impact of COVID-19 pandemic

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 the COVID-19 pandemic 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, the COVID-19 pandemic has continued to affect our employees, clients and communities, with resultant impacts on our operations, financial results and present and future risks to our business.

Measures to contain the spread of COVID-19, including business closures, social distancing protocols, travel restrictions, school closures, quarantines, and restrictions on gatherings and events, have been and continue to be widespread. These measures have had and continue 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 progress towards reopening plans have been accompanied by resurgences in the spread of COVID-19 in some regions, resulting in the re-imposition of restrictions in certain regions. As the COVID-19 pandemic continues to evolve, including through the emergence and progression of new variants of COVID-19 in different regions, governments continue to adjust their response and approach to the pandemic. Consequently, the extent of containment measures and progress towards reopening continues to vary and fluctuate across different regions. While vaccines have been approved for use and are being administered in many countries, uncertainty remains regarding vaccine efficacy against new variants of COVID-19, vaccine supply and availability, and the ability of governments to quickly and effectively distribute vaccines to inoculate a sufficient proportion of the population to enable widespread easing of containment measures and support the transition to a fully reopened economy. All of these factors contribute to the uncertainty regarding the timing of a full recovery. The COVID-19 pandemic, the containment measures and the phased reopening approach taken in several regions could have longer-term effects on economic and commercial activity and consumer behaviour after the COVID-19 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 provided and continue to provide unprecedented relief programs and temporary measures to facilitate the continued operation of the global economy and financial system, all of which are intended to provide support to individuals and businesses. While some programs have come to an end, other programs remain in place or have continued to be developed in an effort to support the overall economy. We expect that these governments, regulatory bodies, central banks and private organizations will continue to assess the need for these programs and measures.

In addition to the broad impacts of the COVID-19 pandemic on our employees, clients, communities and operations, the COVID-19 pandemic has impacted and will continue to impact our financial results. Results across all of our business segments have been and continue to be impacted to varying degrees by downstream implications from changes in the macroeconomic environment, including lower interest rates, modest consumer spending relative to pre-pandemic levels, market volatility, fluctuations in credit spreads, as well as other impacts including changes in credit risk, 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 of the extent and duration of the COVID-19 pandemic and its impacts 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. We are closely monitoring the potential continued effects and impacts of the COVID-19 pandemic.

For further details regarding the impact of the COVID-19 pandemic, including associated risks, relief programs, programs in support of funding and liquidity, and other government measures, refer to the Significant developments: COVID-19, including the Impact of pandemic risk factor, risk and Capital management sections of our 2020 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, various temporary relief programs were launched beyond the available government programs.

A summary of RBC and government relief programs is included in the Significant developments: COVID-19 section of our 2020 Annual Report, with updates noted below.

RBC relief programs

During the second quarter of 2020, we announced the RBC Client Relief program which aimed to provide immediate and long-term relief for clients impacted by the COVID-19 pandemic. The RBC Client Relief program for the majority of our commercial and small business clients closed on June 30, 2020 and loan deferrals within the program closed for retail clients on September 30, 2020.

As at April 30, 2021, payment deferral periods for clients that participated in these programs have largely concluded; however, we have assessed and will continue to assess the needs of each individual client and continue to provide support to clients on a case by case basis. The majority of our clients that have exited these programs have returned to making regular payments on their loans following the expiry of their payment deferral periods.

Government programs in response to the COVID-19 pandemic

In response to the COVID-19 pandemic, both the Canadian and U.S. federal governments established programs intended to support businesses experiencing cash flow challenges during this unprecedented time, through which financial institutions have facilitated and continue to facilitate the provision of financial relief. In Canada, these programs include the Canada Emergency Business Account (CEBA) and the Business Credit Availability Program (BCAP), which is comprised of the Export Development Canada (EDC) BCAP Guarantee, the Business Development Bank of Canada (BDC) Co-Lending Program, the BDC Mid-Market Financing Program, and the EDC Mid-Market Guarantee and Financing Program. In the U.S., the federal government has established the Paycheck Protection Program (PPP). There have been no significant changes to these programs since October 31, 2020, except as noted below:

- On March 22, 2021, the Canadian Federal government announced that the application deadline for the CEBA program has been extended from March 31, 2021 to June 30, 2021.
- In January 2021, the U.S. Small Business Administration (SBA), in consultation with the U.S. Treasury Department, pursuant to the “Economic Aid to Hard-Hit Small Businesses, Nonprofits, and Venues Act” (Economic Aid Act) relaunched the PPP, extending it through March 31, 2021, and announced a number of updates to the PPP for current and future loans. The expanded program includes new categories of eligible expenses, including operating expenditures, property damage costs, supplier costs and worker protection expenditures, in addition to payroll costs, utilities and mortgage interest. Borrowers are also provided with additional flexibility, including the ability to set their covered period for forgivable expenditures to be any length between 8 and 24 weeks. Certain borrowers with existing PPP loans may qualify for a second draw loan and may be eligible for a supplemental increase to their first draw. On March 30, 2021, the “PPP Extension Act” was signed into law, extending the PPP for an additional two months to May 31, 2021, and providing an additional 30-day period for the SBA to process pending applications.
- On January 26, 2021, the Canadian Federal government announced the BDC Highly Affected Sectors Credit Availability Program (HASCAP). Under this program, Canadian banks are able to provide low-interest loans ranging from \$25,000 to \$1 million to businesses that have been heavily impacted by COVID-19 to cover operational cash flow needs. Loans funded under this program are fully guaranteed by the BDC. The application deadline for this program is June 30, 2021.

As at April 30, 2021, we have facilitated the administration of relief to more than 194,000 clients (January 31, 2021 – 184,800) who have enrolled in the Canadian federal government programs, with corresponding exposures of \$10.8 billion (January 31, 2021 – \$9.3 billion), of which \$10.2 billion (January 31, 2021 – \$8.7 billion) was funded. For further details, refer to Note 6 of our 2020 Annual Consolidated Financial Statements. As at April 30, 2021, we have provided \$6.4 billion (US\$5.2 billion) of funding (January 31, 2021 – \$5.7 billion, (US\$4.5 billion)) to 20,341 clients (January 31, 2021 – 16,835 clients) through the PPP.

Financial performance

Overview

Q2 2021 vs. Q2 2020

Net income of \$4,015 million was up \$2,534 million from a year ago. Diluted earnings per share (EPS) of \$2.76 was up \$1.76 and return on common equity (ROE) of 19.4% was up from 7.3% last year. Our Common Equity Tier 1 (CET1) ratio of 12.8% was up 110 bps from a year ago.

Our results reflected higher earnings in Personal & Commercial Banking, Capital Markets, Wealth Management and Insurance, partially offset by lower earnings in Investor & Treasury Services. The same quarter last year reflected elevated provisions on performing loans due to the impact of the onset of the COVID-19 pandemic, which unfavourably impacted results in Personal & Commercial Banking, Capital Markets and Wealth Management in the prior year.

Q2 2021 vs. Q1 2021

Net income of \$4,015 million was up \$168 million or 4% from last quarter. Diluted EPS of \$2.76 was up \$0.10 or 4% and ROE of 19.4% was up from 18.6% in the prior quarter. Our CET1 ratio of 12.8% was up 30 bps from last quarter.

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

Q2 2021 vs. Q2 2020 (Six months ended)

Net income of \$7,862 million was up \$2,872 million or 58% from the same period last year. Diluted EPS of \$5.42 was up \$2.02 or 59% and ROE of 19.0% was up from 12.5% in the prior year.

Our results reflected higher earnings in Personal & Commercial Banking, Capital Markets, Wealth Management and Insurance, partially offset by lower earnings in Investor & Treasury Services. The same period last year reflected elevated provisions on performing loans due to the impact of the onset of the COVID-19 pandemic, which unfavourably impacted results in Personal & Commercial Banking, Capital Markets and Wealth Management 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.

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 six months ended	
	Q2 2021 vs. Q2 2020	Q2 2021 vs. Q1 2021	Q2 2021 vs. Q2 2020	
(Millions of Canadian dollars, except per share amounts)				
<i>Increase (decrease):</i>				
Total revenue	\$ (356)	\$ (95)	\$ (429)	
PCL	13	6	15	
Non-interest expense	(256)	(71)	(305)	
Income taxes	(24)	(7)	(26)	
Net income	(89)	(23)	(113)	
Impact on EPS				
Basic	\$ (0.06)	\$ (0.02)	\$ (0.08)	
Diluted	(0.06)	(0.02)	(0.08)	

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

	For the three months ended			For the six months ended	
	April 30 2021	January 31 2021	April 30 2020	April 30 2021	April 30 2020
(Average foreign currency equivalent of C\$1.00) (1)					
U.S. dollar	0.798	0.779	0.725	0.789	0.742
British pound	0.577	0.574	0.575	0.575	0.577
Euro	0.669	0.644	0.659	0.656	0.671

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

Total revenue

(Millions of Canadian dollars, except percentage amounts)	For the three months ended			For the six months ended	
	April 30 2021	January 31 2021	April 30 2020	April 30 2021	April 30 2020
Interest and dividend income	\$ 6,898	\$ 7,236	\$ 9,226	\$ 14,134	\$ 19,464
Interest expense	2,044	2,201	3,761	4,245	8,778
Net interest income	4,854	5,035	5,465	9,889	10,686
NIM	1.50%	1.50%	1.61%	1.50%	1.60%
Insurance premiums, investment and fee income	536	1,809	197	2,345	2,191
Trading revenue	377	524	(66)	901	392
Investment management and custodial fees	1,711	1,703	1,500	3,414	3,035
Mutual fund revenue	1,014	1,000	890	2,014	1,836
Securities brokerage commissions	431	401	460	832	778
Service charges	460	458	468	918	956
Underwriting and other advisory fees	747	590	544	1,337	1,171
Foreign exchange revenue, other than trading	292	289	280	581	533
Card service revenue	281	272	212	553	499
Credit fees	368	332	304	700	664
Net gains on investment securities	82	35	45	117	56
Share of profit in joint ventures and associates	24	25	15	49	37
Other	441	470	19	911	335
Non-interest income	6,764	7,908	4,868	14,672	12,483
Total revenue	\$ 11,618	\$ 12,943	\$ 10,333	\$ 24,561	\$ 23,169
Additional trading information					
Net interest income	\$ 642	\$ 740	\$ 1,064	\$ 1,382	\$ 1,764
Non-interest income	377	524	(66)	901	392
Total trading revenue	\$ 1,019	\$ 1,264	\$ 998	\$ 2,283	\$ 2,156

Q2 2021 vs. Q2 2020

Total revenue increased \$1,285 million or 12% from a year ago, mainly due to higher trading revenue, other revenue and insurance premiums, investment and fee income (Insurance revenue). Higher investment management and custodial fees, underwriting and other advisory fees, as well as mutual fund revenue also contributed to the increase. These factors were partially offset by lower net interest income. The impact of foreign exchange translation decreased total revenue by \$356 million.

Net interest income decreased \$611 million or 11%, largely due to lower spreads in Personal & Commercial Banking and Wealth Management, and lower trading revenue in Capital Markets primarily in repo products. The impact of foreign exchange translation also contributed to the decrease. These factors were partially offset by volume growth in Canadian Banking and Wealth Management.

NIM was down 11 bps compared to last year, mainly due to lower spreads in Personal & Commercial Banking and Wealth Management primarily due to the impact of lower interest rates.

Insurance revenue increased \$339 million, primarily reflecting the change in fair value of investments backing policyholder liabilities, which is largely offset in PBCAE.

Trading revenue increased \$443 million, as the prior year included loan underwriting markdowns impacting fixed income trading in the U.S. and Europe driven by widening credit spreads. Higher equity trading across most regions reflecting increased client activity also contributed to the increase.

Investment management and custodial fees increased \$211 million or 14%, mainly due to higher average fee-based client assets reflecting market appreciation and net sales.

Mutual fund revenue increased \$124 million or 14%, primarily due to higher average fee-based client assets reflecting market appreciation and net sales in Wealth Management, and higher average balances driving higher mutual fund distribution fees in Canadian Banking.

Underwriting and other advisory fees increased \$203 million or 37%, largely driven by higher equity origination, higher M&A activity and higher debt origination, all largely in the U.S.

Other revenue increased \$422 million, largely attributable to 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.

Q2 2021 vs. Q1 2021

Total revenue decreased \$1,325 million or 10% from last quarter, mainly due to lower insurance revenue. Lower net interest income and trading revenue also contributed to the decrease. These factors were partially offset by higher underwriting and other advisory fees. The impact of foreign exchange translation decreased total revenue by \$95 million.

Net interest income decreased \$181 million or 4%, mainly due to the impact of three less days in the current quarter, and lower trading revenue in Capital Markets. These factors were partially offset by volume growth in Canadian Banking.

Insurance revenue decreased \$1,273 million or 70%, mainly reflecting the change in fair value of investments backing policyholder liabilities and lower group annuity sales, both of which are largely offset in PBCAE.

Trading revenue decreased \$147 million or 28%, mainly attributable to lower fixed income trading across all regions driven by reduced client activity.

Underwriting and other advisory fees increased \$157 million or 27%, primarily driven by higher debt and equity origination across all regions.

Q2 2021 vs. Q2 2020 (Six months ended)

Total revenue increased \$1,392 million or 6% from the same period last year, primarily driven by higher other revenue and trading revenue. Higher investment management and custodial fees, mutual fund revenue, underwriting and other advisory fees, and insurance revenue also contributed to the increase. These factors were partially offset by lower net interest income. The impact of foreign exchange translation decreased total revenue by \$429 million.

Net interest income decreased \$797 million or 7%, largely due to lower spreads in Personal & Commercial Banking and Wealth Management. Lower trading revenue in Capital Markets and the impact of foreign exchange translation also contributed to the decrease. These factors were partially offset by volume growth in Canadian Banking and Wealth Management.

Insurance revenue increased \$154 million or 7%, mainly reflecting the change in fair value of investments backing policyholder liabilities, partially offset by lower group annuity sales, both of which are largely offset in PBCAE.

Trading revenue increased \$509 million, as the prior year included loan underwriting markdowns impacting fixed income trading in the U.S. and Europe driven by widening credit spreads. Higher equity trading across all regions reflecting increased client activity also contributed to the increase.

Investment management and custodial fees increased \$379 million or 12%, largely driven by higher average fee-based client assets reflecting market appreciation and net sales.

Mutual fund revenue increased \$178 million or 10%, primarily due to higher average fee-based client assets reflecting market appreciation and net sales in Wealth Management, and higher average balances driving higher mutual fund distribution fees in Canadian Banking.

Underwriting and other advisory fees increased \$166 million or 14%, mainly due to higher equity origination across most regions.

Other revenue increased \$576 million, largely attributable to 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.

Provision for credit losses

Q2 2021 vs. Q2 2020

Total PCL decreased \$2,926 million from a year ago.

PCL on loans of \$(83) million decreased \$2,817 million, as the prior year reflected elevated provisions on performing loans due to the impact of the onset of the COVID-19 pandemic. The PCL on loans ratio was (5) bps.

Q2 2021 vs. Q1 2021

Total PCL decreased \$206 million from last quarter.

PCL on loans of \$(83) million decreased \$204 million, primarily due to lower provisions in Personal & Commercial Banking and Capital Markets, partially offset by higher recoveries in Wealth Management in the prior quarter. The PCL on loans ratio of (5) bps decreased 12 bps.

Q2 2021 vs. Q2 2020 (Six months ended)

Total PCL decreased \$3,235 million from the same period last year.

PCL on loans of \$38 million decreased \$3,117 million from the same period last year, as the prior year reflected elevated provisions on performing loans due to the impact of the onset of the COVID-19 pandemic. The PCL on loans ratio was 1 bp.

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

Insurance policyholder benefits, claims and acquisition expense (PBCAE)

Q2 2021 vs. Q2 2020

PBCAE increased \$326 million from a year ago, primarily reflecting the change in fair value of investments backing policyholder liabilities, which is largely offset in revenue. The impact of lower new longevity reinsurance contracts also contributed to the increase. These factors were partially offset by lower claims costs, mainly in our travel-related and disability products, as well as the impact of actuarial adjustments.

Q2 2021 vs. Q1 2021

PBCAE decreased \$1,257 million or 89% from last quarter, primarily reflecting the change in fair value of investments backing policyholder liabilities and lower group annuity sales, both of which are largely offset in revenue.

Q2 2021 vs. Q2 2020 (Six months ended)

PBCAE increased \$118 million or 8% from the same period last year, mainly reflecting the change in fair value of investments backing policyholder liabilities, which is largely offset in revenue. Lower new longevity reinsurance contracts also contributed to the increase. These factors were partially offset by lower claims costs, primarily in our travel-related and disability products, and lower group annuity sales.

Non-interest expense

(Millions of Canadian dollars, except percentage amounts)	For the three months ended			For the six months ended	
	April 30 2021	January 31 2021	April 30 2020	April 30 2021	April 30 2020
Salaries	\$ 1,641	\$ 1,655	\$ 1,671	\$ 3,296	\$ 3,323
Variable compensation	1,874	1,804	1,370	3,678	3,016
Benefits and retention compensation	503	543	508	1,046	1,049
Share-based compensation	134	286	24	420	245
Human resources	4,152	4,288	3,573	8,440	7,633
Equipment	487	493	468	980	930
Occupancy	400	404	417	804	814
Communications	212	213	252	425	502
Professional fees	314	291	324	605	608
Amortization of other intangibles	318	319	315	637	618
Other	496	534	593	1,030	1,215
Non-interest expense	\$ 6,379	\$ 6,542	\$ 5,942	\$ 12,921	\$ 12,320
Efficiency ratio ⁽¹⁾	54.9%	50.5%	57.5%	52.6%	53.2%
Efficiency ratio adjusted ⁽²⁾	52.3%	51.9%	52.6%	52.1%	52.1%

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

(2) Measure has been adjusted by excluding the change in fair value of investments backing policyholder liabilities. This is a non-GAAP measure. For further details, refer to the Key performance and non-GAAP measures section.

Q2 2021 vs. Q2 2020

Non-interest expense increased \$437 million or 7% from a year ago, mainly due to higher variable compensation on improved results, and the change in the fair value of our U.S. share-based compensation plans, which was largely offset in Other revenue. These factors were partially offset by the impact of foreign exchange translation.

Our efficiency ratio of 54.9% decreased 260 bps from 57.5% last year. Excluding the change in fair value of investments backing policyholder liabilities, our efficiency ratio of 52.3% decreased 30 bps from 52.6% last year.

Q2 2021 vs. Q1 2021

Non-interest expense decreased \$163 million or 2% from last quarter, primarily due to the impact of foreign exchange translation and lower staff related costs. A favourable sales tax adjustment in the current quarter as well as the change in the fair value of our U.S. share-based compensation plans, which was largely offset in Other revenue, also contributed to the decrease. These factors were partially offset by higher variable compensation on improved results.

Our efficiency ratio of 54.9% increased 440 bps from 50.5% last quarter. Excluding the change in fair value of investments backing policyholder liabilities, our efficiency ratio of 52.3% increased 40 bps from 51.9% last quarter.

Q2 2021 vs. Q2 2020 (Six months ended)

Non-interest expense increased \$601 million or 5% from the same period last year, mainly attributable to higher variable compensation on improved results and the change in the fair value of our U.S. share-based compensation plans, which was largely offset in Other revenue. These factors were partially offset by the impact of foreign exchange translation.

Our efficiency ratio of 52.6% decreased 60 bps from 53.2% last year. Excluding the change in fair value of investments backing policyholder liabilities, our efficiency ratio of 52.1% remained unchanged from 52.1% 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

(Millions of Canadian dollars, except percentage amounts)	For the three months ended			For the six months ended	
	April 30 2021	January 31 2021	April 30 2020	April 30 2021	April 30 2020
Income taxes	\$ 1,171	\$ 1,038	\$ 257	\$ 2,209	\$ 1,173
Income before income taxes	5,186	4,885	1,738	10,071	6,163
Effective income tax rate	22.6%	21.2%	14.8%	21.9%	19.0%

Q2 2021 vs. Q2 2020

Income tax expense increased \$914 million from a year ago, primarily due to higher income before income taxes in the current quarter.

The effective income tax rate of 22.6% increased 780 bps, mainly due to the impact of changes in earnings mix and the proportion of tax exempt income relative to lower earnings in the prior year.

Q2 2021 vs. Q1 2021

Income tax expense increased \$133 million or 13% from last quarter, primarily due to higher income before income taxes and net favourable tax adjustments in the prior quarter.

The effective income tax rate of 22.6% increased 140 bps, mainly due to the net favourable tax adjustments in the prior quarter.

Q2 2021 vs. Q2 2020 (Six months ended)

Income tax expense increased \$1,036 million or 88% from the same period last year, primarily due to higher income before income taxes.

The effective income tax rate of 21.9% increased 290 bps, mainly due to changes in earnings mix combined with the impact of lower earnings in the same period last 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, 2020.

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 2020 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 2020 Annual Report.

The following table provides a summary of our ROE calculations:

(Millions of Canadian dollars, except percentage amounts)	For the three months ended								January 31	April 30
	April 30 2021							2021	2020	
	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total	Total	Total	
Net income available to common shareholders	\$ 1,885	\$ 676	\$ 185	\$ 117	\$ 1,050	\$ 25	\$ 3,938	\$ 3,787	\$ 1,420	
Total average common equity (1), (2)	24,250	16,100	2,350	3,350	22,850	14,550	83,450	80,750	79,100	
ROE (3)	31.8%	17.2%	32.1%	14.3%	18.9%	n.m.	19.4%	18.6%	7.3%	

(Millions of Canadian dollars, except percentage amounts)	For the six months ended								April 30
	April 30 2021							2020	
	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total	Total	
Net income available to common shareholders	\$ 3,659	\$ 1,313	\$ 384	\$ 238	\$ 2,101	\$ 30	\$ 7,725	\$ 4,859	
Total average common equity (1), (2)	23,800	16,150	2,300	3,250	22,700	13,850	82,050	78,450	
ROE (3)	31.0%	16.4%	33.3%	14.8%	18.7%	n.m.	19.0%	12.5%	

(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 six months ended April 30, 2021 with the corresponding periods in the prior year and the three months ended January 31, 2021. 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 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 policyholder liabilities:

(Millions of Canadian dollars, except percentage amounts)	For the three months ended									
	April 30 2021			January 31 2021			April 30 2020			
	As reported	Item excluded		As reported	Item excluded		As reported	Item excluded		
		Change in fair value of investments backing policyholder liabilities	Adjusted		Change in fair value of investments backing policyholder liabilities	Adjusted		Change in fair value of investments backing policyholder liabilities	Adjusted	
Total revenue	\$ 11,618	\$ 568	\$ 12,186	\$ 12,943	\$ (346)	\$ 12,597	\$ 10,333	\$ 953	\$ 11,286	
Non-interest expense	6,379	–	6,379	6,542	–	6,542	5,942	–	5,942	
Efficiency ratio	54.9%		52.3%	50.5%		51.9%	57.5%		52.6%	

(Millions of Canadian dollars, except percentage amounts)	For the six months ended									
	April 30 2021			April 30 2020						
	As reported	Item excluded		As reported	Item excluded		As reported	Item excluded		
		Change in fair value of investments backing policyholder liabilities	Adjusted		Change in fair value of investments backing policyholder liabilities	Adjusted		Change in fair value of investments backing policyholder liabilities	Adjusted	
Total revenue	\$ 24,561	\$ 222	\$ 24,783	\$ 23,169	\$ 485	\$ 23,654				
Non-interest expense	12,921	–	12,921	12,320	–	12,320				
Efficiency ratio	52.6%		52.1%	53.2%		52.1%				

Personal & Commercial Banking

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	As at or for the three months ended			As at or for the six months ended	
	April 30 2021	January 31 2021	April 30 2020	April 30 2021	April 30 2020
Net interest income	\$ 3,085	\$ 3,161	\$ 3,149	\$ 6,246	\$ 6,375
Non-interest income	1,442	1,402	1,251	2,844	2,635
Total revenue	4,527	4,563	4,400	9,090	9,010
PCL on performing assets	(166)	(60)	1,370	(226)	1,436
PCL on impaired assets	201	225	336	426	612
PCL	35	165	1,706	200	2,048
Non-interest expense	1,915	1,978	1,947	3,893	3,931
Income before income taxes	2,577	2,420	747	4,997	3,031
Net income	\$ 1,908	\$ 1,793	\$ 532	\$ 3,701	\$ 2,218
Revenue by business					
Canadian Banking	\$ 4,341	\$ 4,352	\$ 4,170	\$ 8,693	\$ 8,538
Caribbean & U.S. Banking	186	211	230	397	472
Selected balance sheet and other information					
ROE	31.8%	30.1%	9.0%	31.0%	18.7%
NIM	2.56%	2.56%	2.73%	2.56%	2.75%
Efficiency ratio	42.3%	43.3%	44.3%	42.8%	43.6%
Operating leverage	4.5%	(0.7)%	(1.7)%	1.9%	(0.4)%
Average total earning assets, net	\$ 493,400	\$ 489,800	\$ 468,400	\$ 491,600	\$ 465,900
Average loans and acceptances, net	497,400	493,500	471,300	495,400	469,000
Average deposits	495,000	490,100	428,700	492,500	421,100
AUA ⁽¹⁾	339,000	320,900	275,700	339,000	275,700
Average AUA	334,400	315,900	275,900	325,000	283,300
PCL on impaired loans as a % of average net loans and acceptances	0.17%	0.18%	0.28%	0.18%	0.26%
Other selected information – Canadian Banking					
Net income	\$ 1,872	\$ 1,754	\$ 649	\$ 3,626	\$ 2,273
NIM	2.55%	2.54%	2.70%	2.55%	2.71%
Efficiency ratio	40.8%	41.9%	42.7%	41.3%	42.0%
Operating leverage	4.7%	(1.6)%	(1.8)%	1.5%	(0.4)%

(1) AUA represents period-end spot balances and includes securitized residential mortgages and credit card loans as at April 30, 2021 of \$15.0 billion and \$2.9 billion, respectively (January 31, 2021 – \$15.3 billion and \$4.1 billion; April 30, 2020 – \$16.1 billion and \$6.7 billion).

Financial performance

Q2 2021 vs. Q2 2020

Net income increased \$1,376 million from a year ago, primarily attributable to lower PCL. Average volume growth of 11% in Canadian Banking was mostly offset by lower spreads due to the lower interest rate environment.

Total revenue increased \$127 million or 3%.

Canadian Banking revenue increased \$171 million or 4%, primarily driven by average volume growth of 16% in deposits and 6% in loans, higher card service revenue and higher average balances driving higher mutual fund distribution fees. Higher securities brokerage commissions reflecting increased client activity also contributed to the increase. These factors were partially offset by lower spreads and the impact of one less day in the current quarter.

Caribbean & U.S. Banking revenue decreased \$44 million or 19%, primarily reflecting lower spreads and the impact of foreign exchange translation.

Net interest margin was down 17 bps, primarily due to lower interest rates.

PCL decreased \$1,671 million, as the prior year reflected elevated provisions on performing loans due to the impact of the onset of the COVID-19 pandemic as compared to releases in the current quarter driven by improvements in our macroeconomic and credit quality outlook. Lower provisions on impaired loans also contributed to the decrease, resulting in a decrease of 11 bps in the impaired loans ratio. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense decreased \$32 million or 2%, largely attributable to lower discretionary spend and a favourable sales tax adjustment in the current quarter, partially offset by higher staff-related costs.

Q2 2021 vs. Q1 2021

Net income increased \$115 million or 6% from last quarter, primarily due to lower PCL resulting from higher releases of provisions on performing loans in the current quarter. Average volume growth of 1% in Canadian Banking and lower staff-related costs also contributed to the increase. These factors were partially offset by the impact of three less days in the current quarter.

Net interest margin remained flat.

Q2 2021 vs. Q2 2020 (Six months ended)

Net income increased \$1,483 million or 67% from the same period last year, largely reflecting lower PCL. Average volume growth of 11% in Canadian Banking was more than offset by lower spreads due to the lower interest rate environment.

Total revenue increased \$80 million or 1%, largely due to average volume growth in Canadian Banking of 18% in deposits and 6% in loans. Higher securities brokerage commissions reflecting increased client activity, higher average balances driving higher mutual fund distribution fees, and higher card service revenue also contributed to the increase. These factors were partially offset by lower spreads.

PCL decreased \$1,848 million, as the same period last year reflected elevated provisions on performing loans due to the impact of the onset of the COVID-19 pandemic as compared to releases in the current year driven by improvements in our macroeconomic and credit quality outlook. Lower provisions on impaired loans also contributed to the decrease, resulting in a decrease of 8 bps in the impaired loans ratio. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense decreased \$38 million or 1%.

Wealth Management

(Millions of Canadian dollars, except number of, percentage amounts and as otherwise noted)	As at or for the three months ended			As at or for the six months ended	
	April 30 2021	January 31 2021	April 30 2020	April 30 2021	April 30 2020
Net interest income	\$ 666	\$ 666	\$ 737	\$ 1,332	\$ 1,475
Non-interest income	2,728	2,721	2,085	5,449	4,513
Total revenue	3,394	3,387	2,822	6,781	5,988
PCL on performing assets	(5)	(2)	76	(7)	75
PCL on impaired assets	3	(27)	15	(24)	14
PCL	(2)	(29)	91	(31)	89
Non-interest expense	2,495	2,563	2,169	5,058	4,539
Income before income taxes	901	853	562	1,754	1,360
Net income	\$ 691	\$ 649	\$ 424	\$ 1,340	\$ 1,047
Revenue by business					
Canadian Wealth Management	\$ 964	\$ 900	\$ 835	\$ 1,864	\$ 1,678
U.S. Wealth Management (including City National)	1,700	1,702	1,384	3,402	3,008
U.S. Wealth Management (including City National) (US\$ millions)	1,358	1,326	1,003	2,684	2,237
Global Asset Management	628	695	500	1,323	1,094
International Wealth Management	102	90	103	192	208
Selected balance sheet and other information					
ROE	17.2%	15.6%	10.4%	16.4%	13.0%
NIM	2.38%	2.34%	2.97%	2.36%	3.07%
Pre-tax margin (1)	26.5%	25.2%	19.9%	25.9%	22.7%
Number of advisors (2)	5,459	5,457	5,333	5,459	5,333
Average total earning assets, net	\$ 114,800	\$ 112,900	\$ 100,900	\$ 113,800	\$ 96,700
Average loans and acceptances, net	83,100	81,800	75,100	82,500	72,300
Average deposits	139,700	137,900	119,100	138,800	112,300
AUA (3)	1,227,000	1,180,400	1,053,700	1,227,000	1,053,700
U.S. Wealth Management (including City National) (3)	651,300	623,000	559,200	651,300	559,200
U.S. Wealth Management (including City National) (US\$ millions) (3)	529,800	487,000	401,700	529,800	401,700
AUM (3)	922,300	890,000	782,100	922,300	782,100
Average AUA	1,218,200	1,171,300	1,040,200	1,194,400	1,068,900
Average AUM	910,400	883,800	770,400	896,800	775,300
PCL on impaired loans as a % of average net loans and acceptances	0.02%	(0.13)%	0.08%	(0.06)%	0.04%

Estimated impact of U.S. dollar, British pound and Euro translation on key income statement items

(Millions of Canadian dollars, except percentage amounts)

	For the three months ended		For the six months ended
	Q2 2021 vs. Q2 2020	Q2 2021 vs. Q1 2021	Q2 2021 vs. Q2 2020
Increase (decrease):			
Total revenue	\$ (181)	\$ (47)	\$ (222)
PCL	–	–	1
Non-interest expense	(146)	(37)	(180)
Net income	(28)	(7)	(34)
Percentage change in average U.S. dollar equivalent of C\$1.00	10%	2%	6%
Percentage change in average British pound equivalent of C\$1.00	–%	1%	–%
Percentage change in average Euro equivalent of C\$1.00	2%	4%	(2)%

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

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

(3) Represents period-end spot balances.

Financial performance

Q2 2021 vs. Q2 2020

Net income increased \$267 million or 63% from a year ago, primarily due to average loan growth and higher average fee-based client assets, net of the associated variable compensation. Lower PCL and higher transactional revenue also contributed to the increase. These factors were partially offset by the impact of lower interest rates.

Total revenue increased \$572 million or 20%.

Canadian Wealth Management revenue increased \$129 million or 15%, mainly due to higher average fee-based client assets, reflecting market appreciation and net sales.

U.S. Wealth Management (including City National) revenue increased \$316 million or 23%. In U.S. dollars, revenue increased \$355 million or 35%, primarily attributable to 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. Average loan growth of 23%, higher average fee-based client assets reflecting market appreciation and net sales and higher transactional revenue, mainly driven by client activity, also contributed to the increase. These factors were partially offset by the impact of lower interest rates on net interest income.

Global Asset Management revenue increased \$128 million or 26%, largely due to higher average fee-based client assets reflecting market appreciation and net sales.

PCL decreased \$93 million in U.S. Wealth Management (including City National), as the prior year reflected elevated provisions on performing loans due to the impact of the onset of the COVID-19 pandemic as compared to releases in the current quarter. Lower provisions on impaired loans also contributed to the decrease, resulting in a decrease of 6 bps in the impaired loans ratio. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense increased \$326 million or 15%, primarily due to changes in the fair value of our U.S. share-based compensation plans, which was largely offset in revenue, and higher variable compensation commensurate with increased commissionable revenue. These factors were partially offset by the impact of foreign exchange translation.

Q2 2021 vs. Q1 2021

Net income increased \$42 million or 6% from last quarter, largely attributable to higher average fee-based client assets, net of the associated variable compensation, lower staff related costs and higher transactional revenue. These factors were partially offset by unfavourable changes in the fair value of seed capital investments.

Q2 2021 vs. Q2 2020 (Six months ended)

Net income increased \$293 million or 28% from the same period last year, primarily due to average loan growth and higher average fee-based client assets, net of the associated variable compensation. Lower PCL and higher transactional revenue also contributed to the increase. These factors were partially offset by the impact of lower interest rates on loans and sweep deposits.

Total revenue increased \$793 million or 13%, primarily due to higher average fee-based client assets reflecting market appreciation and net sales, 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, and average loan growth of 14%. Higher transactional revenue, mainly driven by client activity, also contributed to the increase. These factors were partially offset by the impact of lower interest rates on net interest income and revenue from sweep deposits, as well as the impact of foreign exchange translation.

PCL decreased \$120 million in U.S. Wealth Management (including City National), as the same period last year reflected elevated provisions on performing loans due to the impact of the onset of the COVID-19 pandemic as compared to releases in the current year. Recoveries on impaired loans in the current year as compared to provisions taken in the same period last year also contributed to the decrease, resulting in a decrease of 10 bps in the impaired loans ratio. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense increased \$519 million or 11%, primarily due to changes in the fair value of our U.S. share-based compensation plans, which was largely offset in revenue, and higher variable compensation commensurate with increased commissionable revenue. These factors were partially offset by the impact of foreign exchange translation.

Insurance

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	As at or for the three months ended			As at or the six months ended	
	April 30 2021	January 31 2021	April 30 2020	April 30 2021	April 30 2020
Non-interest income					
Net earned premiums	\$ 929	\$ 1,248	\$ 957	\$ 2,177	\$ 2,307
Investment income, gains/(losses) on assets supporting insurance policyholder liabilities (1)	(432)	524	(796)	92	(187)
Fee income	39	37	36	76	71
Total revenue	536	1,809	197	2,345	2,191
PCL	–	–	1	–	1
Insurance policyholder benefits and claims (1)	59	1,331	(257)	1,390	1,278
Insurance policyholder acquisition expense	90	75	80	165	159
Non-interest expense	140	149	148	289	301
Income before income taxes	247	254	225	501	452
Net income	\$ 187	\$ 201	\$ 180	\$ 388	\$ 361
Revenue by business					
Canadian Insurance	\$ (172)	\$ 1,157	\$ (344)	\$ 985	\$ 1,039
International Insurance	708	652	541	1,360	1,152
Selected balances and other information					
ROE	32.1%	34.5%	33.0%	33.3%	32.7%
Premiums and deposits (2)	\$ 1,161	\$ 1,444	\$ 1,148	\$ 2,605	\$ 2,690
Fair value changes on investments backing policyholder liabilities (1)	(568)	346	(953)	(222)	(485)

(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 PBCAE.

(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

Q2 2021 vs. Q2 2020

Net income increased \$7 million or 4% from a year ago, mainly due to lower claims costs and the favourable impact of actuarial adjustments. These factors were partially offset by the impact of realized investment gains in the prior year and lower new longevity reinsurance contracts.

Total revenue increased \$339 million.

Canadian Insurance revenue increased \$172 million or 50%, primarily reflecting the change in fair value of investments backing policyholder liabilities, which is largely offset in PBCAE as indicated below. This was partially offset by the impact of realized investment gains in the prior year.

International Insurance revenue increased \$167 million or 31%, primarily reflecting the change in fair value of investments backing policyholder liabilities, which is largely offset in PBCAE as indicated below. This was partially offset by lower international life volumes.

PBCAE increased \$326 million, primarily reflecting the change in fair value of investments backing policyholder liabilities, which is largely offset in revenue. The impact of lower new longevity reinsurance contracts also contributed to the increase. These factors were partially offset by lower claims costs, mainly in our travel-related and disability products, as well as the impact of actuarial adjustments.

Non-interest expense decreased \$8 million or 5%, reflecting benefits from ongoing efficiency initiatives.

Q2 2021 vs. Q1 2021

Net income decreased \$14 million or 7% from last quarter, largely due to lower new longevity reinsurance contracts.

Q2 2021 vs. Q2 2020 (Six months ended)

Net income increased \$27 million or 7% from the same period last year, largely due to lower claims costs partially offset by the impact of lower new longevity reinsurance contracts.

Total revenue increased \$154 million or 7%, mainly reflecting the change in fair value of investments backing policyholder liabilities, partially offset by lower group annuity sales, both of which are largely offset in PBCAE as indicated below.

PBCAE increased \$118 million or 8%, mainly reflecting the change in fair value of investments backing policyholder liabilities, which is largely offset in revenue. Lower new longevity reinsurance contracts also contributed to the increase. These factors were partially offset by lower claims costs, primarily in our travel-related and disability products, and lower group annuity sales.

Non-interest expense decreased \$12 million or 4%, reflecting benefits from ongoing efficiency initiatives.

Investor & Treasury Services

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	As at or for the three months ended			As at or for the six months ended	
	April 30 2021	January 31 2021	April 30 2020	April 30 2021	April 30 2020
Net interest income	\$ 87	\$ 91	\$ 74	\$ 178	\$ 132
Non-interest income	447	474	635	921	1,174
Total revenue	534	565	709	1,099	1,306
PCL on performing assets	(2)	(2)	14	(4)	14
PCL on impaired assets	–	–	–	–	–
PCL	(2)	(2)	14	(4)	14
Non-interest expense	375	401	392	776	794
Income before income taxes	161	166	303	327	498
Net income	\$ 120	\$ 123	\$ 226	\$ 243	\$ 369
Selected balance sheet and other information					
ROE	14.3%	15.3%	28.4%	14.8%	23.2%
Average deposits	\$ 220,400	\$ 204,300	\$ 194,700	\$ 212,200	\$ 184,500
Average client deposits	64,000	63,100	64,900	63,600	61,300
Average wholesale funding deposits	156,400	141,200	129,800	148,600	123,200
AUA ⁽¹⁾	4,530,100	4,617,300	4,037,700	4,530,100	4,037,700
Average AUA	4,579,400	4,628,700	4,292,800	4,604,500	4,289,500

(1) Represents period-end spot balances

Financial performance

Q2 2021 vs. Q2 2020

Net income decreased \$106 million or 47% from a year ago, primarily driven by lower revenue from funding and liquidity and client deposits.

Total revenue decreased \$175 million or 25%, primarily due to lower funding and liquidity revenue as the prior year benefitted from the impact of interest rate movements and higher gains from the disposition of investment securities. Lower client deposit revenue largely driven by lower interest rates, and lower revenue from our asset services business as the prior year reflected increased client activity due to elevated market volatility, also contributed to the decrease.

Non-interest expense decreased \$17 million or 4%, largely attributable to a favourable sales tax adjustment in the current quarter, and lower staff-related costs including the benefit from ongoing efficiency initiatives.

Q2 2021 vs. Q1 2021

Net income decreased \$3 million or 2% from last quarter, mainly driven by lower funding and liquidity revenue as the prior quarter benefitted from money market opportunities, partially offset by the impact of annual regulatory costs in the prior quarter.

Q2 2021 vs. Q2 2020 (Six months ended)

Net income decreased \$126 million or 34% from the same period last year, largely driven by lower revenue from funding and liquidity and client deposits.

Total revenue decreased \$207 million or 16%, primarily due to lower funding and liquidity revenue as the same period last year benefitted from the impact of interest rate movements and market volatility. Lower client deposit revenue largely driven by lower interest rates also contributed to the decrease.

Non-interest expense decreased \$18 million or 2%, largely attributable to lower staff-related costs including the benefit from ongoing efficiency initiatives, and a favourable sales tax adjustment in the current period.

Capital Markets

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	As at or for the three months ended			As at or for the six months ended	
	April 30 2021	January 31 2021	April 30 2020	April 30 2021	April 30 2020
Net interest income (1)	\$ 1,121	\$ 1,199	\$ 1,456	\$ 2,320	\$ 2,617
Non-interest income (1)	1,597	1,509	857	3,106	2,244
Total revenue (1)	2,718	2,708	2,313	5,426	4,861
PCL on performing assets	(98)	(41)	723	(139)	741
PCL on impaired assets	(29)	18	294	(11)	355
PCL	(127)	(23)	1,017	(150)	1,096
Non-interest expense	1,468	1,441	1,291	2,909	2,726
Income before income taxes	1,377	1,290	5	2,667	1,039
Net income	\$ 1,071	\$ 1,067	\$ 105	\$ 2,138	\$ 987
Revenue by business					
Corporate and Investment Banking	\$ 1,197	\$ 1,112	\$ 722	\$ 2,309	\$ 1,863
Global Markets	1,562	1,626	1,694	3,188	3,144
Other	(41)	(30)	(103)	(71)	(146)
Selected balance sheet and other information					
ROE	18.9%	18.5%	1.5%	18.7%	8.3%
Average total assets	\$ 694,600	\$ 743,100	\$ 820,700	\$ 719,200	\$ 767,800
Average trading securities	120,900	125,200	108,100	123,100	112,000
Average loans and acceptances, net	97,300	98,300	117,600	97,800	108,300
Average deposits	72,600	73,600	79,300	73,100	77,900
PCL on impaired loans as a % of average net loans and acceptances	(0.13)%	0.07%	0.94%	(0.02)%	0.62%

Estimated impact of U.S. dollar, British pound and Euro translation on key income statement items (Millions of Canadian dollars, except percentage amounts)	For the three months ended		For the six months ended
	Q2 2021 vs. Q2 2020	Q2 2021 vs. Q1 2021	Q2 2021 vs. Q2 2020
<i>Increase (decrease):</i>			
Total revenue	\$ (160)	\$ (40)	\$ (198)
PCL	13	6	14
Non-interest expense	(84)	(21)	(103)
Net income	(71)	(19)	(89)
Percentage change in average U.S. dollar equivalent of C\$1.00	10%	2%	6%
Percentage change in average British pound equivalent of C\$1.00	–%	1%	–%
Percentage change in average Euro equivalent of C\$1.00	2%	4%	(2)%

(1) The taxable equivalent basis (teb) adjustment for the three months ended April 30, 2021 was \$135 million (January 31, 2021 – \$128 million; April 30, 2020 – \$132 million) and for the six months ended April 30, 2021 was \$263 million (April 30, 2020 – \$260 million). For further discussion, refer to the How we measure and report our business segments section of our 2020 Annual Report.

Financial performance**Q2 2021 vs. Q2 2020**

Net income increased \$966 million from a year ago, primarily driven by lower PCL and higher revenue in Corporate and Investment Banking. These factors were partially offset by higher taxes reflecting an increase in the proportion of earnings from higher tax rate jurisdictions, and higher compensation on improved results.

Total revenue increased \$405 million or 18%.

Corporate and Investment Banking revenue increased \$475 million or 66%, as the prior year included loan underwriting markdowns impacting fixed income trading revenue in the U.S. and Europe driven by widening credit spreads. Higher M&A activity and higher equity and debt origination, all largely in the U.S., as well as higher loan syndication activity in North America also contributed to the increase. These factors were partially offset by the impact of foreign exchange translation.

Global Markets revenue decreased \$132 million or 8%, largely driven by lower fixed income trading revenue across most regions as the prior year benefitted from increased client activity in rates and repo products amidst elevated market volatility.

The impact of foreign exchange translation also contributed to the decrease. These factors were partially offset by higher equity trading revenue across most regions reflecting increased client activity, as well as gains from the disposition of certain investment securities.

Other revenue improved \$62 million, mainly reflecting lower residual funding costs.

PCL decreased \$1,144 million, as the prior year reflected elevated provisions on performing loans due to the impact of the onset of the COVID-19 pandemic as compared to releases in the current quarter driven by improvements in our macroeconomic and credit quality outlook and lower exposures. Recoveries on impaired loans in the oil & gas and other services sectors in the current quarter as compared to provisions taken in the prior year also contributed to the decrease, resulting in a decrease of 107 bps in the impaired loans ratio. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense increased \$177 million or 14%, primarily due to higher compensation on improved results, partially offset by the impact of foreign exchange translation.

Q2 2021 vs. Q1 2021

Net income remained relatively flat as lower PCL and higher debt and equity origination across all regions were offset by lower fixed income trading revenue across all regions driven by reduced client activity, and higher taxes as the prior quarter reflected favourable tax adjustments.

Q2 2021 vs. Q2 2020 (Six months ended)

Net income increased \$1,151 million from the same period last year, primarily due to lower PCL and higher revenue in Corporate and Investment Banking. These factors were partially offset by higher taxes reflecting an increase in the proportion of earnings from higher tax rate jurisdictions, and higher compensation on improved results.

Total revenue increased \$565 million or 12%, primarily due to higher equity trading revenue across all regions driven by increased client activity, and higher equity origination across most regions. The impact of residual funding costs and gains on the disposition of certain investment securities also contributed to the increase. These factors were partially offset by the impact of foreign exchange translation.

PCL decreased \$1,246 million, as the same period last year reflected elevated provisions on performing loans due to the impact of the onset of the COVID-19 pandemic as compared to releases in the current year driven by improvements in our macroeconomic and credit quality outlook and lower exposures. Recoveries on impaired loans in the oil & gas sector in the current year as compared to provisions taken in the same period last year also contributed to the decrease, resulting in a decrease of 64 bps in the impaired loans ratio. For further details, refer to Credit quality performance in the Credit risk section.

Non-interest expense increased \$183 million or 7%, primarily driven by higher compensation on improved results, partially offset by the impact of foreign exchange translation.

Corporate Support

(Millions of Canadian dollars)	For the three months ended			For the six months ended	
	April 30 2021	January 31 2021	April 30 2020	April 30 2021	April 30 2020
Net interest income (loss) ⁽¹⁾	\$ (105)	\$ (82)	\$ 49	\$ (187)	\$ 87
Non-interest income (loss) ⁽¹⁾	14	(7)	(157)	7	(274)
Total revenue ⁽¹⁾	(91)	(89)	(108)	(180)	(187)
PCL	–	(1)	1	(1)	1
Non-interest expense	(14)	10	(5)	(4)	29
Income (loss) before income taxes ⁽¹⁾	(77)	(98)	(104)	(175)	(217)
Income taxes (recoveries) ⁽¹⁾	(115)	(112)	(118)	(227)	(225)
Net income (loss)	\$ 38	\$ 14	\$ 14	\$ 52	\$ 8

(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 April 30, 2021 was \$135 million, compared to \$128 million in the prior quarter and \$132 million in the same quarter last year. The teb amount for the six months ended April 30, 2021 was \$263 million, compared to \$260 million in the same period last year.

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

Q2 2021

Net income was \$38 million, primarily due to asset/liability management activities.

Q1 2021

Net income was \$14 million, primarily due to asset/liability management activities.

Q2 2020

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

Q2 2021 (Six months ended)

Net income was \$52 million, mainly due to asset/liability management activities.

Q2 2020 (Six months ended)

Net income was \$8 million, mainly due to asset/liability management activities, partially offset by net unfavourable tax adjustments and residual unallocated costs.

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⁾

(Millions of Canadian dollars, except per share and percentage amounts)	2021		2020			2019		
	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Personal & Commercial Banking	\$ 4,527	\$ 4,563	\$ 4,373	\$ 4,348	\$ 4,400	\$ 4,610	\$ 4,568	\$ 4,546
Wealth Management	3,394	3,387	3,068	3,164	2,822	3,166	3,187	3,029
Insurance	536	1,809	958	2,212	197	1,994	1,153	1,463
Investor & Treasury Services	534	565	521	484	709	597	566	561
Capital Markets ⁽²⁾	2,718	2,708	2,275	2,748	2,313	2,548	1,987	2,034
Corporate Support ⁽²⁾	(91)	(89)	(103)	(36)	(108)	(79)	(91)	(89)
Total revenue	11,618	12,943	11,092	12,920	10,333	12,836	11,370	11,544
PCL	(96)	110	427	675	2,830	419	499	425
PBCAE	149	1,406	461	1,785	(177)	1,614	654	1,046
Non-interest expense	6,379	6,542	6,058	6,380	5,942	6,378	6,319	5,992
Income before income taxes	5,186	4,885	4,146	4,080	1,738	4,425	3,898	4,081
Income taxes	1,171	1,038	900	879	257	916	692	818
Net income	\$ 4,015	\$ 3,847	\$ 3,246	\$ 3,201	\$ 1,481	\$ 3,509	\$ 3,206	\$ 3,263
EPS – basic	\$ 2.76	\$ 2.66	\$ 2.23	\$ 2.20	\$ 1.00	\$ 2.41	\$ 2.19	\$ 2.23
– diluted	2.76	2.66	2.23	2.20	1.00	2.40	2.18	2.22
Effective income tax rate	22.6%	21.2%	21.7%	21.5%	14.8%	20.7%	17.8%	20.0%
Period average US\$ equivalent of C\$1.00	\$ 0.798	\$ 0.779	\$ 0.756	\$ 0.737	\$ 0.725	\$ 0.760	\$ 0.755	\$ 0.754

(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 2020 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 trading 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 subsequently improved, our earnings continued to be impacted by the COVID-19 pandemic and its associated downstream implications. 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. NIM has been negatively impacted by margin compression over the latter part of the period from the lower interest rate environment, including cumulative BoC rate cuts of 150 bps in the second quarter of 2020.

Wealth Management revenue has benefitted from growth in average-fee based client assets and loans over the period. The latter part of the period has been negatively impacted by a lower interest rate environment, mainly reflecting the U.S. Fed rate cuts. 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 fourth quarter of 2019 included a gain on the sale of the private debt business of BlueBay.

Insurance revenue has fluctuated over the period, primarily due to the impact of changes in the fair value of investments backing policyholder liabilities as well as the timing of group annuity sales, both of which are largely offset in PBCAE. The first quarters of 2020 and 2021 reflect higher group annuity sales.

Investor & Treasury Services revenue has been impacted by interest rate movements, market volatility and client activity over the period, which resulted in heightened fluctuations in the second and third quarters of 2020 following the onset of the COVID-19 pandemic. The latter part of the period has also been impacted by elevated enterprise liquidity.

Capital Markets revenue is influenced, to a large extent, by market conditions that impact client activity, with 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. Following the onset of the COVID-19 pandemic, 2020 was characterized by unprecedented levels of market volatility which drove increased client activity over that period, resulting in higher trading revenue. Elevated market volatility in the second quarter of 2020 also resulted in loan underwriting markdowns, with reversals in the latter half of 2020 as market conditions improved. The first quarters of 2020 and 2021 reflected favourable market conditions and increased client activity resulting in higher trading revenue and M&A activity. The second quarter of 2021 saw strong equity and debt origination as well as M&A activity.

PCL on assets is comprised of provisions taken on performing assets and provisions taken on impaired assets. PCL on performing assets has fluctuated over the period as it is impacted by macroeconomic conditions, changes in exposures and credit quality as well as model changes. The impact of the COVID-19 pandemic resulted in a significant increase in provisions in 2020, largely in the second quarter. While uncertainty over the impact of the COVID-19 pandemic remains, the first half of 2021 saw improvements in our macroeconomic and credit quality outlook resulting in releases of provisions on performing assets. PCL on impaired assets reflected normalized levels 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 remainder of 2020 saw higher provisions on impaired loans in Capital Markets largely in the oil & gas sector. The impact of the COVID-19 related government support and payment deferral programs contributed to lower provisions on impaired loans in our Canadian Banking retail portfolios since the second half of 2020. In the first half of 2021, we saw lower provisions on impaired loans in Capital Markets, largely due to recoveries in the oil & gas sector.

PBCAE has fluctuated over the period as it includes the impact of changes in the fair value of investments backing policyholder liabilities and the impact of group annuity sales, both of which are largely offset in Revenue. The fair value of investments backing policyholder liabilities is impacted by changes in market conditions. PBCAE has also fluctuated due to the impact of reinsurance contract negotiations, investment-related experience and claims costs over the period. Actuarial adjustments, which generally occur in the fourth quarter of each year, also impact PBCAE.

Non-interest expense has generally trended upwards over the period. Variable compensation has fluctuated over the period, commensurate with fluctuations in revenue and earnings, including the impact of decreased results in the second quarter of 2020. Changes in the fair value of our U.S. share-based compensation plans, which are largely offset in revenue, also cause fluctuations in staff-related costs and are impacted by market conditions. While we continue to focus on efficiency management activities, expenses over the period generally reflect higher costs in support of business growth, including staff-related costs, and our ongoing investments in technology and related costs, including digital initiatives. The fourth quarter of 2019 reflected severance and related costs associated with the repositioning of our Investor & Treasury Services business. Beginning in the second quarter of 2020, Non-interest expense was 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 more than offset by lower discretionary spend over that period.

Our effective income tax rate has fluctuated over the period, mostly due to varying levels of tax adjustments and changes in earnings mix. 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

(Millions of Canadian dollars)	As at	
	April 30 2021	October 31 2020
Assets		
Cash and due from banks	\$ 114,307	\$ 118,888
Interest-bearing deposits with banks	63,438	39,013
Securities, net of applicable allowance (1)	255,152	275,814
Assets purchased under reverse repurchase agreements and securities borrowed	308,031	313,015
Loans		
Retail	476,230	457,976
Wholesale	202,427	208,655
Allowance for loan losses	(5,146)	(5,639)
Other – Derivatives	97,236	113,488
– Other (2)	103,641	103,338
Total assets	\$1,615,316	\$ 1,624,548
Liabilities		
Deposits	\$1,033,323	\$ 1,011,885
Other – Derivatives	92,402	109,927
– Other (2)	387,755	406,102
Subordinated debentures	9,014	9,867
Total liabilities	1,522,494	1,537,781
Equity attributable to shareholders	92,735	86,664
Non-controlling interests	87	103
Total equity	92,822	86,767
Total liabilities and equity	\$1,615,316	\$ 1,624,548

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

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

Q2 2021 vs. Q4 2020

Total assets decreased \$9.2 billion or 1% from October 31, 2020. Foreign exchange translation decreased total assets by \$84.4 billion.

Cash and due from banks was down \$4.6 billion or 4%, primarily due to lower deposits with central banks, reflecting our short term cash and liquidity management activities. The impact of foreign exchange translation also contributed to the decrease.

Interest-bearing deposits with banks increased \$24.4 billion or 63%, primarily due to higher deposits with central banks, reflecting our short term cash and liquidity management activities.

Securities, net of applicable allowance, were down \$20.7 billion or 7%, mainly due to lower government debt securities largely driven by our short-term cash management activities and the impact of foreign exchange translation. These factors were partially offset by higher equity trading securities.

Assets purchased under reverse repurchase agreements (reverse repos) and securities borrowed decreased \$5.0 billion or 2%, largely due to the impact of foreign exchange translation and our liquidity management activities, largely offset by increased client demand.

Loans (net of Allowance for loan losses) were up \$12.5 billion or 2%, largely due to volume growth in residential mortgages and wholesale loans. These factors were largely offset by the impact of foreign exchange translation.

Derivative assets were down \$16.3 billion or 14%, mainly attributable to the impact of foreign exchange translation and lower fair values on interest rate contracts. These factors were largely offset by higher fair values on foreign exchange contracts.

Total liabilities decreased \$15.3 billion or 1%. Foreign exchange translation decreased total liabilities by \$84.4 billion.

Deposits increased \$21.4 billion or 2%, mainly due to higher business and retail deposits driven by client activity as well as our clients' preference for the safety of higher cash balances amidst the COVID-19 pandemic and lower client spending. Higher issuances of fixed term notes due to funding requirements also contributed to the increase. These factors were largely offset by the impact of foreign exchange translation.

Derivative liabilities were down \$17.5 billion or 16%, mainly attributable to the impact of foreign exchange translation and lower fair values on interest rate contracts. These factors were largely offset by higher fair values on foreign exchange contracts.

Other liabilities decreased \$18.3 billion or 5%, mainly attributable to the impact of foreign exchange translation.

Total equity increased \$6.1 billion or 7%, reflecting earnings, net of dividends and the issuance of limited recourse capital notes.

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 Q2 2021 Report to Shareholders. Our significant off-balance sheet transactions include those described on pages 51 to 53 of our 2020 Annual Report.

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 and may arise directly from the risk of default of a primary obligor (e.g., issuer, debtor, counterparty, borrower or policyholder), indirectly from a secondary obligor (e.g., guarantor or reinsurer), through off-balance sheet exposures, contingent credit risk, associated credit risk and/or transactional risk. Credit risk includes counterparty credit risk arising from both trading and non-trading activities.

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 2020 Annual Report.

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.

(Millions of Canadian dollars, except percentage amounts)	As at April 30, 2021					
	Residential mortgages				Home equity lines of credit	
	Insured (1)		Uninsured		Total	Total
Region (2)						
Canada						
Atlantic provinces	\$ 8,387	50%	\$ 8,365	50%	\$ 16,752	\$ 1,603
Quebec	12,902	33	25,617	67	38,519	3,066
Ontario	36,033	23	121,729	77	157,762	15,525
Alberta	20,978	51	20,033	49	41,011	5,556
Saskatchewan and Manitoba	9,243	47	10,438	53	19,681	2,008
B.C. and territories	14,006	23	47,249	77	61,255	7,535
Total Canada (3)	101,549	30	233,431	70	334,980	35,293
U.S. (4)	–	–	20,279	100	20,279	1,419
Other International (4)	–	–	2,744	100	2,744	1,315
Total International	–	–	23,023	100	23,023	2,734
Total	\$ 101,549	28%	\$ 256,454	72%	\$ 358,003	\$ 38,027

(Millions of Canadian dollars, except percentage amounts)	As at January 31, 2021					
	Residential mortgages				Home equity lines of credit	
	Insured (1)		Uninsured		Total	Total
Region (2)						
Canada						
Atlantic provinces	\$ 8,374	51%	\$ 8,127	49%	\$ 16,501	\$ 1,632
Quebec	13,103	35	24,857	65	37,960	3,144
Ontario	37,394	24	116,704	76	154,098	15,643
Alberta	21,173	52	19,686	48	40,859	5,697
Saskatchewan and Manitoba	9,366	48	10,326	52	19,692	2,058
B.C. and territories	14,415	24	45,469	76	59,884	7,611
Total Canada (3)	103,825	32	225,169	68	328,994	35,785
U.S. (4)	–	–	20,083	100	20,083	1,532
Other International (4)	–	–	2,855	100	2,855	1,339
Total International	–	–	22,938	100	22,938	2,871
Total	\$ 103,825	30%	\$ 248,107	70%	\$ 351,932	\$ 38,656

- (1) Insured residential mortgages are mortgages whereby our exposure to default is mitigated by insurance through CMHC or other private mortgage default insurers.
- (2) 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.
- (3) Total consolidated residential mortgages in Canada of \$335.0 billion (January 31, 2021 – \$329.0 billion) was largely comprised of \$305.5 billion (January 31, 2021 – \$299.6 billion) of residential mortgages and \$11.1 billion (January 31, 2021 – \$10.9 billion) of mortgages with commercial clients, of which \$7.7 billion (January 31, 2021 – \$7.5 billion) are insured mortgages, both in Canadian Banking, and \$18.4 billion (January 31, 2021 – \$18.5 billion) of residential mortgages in Capital Markets held for securitization purposes.
- (4) Home equity lines of credit include term loans collateralized by residential mortgages.

Home equity lines of credit are uninsured and reported within the personal loan category.

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.

Amortization period	As at					
	April 30 2021			January 31 2021		
	Canada	U.S. and other International	Total	Canada	U.S. and other International	Total
≤ 25 years	77%	34%	74%	77%	36%	74%
> 25 years ≤ 30 years	23	66	26	22	64	25
> 30 years ≤ 35 years	–	–	–	1	–	1
Total	100%	100%	100%	100%	100%	100%

Average loan-to-value (LTV) ratios

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

Region (3)	For the three months ended				For the six months ended	
	April 30 2021		January 31 2021		April 30 2021	
	Uninsured		Uninsured		Uninsured	
	Residential mortgages (1)	RBC Homeline Plan® products (2)	Residential mortgages (1)	RBC Homeline Plan® products (2)	Residential mortgages (1)	RBC Homeline Plan® products (2)
Atlantic provinces	75%	75%	73%	75%	75%	75%
Quebec	72	74	72	74	72	74
Ontario	71	69	71	69	71	69
Alberta	73	73	73	72	73	72
Saskatchewan and Manitoba	74	75	74	75	74	75
B.C. and territories	70	67	70	67	70	67
U.S.	72	n.m.	72	n.m.	72	n.m.
Other International	71	n.m.	71	n.m.	71	n.m.
Average of newly originated and acquired for the period (4), (5)	72%	69%	72%	69%	72%	69%
Total Canadian Banking residential mortgages portfolio (6)	55%	48%	56%	48%	55%	48%

(1) Residential mortgages exclude residential mortgages within the RBC Homeline Plan® products.

(2) RBC Homeline Plan® products are comprised of both residential mortgages and home equity lines of credit.

(3) 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.

(4) The average LTV ratios for newly originated and acquired uninsured residential mortgages and RBC Homeline Plan® products are calculated on a weighted basis by mortgage amounts at origination.

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

(6) Weighted by mortgage balances and adjusted for property values based on the Teranet – National Bank National Composite House Price Index.

n.m. not meaningful

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

(Millions of Canadian dollars)	As at								January 31 2021 (3)
	April 30 2021								
	Asset type				Client type				
	Loans Outstanding	Securities (4)	Repo-style transactions	Derivatives	Financials	Sovereign	Corporate	Total	Total
U.K.	\$ 10,069	\$ 19,526	\$ 680	\$ 2,639	\$ 11,206	\$ 11,970	\$ 9,738	\$ 32,914	\$ 33,895
Germany	1,580	8,087	1	101	3,874	3,990	1,905	9,769	10,240
France	1,457	8,704	8	326	1,940	7,520	1,035	10,495	7,588
Total U.K., Germany, France	13,106	36,317	689	3,066	17,020	23,480	12,678	53,178	51,723
Ireland	714	577	386	47	778	1	945	1,724	1,808
Italy	100	230	–	7	133	71	133	337	256
Portugal	–	24	2	–	5	–	21	26	15
Spain	348	168	47	7	146	–	424	570	612
Total peripheral	1,162	999	435	61	1,062	72	1,523	2,657	2,691
Luxembourg	3,055	4,460	85	63	2,229	3,959	1,475	7,663	6,076
Netherlands	1,020	708	32	90	439	63	1,348	1,850	2,157
Norway	162	1,181	7	23	943	241	189	1,373	1,626
Sweden	402	1,425	2	20	810	828	211	1,849	1,957
Switzerland	956	12,118	206	42	1,979	10,664	679	13,322	11,249
Other	2,099	2,004	74	135	1,637	738	1,937	4,312	4,355
Total other Europe	7,694	21,896	406	373	8,037	16,493	5,839	30,369	27,420
Net exposure to Europe (5), (6)	\$ 21,962	\$ 59,212	\$ 1,530	\$ 3,500	\$ 26,119	\$ 40,045	\$ 20,040	\$ 86,204	\$ 81,834

(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 \$151.3 billion against repo-style transactions (January 31, 2021 – \$150.7 billion) and \$10.0 billion against derivatives (January 31, 2021 – \$13.1 billion).

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

(4) Securities include \$11.1 billion of trading securities (January 31, 2021 – \$12.2 billion), \$34.6 billion of deposits (January 31, 2021 – \$25.4 billion) and \$13.5 billion of investment securities (January 31, 2021 – \$13.7 billion). Trading and investment securities amounts have been revised from those previously presented.

(5) Excludes \$2.2 billion (January 31, 2021 – \$2.5 billion) of exposures to supranational agencies, predominantly in Luxembourg.

(6) Reflects \$1.5 billion of mitigation through credit default swaps, which are largely used to hedge single name exposures and market risk (January 31, 2021 – \$1.4 billion).

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

(Millions of Canadian dollars, except percentage amounts)	For the three months ended			For the six months ended	
	April 30 2021	January 31 2021	April 30 2020	April 30 2021	April 30 2020
Personal & Commercial Banking	\$ 39	\$ 168	\$ 1,687	\$ 207	\$ 2,030
Wealth Management	(2)	(28)	87	(30)	85
Capital Markets	(116)	(19)	950	(135)	1,030
Corporate Support and other	(4)	–	10	(4)	10
PCL – Loans	(83)	121	2,734	38	3,155
PCL – Other financial assets	(13)	(11)	96	(24)	94
Total PCL	\$ (96)	\$ 110	\$ 2,830	\$ 14	\$ 3,249
PCL on loans is comprised of:					
Retail	\$ (104)	\$ (63)	\$ 725	\$ (167)	\$ 759
Wholesale	(156)	(34)	1,396	(190)	1,445
PCL on performing loans	(260)	(97)	2,121	(357)	2,204
Retail	166	180	281	346	552
Wholesale	11	38	332	49	399
PCL on impaired loans	177	218	613	395	951
PCL – Loans	\$ (83)	\$ 121	\$ 2,734	\$ 38	\$ 3,155
PCL on loans as a % of average net loans and acceptances	(0.05)%	0.07%	1.65%	0.01%	0.96%
PCL on impaired loans as a % of average net loans and acceptances	0.11%	0.13%	0.37%	0.12%	0.29%

Additional information by geography (1)

Canada					
Residential mortgages	\$ 5	\$ 15	\$ 9	\$ 20	\$ 19
Personal	69	85	138	154	267
Credit cards	79	67	139	146	276
Small business	8	9	14	17	26
Retail	161	176	300	337	588
Wholesale	29	34	76	63	82
PCL on impaired loans	190	210	376	400	670
U.S.					
Retail	2	(1)	2	1	–
Wholesale	7	(21)	178	(14)	233
PCL on impaired loans	9	(22)	180	(13)	233
Other International					
Retail	3	5	(21)	8	(36)
Wholesale	(25)	25	78	–	84
PCL on impaired loans	(22)	30	57	8	48
PCL on impaired loans	\$ 177	\$ 218	\$ 613	\$ 395	\$ 951

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

Q2 2021 vs. Q2 2020

Total PCL was \$(96) million. PCL on loans of \$(83) million decreased \$2,817 million from a year ago, primarily due to lower provisions in Personal & Commercial Banking, Capital Markets and Wealth Management. The PCL on loans ratio was (5) bps.

PCL on performing loans was \$(260) million, compared to \$2,121 million in the prior year, as the prior year reflected elevated provisions due to the impact of the onset of the COVID-19 pandemic as compared to releases in the current quarter. While uncertainty over the impact of the COVID-19 pandemic remains, the releases were driven by improvements in our macroeconomic and credit quality outlook.

PCL on impaired loans of \$177 million decreased \$436 million, mainly due to recoveries in Capital Markets in the current quarter as compared to provisions taken in the prior year. Lower provisions in Personal & Commercial Banking and Wealth Management also contributed to the decrease.

PCL on loans in Personal & Commercial Banking decreased \$1,648 million, primarily reflecting provisions taken on performing loans in our Canadian Banking portfolios in the prior year as compared to releases in the current quarter, as described above. Lower provisions on impaired loans in our Canadian Banking retail portfolios also contributed to the decrease.

PCL on loans in Wealth Management decreased \$89 million, due to lower provisions in U.S. Wealth Management (including City National). The decrease primarily reflected provisions on performing loans taken in the prior year as compared to releases in the current quarter, as described above. Lower provisions on impaired loans also contributed to the decrease.

PCL on loans in Capital Markets decreased \$1,066 million, largely reflecting provisions on performing loans taken in the prior year as compared to releases in the current quarter, as described above, and lower exposures. Recoveries on impaired loans in a few sectors, including the oil & gas and other services sectors, in the current quarter as compared to provisions in the prior year also contributed to the decrease.

Q2 2021 vs. Q1 2021

PCL on loans of \$(83) million decreased \$204 million from last quarter, primarily due to lower provisions in Personal & Commercial Banking and Capital Markets, partially offset by higher recoveries in Wealth Management in the prior quarter. The PCL on loans ratio of (5) bps decreased 12 bps.

PCL on performing loans of \$(260) million decreased \$163 million, primarily reflecting higher releases of provisions in Personal & Commercial Banking and Capital Markets. While uncertainty over the impact of the COVID-19 pandemic remains, the releases were driven by improvements in our macroeconomic and credit quality outlook.

PCL on impaired loans of \$177 million decreased \$41 million, primarily due to recoveries in Capital Markets as compared to provisions in the last quarter and lower provisions in Personal & Commercial Banking, partially offset by recoveries in Wealth Management in the prior quarter.

PCL on loans in Personal & Commercial Banking decreased \$129 million, mainly due to higher releases of provisions on performing loans in our Canadian Banking portfolios, as described above. Lower provisions on impaired loans in the majority of our Canadian Banking portfolios also contributed to the decrease.

PCL on loans in Wealth Management increased \$26 million, primarily due to recoveries on impaired loans in U.S. Wealth Management (including City National), largely in the consumer discretionary and consumer staples sectors, in the prior quarter as compared to provisions in the current quarter in the consumer discretionary sector.

PCL on loans in Capital Markets decreased \$97 million, largely due to higher releases of provisions on performing loans in the current quarter, as described above. Recoveries on impaired loans in the other services and oil & gas sectors in the current quarter as compared to provisions taken in a few sectors in the prior quarter, also contributed to the decrease.

Q2 2021 vs. Q2 2020 (Six months ended)

Total PCL was \$14 million. PCL on loans of \$38 million decreased \$3,117 million from the same period last year, primarily due to lower provisions in Personal & Commercial Banking, Capital Markets and Wealth Management. The PCL on loans ratio was 1 bp.

PCL on performing loans was \$(357) million, compared to \$2,204 million in the same period last year, primarily reflecting elevated provisions in Personal & Commercial Banking, Capital Markets and Wealth Management in the prior year due to the impact of the onset of the COVID-19 pandemic and releases in the current year. While uncertainty over the impact of the COVID-19 pandemic remains, the releases in the current year were driven by improvements in our macroeconomic and credit quality outlook.

PCL on impaired loans of \$395 million decreased \$556 million, largely due to recoveries in Capital Markets in the current year as compared to provisions taken in the same period last year. Lower provisions in Personal & Commercial Banking and Wealth Management also contributed to the decrease.

PCL on loans in Personal & Commercial Banking decreased \$1,823 million, primarily reflecting provisions taken on performing loans in our Canadian Banking portfolios in the same period last year as compared to releases in the current year, as described above. Lower provisions on impaired loans in the majority of our Canadian Banking retail portfolios, partially offset by recoveries in the same period last year in our Caribbean Banking portfolios, also contributed to the decrease.

PCL on loans in Wealth Management decreased \$115 million in U.S. Wealth Management (including City National), largely reflecting provisions taken on performing loans in the same period last year as compared to releases in the current year, as described above. Recoveries on impaired loans in a few sectors in the current year, including the consumer staples sector, as compared to provisions taken in the same period last year also contributed to the decrease.

PCL on loans in Capital Markets decreased \$1,165 million, largely reflecting provisions taken on performing loans in the same period last year as compared to releases in the current year, as described above, and lower exposures. Recoveries on impaired loans in the oil & gas sector in the current year as compared to provisions taken in the same period last year, also contributed to the decrease.

Gross impaired loans

	As at and for the three months ended		
	April 30 2021	January 31 2021	April 30 2020
(Millions of Canadian dollars, except percentage amounts)			
Personal & Commercial Banking	\$ 1,739	\$ 1,726	\$ 1,637
Wealth Management	338	289	329
Capital Markets	700	857	1,563
Total GIL	\$ 2,777	\$ 2,872	\$ 3,529
Canada (1)			
Retail	\$ 822	\$ 768	\$ 832
Wholesale	613	708	625
GIL	1,435	1,476	1,457
U.S. (1)			
Retail	22	27	31
Wholesale	651	677	1,311
GIL	673	704	1,342
Other International (1)			
Retail	226	215	211
Wholesale	443	477	519
GIL	669	692	730
Total GIL	\$ 2,777	\$ 2,872	\$ 3,529
Impaired loans, beginning balance	\$ 2,872	\$ 3,195	\$ 2,936
Classified as impaired during the period (new impaired) (2)	605	530	1,308
Net repayments (2)	(285)	(206)	(253)
Amounts written off	(301)	(314)	(423)
Other (2), (3)	(114)	(333)	(39)
Impaired loans, balance at end of period	\$ 2,777	\$ 2,872	\$ 3,529
GIL as a % of related loans and acceptances			
Total GIL as a % of related loans and acceptances	0.40%	0.41%	0.51%
Personal & Commercial Banking	0.34%	0.35%	0.34%
Canadian Banking	0.28%	0.28%	0.28%
Caribbean Banking	4.98%	4.36%	3.84%
Wealth Management	0.40%	0.34%	0.40%
Capital Markets	0.73%	0.84%	1.19%

(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 Net repayments and certain Other movements are not reasonably determinable. Certain GIL movements for Caribbean Banking retail and wholesale portfolios are generally allocated to Net repayments and new impaired, as Net repayments and certain Other movements 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.

Q2 2021 vs. Q2 2020

Total GIL of \$2,777 million decreased \$752 million or 21% from a year ago and the total GIL ratio of 40 bps decreased 11 bps, primarily reflecting lower impaired loans in Capital Markets, partially offset by higher impaired loans in Personal & Commercial Banking.

GIL in Personal & Commercial Banking increased \$102 million or 6%, primarily due to higher impaired loans in our Canadian Banking commercial portfolios, largely in the other services sector, and our Caribbean Banking portfolios.

GIL in Capital Markets decreased \$863 million or 55%, primarily due to lower impaired loans in a few sectors, including the oil & gas, utilities and consumer discretionary sectors.

Q2 2021 vs. Q1 2021

Total GIL decreased \$95 million or 3% from last quarter, and the total GIL ratio of 40 bps decreased 1 bp, reflecting lower impaired loans in Capital Markets, partially offset by higher impaired loans in Wealth Management and Personal & Commercial Banking.

GIL in Personal & Commercial Banking increased \$13 million or 1%, primarily due to higher impaired loans in our Canadian Banking retail and Caribbean Banking portfolios, partially offset by lower impaired loans in our Canadian Banking commercial portfolios.

GIL in Wealth Management increased \$49 million or 17%, reflecting higher impaired loans in U.S. Wealth Management (including City National) in a few sectors, including the consumer discretionary and information technology sectors.

GIL in Capital Markets decreased \$157 million or 18%, primarily due to lower impaired loans in a few sectors, including the oil & gas sector, partially offset by higher impaired loans in the real estate & related sector.

Allowance for credit losses (ACL)

(Millions of Canadian dollars)	As at		
	April 30 2021	January 31 2021	April 30 2020
Personal & Commercial Banking	\$ 4,204	\$ 4,391	\$ 4,102
Wealth Management	353	365	336
Capital Markets	966	1,152	1,415
Corporate Support and other	2	6	12
ACL on loans	5,525	5,914	5,865
ACL on other financial assets	114	131	118
Total ACL	\$ 5,639	\$ 6,045	\$ 5,983
ACL on loans is comprised of:			
Retail	\$ 2,798	\$ 2,859	\$ 2,635
Wholesale	1,908	2,161	2,158
ACL on performing loans	\$ 4,706	\$ 5,020	\$ 4,793
ACL on impaired loans	819	894	1,072

Additional information by geography (1)

Canada			
Retail	\$ 183	\$ 195	\$ 216
Wholesale	216	215	207
ACL on impaired loans	399	410	423
U.S.			
Retail	1	1	2
Wholesale	150	175	279
ACL on impaired loans	151	176	281
Other International			
Retail	112	116	117
Wholesale	157	192	251
ACL on impaired loans	269	308	368
ACL on impaired loans	\$ 819	\$ 894	\$ 1,072

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

Q2 2021 vs. Q2 2020

Total ACL of \$5,639 million decreased \$344 million or 6% from a year ago, primarily reflecting a decrease of \$340 million in ACL on loans.

ACL on performing loans of \$4,706 million decreased \$87 million, primarily reflecting lower ACL in Capital Markets driven by improvements in our macroeconomic and credit quality outlook, as well as the impact of foreign exchange translation, partially offset by higher ACL in Personal & Commercial Banking and Wealth Management.

ACL on impaired loans of \$819 million decreased \$253 million, due to lower ACL in Capital Markets, Wealth Management and Personal & Commercial Banking.

Q2 2021 vs. Q1 2021

Total ACL of \$5,639 million decreased \$406 million or 7% from last quarter, primarily reflecting a decrease of \$389 million in ACL on loans.

ACL on performing loans of \$4,706 million decreased \$314 million, primarily reflecting lower ACL in Personal & Commercial Banking, Capital Markets and Wealth Management. While uncertainty over the impact of the COVID-19 pandemic remains, the decrease was driven by improvements in our macroeconomic and credit quality outlook in the current quarter. The impact of foreign exchange translation also contributed to the decrease.

ACL on impaired loans of \$819 million decreased \$75 million, due to lower ACL in Capital Markets and Personal & Commercial Banking, partially offset by higher ACL in Wealth Management.

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 2020 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), Stressed Value-at-Risk (SVaR) and Incremental Risk Charge (IRC).

Market risk controls are also in place to manage Interest Rate Risk in the Banking Book (IRRBB) that arises primarily from traditional customer-originated banking products such as deposits and loans, and also includes related hedges as well as the interest rate risk from securities held for liquidity management. Factors contributing to IRRBB include the mismatch between asset and liability repricing dates, relative changes in asset and liability rates in response to market rate scenarios, and other 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 IRRBB, we assess two primary metrics, Net Interest Income (NII) risk and Economic Value of Equity (EVE) risk, under a range of market shocks, scenarios, and time horizons. There has been no material change to the IRRBB measurement methodology, controls, or limits from those described in our 2020 Annual Report. For further details of our approach to the management of market risk, refer to the Market risk section of our 2020 Annual Report.

Market risk measures – FVTPL positions

VaR and SVaR

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

(Millions of Canadian dollars)	April 30, 2021				January 31, 2021		April 30, 2020	
	As at	For the three months ended			As at	For the three months ended	As at	For the three months ended
		Average	High	Low		Average		Average
Equity	\$ 20	\$ 18	\$ 33	\$ 12	\$ 17	\$ 17	\$ 55	\$ 39
Foreign exchange	5	4	6	3	4	3	3	3
Commodities	2	2	3	2	2	3	5	3
Interest rate (1)	48	44	64	21	36	40	132	61
Credit specific (2)	9	8	9	7	7	7	6	6
Diversification (3)	(30)	(34)	n.m.	n.m.	(25)	(31)	(15)	(20)
Market risk VaR	\$ 54	\$ 42	\$ 70	\$ 23	\$ 41	\$ 39	\$ 186	\$ 92
Market risk Stressed VaR	\$ 58	\$ 53	\$ 84	\$ 32	\$ 49	\$ 55	\$ 139	\$ 147

(Millions of Canadian dollars)	April 30, 2021				April 30, 2020	
	As at	For the six months ended			As at	For the six months ended
		Average	High	Low		Average
Equity	\$ 20	\$ 17	\$ 33	\$ 12	\$ 55	\$ 30
Foreign exchange	5	4	6	2	3	3
Commodities	2	2	4	2	5	2
Interest rate (1)	48	42	64	21	132	37
Credit specific (2)	9	8	9	6	6	5
Diversification (3)	(30)	(33)	n.m.	n.m.	(15)	(19)
Market risk VaR	\$ 54	\$ 40	\$ 72	\$ 23	\$ 186	\$ 58
Market risk Stressed VaR	\$ 58	\$ 54	\$ 101	\$ 30	\$ 139	\$ 115

(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.

n.m. not meaningful

Q2 2021 vs. Q2 2020

Average market risk VaR of \$42 million decreased \$50 million and average SVaR of \$53 million decreased \$94 million from last year as Q2 2020 credit spread and volatility levels were heightened relative to the current quarter. This impacted loan underwriting commitments as well as fixed income and equity portfolios last year. Since Q3 2020, VaR levels have remained relatively stable as overall market volatility and credit spreads improved, and diversification increased.

Q2 2021 vs. Q1 2021

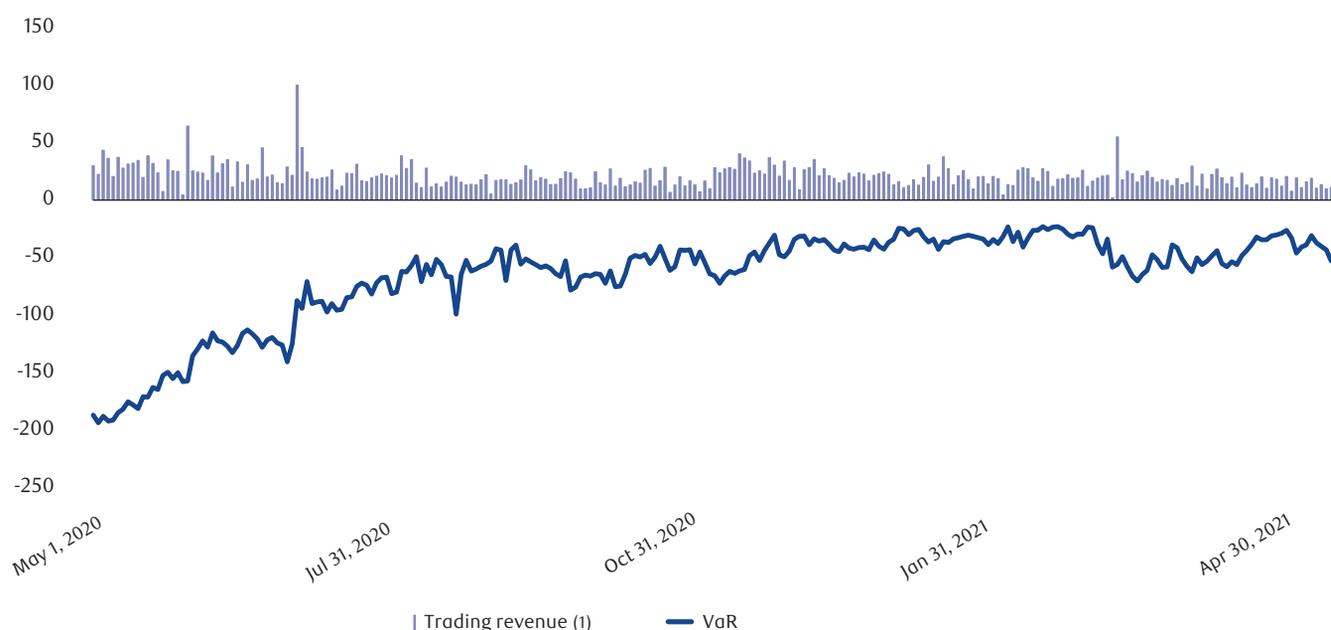
Average market risk VaR of \$42 million and average SVaR of \$53 million both remained stable.

Q2 2021 vs. Q2 2020 (Six months ended)

Average market risk VaR of \$40 million decreased \$18 million and average SVaR of \$54 million decreased \$61 million as the same period last year reflected the market turmoil from March 2020. The impact from the inclusion of the March 2020 period of significant market volatility in the current historical VaR period was partially offset by the impact of diversification.

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 April 30, 2021 and January 31, 2021.

Trading revenue (1) and VaR (Millions of Canadian dollars)



(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 April 30, 2021, we held assets in support of \$12.1 billion of liabilities with respect to insurance obligations (January 31, 2021 – \$12.8 billion).

Market risk measures – IRRBB 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, assuming no subsequent hedging. Rate floors are applied within the declining rates scenarios which prevent EVE valuation and NII simulation rate levels from falling below a minimum average level of negative 25 bps across major currencies. 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.

(Millions of Canadian dollars)	April 30 2021						January 31 2021		April 30 2020	
	EVE risk			NII risk (1)			EVE risk	NII risk (1)	EVE risk	NII risk (1)
	Canadian dollar impact	U.S. dollar impact	Total	Canadian dollar impact	U.S. dollar impact	Total				
Before-tax impact of:										
100 bps increase in rates (2)	\$ (1,719)	\$ (345)	\$ (2,064)	\$ 471	\$ 387	\$ 858	\$ (1,882)	\$ 836	\$ (1,708)	\$ 701
100 bps decrease in rates (2)	1,500	271	1,771	(554)	(304)	(858)	1,433	(714)	1,459	(726)

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

(2) Effective Q4 2020 the IRRBB 100 bps increase and decrease in rates scenarios were updated on a prospective basis in accordance with OSFI's B-12: Interest Rate Risk Management guideline. This resulted in the inclusion of EVE and NII risk arising from Capital Markets and treasury related services within Investor & Treasury Services banking book activities beginning in Q4 2020.

As at April 30, 2021, an immediate and sustained -100 bps shock would have had a negative impact to our NII of \$858 million, up from \$714 million last quarter. An immediate and sustained +100 bps shock at the end of April 30, 2021 would have had a negative impact to the bank's EVE of \$2,064 million, up from \$1,882 million reported last quarter. The quarter-over-quarter change in NII sensitivity, in particular for the -100 bps shock, was largely attributable to continued growth in low cost deposits in the current quarter, while the quarter-over-quarter change in EVE sensitivity was largely attributable to continued growth in the bank's book capital. During the second quarter of 2021, NII and EVE risks remained within approved limits.

Market risk measures for other material non-trading portfolios

Investment securities carried at FVOCI

We held \$63.1 billion of investment securities carried at FVOCI as at April 30, 2021, compared to \$76.8 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 April 30, 2021, our portfolio of investment securities carried at FVOCI is interest rate sensitive and would impact OCI by a pre-tax change in value of \$6 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 \$17 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 IRRBB measures as at April 30, 2021 was \$60.5 billion. Our investment securities carried at FVOCI also include equity exposures of \$0.5 billion as at April 30, 2021, 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 currencies. Consequently, we 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 IRRBB measure and other internal non-trading market risk measures. We use interest rate swaps to manage our IRRBB, 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 2020 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:

(Millions of Canadian dollars)	As at April 30, 2021			
	Balance sheet amount	Market risk measure		Non-traded risk primary risk sensitivity
		Traded risk (1)	Non-traded risk (2)	
Assets subject to market risk				
Cash and due from banks	\$ 114,307	\$ –	\$ 114,307	Interest rate
Interest-bearing deposits with banks	63,438	41,380	22,058	Interest rate
Securities				
Trading	125,733	114,777	10,956	Interest rate, credit spread
Investment, net of applicable allowance	129,419	–	129,419	Interest rate, credit spread, equity
Assets purchased under reverse repurchase agreements and securities borrowed	308,031	265,880	42,151	Interest rate
Loans				
Retail	476,230	8,147	468,083	Interest rate
Wholesale	202,427	7,107	195,320	Interest rate
Allowance for loan losses	(5,146)	–	(5,146)	Interest rate
Segregated fund net assets	2,338	–	2,338	Interest rate
Other				
Derivatives	97,236	93,285	3,951	Interest rate, foreign exchange
Other assets	90,223	8,513	81,710	Interest rate
Assets not subject to market risk (3)	11,080			
Total assets	\$ 1,615,316	\$ 539,089	\$ 1,065,147	
Liabilities subject to market risk				
Deposits	\$ 1,033,323	\$ 125,786	\$ 907,537	Interest rate
Segregated fund liabilities	2,338	–	2,338	Interest rate
Other				
Obligations related to securities sold short	31,817	31,817	–	
Obligations related to assets sold under repurchase agreements and securities loaned	257,049	235,509	21,540	Interest rate
Derivatives	92,402	90,309	2,093	Interest rate, foreign exchange
Other liabilities	81,235	8,234	73,001	Interest rate
Subordinated debentures	9,014	–	9,014	Interest rate
Liabilities not subject to market risk (4)	15,316			
Total liabilities	\$ 1,522,494	\$ 491,655	\$ 1,015,523	
Total equity	92,822			
Total liabilities and equity	\$ 1,615,316			

(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 IRRBB 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 IRRBB.

(3) Assets not subject to market risk include physical and other assets.

(4) Liabilities not subject to market risk include payroll related and other liabilities.

(Millions of Canadian dollars)	As at January 31, 2021			
	Balance sheet amount	Market risk measure		Non-traded risk primary risk sensitivity
		Traded risk (1)	Non-traded risk (2)	
Assets subject to market risk				
Cash and due from banks	\$ 149,588	\$ –	\$ 149,588	Interest rate
Interest-bearing deposits with banks	33,731	18,440	15,291	Interest rate
Securities				
Trading	148,023	136,539	11,484	Interest rate, credit spread
Investment, net of applicable allowance	139,459	–	139,459	Interest rate, credit spread, equity
Assets purchased under reverse repurchase agreements and securities borrowed	311,033	253,347	57,686	Interest rate
Loans				
Retail	464,579	5,919	458,660	Interest rate
Wholesale	213,462	8,807	204,655	Interest rate
Allowance for loan losses	(5,478)	–	(5,478)	Interest rate
Segregated fund net assets	2,127	–	2,127	Interest rate
Other				
Derivatives	110,917	105,960	4,957	Interest rate, foreign exchange
Other assets	92,033	7,391	84,642	Interest rate
Assets not subject to market risk (3)	11,677			
Total assets	\$ 1,671,151	\$ 536,403	\$ 1,123,071	
Liabilities subject to market risk				
Deposits	\$ 1,054,597	\$ 121,815	\$ 932,782	Interest rate
Segregated fund liabilities	2,127	–	2,127	Interest rate
Other				
Obligations related to securities sold short	32,569	32,569	–	
Obligations related to assets sold under repurchase agreements and securities loaned	274,907	250,747	24,160	Interest rate
Derivatives	106,071	104,333	1,738	Interest rate, foreign exchange
Other liabilities	88,046	8,597	79,449	Interest rate
Subordinated debentures	9,186	–	9,186	Interest rate
Liabilities not subject to market risk (4)	13,399			
Total liabilities	\$ 1,580,902	\$ 518,061	\$ 1,049,442	
Total equity	90,249			
Total liabilities and equity	\$ 1,671,151			

(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 IRRBB 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 IRBB.

(3) Assets not subject to market risk include physical and other assets.

(4) Liabilities not subject to market risk include 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. 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 2020 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.

Commencing in the second quarter of 2020, 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 contained temporary modifications in limits, including those used for covered bonds. For further details, refer to the Liquidity and funding risk section of our 2020 Annual Report. On April 6, 2021, OSFI announced the unwinding of the temporary increase in the covered bond limit, effective immediately.

Liquidity reserve

Our liquidity reserve consists of available unencumbered liquid assets. 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. Similarly, uncommitted and undrawn central bank borrowing facilities that could be accessed subject to satisfying certain preconditions as set by various central banks (e.g., BoC, the Fed, Bank of England, and Bank of France), as well as amounts that qualify as eligible collateral at the Federal Reserve Bank of New York (FRBNY) and Federal Home Loan Bank (FHLB) are also excluded from the determination of the liquidity reserve.

(Millions of Canadian dollars)	As at April 30, 2021				
	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	\$ 114,307	\$ –	\$ 114,307	\$ 3,369	\$ 110,938
Interest-bearing deposits with banks	63,438	–	63,438	–	63,438
Securities issued or guaranteed by sovereigns, central banks or multilateral development banks (1)	200,981	305,131	506,112	346,565	159,547
Other securities	98,467	122,165	220,632	124,822	95,810
Other liquid assets (2)	27,227	–	27,227	25,335	1,892
Total liquid assets	\$ 504,420	\$ 427,296	\$ 931,716	\$ 500,091	\$ 431,625

(Millions of Canadian dollars)	As at January 31, 2021				
	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	\$ 149,588	\$ –	\$ 149,588	\$ 3,666	\$ 145,922
Interest-bearing deposits with banks	33,731	–	33,731	–	33,731
Securities issued or guaranteed by sovereigns, central banks or multilateral development banks (1)	235,660	310,209	545,869	362,186	183,683
Other securities	104,878	114,407	219,285	113,748	105,537
Other liquid assets (2)	28,584	–	28,584	26,711	1,873
Total liquid assets	\$ 552,441	\$ 424,616	\$ 977,057	\$ 506,311	\$ 470,746

(Millions of Canadian dollars)	As at	
	April 30 2021	January 31 2021
Royal Bank of Canada	\$ 240,130	\$ 291,003
Foreign branches	55,895	46,361
Subsidiaries	135,600	133,382
Total unencumbered liquid assets	\$ 431,625	\$ 470,746

(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) Encumbered liquid assets amount represents cash collateral and margin deposit amounts pledged related to 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.

Q2 2021 vs. Q1 2021

Total liquid assets decreased \$45.3 billion or 5% and total unencumbered liquid assets decreased \$39.1 billion or 8% from last quarter, mainly due to a decrease in bank-owned securities balances, reflecting lower wholesale funding levels.

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 April 30, 2021, our unencumbered assets available as collateral comprised 26% of total assets (January 31, 2021 – 28%).

(Millions of Canadian dollars)	As at									
	April 30 2021					January 31 2021				
	Encumbered		Unencumbered			Encumbered		Unencumbered		
	Pledged as collateral	Other (1)	Available as collateral (2)	Other (3)	Total	Pledged as collateral	Other (1)	Available as collateral (2)	Other (3)	Total
Cash and due from banks	\$ –	\$ 3,369	\$ 110,938	\$ –	\$ 114,307	\$ –	\$ 3,666	\$ 145,922	\$ –	\$ 149,588
Interest-bearing deposits with banks	–	–	63,438	–	63,438	–	–	33,731	–	33,731
Securities										
Trading	50,179	–	80,271	3,817	134,267	52,656	–	99,899	3,486	156,041
Investment, net of applicable allowance	12,075	–	117,291	53	129,419	12,634	–	126,772	53	139,459
Assets purchased under reverse repurchase agreements and securities borrowed (4)	420,370	17,663	29,668	5,899	473,600	422,751	17,587	31,568	5,851	477,757
Loans										
Retail										
Mortgage securities	30,803	–	34,337	–	65,140	31,212	–	37,968	–	69,180
Mortgage loans	44,423	–	26,936	221,504	292,863	62,108	–	26,490	194,154	282,752
Non-mortgage loans	3,165	–	9,139	105,923	118,227	3,806	–	10,629	98,212	112,647
Wholesale	–	–	–	202,427	202,427	–	–	–	213,462	213,462
Allowance for loan losses	–	–	–	(5,146)	(5,146)	–	–	–	(5,478)	(5,478)
Segregated fund net assets	–	–	–	2,338	2,338	–	–	–	2,127	2,127
Other										
Derivatives	–	–	–	97,236	97,236	–	–	–	110,917	110,917
Others (5)	25,335	–	1,892	74,076	101,303	26,711	–	1,873	75,126	103,710
Total assets	\$ 586,350	\$ 21,032	\$ 473,910	\$ 708,127	\$ 1,789,419	\$ 611,878	\$ 21,253	\$ 514,852	\$ 697,910	\$ 1,845,893

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

(2) Represents assets that are readily available for use as collateral, including NHA MBS, our unencumbered mortgage loans that qualify as eligible collateral at FHLB, as well as loans that qualify as eligible collateral for discount window facility available to us and lodged at the FRBNY.

(3) 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. This also includes loans that could be used to collateralize central bank advances, including those for pledging to the BoC under the expanded eligibility criteria announced in Q2 2020. For further details on programs in support of liquidity and funding announced in fiscal 2020, refer to the Significant developments: COVID-19 section of our 2020 Annual Report.

(4) Includes bank-owned liquid assets and securities received as collateral from off-balance sheet securities financing, derivative transactions, and margin lending. Includes \$17.7 billion (January 31, 2021 – \$17.6 billion) of collateral received through reverse repurchase transactions that cannot be rehypothecated in its current legal form.

(5) 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 April 30, 2021, relationship-based deposits, which are the primary source of funding for retail loans and mortgages, were \$732.0 billion or 55% of our total funding (January 31, 2021 – \$716.2 billion or 52%). 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 liquid asset buffers.

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 Canada Deposit Insurance Corporation (CDIC) to convert all or a portion of certain shares and liabilities of that bank into common shares. As at April 30, 2021, the notional value of issued and outstanding long-term debt subject to conversion under the Bail-in regime was \$41.8 billion (January 31, 2021 – \$39.9 billion).

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

Long-term debt issuance

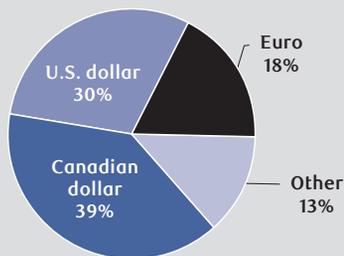
Our wholesale funding activities are well-diversified by geography, investor segment, instrument, currency, structure and maturity. We maintain an ongoing presence in different funding markets, which allows us to continuously monitor market developments and trends, identify opportunities and risks, and 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.

Programs by geography

Canada	U.S.	Europe/Asia
<ul style="list-style-type: none"> Canadian Shelf Program – \$25 billion 	<ul style="list-style-type: none"> U.S. Shelf Program – US\$40 billion 	<ul style="list-style-type: none"> European Debt Issuance Program – US\$40 billion Global Covered Bond Program – €60 billion Japanese Issuance Programs – ¥1 trillion

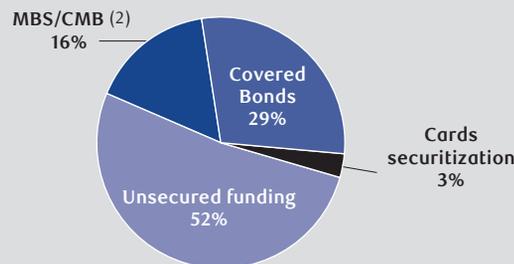
We also raise long-term funding using Canadian Senior Notes, Canadian National Housing Act MBS, Canada Mortgage Bonds, credit card receivable-backed securities, Kangaroo Bonds (issued in the Australian domestic market by foreign firms) and Yankee Certificates of Deposit (issued in the U.S. domestic market 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.

Long-term debt (1) – funding mix by currency of issuance



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

Long-term debt (1) – funding mix by product



(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⁾

(Millions of Canadian dollars)	As at April 30, 2021							
	Less than 1 month	1 to 3 months	3 to 6 months	6 to 12 months	Less than 1 year sub-total	1 year to 2 years	2 years and greater	Total
Deposits from banks ⁽²⁾	\$ 5,820	\$ 12	\$ –	\$ –	\$ 5,832	\$ –	\$ –	\$ 5,832
Certificates of deposit and commercial paper	4,397	11,634	21,417	24,782	62,230	31	–	62,261
Asset-backed commercial paper ⁽³⁾	2,578	3,107	4,459	2,568	12,712	–	–	12,712
Senior unsecured medium-term notes ⁽⁴⁾	198	3,575	3,356	9,851	16,980	7,070	36,259	60,309
Senior unsecured structured notes ⁽⁵⁾	162	338	289	1,461	2,250	1,678	7,423	11,351
Mortgage securitization	–	1,728	437	1,662	3,827	2,568	11,532	17,927
Covered bonds/asset-backed securities ⁽⁶⁾	553	1,274	2,997	1,341	6,165	8,453	20,954	35,572
Subordinated liabilities	–	–	999	–	999	242	7,642	8,883
Other ⁽⁷⁾	6,445	569	370	640	8,024	8,070	443	16,537
Total	\$ 20,153	\$ 22,237	\$ 34,324	\$ 42,305	\$ 119,019	\$ 28,112	\$ 84,253	\$ 231,384
Of which:								
– Secured	\$ 9,223	\$ 6,376	\$ 8,126	\$ 5,571	\$ 29,296	\$ 11,021	\$ 32,909	\$ 73,226
– Unsecured	10,930	15,861	26,198	36,734	89,723	17,091	51,344	158,158

(Millions of Canadian dollars)	As at January 31, 2021							
	Less than 1 month	1 to 3 months	3 to 6 months	6 to 12 months	Less than 1 year sub-total	1 year to 2 years	2 years and greater	Total
Deposits from banks ⁽²⁾	\$ 11,689	\$ 361	\$ 70	\$ –	\$ 12,120	\$ –	\$ –	\$ 12,120
Certificates of deposit and commercial paper	6,124	14,356	10,640	31,961	63,081	–	–	63,081
Asset-backed commercial paper ⁽³⁾	2,030	2,251	3,836	4,496	12,613	–	–	12,613
Senior unsecured medium-term notes ⁽⁴⁾	880	4,983	7,667	4,375	17,905	13,797	36,209	67,911
Senior unsecured structured notes ⁽⁵⁾	419	590	292	1,133	2,434	1,400	8,449	12,283
Mortgage securitization	–	265	1,730	793	2,788	3,441	11,544	17,773
Covered bonds/asset-backed securities ⁽⁶⁾	–	5,798	1,890	3,994	11,682	7,044	24,138	42,864
Subordinated liabilities	–	–	–	1,000	1,000	253	7,677	8,930
Other ⁽⁷⁾	8,287	438	934	229	9,888	630	6,459	16,977
Total	\$ 29,429	\$ 29,042	\$ 27,059	\$ 47,981	\$ 133,511	\$ 26,565	\$ 94,476	\$ 254,552
Of which:								
– Secured	\$ 9,016	\$ 8,562	\$ 7,649	\$ 9,427	\$ 34,654	\$ 10,485	\$ 35,682	\$ 80,821
– Unsecured	20,413	20,480	19,410	38,554	98,857	16,080	58,794	173,731

(1) Excludes bankers' acceptances and repos.

(2) Excludes deposits associated with services we provide to banks (e.g., custody, cash management).

(3) Only includes consolidated liabilities, including our collateralized commercial paper program.

(4) Includes deposit notes.

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

(6) Includes credit card and mortgage loans.

(7) Includes tender option bonds (secured) of \$7,008 million (January 31, 2021 – \$7,560 million), bearer deposit notes (unsecured) of \$1,259 million (January 31, 2021 – \$1,659 million), other long-term structured deposits (unsecured) of \$8,264 million (January 31, 2021 – \$7,751 million), and FHLB advances (secured) of \$6 million (January 31, 2021 – \$7 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 2020 Annual Report.

Credit ratings (1)

	As at May 26, 2021			
	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-	A	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.
- (2) Includes senior long-term debt issued prior to September 23, 2018 and 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 November 18, 2020, Moody's affirmed our ratings with a stable outlook.
- (5) On October 28, 2020, Standard & Poor's affirmed our ratings with a stable outlook.
- (6) On January 13, 2021, Fitch Ratings affirmed our ratings with a negative outlook.
- (7) On May 14, 2021, 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.

(Millions of Canadian dollars)	As at					
	April 30 2021			January 31 2021		
	One-notch downgrade	Two-notch downgrade	Three-notch downgrade	One-notch downgrade	Two-notch downgrade	Three-notch downgrade
Contractual derivatives funding or margin requirements	\$ 404	\$ 89	\$ 124	\$ 339	\$ 79	\$ 124
Other contractual funding or margin requirements (1)	153	–	3	185	–	–

- (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 BCBS and OSFI regulatory minimum coverage level for LCR is 100%.

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	
	April 30 2021	
	Total unweighted value (average) (2)	Total weighted value (average)
<i>(Millions of Canadian dollars, except percentage amounts)</i>		
High-quality liquid assets		
Total high-quality liquid assets (HQLA)		\$ 364,160
Cash outflows		
Retail deposits and deposits from small business customers, of which:	\$ 354,145	\$ 33,062
<i>Stable deposits (3)</i>	122,351	3,671
<i>Less stable deposits</i>	231,794	29,391
Unsecured wholesale funding, of which:	408,807	192,403
<i>Operational deposits (all counterparties) and deposits in networks of cooperative banks (4)</i>	173,876	41,157
<i>Non-operational deposits</i>	203,955	120,270
<i>Unsecured debt</i>	30,976	30,976
Secured wholesale funding		28,412
Additional requirements, of which:	258,147	61,990
<i>Outflows related to derivative exposures and other collateral requirements</i>	40,727	17,499
<i>Outflows related to loss of funding on debt products</i>	8,454	8,454
<i>Credit and liquidity facilities</i>	208,966	36,037
Other contractual funding obligations (5)	26,036	26,036
Other contingent funding obligations (6)	591,502	9,391
Total cash outflows		\$ 351,294
Cash inflows		
Secured lending (e.g., reverse repos)	\$ 254,959	\$ 41,531
Inflows from fully performing exposures	12,550	7,312
Other cash inflows	27,905	27,905
Total cash inflows		\$ 76,748
		Total adjusted value
Total HQLA		\$ 364,160
Total net cash outflows		274,546
Liquidity coverage ratio		133%

	January 31 2021	
		Total adjusted value
<i>(Millions of Canadian dollars, except percentage amounts)</i>		
Total HQLA		\$ 358,263
Total net cash outflows		254,011
Liquidity coverage ratio		141%

- (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 April 30, 2021 is calculated as an average of 63 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, 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%).

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.

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.

Q2 2021 vs. Q1 2021

The average LCR for the quarter ended April 30, 2021 was 133%, which translates into a surplus of approximately \$89.6 billion, compared to 141% and a surplus of approximately \$104.3 billion in the prior quarter. Average LCR decreased from the prior quarter primarily due to lower funding levels as the bank continues to optimize its liquidity position. We expect liquidity levels will continue to be influenced by central bank policy and actions, and we will continue to manage our LCR in reflection of these and other industry-wide developments.

Net Stable Funding Ratio (NSFR)

NSFR is a Basel III metric that measures the sufficiency of available stable funding relative to the amount of required stable funding. The BCBS and OSFI regulatory minimum coverage level for NSFR is 100%.

Available stable funding is defined as the portion of capital and liabilities expected to be reliable over the time horizon considered by the NSFR, which extends to one year. Required stable funding is a function of the liquidity characteristics and residual maturities of the various assets held by the bank as well as those of its off-balance sheet exposures.

Beginning in Q1 2021, OSFI requires Canadian D-SIBs to disclose the NSFR using the standard Basel disclosure template. Amounts presented in this disclosure template are determined in accordance with the requirements of OSFI's Liquidity Adequacy Requirements (LAR) guideline and are not necessarily aligned with the classification requirements prescribed under IFRS.

Net Stable Funding Ratio common disclosure template (1)

	As at April 30, 2021				
	Unweighted value by residual maturity (2)				Weighted value
	No maturity	< 6 months	6 months to < 1 year	≥ 1 year	
(Millions of Canadian dollars, except percentage amounts)					
Available Stable Funding (ASF) Item					
Capital:	\$ 92,716	\$ –	\$ –	\$ 9,497	\$ 102,213
Regulatory Capital	92,716	–	–	9,497	102,213
Other Capital Instruments	–	–	–	–	–
Retail deposits and deposits from small business customers:	319,334	52,333	22,845	21,291	384,309
Stable deposits (3)	108,673	26,349	12,700	8,771	149,107
Less stable deposits	210,661	25,984	10,145	12,520	235,202
Wholesale funding:	305,477	370,204	50,553	88,243	283,430
Operational deposits (4)	191,921	–	–	–	95,960
Other wholesale funding	113,556	370,204	50,553	88,243	187,470
Liabilities with matching interdependent assets (5)	–	3,302	3,303	25,923	–
Other liabilities:	36,373	–	174,798	–	12,676
NSFR derivative liabilities	–	–	14,247	–	–
All other liabilities and equity not included in the above categories	36,373	147,776	199	12,576	12,676
Total ASF					\$ 782,628
Required Stable Funding (RSF) Item					
Total NSFR high-quality liquid assets (HQLA)					\$ 31,427
Deposits held at other financial institutions for operational purposes	–	2,651	–	–	1,325
Performing loans and securities:	163,508	267,717	111,797	391,638	545,542
Performing loans to financial institutions secured by Level 1 HQLA	–	110,091	18,841	161	16,608
Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	4,276	64,225	32,095	10,422	39,067
Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and PSEs, of which:	94,713	74,983	38,209	125,287	239,194
With a risk weight of less than or equal to 35% under the Basel II standardized approach for credit risk	–	1,597	1,435	5,506	5,094
Performing residential mortgages, of which:	37,183	16,713	22,166	239,443	211,782
With a risk weight of less than or equal to 35% under the Basel II standardized approach for credit risk	37,183	16,627	20,522	239,371	210,305
Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	27,336	1,705	486	16,325	38,891
Assets with matching interdependent liabilities (5)	–	3,301	3,303	25,923	–
Other assets:	1,892	–	225,530	–	63,114
Physical traded commodities, including gold	1,892	–	–	–	1,609
Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	–	–	14,198	–	12,069
NSFR derivative assets	–	–	14,292	–	44
NSFR derivative liabilities before deduction of variation margin posted	–	–	33,954	–	1,698
All other assets not included in the above categories	–	116,303	155	46,628	47,694
Off-balance sheet items	–	–	623,369	–	22,236
Total RSF					\$ 663,644
Net Stable Funding Ratio (%)					118%

As at January 31, 2021

(Millions of Canadian dollars, except percentage amounts)		Weighted value
Total ASF		\$ 784,238
Total RSF		662,046
Net Stable Funding Ratio (%)		118%

- (1) The NSFR is calculated in accordance with OSFI's Liquidity Adequacy Requirements (LAR) guideline, which, in turn, reflects liquidity-related requirements issued by the BCBS as updated in accordance with the regulatory guidance issued in fiscal 2020.
- (2) Totals for the following rows encompass the residual maturity categories of less than 6 months, 6 months to less than 1 year, and greater than or equal to 1 year in accordance with the requirements of the common disclosure template prescribed by OSFI: Other liabilities, NSFR derivative liabilities, Other assets, Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs, NSFR derivative assets, NSFR derivative liabilities before deduction of variation margin posted, and Off-balance sheet items.
- (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, 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) Interdependent assets and liabilities represent National Housing Act Mortgage-Backed Securities (NHA MBS) liabilities, including liabilities arising from transactions involving the Canada Mortgage Bond program and their corresponding encumbered mortgages.

Available stable funding is comprised primarily of a diversified pool of personal and commercial deposits, capital, as well as long-term wholesale liabilities. Required stable funding is driven mainly by the bank's mortgage and loan portfolio, secured loans to financial institutions and to a lesser extent by other less liquid assets. NSFR does not reflect any unused market funding capacity that we believe is available to the bank.

Volume and composition of available stable funding is actively managed to optimize our structural funding position and meet NSFR objectives. Our NSFR is managed in accordance with our comprehensive LRMF.

Q2 2021 vs. Q1 2021

The NSFR as at April 30, 2021 was 118%, which translates into a surplus of approximately \$119.0 billion, compared to 118% and a surplus of approximately \$122.2 billion in the prior quarter. NSFR has remained stable over the quarter as lower wholesale funding was largely offset by continued growth in client deposits.

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 2020 Annual Report.

(Millions of Canadian dollars)	As at April 30, 2021									
	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	5 years and greater	With no specific maturity	Total
Assets										
Cash and deposits with banks	\$ 175,499	\$ 1	\$ –	\$ 11	\$ –	\$ –	\$ –	\$ –	\$ 2,234	\$ 177,745
Securities										
Trading (1)	65,080	19	119	26	17	33	123	9,124	51,192	125,733
Investment, net of applicable allowance	3,912	8,150	3,775	6,419	6,658	18,326	30,174	51,528	477	129,419
Assets purchased under reverse repurchase agreements and securities borrowed (2)	146,475	67,298	26,165	26,156	23,732	98	–	–	18,107	308,031
Loans, net of applicable allowance	25,055	19,390	24,518	26,872	30,801	129,541	283,080	56,331	77,923	673,511
Other										
Customers' liability under acceptances	13,047	5,867	–	2	9	5	–	–	(113)	18,817
Derivatives	6,051	7,294	4,211	6,625	2,667	10,055	17,942	42,384	7	97,236
Other financial assets	32,147	1,097	1,277	275	354	209	218	2,014	3,247	40,838
Total financial assets	467,266	109,116	60,065	66,386	64,238	158,267	331,537	161,381	153,074	1,571,330
Other non-financial assets	6,225	1,544	(52)	181	430	2,523	2,107	5,695	25,333	43,986
Total assets	\$ 473,491	\$ 110,660	\$ 60,013	\$ 66,567	\$ 64,668	\$ 160,790	\$ 333,644	\$ 167,076	\$ 178,407	\$ 1,615,316
Liabilities and equity										
Deposits (3)										
Unsecured borrowing	\$ 75,344	\$ 43,258	\$ 41,162	\$ 37,211	\$ 41,639	\$ 20,250	\$ 50,477	\$ 13,782	\$ 623,949	\$ 947,072
Secured borrowing	3,218	6,422	6,478	2,817	4,307	6,068	17,603	6,408	–	53,321
Covered bonds	–	1,274	2,289	852	–	5,986	14,416	8,113	–	32,930
Other										
Acceptances	13,056	5,868	–	–	9	–	–	–	9	18,942
Obligations related to securities sold short	31,817	–	–	–	–	–	–	–	–	31,817
Obligations related to assets sold under repurchase agreements and securities loaned (2)	203,947	26,430	9,171	171	1,992	2,956	–	–	12,382	257,049
Derivatives	5,904	7,208	4,290	5,433	3,282	8,789	18,616	38,879	1	92,402
Other financial liabilities	32,815	997	813	425	546	843	2,044	10,069	679	49,231
Subordinated debentures	–	–	–	–	–	188	2,042	6,784	–	9,014
Total financial liabilities	366,101	91,457	64,203	46,909	51,775	45,080	105,198	84,035	637,020	1,491,778
Other non-financial liabilities	1,089	1,088	103	3,604	1,148	991	966	12,348	9,379	30,716
Equity	–	–	–	–	–	–	–	–	92,822	92,822
Total liabilities and equity	\$ 367,190	\$ 92,545	\$ 64,306	\$ 50,513	\$ 52,923	\$ 46,071	\$ 106,164	\$ 96,383	\$ 739,221	\$ 1,615,316
Off-balance sheet items										
Financial guarantees	\$ 590	\$ 2,171	\$ 2,093	\$ 2,430	\$ 3,086	\$ 1,297	\$ 3,744	\$ 673	\$ 72	\$ 16,156
Commitments to extend credit	7,562	8,277	8,427	12,091	19,606	51,777	150,273	16,844	3,190	278,047
Other credit-related commitments	2,178	1,104	1,366	1,648	1,529	169	843	4	91,266	100,107
Other commitments	15	11	17	18	18	64	180	350	557	1,230
Total off-balance sheet items	\$ 10,345	\$ 11,563	\$ 11,903	\$ 16,187	\$ 24,239	\$ 53,307	\$ 155,040	\$ 17,871	\$ 95,085	\$ 395,540

(1) 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.

(2) Open reverse repo and repo contracts, which have no set maturity date and are typically short term, have been included in the with no specific maturity category.

(3) 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 January 31, 2021										
(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	5 years and greater	With no specific maturity	Total
Assets										
Cash and deposits with banks	\$ 180,806	\$ 1	\$ –	\$ –	\$ 10	\$ –	\$ –	\$ –	\$ 2,502	\$ 183,319
Securities										
Trading (1)	84,588	28	28	80	27	24	89	9,860	53,299	148,023
Investment, net of applicable allowance	3,688	7,658	5,591	9,262	9,068	23,600	28,276	51,813	503	139,459
Assets purchased under reverse repurchase agreements and securities borrowed (2)	146,637	77,142	30,320	19,790	15,850	2	–	–	21,292	311,033
Loans, net of applicable allowance	26,602	18,723	27,798	25,633	27,086	136,842	276,030	56,079	77,770	672,563
Other										
Customers' liability under acceptances	12,206	6,640	16	–	5	–	5	–	(116)	18,756
Derivatives	6,034	8,102	4,963	3,232	5,702	10,526	21,014	51,341	3	110,917
Other financial assets	32,811	3,033	1,557	76	224	240	261	2,048	3,241	43,491
Total financial assets	493,372	121,327	70,273	58,073	57,972	171,234	325,675	171,141	158,494	1,627,561
Other non-financial assets	5,493	1,513	1,017	40	434	2,249	2,126	5,824	24,894	43,590
Total assets	\$ 498,865	\$ 122,840	\$ 71,290	\$ 58,113	\$ 58,406	\$ 173,483	\$ 327,801	\$ 176,965	\$ 183,388	\$ 1,671,151
Liabilities and equity										
Deposits (3)										
Unsecured borrowing (4)	\$ 99,425	\$ 55,458	\$ 42,762	\$ 31,840	\$ 36,582	\$ 26,661	\$ 50,889	\$ 14,642	\$ 602,794	\$ 961,053
Secured borrowing	2,089	3,763	7,787	5,618	1,371	8,904	17,875	6,272	–	53,679
Covered bonds	–	5,296	1,314	2,397	882	3,971	17,283	8,722	–	39,865
Other										
Acceptances	12,213	6,641	15	–	3	–	–	–	9	18,881
Obligations related to securities sold short	32,569	–	–	–	–	–	–	–	–	32,569
Obligations related to assets sold under repurchase agreements and securities loaned (2)	206,486	46,307	1,452	1,488	176	4,957	–	–	14,041	274,907
Derivatives	5,616	8,353	4,688	3,223	4,407	9,504	21,705	48,569	6	106,071
Other financial liabilities (4)	36,535	1,884	1,215	334	509	854	2,070	10,643	565	54,609
Subordinated debentures	–	–	–	–	–	196	2,159	6,831	–	9,186
Total financial liabilities	394,933	127,702	59,233	44,900	43,930	55,047	111,981	95,679	617,415	1,550,820
Other non-financial liabilities	1,225	1,052	297	982	2,796	848	850	12,707	9,325	30,082
Equity	–	–	–	–	–	–	–	–	90,249	90,249
Total liabilities and equity	\$ 396,158	\$ 128,754	\$ 59,530	\$ 45,882	\$ 46,726	\$ 55,895	\$ 112,831	\$ 108,386	\$ 716,989	\$ 1,671,151
Off-balance sheet items										
Financial guarantees	\$ 575	\$ 1,696	\$ 2,794	\$ 2,078	\$ 2,438	\$ 1,200	\$ 4,520	\$ 663	\$ 63	\$ 16,027
Commitments to extend credit	3,214	9,807	15,776	9,660	15,265	53,484	153,137	14,503	3,170	278,016
Other credit-related commitments	1,835	1,154	1,635	1,421	1,534	225	940	6	84,333	93,083
Other commitments	108	12	18	18	18	72	181	332	526	1,285
Total off-balance sheet items	\$ 5,732	\$ 12,669	\$ 20,223	\$ 13,177	\$ 19,255	\$ 54,981	\$ 158,778	\$ 15,504	\$ 88,092	\$ 388,411

- (1) 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.
- (2) Open reverse repo and repo contracts, which have no set maturity date and are typically short term, have been included in the with no specific maturity category.
- (3) 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.
- (4) Amounts previously presented were reclassified to reflect the contractual maturities of certain term deposits and related balances.

Capital management

We continue to manage our capital in accordance with our Capital Management Framework as described in our 2020 Annual Report. In addition, we continue to monitor for new regulatory capital developments, including OSFI guidance relating to the BCBS Basel III reforms and guidance issued in response to the COVID-19 pandemic, in order to ensure timely and accurate compliance with these requirements as disclosed in the Capital management section in our 2020 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.

The Financial Stability Board (FSB) has re-designated us as a Global Systemically Important Bank (G-SIB). This designation requires us to maintain a higher loss absorbency requirement (common equity as a percentage of risk-weighted assets) of 1% consistent with the D-SIB requirement.

On March 13, 2020, OSFI announced a decrease in the Domestic Stability Buffer (DSB) from 2.25% to 1.0% of total RWA in response to the disruption related to the COVID-19 pandemic and in support of a D-SIB's 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. On December 8, 2020, OSFI reaffirmed the DSB at 1.0% of total RWA, consistent with its commitment. On December 14, 2020, OSFI reaffirmed its expectation, as initially announced in March 2020, that all banks should not increase their dividend payments and should stop any share buybacks, and clarified that certain exceptions for non-recurring special dividends may be acceptable, subject to approval.

In Q2 2020, OSFI announced a series of regulatory adjustments and guidance, and continues to release regulations implementing and/or clarifying certain aspects or requirements on a rolling basis, to further support the financial and operational resilience of the banking sector in response to the ongoing COVID-19 pandemic. Such measures and guidance to date include, but are not limited to:

- Regulatory adjustments to RWA, including temporary measures to reduce stressed VaR (SVaR) multipliers from three to one and the permanent exclusion of Funding Valuation Adjustment hedges from market risk.
 - On March 16, 2021, OSFI announced the unwinding of the temporary measures to reduce SVaR multipliers, requiring banks to revert to pre-pandemic levels effective May 1, 2021.
- 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 quarters 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.
- Leverage ratio exposure amounts are to exclude central bank reserves and sovereign-issued securities that qualify as HQLA until December 31, 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.
- Clarification of the applicable capital and leverage ratio treatment of certain government relief programs. For further details, refer to the Capital management section of our 2020 Annual Report, as updated below:
 - On January 27, 2021, OSFI provided guidance on the associated capital treatment of the BDC Highly Affected Sectors Credit Availability Program (HASCAP), noting that the risk-weighting should be in accordance with existing regulatory guidelines. In addition, the full amount of the loan is required to be included in the leverage ratio calculation.

OSFI has assessed and will continue to assess the need for these relief measures. We have incorporated the effective 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 capital and leverage ratios	OSFI regulatory target requirements for large banks under Basel III					RBC capital and leverage ratios as at April 30, 2021	Domestic Stability Buffer ⁽³⁾	Minimum including Capital Buffers, D-SIB/G-SIB surcharge and Domestic Stability Buffer
	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⁾			
Common Equity Tier 1	4.5%	2.5%	7.0%	1.0%	8.0%	12.8%	1.0%	9.0%
Tier 1 capital	6.0%	2.5%	8.5%	1.0%	9.5%	14.1%	1.0%	10.5%
Total capital	8.0%	2.5%	10.5%	1.0%	11.5%	15.8%	1.0%	12.5%
Leverage ratio	3.0%	n.a.	3.0%	n.a.	3.0%	5.0%	n.a.	3.0%

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

(2) 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 December 8, 2020, OSFI reaffirmed the DSB at 1.0% of total RWA.

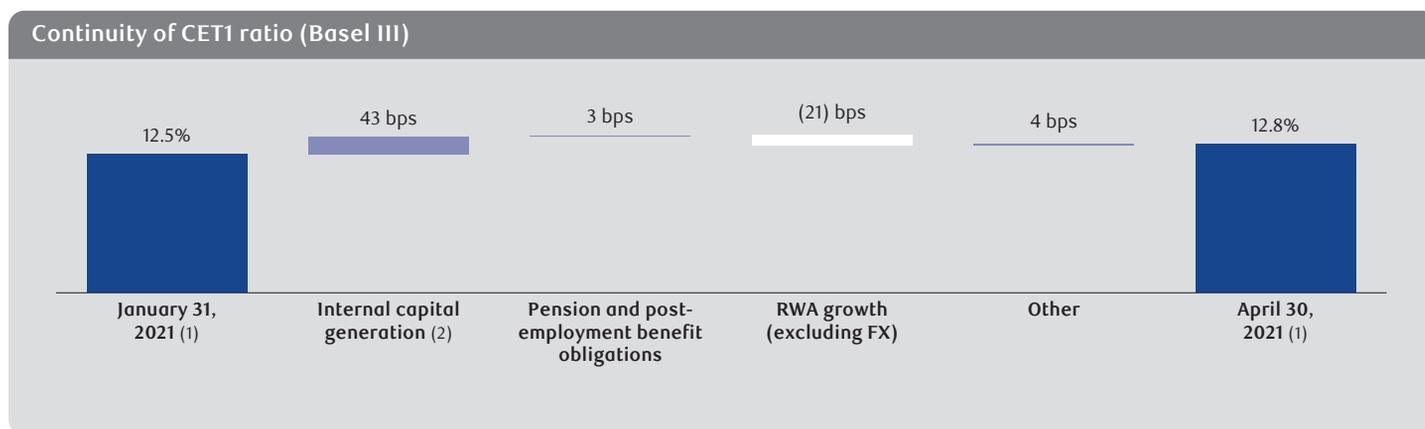
n.a. not applicable

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.

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	As at		
	April 30 2021	January 31 2021	October 31 2020
Capital ⁽¹⁾			
CET1 capital	\$ 70,970	\$ 69,555	\$ 68,082
Tier 1 capital	78,139	76,733	74,005
Total capital	87,636	86,543	84,928
Risk-weighted assets (RWA) used in calculation of capital ratios ⁽¹⁾			
Credit risk	\$ 452,857	\$ 458,162	\$ 448,821
Market risk	30,617	28,449	27,374
Operational risk	72,133	70,908	70,047
Total RWA	\$ 555,607	\$ 557,519	\$ 546,242
Capital ratios and Leverage ratio ⁽¹⁾			
CET1 ratio	12.8%	12.5%	12.5%
Tier 1 capital ratio	14.1%	13.8%	13.5%
Total capital ratio	15.8%	15.5%	15.5%
Leverage ratio	5.0%	4.8%	4.8%
Leverage ratio exposure (billions)	\$ 1,576.3	\$ 1,585.3	\$ 1,552.9

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

Q2 2021 vs. Q1 2021



(1) Represents rounded figures.

(2) Internal capital generation of \$2.4 billion which represents Net income available to shareholders, less common and preferred shares dividends and distributions on other equity instruments.

Our CET1 ratio was 12.8%, up 30 bps from last quarter, mainly reflecting internal capital generation and the impact of higher discount rates in determining our pension and other post-employment benefit obligations, partially offset by RWA growth (excluding FX).

Our Tier 1 capital ratio of 14.1% was up 30 bps, reflecting the factors noted above under the CET1 ratio.

Our Total capital ratio of 15.8% was up 30 bps, reflecting the factors noted above under the Tier 1 capital ratio.

RWA decreased by \$1.9 billion, primarily driven by the impact of foreign exchange translation and net credit upgrades. These factors were partially offset by growth in wholesale lending, client-driven trading activity and residential mortgages. The impact of foreign exchange translation on RWA is largely mitigated with economic hedges in our CET1 ratio.

Our Leverage ratio of 5.0% was up 20 bps, mainly reflecting internal capital generation and the impact of foreign exchange translation, partially offset by lower regulatory modifications for central bank reserves and sovereign-issued securities qualifying as HQLA.

Leverage exposures decreased by \$9.0 billion, mainly due to the impact of foreign exchange translation, partially offset by lower regulatory modifications for central bank reserves and sovereign-issued securities qualifying as HQLA.

In Q3 2021, we expect to reflect model parameter updates to increase the threshold for determining small business clients subject to retail capital treatment, as permitted under regulatory capital requirements, and to recalibrate probability of default parameters for the remaining borrowers in our wholesale portfolio. We expect the implementation of these parameter updates to increase our CET1 ratio by approximately 70-80 bps in Q3 2021. This impact will be partially offset by the increase in SVaR multipliers effective May 1, 2021, as discussed above, which is expected to decrease our CET1 ratio by approximately 10-15 bps. Both of these estimates are subject to change based on portfolio size or portfolio mix held.

Selected capital management activity

The following table provides our selected capital management activity:

(Millions of Canadian dollars, except number of shares)	For the three months ended April 30, 2021			For the six months ended April 30, 2021		
	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)		324	\$ 25	820	\$ 61	
Issuance of limited recourse capital notes (LRCNs) Series 2 (2), (3), (4)	November 2, 2020	–	–	1,250	1,250	
Tier 2 capital						
Redemption of January 20, 2026 subordinated debentures (3), (4)	January 20, 2021		\$ –		\$ (1,500)	
Issuance of January 28, 2033 subordinated debentures (3), (4)	January 28, 2021		–		1,000	

(1) Amounts include cash received for stock options exercised during the period and 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, 2020, we announced a normal course issuer bid (NCIB) to purchase up to 20 million of our common shares. This NCIB expired on March 1, 2021, with 0.4 million common shares repurchased and cancelled at a cost of \$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.

As at April 30, 2021, we do not have an active NCIB.

We determine the amount and timing of purchases under an 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 November 2, 2020, we issued \$1,250 million of LRCN Series 2, at a price per note of \$1,000. The LRCN Series 2 bear interest at a fixed rate of 4.0% per annum until February 24, 2026, and thereafter at a rate per annum, reset every fifth year, equal to the 5-Year Government of Canada Yield plus 3.617% until maturity on February 24, 2081.

On January 20, 2021, we redeemed all \$1,500 million of our outstanding 3.31% subordinated debentures due on January 20, 2026 for 100% of their principal amount plus interest accrued to, but excluding, the redemption date.

On January 28, 2021, we issued \$1,000 million of NVCC subordinated debentures. The notes bear interest at a fixed rate of 1.67% per annum until January 28, 2028, and at the three-month Canadian Dollar Offered Rate plus 0.55% thereafter until their maturity on January 28, 2033.

On May 24, 2021, we redeemed all 29 million of our issued and outstanding Non-Cumulative 5-Year Rate Reset First Preferred Shares Series BK at a price of \$25 per share.

During the quarter, we also announced our intention to redeem all 30 million of our issued and outstanding Non-Cumulative 5-Year Rate Reset First Preferred Shares Series BM at a price of \$25 per share. The shares will be redeemed on August 24, 2021.

Selected share data ⁽¹⁾

(Millions of Canadian dollars, except number of shares and as otherwise noted)	As at April 30, 2021		
	Number of shares (000s)	Amount	Dividends declared per share
Common shares issued	1,424,681	\$ 17,689	\$ 1.08
Treasury shares – common shares (2)	46	9	
Common shares outstanding	1,424,727	\$ 17,698	
Stock options and awards			
Outstanding	8,169		
Exercisable	3,677		
First preferred shares issued			
Non-cumulative Series AZ ^{(3), (4)}	20,000	\$ 500	\$ 0.23
Non-cumulative Series BB ^{(3), (4)}	20,000	500	0.23
Non-cumulative Series BD ^{(3), (4)}	24,000	600	0.20
Non-cumulative Series BF ^{(3), (4)}	12,000	300	0.19
Non-cumulative Series BH ⁽⁴⁾	6,000	150	0.31
Non-cumulative Series BI ⁽⁴⁾	6,000	150	0.31
Non-cumulative Series BJ ⁽⁴⁾	6,000	150	0.33
Non-cumulative Series BK ^{(3), (4)}	29,000	725	0.34
Non-cumulative Series BM ^{(3), (4)}	30,000	750	0.34
Non-cumulative Series BO ^{(3), (4)}	14,000	350	0.30
Non-cumulative Series C-2 ⁽⁵⁾	15	23	US\$ 16.88
Other equity instruments issued			
Limited recourse capital notes Series 1 ^{(3), (4), (6), (7)}	1,750	1,750	4.50%
Limited recourse capital notes Series 2 ^{(3), (4), (6), (8)}	1,250	1,250	4.00%
Preferred shares and other equity instruments issued	170,015	7,198	
Treasury instruments – preferred shares and other equity instruments	(6)	(7)	
Preferred shares and other equity instruments outstanding	170,009	\$ 7,191	
Dividends on common shares		\$ 1,540	
Dividends on preferred shares and distributions on other equity instruments ⁽⁹⁾		76	

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

(2) Positive amounts represent a short position in treasury shares.

(3) Dividend rate will reset every five years.

(4) NVCC instruments.

(5) Represents 615,400 depository shares relating to preferred shares Series C-2. Each depository 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 annual interest rate percentage applicable to the notes issued as at the reporting date.

(7) In connection with the issuance of LRCN Series 1, on July 28, 2020, we issued \$1,750 million of First Preferred Shares Series BQ (Series BQ) at a price of \$1,000 per Series BQ share. The Series BQ were issued to a consolidated trust to be held as trust assets in connection with the LRCN structure.

(8) In connection with the issuance of LRCN Series 2, on November 2, 2020, we issued \$1,250 million of First Preferred Shares Series BR (Series BR) at a price of \$1,000 per Series BR share. The Series BR were issued to a consolidated trust to be held as trust assets in connection with the LRCN structure.

(9) Excludes distributions to non-controlling interests.

As at May 21, 2021, the number of outstanding common shares was 1,425,096,393, net of treasury shares held of (270,601), and the number of stock options and awards was 8,027,735.

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 as at April 30, 2021, which were the preferred shares Series AZ, BB, BD, BF, BH, BI, BJ, BK, BM, BO, LRCN Series 1, LRCN Series 2 and subordinated debentures due on September 29, 2026, January 27, 2026, July 25, 2029, December 23, 2029, June 30, 2030 and January 28, 2033 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 3,922 million common shares, in aggregate, which would represent a dilution impact of 73.36% based on the number of common shares outstanding as at April 30, 2021.

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 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 risk-based TLAC ratio, which builds on the risk-based capital ratios described in the Capital Adequacy Requirements (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 DSB currently set at 1.0%. 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

On March 11, 2021, OSFI launched industry consultations on the adoption of the BCBS Basel III reforms into its existing Capital Adequacy Requirements, Leverage Requirements and Liquidity Adequacy Requirements Guidelines and related Pillar 3 disclosure requirements. While adopting the international standards, OSFI is also tailoring requirements for the Canadian market. We expect to continue to engage with OSFI on the domestic implementation of the Basel III reforms and are taking appropriate steps to ensure required adoption readiness based on guidance provided to date. The revised guidelines noted above will be effective November 1, 2022 for Canadian D-SIBs.

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 2020 Annual Consolidated Financial Statements and our Q2 2021 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 COVID-19 pandemic, the effectiveness of steps undertaken by governments and central banks in response to the COVID-19 pandemic and vaccine efficacy against new variants of COVID-19, supply and availability remains uncertain. Certain critical judgments 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.

Changes in accounting policies and disclosures

Changes in accounting policies

During the first quarter of 2021, we adopted the revised *Conceptual Framework*. The amendments had no material impact on our Consolidated Financial Statements.

During the first quarter of 2021, we early adopted the Phase 2 amendments to IFRS 9 *Financial Instruments*, IAS 39 *Financial Instruments: Recognition and Measurement*, IFRS 7 *Financial Instruments: Disclosures*, IFRS 4 *Insurance contracts*, and IFRS 16 *Leases (Amendments)*. Refer to Note 2 of our Condensed Financial Statements for details of these changes.

Future changes in accounting policies and disclosures

Future changes in accounting policies and disclosures that are not yet effective for us are described in Note 2 of our audited 2020 Annual Consolidated Financial Statements.

Controls and procedures

Disclosure controls and procedures

As of April 30, 2021, 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 April 30, 2021.

Internal control over financial reporting

No changes were made in our internal control over financial reporting during the quarter ended April 30, 2021 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 26 of our audited 2020 Annual Consolidated Financial Statements.

EDTF recommendations index

We aim to present transparent, high-quality risk disclosures by providing disclosures in our 2020 Annual Report, Q2 2021 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 Q2 2021 Report to Shareholders.

The following index summarizes our disclosure by EDTF recommendation:

Type of Risk	Recommendation	Disclosure	Location of disclosure		
			RTS page	Annual Report page	SFI page
General	1	Table of contents for EDTF risk disclosure	51	117	1
	2	Define risk terminology and measures		56-61, 222-223	–
	3	Top and emerging risks		53-55	–
	4	New regulatory ratios	45-47	96-101	–
Risk governance, risk management and business model	5	Risk management organization		56-61	–
	6	Risk culture		57-61	–
	7	Risk in the context of our business activities		104	–
	8	Stress testing		58-59, 73	–
Capital adequacy and risk-weighted assets (RWA)	9	Minimum Basel III capital ratios and Domestic systemically important bank surcharge	46	97-101	–
	10	Composition of capital and reconciliation of the accounting balance sheet to the regulatory balance sheet		–	*
	11	Flow statement of the movements in regulatory capital		–	20
	12	Capital strategic planning		96-101	–
	13	RWA by business segments		–	21
	14	Analysis of capital requirement, and related measurement model information		62-65	*
	15	RWA credit risk and related risk measurements		–	*
Liquidity	16	Movement of risk-weighted assets by risk type		–	21
	17	Basel back-testing		58, 62	32
Funding	18	Quantitative and qualitative analysis of our liquidity reserve	36-37	80-81, 85-86	–
	19	Encumbered and unencumbered assets by balance sheet category, and contractual obligations for rating downgrades	37, 40	81, 84	–
	20	Maturity analysis of consolidated total assets, liabilities and off-balance sheet commitments analyzed by remaining contractual maturity at the balance sheet date	44-45	86-87	–
Market risk	21	Sources of funding and funding strategy	38-39	81-83	–
	22	Relationship between the market risk measures for trading and non-trading portfolios and the balance sheet	34-35	77-78	–
	23	Decomposition of market risk factors	31-33	73-76	–
	24	Market risk validation and back-testing		73	–
	25	Primary risk management techniques beyond reported risk measures and parameters		73-76	–
Credit risk	26	Bank's credit risk profile	24-30	61-72, 165-172	22-32, *
		Quantitative summary of aggregate credit risk exposures that reconciles to the balance sheet	70-76	111-116	*
	27	Policies for identifying impaired loans		63-65, 106-107, 136-139	–
	28	Reconciliation of the opening and closing balances of impaired loans and impairment allowances during the year		–	24, 29
	29	Quantification of gross notional exposure for OTC derivatives or exchange-traded derivatives		66	33
Other	30	Credit risk mitigation, including collateral held for all sources of credit risk		64-65	*
	31	Other risk types		89-96	–
	32	Publicly known risk events		92-93, 210-211	–

* These disclosure requirements are satisfied or partially satisfied by disclosures provided in our Pillar 3 Report for the quarter ended April 30, 2021 and for the year ended October 31, 2020.

Interim Condensed Consolidated Financial Statements (unaudited)

Interim Condensed Consolidated Balance Sheets (unaudited)

(Millions of Canadian dollars)	As at	
	April 30 2021	October 31 2020
Assets		
Cash and due from banks	\$ 114,307	\$ 118,888
Interest-bearing deposits with banks	63,438	39,013
Securities		
Trading	125,733	136,071
Investment, net of applicable allowance (Note 4)	129,419	139,743
	255,152	275,814
Assets purchased under reverse repurchase agreements and securities borrowed	308,031	313,015
Loans (Note 5)		
Retail	476,230	457,976
Wholesale	202,427	208,655
	678,657	666,631
Allowance for loan losses (Note 5)	(5,146)	(5,639)
	673,511	660,992
Segregated fund net assets	2,338	1,922
Other		
Customers' liability under acceptances	18,817	18,507
Derivatives	97,236	113,488
Premises and equipment	7,601	7,934
Goodwill	10,816	11,302
Other intangibles	4,497	4,752
Other assets	59,572	58,921
	198,539	214,904
Total assets	\$ 1,615,316	\$ 1,624,548
Liabilities and equity		
Deposits (Note 6)		
Personal	\$ 348,114	\$ 343,052
Business and government	644,283	624,311
Bank	40,926	44,522
	1,033,323	1,011,885
Segregated fund net liabilities	2,338	1,922
Other		
Acceptances	18,942	18,618
Obligations related to securities sold short	31,817	29,285
Obligations related to assets sold under repurchase agreements and securities loaned	257,049	274,231
Derivatives	92,402	109,927
Insurance claims and policy benefit liabilities	12,109	12,215
Other liabilities	65,500	69,831
	477,819	514,107
Subordinated debentures (Note 9)	9,014	9,867
Total liabilities	1,522,494	1,537,781
Equity attributable to shareholders		
Preferred shares and other equity instruments (Note 9)	7,191	5,945
Common shares (Note 9)	17,698	17,499
Retained earnings	66,163	59,806
Other components of equity	1,683	3,414
	92,735	86,664
Non-controlling interests	87	103
Total equity	92,822	86,767
Total liabilities and equity	\$ 1,615,316	\$ 1,624,548

The accompanying notes are an integral part of these Interim Condensed Consolidated Financial Statements.

Interim Condensed Consolidated Statements of Income (unaudited)

(Millions of Canadian dollars, except per share amounts)	For the three months ended		For the six months ended	
	April 30 2021	April 30 2020	April 30 2021	April 30 2020
Interest and dividend income (Note 3)				
Loans	\$ 5,296	\$ 5,937	\$ 10,803	\$ 12,295
Securities	1,217	1,730	2,493	3,472
Assets purchased under reverse repurchase agreements and securities borrowed	322	1,492	711	3,501
Deposits and other	63	67	127	196
	6,898	9,226	14,134	19,464
Interest expense (Note 3)				
Deposits and other	1,392	2,337	2,900	5,357
Other liabilities	609	1,343	1,250	3,257
Subordinated debentures	43	81	95	164
	2,044	3,761	4,245	8,778
Net interest income	4,854	5,465	9,889	10,686
Non-interest income				
Insurance premiums, investment and fee income	536	197	2,345	2,191
Trading revenue	377	(66)	901	392
Investment management and custodial fees	1,711	1,500	3,414	3,035
Mutual fund revenue	1,014	890	2,014	1,836
Securities brokerage commissions	431	460	832	778
Service charges	460	468	918	956
Underwriting and other advisory fees	747	544	1,337	1,171
Foreign exchange revenue, other than trading	292	280	581	533
Card service revenue	281	212	553	499
Credit fees	368	304	700	664
Net gains on investment securities	82	45	117	56
Share of profit in joint ventures and associates	24	15	49	37
Other	441	19	911	335
	6,764	4,868	14,672	12,483
Total revenue	11,618	10,333	24,561	23,169
Provision for credit losses (Notes 4 and 5)	(96)	2,830	14	3,249
Insurance policyholder benefits, claims and acquisition expense	149	(177)	1,555	1,437
Non-interest expense				
Human resources (Note 7)	4,152	3,573	8,440	7,633
Equipment	487	468	980	930
Occupancy	400	417	804	814
Communications	212	252	425	502
Professional fees	314	324	605	608
Amortization of other intangibles	318	315	637	618
Other	496	593	1,030	1,215
	6,379	5,942	12,921	12,320
Income before income taxes	5,186	1,738	10,071	6,163
Income taxes	1,171	257	2,209	1,173
Net income	\$ 4,015	\$ 1,481	\$ 7,862	\$ 4,990
Net income attributable to:				
Shareholders	\$ 4,014	\$ 1,484	\$ 7,859	\$ 4,988
Non-controlling interests	1	(3)	3	2
	\$ 4,015	\$ 1,481	\$ 7,862	\$ 4,990
Basic earnings per share (in dollars) (Note 10)	\$ 2.76	\$ 1.00	\$ 5.42	\$ 3.41
Diluted earnings per share (in dollars) (Note 10)	2.76	1.00	5.42	3.40
Dividends per common share (in dollars)	1.08	1.08	2.16	2.13

The accompanying notes are an integral part of these Interim Condensed Consolidated Financial Statements.

Interim Condensed Consolidated Statements of Comprehensive Income (unaudited)

(Millions of Canadian dollars)	For the three months ended		For the six months ended	
	April 30 2021	April 30 2020	April 30 2021	April 30 2020
Net income	\$ 4,015	\$ 1,481	\$ 7,862	\$ 4,990
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	(79)	(989)	290	(806)
Provision for credit losses recognized in income	15	24	13	23
Reclassification of net losses (gains) on debt securities and loans at fair value through other comprehensive income to income	(66)	(64)	(102)	(73)
	(130)	(1,029)	201	(856)
Foreign currency translation adjustments				
Unrealized foreign currency translation gains (losses)	(2,466)	2,937	(4,634)	3,348
Net foreign currency translation gains (losses) from hedging activities	1,035	(1,126)	1,827	(1,304)
Reclassification of losses (gains) on foreign currency translation to income	(7)	-	(7)	-
	(1,438)	1,811	(2,814)	2,044
Net change in cash flow hedges				
Net gains (losses) on derivatives designated as cash flow hedges	669	(1,103)	796	(1,277)
Reclassification of losses (gains) on derivatives designated as cash flow hedges to income	33	108	78	100
	702	(995)	874	(1,177)
Items that will not be reclassified subsequently to income:				
Remeasurements of employee benefit plans (Note 7)	938	457	1,719	(12)
Net fair value change due to credit risk on financial liabilities designated at fair value through profit or loss	88	662	(36)	553
Net gains (losses) on equity securities designated at fair value through other comprehensive income	(5)	20	(1)	21
	1,021	1,139	1,682	562
Total other comprehensive income (loss), net of taxes	155	926	(57)	573
Total comprehensive income (loss)	\$ 4,170	\$ 2,407	\$ 7,805	\$ 5,563
Total comprehensive income attributable to:				
Shareholders	\$ 4,173	\$ 2,404	\$ 7,810	\$ 5,555
Non-controlling interests	(3)	3	(5)	8
	\$ 4,170	\$ 2,407	\$ 7,805	\$ 5,563

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

(Millions of Canadian dollars)	For the three months ended		For the six months ended	
	April 30 2021	April 30 2020	April 30 2021	April 30 2020
Income taxes on other comprehensive income				
Net unrealized gains (losses) on debt securities and loans at fair value through other comprehensive income	\$ (49)	\$ (147)	\$ (2)	\$ (92)
Provision for credit losses recognized in income	6	3	6	3
Reclassification of net losses (gains) on debt securities and loans at fair value through other comprehensive income	(10)	(23)	(23)	(26)
Unrealized foreign currency translation gains (losses)	-	1	2	1
Net foreign currency translation gains (losses) from hedging activities	354	(384)	620	(446)
Net gains (losses) on derivatives designated as cash flow hedges	238	(394)	283	(457)
Reclassification of losses (gains) on derivatives designated as cash flow hedges to income	12	39	28	36
Remeasurements of employee benefit plans	331	165	608	(2)
Net fair value change due to credit risk on financial liabilities designated at fair value through profit or loss	31	237	(13)	198
Net gains (losses) on equity securities designated at fair value through other comprehensive income	(1)	7	(1)	5
Total income tax expenses (recoveries)	\$ 912	\$ (496)	\$ 1,508	\$ (780)

The accompanying notes are an integral part of these Interim Condensed Consolidated Financial Statements.

Interim Condensed Consolidated Statements of Changes in Equity (unaudited)

	For the three months ended April 30, 2021											
	Preferred shares and other equity instruments	Common shares	Treasury – preferred shares and other equity instruments	Treasury – common shares	Retained earnings	FVOCI securities and loans	Foreign currency translation	Cash flow hedges	Total other components of equity	Equity attributable to shareholders	Non-controlling interests	Total equity
(Millions of Canadian dollars)	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Balance at beginning of period	7,198	17,664	17	(26)	62,751	192	3,260	(907)	2,545	90,149	100	90,249
Changes in equity												
Issues of share capital and other equity instruments	–	25	–	–	–	–	–	–	–	25	–	25
Common shares purchased for cancellation	–	–	–	–	–	–	–	–	–	–	–	–
Redemption of preferred shares and other equity instruments	–	–	–	–	(2)	–	–	–	–	(2)	–	–
Sales of treasury shares and other equity instruments	–	–	–	–	(1,540)	–	–	–	–	(1,540)	–	–
Purchases of treasury shares and other equity instruments	–	–	153	1,039	–	–	–	–	–	1,192	–	1,192
Share-based compensation awards	–	–	(177)	(1,004)	–	–	–	–	–	(1,181)	–	(1,181)
Dividends on common shares	–	–	–	–	(2)	–	–	–	–	(2)	–	(2)
Dividends on preferred shares and distributions on other equity instruments	–	–	–	–	(76)	–	–	–	–	(76)	(1)	(77)
Other	–	–	–	–	(5)	–	–	–	–	(5)	(9)	(14)
Net income	–	–	–	–	4,014	–	–	–	–	4,014	1	4,015
Total other comprehensive income (loss), net of taxes	–	–	–	–	1,021	(130)	(1,434)	702	(862)	159	(4)	155
Balance at end of period	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	7,198	17,689	(7)	9	66,163	62	1,826	(205)	1,683	92,735	87	92,822

	For the three months ended April 30, 2020											
	Preferred shares and other equity instruments	Common shares	Treasury – preferred shares and other equity instruments	Treasury – common shares	Retained earnings	FVOCI securities and loans	Foreign currency translation	Cash flow hedges	Total other components of equity	Equity attributable to shareholders	Non-controlling interests	Total equity
(Millions of Canadian dollars)	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Balance at beginning of period	5,698	17,577	1	(72)	56,279	206	4,454	(188)	4,472	83,955	106	84,061
Changes in equity												
Issues of share capital and other equity instruments	–	26	–	–	–	–	–	–	–	26	–	26
Common shares purchased for cancellation	–	(11)	–	–	(76)	–	–	–	–	(87)	–	(87)
Redemption of preferred shares and other equity instruments	–	–	–	–	–	–	–	–	–	–	–	–
Sales of treasury shares and other equity instruments	–	–	–	–	–	–	–	–	–	–	–	–
Purchases of treasury shares and other equity instruments	–	–	30	1,605	–	–	–	–	–	1,635	–	1,635
Share-based compensation awards	–	–	(30)	(1,608)	–	–	–	–	–	(1,638)	–	(1,638)
Dividends on common shares	–	–	–	–	(2)	–	–	–	–	(2)	–	(2)
Dividends on preferred shares and distributions on other equity instruments	–	–	–	–	(1,538)	–	–	–	–	(1,538)	–	(1,538)
Other	–	–	–	–	(64)	–	–	–	–	(64)	(3)	(67)
Net income	–	–	–	–	244	–	–	–	–	244	(1)	243
Total other comprehensive income (loss), net of taxes	–	–	–	–	1,484	–	–	–	–	1,484	(3)	1,481
Balance at end of period	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
	5,698	17,592	1	(75)	57,466	(823)	6,259	(1,183)	4,253	84,935	105	85,040

	For the six months ended April 30, 2021																							
	Preferred shares and other equity instruments	Common shares	Treasury – preferred shares and other equity instruments	Treasury – common shares	Retained earnings	FVOCI securities and loans	Foreign currency translation	Cash flow hedges	Total other components of equity	Equity attributable to shareholders	Non-controlling interests	Total equity												
(Millions of Canadian dollars)	\$	5,948	\$	17,628	\$	(3)	\$	(129)	\$	59,806	\$	(139)	\$	4,632	\$	(1,079)	\$	3,414	\$	86,664	\$	103	\$	86,767
Balance at beginning of period																								
Changes in equity																								
Issues of share capital and other equity instruments		1,250		61						(3)										1,308				1,308
Common shares purchased for cancellation																								
Redemption of preferred shares and other equity instruments																								
Sales of treasury shares and other equity instruments																								
Purchases of treasury shares and other equity instruments																								
Share-based compensation awards										(4)										(2,007)				(2,007)
Dividends on common shares										(3,079)										(4)				(4)
Dividends on preferred shares and distributions on other equity instruments										(134)										(134)				(136)
Other										36										36				27
Net income										7,859										7,859				7,862
Total other comprehensive income (loss), net of taxes										1,682										(49)				(57)
Balance at end of period	\$	7,198	\$	17,689	\$	(7)	\$	9	\$	66,163	\$	62	\$	1,826	\$	(205)	\$	1,683	\$	92,735	\$	87	\$	92,822

For the six months ended April 30, 2020

	For the six months ended April 30, 2020																							
	Preferred shares and other equity instruments	Common shares	Treasury – preferred shares and other equity instruments	Treasury – common shares	Retained earnings	FVOCI securities and loans	Foreign currency translation	Cash flow hedges	Total other components of equity	Equity attributable to shareholders	Non-controlling interests	Total equity												
(Millions of Canadian dollars)	\$	5,706	\$	17,645	\$	1	\$	(58)	\$	55,874	\$	33	\$	4,221	\$	(6)	\$	4,248	\$	83,416	\$	102	\$	83,518
Adjusted balance at beginning of period																								
Changes in equity																								
Issues of share capital and other equity instruments																								
Common shares purchased for cancellation																								
Redemption of preferred shares and other equity instruments										(717)										(814)				(814)
Sales of treasury shares and other equity instruments																								
Purchases of treasury shares and other equity instruments																								
Share-based compensation awards																								
Dividends on common shares										(3,034)										(3,034)				(3,034)
Dividends on preferred shares and distributions on other equity instruments										(129)										(129)				(133)
Other										(78)										(78)				(79)
Net income										4,988										4,988				4,990
Total other comprehensive income (loss), net of taxes										562										567				573
Balance at end of period	\$	5,698	\$	17,592	\$	1	\$	(75)	\$	57,466	\$	(823)	\$	6,259	\$	(1,183)	\$	4,253	\$	84,935	\$	105	\$	85,040

The accompanying notes are an integral part of these Interim Condensed Consolidated Financial Statements.

Interim Condensed Consolidated Statements of Cash Flows (unaudited)

(Millions of Canadian dollars)	For the three months ended		For the six months ended	
	April 30 2021	April 30 2020	April 30 2021	April 30 2020
Cash flows from operating activities				
Net income	\$ 4,015	\$ 1,481	\$ 7,862	\$ 4,990
Adjustments for non-cash items and others				
Provision for credit losses	(96)	2,830	14	3,249
Depreciation	318	326	632	659
Deferred income taxes	454	(428)	786	(414)
Amortization and impairment of other intangibles	319	316	639	627
Net changes in investments in joint ventures and associates	(24)	(13)	(48)	(35)
Losses (Gains) on investment securities	(82)	(86)	(123)	(98)
Losses (Gains) on disposition of businesses	(26)	-	(26)	8
Adjustments for net changes in operating assets and liabilities				
Insurance claims and policy benefit liabilities	(645)	(876)	(106)	(18)
Net change in accrued interest receivable and payable	(138)	(231)	(359)	(329)
Current income taxes	394	(699)	673	(954)
Derivative assets	13,681	(46,825)	16,252	(39,247)
Derivative liabilities	(13,669)	50,099	(17,525)	46,167
Trading securities	22,295	8,788	10,343	10,292
Loans, net of securitizations	(605)	(46,092)	(11,980)	(57,727)
Assets purchased under reverse repurchase agreements and securities borrowed	3,002	(1,347)	4,984	(18,573)
Obligations related to assets sold under repurchase agreements and securities loaned	(17,858)	24,214	(17,182)	52,019
Obligations related to securities sold short	(752)	4,723	2,532	5,278
Deposits, net of securitizations	(21,296)	107,220	21,368	124,456
Brokers and dealers receivable and payable	440	2,997	(698)	2,353
Other	3,718	(14,436)	6,220	(20,798)
Net cash from (used in) operating activities	(6,555)	91,961	24,258	111,905
Cash flows from investing activities				
Change in interest-bearing deposits with banks	(29,700)	(17,068)	(24,418)	(10,052)
Proceeds from sales and maturities of investment securities	33,637	35,777	63,310	52,581
Purchases of investment securities	(28,584)	(43,533)	(61,765)	(78,733)
Net acquisitions of premises and equipment and other intangibles	(496)	(758)	(925)	(1,503)
Proceeds from dispositions	78	-	78	-
Net cash from (used in) investing activities	(25,065)	(25,582)	(23,720)	(37,707)
Cash flows from financing activities				
Issuance of subordinated debentures	-	-	1,000	1,500
Repayment of subordinated debentures	-	-	(1,500)	(2,000)
Issue of common shares, net of issuance costs	22	23	53	39
Common shares purchased for cancellation	-	(87)	-	(814)
Issue of preferred shares and other equity instruments, net of issuance costs	-	-	1,247	-
Redemption of preferred shares and other equity instruments	-	-	-	(8)
Sales of treasury shares and other equity instruments	1,192	1,635	2,141	3,234
Purchases of treasury shares and other equity instruments	(1,181)	(1,638)	(2,007)	(3,251)
Dividends paid on shares and distributions paid on other equity instruments	(1,597)	(1,561)	(3,210)	(3,128)
Dividends/distributions paid to non-controlling interests	(1)	(3)	(2)	(4)
Change in short-term borrowings of subsidiaries	(1)	(1,248)	(8)	1,531
Repayment of lease liabilities	(152)	(155)	(298)	(296)
Net cash from (used in) financing activities	(1,718)	(3,034)	(2,584)	(3,197)
Effect of exchange rate changes on cash and due from banks	(1,943)	1,312	(2,535)	1,466
Net change in cash and due from banks	(35,281)	64,657	(4,581)	72,467
Cash and due from banks at beginning of period ⁽¹⁾	149,588	34,120	118,888	26,310
Cash and due from banks at end of period ⁽¹⁾	\$ 114,307	\$ 98,777	\$ 114,307	\$ 98,777
Cash flows from operating activities include:				
Amount of interest paid	\$ 2,161	\$ 3,811	\$ 4,295	\$ 8,568
Amount of interest received	6,692	8,903	13,471	18,654
Amount of dividends received	696	646	1,351	1,304
Amount of income taxes paid	1,248	842	2,274	1,717

(1) We are required to maintain balances with central banks and other regulatory authorities. The total balances were \$2.2 billion as at April 30, 2021 (January 31, 2021 – \$2.5 billion; October 31, 2020 – \$2.5 billion; April 30, 2020 – \$2.6 billion; October 31, 2019 – \$2.6 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 2020 Annual Consolidated Financial Statements and the accompanying notes included on pages 127 to 220 in our 2020 Annual Report. Tabular information is stated in millions of Canadian dollars, except per share amounts and percentages. On May 26, 2021, 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 2020 Annual Consolidated Financial Statements. Our significant accounting policies and future changes in accounting policies and disclosures that are not yet effective for us are described in Note 2 of our audited 2020 Annual Consolidated Financial Statements.

Changes in accounting policies

Conceptual Framework for Financial Reporting (Conceptual Framework)

During the first quarter of 2021, we adopted the revised Conceptual Framework, which replaces the previous version of the Conceptual Framework issued in 2010. The Conceptual Framework is not a standard, and does not override the concepts or requirements in any standard. It may be used to develop consistent accounting policies where there is no applicable standard in place. The revisions include a few new concepts, updated definitions and recognition criteria for assets and liabilities and clarifies some important concepts. These amendments had no material impact on our Consolidated Financial Statements.

Interest Rate Benchmark Reform

During the first quarter of 2021, we early adopted the Phase 2 amendments to IFRS 9 *Financial Instruments*, IAS 39 *Financial Instruments: Recognition and Measurement*, IFRS 7 *Financial Instruments: Disclosures*, IFRS 4 *Insurance contracts*, and IFRS 16 *Leases (Amendments)*. The Amendments provide two key reliefs which are applicable to changes undertaken as a direct consequence of the interest rate benchmark reform (the Reform) and where the transition from interbank offered rates (IBORs) to alternative benchmark rates are transacted on an economically equivalent basis:

- For modifications of financial instruments carried at amortized cost resulting from the Reform which are transacted on an economically equivalent basis, the Amendments allow the benchmark interest rate change to be reflected prospectively in the effective interest rate of the instrument rather than as an immediate gain or loss.
- If qualifying criteria are met, hedging relationships that are directly impacted by the Reform would be able to continue hedge accounting upon transition to alternative benchmark interest rates.

Hedge Accounting

Our hedge accounting policies are described in Note 2 and Note 8 of our 2020 Annual Report. We apply hedge accounting when the hedge is expected to be highly effective in achieving offsetting changes in fair value or variable cash flows attributable to the hedged risk, both at inception and throughout the hedge term. Where hedge accounting can be applied, a hedge relationship is designated and documented at inception to detail the particular risk management objective and strategy for undertaking the hedge transaction. For changes related to the Reform, hedge documentation will be amended for alternative benchmark interest rate risk, including consequential changes to the description of the hedging instrument(s) and the hedged item(s), and the method for assessing hedge effectiveness without terminating the hedge relationship where the scoping requirements are met.

Fair value hedges

Hedge accounting is applicable when the benchmark interest rate designated as the hedged risk can be separately identified as a component of the interest rate risk inherent in the fixed-rate instrument. Generally, this requirement is met when the benchmark interest rate impacting changes in fair value of the instrument is widely accepted and used. In order for alternative benchmark rates to qualify for fair value hedge accounting, the separately identifiable requirement must be met within 24 months of the first designation of that rate in a hedging relationship. If, subsequently, we reasonably expect that the alternative benchmark interest rate will not be separately identifiable within that timeframe, we will discontinue hedge accounting prospectively.

Cash flow hedges

We apply hedge accounting to groups of similar assets or similar liabilities when individual items in the group share similar risk characteristics, and we treat these items and related derivatives as a single hedging relationship. Where hedged cash flows of some items in the group are changed to reference an alternative benchmark interest rate before other items in the group are changed, the individual hedged items within the group are allocated to a subgroup based on the benchmark interest rate being hedged. Each subgroup would be assessed separately to determine whether it meets the eligibility requirements. If a subgroup fails the eligibility requirements, we would discontinue hedge accounting prospectively for the hedging relationship in its entirety.

Progress in and risks arising from the transition to alternative benchmark interest rates

The transition from IBORs to alternative benchmark interest rates will impact financial instruments referencing IBOR rates for terms that extend beyond December 31, 2021.

On March 5, 2021 the Financial Conduct Authority (FCA), the regulator of the ICE Benchmark Administration (IBA) which administers LIBOR, made an announcement regarding the permanent cessation or loss of representativeness of all 35 LIBOR settings currently published by the IBA. Details related to certain settings to which we are exposed are noted below.

- Publication of the 1-week and 2-month U.S. dollar LIBOR settings will cease immediately after December 31, 2021. Publication of the overnight and 12-month U.S. dollar LIBOR settings will cease immediately after June 30, 2023, while the 1-month, 3-month and 6-month U.S. dollar LIBOR settings will no longer be representative of the underlying market and economic reality they are intended to measure after June 30, 2023. The FCA may consult on requiring the IBA to publish 1-month, 3-month and 6-month USD LIBOR settings after the end of June 2023 on a non-representative “synthetic” basis.
- Publication of the overnight, 1-week, 2-month and 12-month sterling LIBOR settings will cease immediately after December 31, 2021, while the 1-month, 3-month and 6-month sterling LIBOR settings will no longer be representative of the underlying market and economic reality they are intended to measure after December 31, 2021. The FCA will consult on requiring the IBA to publish the 1-month, 3-month and 6-month sterling LIBOR settings after the end of 2021, for an unspecified period of time, on a non-representative “synthetic” basis.

The FCA announcement triggered fallback provisions related to our LIBOR linked products, including certain loans, bonds, and derivatives, and defined the dates of their transition to alternative benchmark rates. The fixed spreads to be used in the transition to the relevant alternative benchmark rate for each LIBOR setting were also defined as a result of the announcement.

The details regarding our transition program related to the Reform are described in Note 2 of our 2020 Annual Report. Transition activities are focused on two broad streams of work: (i) developing new alternative risk-free rate linked products, and (ii) converting existing LIBOR based contracts to alternative risk-free rates. Notable transition activities include:

- Our continued incorporation of contractual provisions in new IBOR-based products which provides a means to determine new alternative benchmark rates upon the cessation of IBORs (fallback language).
- The development of new products for clients, including interest-rate derivatives and loans referencing the relevant alternative benchmark interest rates.

Our program timelines are ultimately dependent on broader market acceptance of products that reference the new alternative risk-free rates and our clients’ readiness and ability to adopt the replacement products. Significant matters that we continue to evaluate include client product offerings, short and long term funding strategies, and our hedging programs. We are following the recommended target dates for cessation of LIBOR-based products provided by our regulators.

Financial instruments that have yet to transition to alternative benchmark interest rates

On March 5, 2021, the final cessation date of certain USD LIBOR settings was revised from December 31, 2021 to June 30, 2023. As a result of the change in cessation date, our significant exposures to USD LIBOR as at November 1, 2020 for non-derivative financial assets, non-derivative financial liabilities, derivative notional and undrawn balances of loan commitments subject to the Reform, that have yet to transition and are maturing after June 30, 2023, were \$57,432 million, \$941 million, \$3,368,307 million and \$82,054 million, respectively.

The tables below show our significant exposures to financial instruments referencing benchmark interest rates subject to the Reform that have yet to transition to alternative benchmark interest rates and are maturing after December 31, 2021 as at November 1, 2020, which represent our opening balances for the annual period ending on October 31, 2021. Changes in our exposures during the quarter did not result in significant changes to the risks arising from transition since November 1, 2020. In the normal course of business, our derivative notional amounts may fluctuate with minimal impact to our IBOR conversion plans.

(Millions of Canadian dollars)	As at November 1, 2020		
	Non-derivative financial assets (1)	Non-derivative financial liabilities (2)	Derivative notional (3)
USD LIBOR	\$ 79,123	\$ 5,135	\$ 4,894,150
GBP LIBOR	7,518	1,227	1,773,893
Other IBOR currencies	324	2,456	263,299
	\$ 86,965	\$ 8,818	\$ 6,931,342
Cross currency swaps			
USD LIBOR – GBP LIBOR	n.a.	n.a.	\$ 384,263
Other combinations	n.a.	n.a.	52,875
	n.a.	n.a.	\$ 437,138
	\$ 86,965	\$ 8,818	\$ 7,368,480

(1) Non-derivative assets represent the drawn outstanding balance of Loans and the fair value of Securities.

(2) Non-derivative liabilities represent Deposits.

(3) The notional amount of derivative instruments excludes cross currency swaps with multiple LIBOR legs, which are presented separately in the Cross currency swaps section of this table.

n.a. not applicable

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

The following table presents the undrawn balances of loan commitments referencing benchmark interest rates subject to the Reform.

(Millions of Canadian dollars)	As at November 1, 2020
Authorized and committed undrawn commitments	
USD LIBOR	\$ 136,725
GBP LIBOR	7,533
Other IBOR currencies	1,370
	\$ 145,628

We continue to manage significant exposures to benchmarks that have no announced plans for cessation or further reform, including the Canadian Dollar Offered Rate (CDOR), EURO Interbank Offered Rate (EURIBOR) and Australian Bank Bill Swap Rate (BBSW), which are excluded from the tables above.

Note 3 Fair value of financial instruments**Carrying value and fair value of financial instruments**

The following tables provide a comparison of the carrying values and fair values for financial instruments classified or designated as fair value through profit or loss (FVTPL) and fair value through other comprehensive income (FVOCI). Embedded derivatives are presented on a combined basis with the host contracts. Refer to Note 2 and Note 3 of our audited 2020 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.

(Millions of Canadian dollars)	As at April 30, 2021							
	Carrying value and fair value				Carrying value		Fair value	
	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	\$ –	\$ 41,380	\$ –	\$ –	\$ 22,058	\$ 22,058	\$ 63,438	\$ 63,438
Securities								
Trading	116,265	9,468	–	–	–	–	125,733	125,733
Investment, net of applicable allowance	–	–	62,619	505	66,295	66,612	129,419	129,736
	116,265	9,468	62,619	505	66,295	66,612	255,152	255,469
Assets purchased under reverse repurchase agreements and securities borrowed	265,880	–	–	–	42,151	42,151	308,031	308,031
Loans, net of applicable allowance								
Retail	–	243	259	–	472,783	478,217	473,285	478,719
Wholesale	6,576	2,027	817	–	190,806	192,567	200,226	201,987
	6,576	2,270	1,076	–	663,589	670,784	673,511	680,706
Other								
Derivatives	97,236	–	–	–	–	–	97,236	97,236
Other assets (1)	4,048	–	–	–	55,563	55,528	59,611	59,576
Financial liabilities								
Deposits								
Personal	\$ 270	\$ 17,305			\$ 330,539	\$ 330,101	\$ 348,114	\$ 347,676
Business and government (2)	590	122,791			520,902	522,490	644,283	645,871
Bank (3)	–	14,844			26,082	26,079	40,926	40,923
	860	154,940			877,523	878,670	1,033,323	1,034,470
Other								
Obligations related to securities sold short	31,817	–			–	–	31,817	31,817
Obligations related to assets sold under repurchase agreements and securities loaned	–	235,509			21,540	21,540	257,049	257,049
Derivatives	92,402	–			–	–	92,402	92,402
Other liabilities (4)	(11)	136			62,841	62,844	62,966	62,969
Subordinated debentures	–	–			9,014	9,279	9,014	9,279

(Millions of Canadian dollars)	As at October 31, 2020							
	Carrying value and fair value				Carrying value		Fair value	
	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	\$ -	\$ 21,603	\$ -	\$ -	\$ 17,410	\$ 17,410	\$ 39,013	\$ 39,013
Securities								
Trading	126,027	10,044	-	-	-	-	136,071	136,071
Investment, net of applicable allowance	-	-	81,395	525	57,823	58,627	139,743	140,547
	126,027	10,044	81,395	525	57,823	58,627	275,814	276,618
Assets purchased under reverse repurchase agreements and securities borrowed	264,394	-	-	-	48,621	48,621	313,015	313,015
Loans, net of applicable allowance								
Retail	-	253	260	-	454,429	462,884	454,942	463,397
Wholesale	6,197	2,363	744	-	196,746	198,753	206,050	208,057
	6,197	2,616	1,004	-	651,175	661,637	660,992	671,454
Other								
Derivatives	113,488	-	-	-	-	-	113,488	113,488
Other assets (1)	3,414	-	-	-	57,065	57,065	60,479	60,479
Financial liabilities								
Deposits								
Personal	\$ 104	\$ 17,096			\$ 325,852	\$ 324,804	\$ 343,052	\$ 342,004
Business and government (2)	389	107,466			516,456	518,501	624,311	626,356
Bank (3)	-	18,015			26,507	26,518	44,522	44,533
	493	142,577			868,815	869,823	1,011,885	1,012,893
Other								
Obligations related to securities sold short	29,285	-			-	-	29,285	29,285
Obligations related to assets sold under repurchase agreements and securities loaned	-	255,922			18,309	18,309	274,231	274,231
Derivatives	109,927	-			-	-	109,927	109,927
Other liabilities (4)	80	86			65,712	65,719	65,878	65,885
Subordinated debentures	-	-			9,867	10,071	9,867	10,071

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

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

(3) Bank deposits refer to deposits from regulated banks and central banks.

(4) Includes Acceptances and financial instruments recognized in Other liabilities.

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

(Millions of Canadian dollars)	As at									
	April 30, 2021					October 31, 2020				
	Fair value measurements using			Netting adjustments	Fair value	Fair value measurements using			Netting adjustments	Fair value
Level 1	Level 2	Level 3	Level 1			Level 2	Level 3			
Financial assets										
Interest-bearing deposits with banks	\$ –	\$ 41,380	\$ –	\$ –	\$ 41,380	\$ –	\$ 21,603	\$ –	\$ –	\$ 21,603
Securities										
Trading										
Debt issued or guaranteed by:										
Canadian government (1)										
Federal	8,901	2,251	–	–	11,152	12,773	3,012	–	–	15,785
Provincial and municipal	–	10,598	–	–	10,598	–	11,562	–	–	11,562
U.S. federal, state, municipal and agencies (1)	652	21,610	33	–	22,295	1,508	35,029	44	–	36,581
Other OECD government (2)	4,092	3,289	–	–	7,381	3,085	3,380	–	–	6,465
Mortgage-backed securities (1)	–	24	–	–	24	–	39	–	–	39
Asset-backed securities										
Non-CDO securities (3)	–	511	2	–	513	–	526	2	–	528
Corporate debt and other debt	–	22,560	18	–	22,578	–	21,464	30	–	21,494
Equities	47,065	2,761	1,366	–	51,192	39,795	2,561	1,261	–	43,617
	60,710	63,604	1,419		125,733	57,161	77,573	1,337		136,071
Investment										
Debt issued or guaranteed by:										
Canadian government (1)										
Federal	793	2,094	–	–	2,887	647	1,894	–	–	2,541
Provincial and municipal	–	3,325	–	–	3,325	–	3,233	–	–	3,233
U.S. federal, state, municipal and agencies (1)	265	25,530	–	–	25,795	160	38,364	–	–	38,524
Other OECD government	–	5,890	–	–	5,890	–	7,345	–	–	7,345
Mortgage-backed securities (1)	–	2,207	20	–	2,227	–	2,343	27	–	2,370
Asset-backed securities										
CDO	–	7,003	–	–	7,003	–	7,414	–	–	7,414
Non-CDO securities	–	504	–	–	504	–	854	–	–	854
Corporate debt and other debt	–	14,842	146	–	14,988	–	18,954	160	–	19,114
Equities	44	139	322	–	505	38	152	335	–	525
	1,102	61,534	488		63,124	845	80,553	522		81,920
Assets purchased under reverse repurchase agreements and securities borrowed	–	265,880	–	–	265,880	–	264,394	–	–	264,394
Loans	–	8,777	1,145	–	9,922	–	8,747	1,070	–	9,817
Other										
Derivatives										
Interest rate contracts	–	37,376	272	–	37,648	1	53,720	501	–	54,222
Foreign exchange contracts	–	42,027	75	–	42,102	–	39,246	57	–	39,303
Credit derivatives	–	510	–	–	510	–	463	–	–	463
Other contracts	2,821	15,495	20	–	18,336	4,458	16,767	36	–	21,261
Valuation adjustments	–	(777)	11	–	(766)	–	(1,112)	8	–	(1,104)
Total gross derivatives	2,821	94,631	378	–	97,830	4,459	109,084	602	–	114,145
Netting adjustments	–	–	–	(594)	(594)	–	–	–	(657)	(657)
Total derivatives					97,236					113,488
Other assets	1,489	2,557	2	–	4,048	1,154	2,207	53	–	3,414
	\$ 66,122	\$ 538,363	\$ 3,432	\$ (594)	\$ 607,323	\$ 63,619	\$ 564,161	\$ 3,584	\$ (657)	\$ 630,707
Financial liabilities										
Deposits										
Personal	\$ –	\$ 17,505	\$ 70	\$ –	\$ 17,575	\$ –	\$ 17,061	\$ 139	\$ –	\$ 17,200
Business and government	–	123,381	–	–	123,381	–	107,855	–	–	107,855
Bank	–	14,844	–	–	14,844	–	18,015	–	–	18,015
Other										
Obligations related to securities sold short	13,533	18,284	–	–	31,817	12,484	16,801	–	–	29,285
Obligations related to assets sold under repurchase agreements and securities loaned	–	235,509	–	–	235,509	–	255,922	–	–	255,922
Derivatives										
Interest rate contracts	–	31,177	938	–	32,115	–	46,723	1,089	–	47,812
Foreign exchange contracts	–	39,698	29	–	39,727	–	38,210	35	–	38,245
Credit derivatives	–	674	–	–	674	–	531	–	–	531
Other contracts	3,322	16,736	361	–	20,419	5,734	18,041	337	–	24,112
Valuation adjustments	–	71	(10)	–	61	–	(84)	(32)	–	(116)
Total gross derivatives	3,322	88,356	1,318	–	92,996	5,734	103,421	1,429	–	110,584
Netting adjustments	–	–	–	(594)	(594)	–	–	–	(657)	(657)
Total derivatives					92,402					109,927
Other liabilities	220	(106)	11	–	125	118	10	38	–	166
	\$ 17,075	\$ 497,773	\$ 1,399	\$ (594)	\$ 515,653	\$ 18,336	\$ 519,085	\$ 1,606	\$ (657)	\$ 538,370

(1) As at April 30, 2021, residential and commercial mortgage-backed securities (MBS) included in all fair value levels of trading securities were \$14,141 million and \$nil (October 31, 2020 – \$20,520 million and \$nil), respectively, and in all fair value levels of investment securities were \$7,917 million and \$2,041 million (October 31, 2020 – \$9,487 million and \$2,137 million), respectively.

(2) OECD stands for Organisation for Economic Co-operation and Development.

(3) CDO stands for collateralized debt obligations.

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 April 30, 2021, 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 April 30, 2021, 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 2020 Annual Consolidated Financial Statements.

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

(Millions of Canadian dollars)	For the three months ended April 30, 2021								Gains (losses) included in earnings for positions still held
	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	
Assets									
Securities									
Trading									
Debt issued or guaranteed by:									
U.S. state, municipal and agencies	\$ 39	\$ –	\$ (2)	\$ –	\$ (4)	\$ –	\$ –	\$ 33	\$ –
Asset-backed securities									
Non-CDO securities	2	–	–	–	–	–	–	2	–
Corporate debt and other debt	36	(1)	–	–	(4)	–	(13)	18	(1)
Equities	1,332	30	(33)	55	(43)	25	–	1,366	50
	1,409	29	(35)	55	(51)	25	(13)	1,419	49
Investment									
Mortgage-backed securities	21	–	(1)	–	–	–	–	20	n.a.
Corporate debt and other debt	154	–	(9)	–	1	–	–	146	n.a.
Equities	336	–	(14)	–	–	–	–	322	n.a.
	511	–	(24)	–	1	–	–	488	n.a.
Loans	1,113	(18)	(15)	51	(4)	54	(36)	1,145	18
Other									
Net derivative balances (3)									
Interest rate contracts	(643)	(32)	–	15	(2)	(6)	2	(666)	(32)
Foreign exchange contracts	42	12	(2)	10	(8)	6	(14)	46	12
Other contracts	(100)	14	2	(39)	–	(232)	14	(341)	6
Valuation adjustments	36	–	–	–	(15)	–	–	21	–
Other assets	9	–	–	–	(7)	–	–	2	–
	\$ 2,377	\$ 5	\$ (74)	\$ 92	\$ (86)	\$ (153)	\$ (47)	\$ 2,114	\$ 53
Liabilities									
Deposits	\$ (169)	\$ (26)	\$ 2	\$ (47)	\$ 34	\$ (5)	\$ 141	\$ (70)	\$ 9
Other									
Other liabilities	(13)	–	–	–	2	–	–	(11)	–
	\$ (182)	\$ (26)	\$ 2	\$ (47)	\$ 36	\$ (5)	\$ 141	\$ (81)	\$ 9

Note 3 Fair value of financial instruments (continued)

For the three months ended April 30, 2020

(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 \$	55 \$	– \$	4 \$	– \$	(5) \$	– \$	– \$	54 \$	–
Asset-backed securities									
Non-CDO securities	2	–	–	–	–	–	–	2	–
Corporate debt and other debt	19	–	–	–	–	–	–	19	–
Equities	1,236	(51)	43	47	(19)	–	–	1,256	(37)
	1,312	(51)	47	47	(24)	–	–	1,331	(37)
Investment									
Mortgage-backed securities	27	–	1	–	–	–	–	28	n.a.
Corporate debt and other debt	158	–	6	1	–	–	–	165	n.a.
Equities	293	–	36	4	–	–	–	333	n.a.
	478	–	43	5	–	–	–	526	n.a.
Loans	995	(7)	–	172	(490)	332	(8)	994	16
Other									
Net derivative balances (3)									
Interest rate contracts	(610)	(114)	(2)	(3)	7	34	92	(596)	(55)
Foreign exchange contracts	25	39	1	5	–	–	(4)	66	33
Other contracts	(155)	(79)	(8)	(72)	(1)	(23)	12	(326)	(60)
Valuation adjustments	16	–	–	–	(6)	–	–	10	–
Other assets	80	(26)	4	–	(9)	–	–	49	(27)
	\$ 2,141	\$ (238)	\$ 85	\$ 154	\$ (523)	\$ 343	\$ 92	\$ 2,054	\$ (130)
Liabilities									
Deposits	\$ (268)	\$ 87	\$ (4)	\$ (39)	\$ 8	\$ (66)	\$ 119	\$ (163)	\$ 96
Other									
Other liabilities	(59)	16	(3)	1	9	–	–	(36)	16
	\$ (327)	\$ 103	\$ (7)	\$ (38)	\$ 17	\$ (66)	\$ 119	\$ (199)	\$ 112

(Millions of Canadian dollars)	For the six months ended April 30, 2021								
	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	\$ 44	\$ –	\$ (3)	\$ –	\$ (8)	\$ –	\$ –	\$ 33	\$ –
Asset-backed securities									
Non-CDO securities	2	–	–	–	–	–	–	2	–
Corporate debt and other debt	30	(1)	–	3	(4)	14	(24)	18	(1)
Equities	1,261	48	(66)	164	(66)	25	–	1,366	89
	1,337	47	(69)	167	(78)	39	(24)	1,419	88
Investment									
Mortgage-backed securities	27	–	(7)	–	–	–	–	20	n.a.
Corporate debt and other debt	160	–	(16)	–	2	–	–	146	n.a.
Equities	335	–	(15)	–	2	–	–	322	n.a.
	522	–	(38)	–	4	–	–	488	n.a.
Loans	1,070	(23)	(9)	133	–	70	(96)	1,145	38
Other									
Net derivative balances (3)									
Interest rate contracts	(588)	(31)	(2)	12	(40)	(9)	(8)	(666)	(23)
Foreign exchange contracts	22	25	1	15	(14)	7	(10)	46	29
Other contracts	(301)	3	13	(56)	47	(224)	177	(341)	20
Valuation adjustments	40	–	–	–	(19)	–	–	21	–
Other assets	53	(39)	(2)	–	(10)	–	–	2	(39)
	\$ 2,155	\$ (18)	\$ (106)	\$ 271	\$ (110)	\$ (117)	\$ 39	\$ 2,114	\$ 113
Liabilities									
Deposits	\$ (139)	\$ (55)	\$ 5	\$ (92)	\$ 47	\$ (77)	\$ 241	\$ (70)	\$ 12
Other									
Other liabilities	(38)	22	1	–	4	–	–	(11)	22
	\$ (177)	\$ (33)	\$ 6	\$ (92)	\$ 51	\$ (77)	\$ 241	\$ (81)	\$ 34

Note 3 Fair value of financial instruments (continued)

	For the six months ended April 30, 2020								Gains
(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	(losses) included in earnings for positions still held
Assets									
Securities									
Trading									
Debt issued or guaranteed by:									
U.S. state, municipal and agencies \$	58	\$ -	\$ 4	\$ -	\$ (8)	\$ -	\$ -	54	\$ -
Asset-backed securities									
Non-CDO securities	2	-	-	-	-	-	-	2	-
Corporate debt and other debt	21	(1)	-	-	(1)	-	-	19	-
Equities	1,219	(78)	47	118	(47)	-	(3)	1,256	(49)
	1,300	(79)	51	118	(56)	-	(3)	1,331	(49)
Investment									
Mortgage-backed securities	27	-	1	-	-	-	-	28	n.a.
Corporate debt and other debt	153	-	11	1	-	-	-	165	n.a.
Equities	294	-	36	4	(1)	-	-	333	n.a.
	474	-	48	5	(1)	-	-	526	n.a.
Loans	680	19	-	490	(499)	340	(36)	994	17
Other									
Net derivative balances (3)									
Interest rate contracts	(585)	(110)	(2)	(39)	8	34	98	(596)	(56)
Foreign exchange contracts	21	40	1	16	-	(5)	(7)	66	31
Other contracts	(195)	(94)	(7)	(74)	7	(33)	70	(326)	(72)
Valuation adjustments	22	-	-	-	(12)	-	-	10	-
Other assets	77	(19)	4	-	(13)	-	-	49	(20)
	\$ 1,794	\$ (243)	\$ 95	\$ 516	\$ (566)	\$ 336	\$ 122	\$ 2,054	\$ (149)
Liabilities									
Deposits	\$ (156)	\$ 86	\$ (4)	\$ (213)	\$ 18	\$ (82)	\$ 188	\$ (163)	\$ 94
Other									
Other liabilities	(60)	12	(3)	4	11	-	-	(36)	12
	\$ (216)	\$ 98	\$ (7)	\$ (209)	\$ 29	\$ (82)	\$ 188	\$ (199)	\$ 106

(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 losses on Investment securities recognized in OCI were \$8 million for the three months ended April 30, 2021 (April 30, 2020 – gains of \$25 million) and losses of \$11 million for the six months ended April 30, 2021 (April 30, 2020 – gains of \$29 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 April 30, 2021 included derivative assets of \$378 million (April 30, 2020 – \$698 million) and derivative liabilities of \$1,318 million (April 30, 2020 – \$1,544 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 April 30, 2021, transfers out of Level 1 to Level 2 included Obligations related to securities sold short of \$360 million.

During the three months ended April 30, 2021 transfers out of Level 2 to Level 1 included Obligations related to securities sold short of \$130 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 April 30, 2021 transfers out of Level 2 to Level 3 included:

- \$232 million of OTC equity options in Other contracts, comprised primarily of \$233 million of derivative related liabilities, due to changes in the significance of unobservable inputs.

During the three months ended April 30, 2021, transfers out of Level 3 to Level 2 included:

- \$141 million of Personal deposits, due to changes in the significance of 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.

(Millions of Canadian dollars)	For the three months ended		For the six months ended	
	April 30 2021	April 30 2020	April 30 2021	April 30 2020
Interest and dividend income ^{(1), (2)}				
Financial instruments measured at fair value through profit or loss	\$ 1,080	\$ 2,436	\$ 2,252	\$ 5,421
Financial instruments measured at fair value through other comprehensive income	92	305	194	614
Financial instruments measured at amortized cost	5,726	6,485	11,688	13,429
	6,898	9,226	14,134	19,464
Interest expense ⁽¹⁾				
Financial instruments measured at fair value through profit or loss	\$ 702	\$ 1,635	\$ 1,439	\$ 3,995
Financial instruments measured at amortized cost	1,342	2,126	2,806	4,783
	2,044	3,761	4,245	8,778
Net interest income	\$ 4,854	\$ 5,465	\$ 9,889	\$ 10,686

- (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 April 30, 2021, Interest income of \$139 million (April 30, 2020 – \$123 million), and Interest expense of \$1 million (April 30, 2020 – \$1 million); for the six months ended April 30, 2021, Interest income of \$288 million (April 30, 2020 – \$255 million), and Interest expense of \$2 million (April 30, 2020 – \$3 million).
- (2) Includes dividend income for the three months ended April 30, 2021 of \$609 million (April 30, 2020 – \$614 million) and for the six months ended April 30, 2021 of \$1,217 million (April 30, 2020 – \$1,222 million), which is presented in Interest and dividend income in the Interim Consolidated Statements of Income.

Note 4 Securities

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

(Millions of Canadian dollars)	As at							
	April 30, 2021				October 31, 2020			
	Cost/ Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value	Cost/ Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Debt issued or guaranteed by:								
Canadian government								
Federal ⁽³⁾	\$ 3,003	\$ 2	\$ (118)	\$ 2,887	\$ 2,562	\$ 1	\$ (22)	\$ 2,541
Provincial and municipal	3,547	3	(225)	3,325	3,237	27	(31)	3,233
U.S. federal, state, municipal and agencies ⁽³⁾	25,472	422	(99)	25,795	38,523	323	(322)	38,524
Other OECD government	5,888	3	(1)	5,890	7,336	11	(2)	7,345
Mortgage-backed securities ⁽³⁾	2,237	3	(13)	2,227	2,418	5	(53)	2,370
Asset-backed securities								
CDO	7,004	1	(2)	7,003	7,504	–	(90)	7,414
Non-CDO securities	498	6	–	504	859	2	(7)	854
Corporate debt and other debt	14,934	58	(4)	14,988	19,041	76	(3)	19,114
Equities	264	242	(1)	505	276	253	(4)	525
	\$ 62,847	\$ 740	\$ (463)	\$ 63,124	\$ 81,756	\$ 698	\$ (534)	\$ 81,920

- (1) Excludes \$66,295 million of held-to-collect securities as at April 30, 2021 that are carried at amortized cost, net of allowance for credit losses (October 31, 2020 – \$57,823 million).
- (2) Gross unrealized gains and losses includes \$1 million of allowance for credit losses on debt securities at FVOCI as at April 30, 2021 (October 31, 2020 – \$8 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 \$2,052 million, \$1 million, \$12 million and \$2,041 million, respectively as at April 30, 2021 (October 31, 2020 – \$2,185 million, \$nil, \$48 million and \$2,137 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⁾

(Millions of Canadian dollars)	For the three months ended							
	April 30, 2021				April 30, 2020			
	Performing		Impaired		Performing		Impaired	
	Stage 1	Stage 2	Stage 3 (2)	Total	Stage 1	Stage 2	Stage 3 (2)	Total
Balance at beginning of period	\$ 7	\$ 3	\$ (5)	\$ 5	\$ 6	\$ –	\$ (9)	\$ (3)
Provision for credit losses								
Transfers to stage 1	–	–	–	–	–	–	–	–
Transfers to stage 2	–	–	–	–	–	–	–	–
Transfers to stage 3	–	–	–	–	–	–	–	–
Purchases	3	–	–	3	9	–	–	9
Sales and maturities	(3)	(1)	–	(4)	(2)	–	–	(2)
Changes in risk, parameters and exposures	–	–	(2)	(2)	9	–	10	19
Exchange rate and other	–	(1)	–	(1)	1	–	(1)	–
Balance at end of period	\$ 7	\$ 1	\$ (7)	\$ 1	\$ 23	\$ –	\$ –	\$ 23

(Millions of Canadian dollars)	For the six months ended							
	April 30, 2021				April 30, 2020			
	Performing		Impaired		Performing		Impaired	
	Stage 1	Stage 2	Stage 3 (2)	Total	Stage 1	Stage 2	Stage 3 (2)	Total
Balance at beginning of period	\$ 12	\$ –	\$ (4)	\$ 8	\$ 4	\$ –	\$ (7)	\$ (3)
Provision for credit losses								
Transfers to stage 1	–	–	–	–	–	–	–	–
Transfers to stage 2	–	–	–	–	–	–	–	–
Transfers to stage 3	–	–	–	–	–	–	–	–
Purchases	5	–	–	5	11	–	–	11
Sales and maturities	(7)	(1)	–	(8)	(2)	–	–	(2)
Changes in risk, parameters and exposures	(2)	3	(4)	(3)	9	–	8	17
Exchange rate and other	(1)	(1)	1	(1)	1	–	(1)	–
Balance at end of period	\$ 7	\$ 1	\$ (7)	\$ 1	\$ 23	\$ –	\$ –	\$ 23

(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.

(2) Reflects changes in the allowance for purchased credit impaired securities.

Allowance for credit losses – securities at amortized cost

(Millions of Canadian dollars)	For the three months ended							
	April 30, 2021				April 30, 2020			
	Performing		Impaired		Performing		Impaired	
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Balance at beginning of period	\$ 8	\$ 18	\$ –	\$ 26	\$ 5	\$ 17	\$ –	\$ 22
Provision for credit losses								
Transfers to stage 1	–	–	–	–	–	–	–	–
Transfers to stage 2	–	–	–	–	–	–	–	–
Transfers to stage 3	–	–	–	–	–	–	–	–
Purchases	4	–	–	4	3	–	–	3
Sales and maturities	(1)	–	–	(1)	(1)	–	–	(1)
Changes in risk, parameters and exposures	–	(1)	–	(1)	2	2	–	4
Exchange rate and other	–	–	–	–	–	1	–	1
Balance at end of period	\$ 11	\$ 17	\$ –	\$ 28	\$ 9	\$ 20	\$ –	\$ 29

(Millions of Canadian dollars)	For the six months ended							
	April 30, 2021				April 30, 2020			
	Performing		Impaired		Performing		Impaired	
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Balance at beginning of period	\$ 10	\$ 19	\$ –	\$ 29	\$ 5	\$ 19	\$ –	\$ 24
Provision for credit losses								
Transfers to stage 1	–	–	–	–	–	–	–	–
Transfers to stage 2	–	–	–	–	–	–	–	–
Transfers to stage 3	–	–	–	–	–	–	–	–
Purchases	7	–	–	7	5	–	–	5
Sales and maturities	(1)	–	–	(1)	(1)	–	–	(1)
Changes in risk, parameters and exposures	(5)	–	–	(5)	–	1	–	1
Exchange rate and other	–	(2)	–	(2)	–	–	–	–
Balance at end of period	\$ 11	\$ 17	\$ –	\$ 28	\$ 9	\$ 20	\$ –	\$ 29

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 2020 Annual Report.

(Millions of Canadian dollars)	As at								
	April 30, 2021				October 31, 2020				
	Performing		Impaired		Performing		Impaired		
	Stage 1	Stage 2	Stage 3 (1)	Total	Stage 1	Stage 2	Stage 3 (1)	Total	
Investment securities									
Securities at FVOCI									
Investment grade	\$ 62,074	\$ 38	\$ –	\$ 62,112	\$ 80,719	\$ 87	\$ –	\$ 80,806	
Non-investment grade	363	–	–	363	431	1	–	432	
Impaired	–	–	144	144	–	–	157	157	
	62,437	38	144	62,619	81,150	88	157	81,395	
Items not subject to impairment (2)				505				525	
				\$ 63,124				\$ 81,920	
Securities at amortized cost									
Investment grade	\$ 65,196	\$ –	\$ –	\$ 65,196	\$ 56,885	\$ –	\$ –	\$ 56,885	
Non-investment grade	849	278	–	1,127	647	320	–	967	
Impaired	–	–	–	–	–	–	–	–	
	66,045	278	–	66,323	57,532	320	–	57,852	
Allowance for credit losses	11	17	–	28	10	19	–	29	
Amortized cost	\$ 66,034	\$ 261	\$ –	\$ 66,295	\$ 57,522	\$ 301	\$ –	\$ 57,823	

(1) Reflects \$144 million of purchased credit impaired securities (October 31, 2020 – \$157 million).

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

Allowance for credit losses – Retail and wholesale loans

(Millions of Canadian dollars)	For the three months ended								
	April 30, 2021				April 30, 2020				
	Performing		Impaired		Performing		Impaired		
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total	
Residential mortgages									
Balance at beginning of period	\$ 192	\$ 162	\$ 158	\$ 512	\$ 132	\$ 80	\$ 155	\$ 367	
Provision for credit losses									
Transfers to stage 1	46	(41)	(5)	–	33	(21)	(12)	–	
Transfers to stage 2	(4)	4	–	–	(22)	23	(1)	–	
Transfers to stage 3	(1)	(14)	15	–	(1)	(7)	8	–	
Originations	23	–	–	23	11	–	–	11	
Maturities	(10)	(14)	–	(24)	(3)	(4)	–	(7)	
Changes in risk, parameters and exposures	(52)	55	–	3	(39)	159	2	122	
Write-offs	–	–	(10)	(10)	–	–	(10)	(10)	
Recoveries	–	–	3	3	–	–	2	2	
Exchange rate and other	(2)	(4)	(6)	(12)	3	(7)	3	(1)	
Balance at end of period	\$ 192	\$ 148	\$ 155	\$ 495	\$ 114	\$ 223	\$ 147	\$ 484	
Personal									
Balance at beginning of period	\$ 476	\$ 721	\$ 118	\$ 1,315	\$ 273	\$ 517	\$ 150	\$ 940	
Provision for credit losses									
Transfers to stage 1	145	(144)	(1)	–	110	(107)	(3)	–	
Transfers to stage 2	(25)	25	–	–	(37)	38	(1)	–	
Transfers to stage 3	–	(18)	18	–	(1)	(19)	20	–	
Originations	28	–	–	28	28	–	–	28	
Maturities	(25)	(42)	–	(67)	(11)	(24)	–	(35)	
Changes in risk, parameters and exposures	(108)	140	49	81	(20)	352	112	444	
Write-offs	–	–	(112)	(112)	–	–	(148)	(148)	
Recoveries	–	–	33	33	–	–	29	29	
Exchange rate and other	–	(2)	(1)	(3)	1	–	(1)	–	
Balance at end of period	\$ 491	\$ 680	\$ 104	\$ 1,275	\$ 343	\$ 757	\$ 158	\$ 1,258	
Credit cards									
Balance at beginning of period	\$ 353	\$ 848	\$ –	\$ 1,201	\$ 174	\$ 694	\$ –	\$ 868	
Provision for credit losses									
Transfers to stage 1	152	(152)	–	–	117	(117)	–	–	
Transfers to stage 2	(28)	28	–	–	(25)	25	–	–	
Transfers to stage 3	–	(76)	76	–	(1)	(94)	95	–	
Originations	1	–	–	1	3	–	–	3	
Maturities	(2)	(7)	–	(9)	(4)	(6)	–	(10)	
Changes in risk, parameters and exposures	(149)	168	6	25	(20)	373	47	400	
Write-offs	–	–	(121)	(121)	–	–	(173)	(173)	
Recoveries	–	–	40	40	–	–	31	31	
Exchange rate and other	(1)	–	(1)	(2)	2	–	–	2	
Balance at end of period	\$ 326	\$ 809	\$ –	\$ 1,135	\$ 246	\$ 875	\$ –	\$ 1,121	
Small business									
Balance at beginning of period	\$ 74	\$ 33	\$ 36	\$ 143	\$ 29	\$ 11	\$ 26	\$ 66	
Provision for credit losses									
Transfers to stage 1	26	(26)	–	–	4	(4)	–	–	
Transfers to stage 2	(5)	5	–	–	(2)	2	–	–	
Transfers to stage 3	–	–	–	–	–	–	–	–	
Originations	8	–	–	8	5	–	–	5	
Maturities	(5)	(3)	–	(8)	(2)	–	–	(2)	
Changes in risk, parameters and exposures	(39)	32	8	1	22	11	14	47	
Write-offs	–	–	(7)	(7)	–	–	(10)	(10)	
Recoveries	–	–	2	2	–	–	1	1	
Exchange rate and other	22	30	(2)	50	–	1	(1)	–	
Balance at end of period	\$ 81	\$ 71	\$ 37	\$ 189	\$ 56	\$ 21	\$ 30	\$ 107	
Wholesale									
Balance at beginning of period	\$ 895	\$ 1,145	\$ 582	\$ 2,622	\$ 300	\$ 407	\$ 484	\$ 1,191	
Provision for credit losses									
Transfers to stage 1	126	(123)	(3)	–	39	(38)	(1)	–	
Transfers to stage 2	(40)	52	(12)	–	(37)	37	–	–	
Transfers to stage 3	(1)	(22)	23	–	(1)	(27)	28	–	
Originations	153	–	–	153	413	–	–	413	
Maturities	(133)	(135)	–	(268)	(34)	(42)	–	(76)	
Changes in risk, parameters and exposures	(194)	163	3	(28)	555	463	305	1,323	
Write-offs	–	–	(51)	(51)	–	–	(82)	(82)	
Recoveries	–	–	15	15	–	–	15	15	
Exchange rate and other	(42)	(56)	(34)	(132)	11	7	(12)	6	
Balance at end of period	\$ 764	\$ 1,024	\$ 523	\$ 2,311	\$ 1,246	\$ 807	\$ 737	\$ 2,790	

Note 5 Loans and allowance for credit losses (continued)

(Millions of Canadian dollars)	For the six months ended								
	April 30, 2021				April 30, 2020				
	Performing		Impaired		Performing		Impaired		
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total	
Residential mortgages									
Balance at beginning of period	\$ 206	\$ 160	\$ 152	\$ 518	\$ 146	\$ 77	\$ 179	\$ 402	
Provision for credit losses									
Transfers to stage 1	120	(110)	(10)	–	60	(39)	(21)	–	
Transfers to stage 2	(10)	12	(2)	–	(26)	29	(3)	–	
Transfers to stage 3	(1)	(27)	28	–	(2)	(15)	17	–	
Originations	53	–	–	53	27	–	–	27	
Maturities	(16)	(18)	–	(34)	(7)	(7)	–	(14)	
Changes in risk, parameters and exposures	(156)	141	13	(2)	(84)	188	2	106	
Write-offs	–	–	(19)	(19)	–	–	(22)	(22)	
Recoveries	–	–	5	5	–	–	6	6	
Exchange rate and other	(4)	(10)	(12)	(26)	–	(10)	(11)	(21)	
Balance at end of period	\$ 192	\$ 148	\$ 155	\$ 495	\$ 114	\$ 223	\$ 147	\$ 484	
Personal									
Balance at beginning of period	\$ 480	\$ 733	\$ 96	\$ 1,309	\$ 272	\$ 520	\$ 143	\$ 935	
Provision for credit losses									
Transfers to stage 1	342	(340)	(2)	–	229	(226)	(3)	–	
Transfers to stage 2	(52)	52	–	–	(56)	57	(1)	–	
Transfers to stage 3	(1)	(32)	33	–	(2)	(39)	41	–	
Originations	61	–	–	61	53	–	–	53	
Maturities	(47)	(69)	–	(116)	(23)	(47)	–	(70)	
Changes in risk, parameters and exposures	(290)	338	118	166	(131)	493	213	575	
Write-offs	–	–	(206)	(206)	–	–	(297)	(297)	
Recoveries	–	–	68	68	–	–	67	67	
Exchange rate and other	(2)	(2)	(3)	(7)	1	(1)	(5)	(5)	
Balance at end of period	\$ 491	\$ 680	\$ 104	\$ 1,275	\$ 343	\$ 757	\$ 158	\$ 1,258	
Credit cards									
Balance at beginning of period	\$ 364	\$ 882	\$ –	\$ 1,246	\$ 173	\$ 659	\$ –	\$ 832	
Provision for credit losses									
Transfers to stage 1	378	(378)	–	–	235	(235)	–	–	
Transfers to stage 2	(58)	58	–	–	(47)	47	–	–	
Transfers to stage 3	(2)	(136)	138	–	(1)	(182)	183	–	
Originations	3	–	–	3	5	–	–	5	
Maturities	(4)	(15)	–	(19)	(5)	(14)	–	(19)	
Changes in risk, parameters and exposures	(354)	399	13	58	(114)	600	98	584	
Write-offs	–	–	(227)	(227)	–	–	(347)	(347)	
Recoveries	–	–	77	77	–	–	66	66	
Exchange rate and other	(1)	(1)	(1)	(3)	–	–	–	–	
Balance at end of period	\$ 326	\$ 809	\$ –	\$ 1,135	\$ 246	\$ 875	\$ –	\$ 1,121	
Small business									
Balance at beginning of period	\$ 78	\$ 29	\$ 33	\$ 140	\$ 29	\$ 10	\$ 22	\$ 61	
Provision for credit losses									
Transfers to stage 1	39	(39)	–	–	5	(5)	–	–	
Transfers to stage 2	(6)	6	–	–	(3)	3	–	–	
Transfers to stage 3	–	(1)	1	–	–	(1)	1	–	
Originations	17	–	–	17	8	–	–	8	
Maturities	(11)	(6)	–	(17)	(3)	(1)	–	(4)	
Changes in risk, parameters and exposures	(59)	52	16	9	20	15	25	60	
Write-offs	–	–	(14)	(14)	–	–	(20)	(20)	
Recoveries	–	–	4	4	–	–	3	3	
Exchange rate and other	23	30	(3)	50	–	–	(1)	(1)	
Balance at end of period	\$ 81	\$ 71	\$ 37	\$ 189	\$ 56	\$ 21	\$ 30	\$ 107	
Wholesale									
Balance at beginning of period	\$ 995	\$ 1,132	\$ 668	\$ 2,795	\$ 281	\$ 396	\$ 488	\$ 1,165	
Provision for credit losses									
Transfers to stage 1	255	(252)	(3)	–	66	(64)	(2)	–	
Transfers to stage 2	(87)	113	(26)	–	(45)	46	(1)	–	
Transfers to stage 3	(2)	(37)	39	–	(2)	(45)	47	–	
Originations	360	–	–	360	479	–	–	479	
Maturities	(298)	(274)	–	(572)	(77)	(95)	–	(172)	
Changes in risk, parameters and exposures	(401)	420	39	58	538	562	355	1,455	
Write-offs	–	–	(149)	(149)	–	–	(136)	(136)	
Recoveries	–	–	27	27	–	–	28	28	
Exchange rate and other	(58)	(78)	(72)	(208)	6	7	(42)	(29)	
Balance at end of period	\$ 764	\$ 1,024	\$ 523	\$ 2,311	\$ 1,246	\$ 807	\$ 737	\$ 2,790	

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 2020 Annual Report.

The COVID-19 pandemic significantly impacted our determination of allowance for credit losses and required the application of heightened judgment. A resurgence in the spread of COVID-19 in some regions, including the emergence and progression of new variants of COVID-19, has resulted in certain regions re-imposing or increasing the level of containment measures. Significant fiscal and monetary policy stimulus, as well as bank-led deferral programs introduced in the spring of 2020, have generally supported lower defaults. As the COVID-19 pandemic continues to evolve, including through the emergence and progression of new variants of COVID-19 in different regions, governments continue to adjust their response and approach to the pandemic. Consequently, the extent of containment measures and progress towards reopening continues to vary and fluctuate across regions. While vaccines have been approved for use in many countries, uncertainty remains regarding vaccine efficacy against new variants of COVID-19, vaccine supply and availability, and the ability of governments to quickly and effectively distribute vaccines to inoculate a sufficient proportion of the population to enable widespread easing of containment measures and support the transition to a fully reopened economy. All of these factors contribute to the uncertainty regarding the timing of a full recovery. Accordingly, our allowances continue to have a higher than usual degree of uncertainty and the inputs used are inherently subject to change, which may materially change our estimate of Stage 1 and Stage 2 allowance for credit losses in future periods.

To address the uncertainties inherent in the current and future environment and to reflect all relevant risk factors not captured in our modelled results, we applied expert credit judgment in determining significant increases in credit risk since origination and on our weighted allowance for credit losses. In light of the significant uncertainty, the impact of expert credit judgment on our allowances remains elevated as compared to pre-pandemic levels. We applied quantitative and qualitative adjustments for the impacts of the unprecedented macroeconomic scenarios arising from the COVID-19 pandemic, including the efficacy and distribution of vaccines, the temporary effects of the bank and extended government led payment support programs which may not completely mitigate future losses, and the impacts to particularly vulnerable sectors affected by the COVID-19 pandemic.

All of our IFRS 9 scenarios are designed to include the impact of COVID-19 and depict an ongoing stressed environment as at April 30, 2021 relative to pre-pandemic conditions. Despite positive developments and continuous economic improvement, the possibility of a more prolonged recovery period, including the duration of containment measures in some regions of varying degrees, as well as heightened risk in the real estate sector, have been reflected in our scenario design and weights.

Our base scenario reflects a continuation of the recovery that has been underway since the sharp drop in economic activity in calendar Q2 2020. Vaccine distribution has accelerated since Q1 2021, and the recovery is expected to occur more quickly than our January 31, 2021 forecast. Canadian and U.S. unemployment rates are expected to remain above pre-shock levels at the end of calendar 2021 but we expect the pace of GDP growth to pick up from Q2 2021 onwards alongside the expectation that rising vaccination rates will enable a more significant and sustainable easing of containment measures.

Downside scenarios, including two additional and more severe downside scenarios designed for the energy and real estate sectors, reflect the possibility of a double-dip recession, with conditions deteriorating from Q2 2021 levels 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.

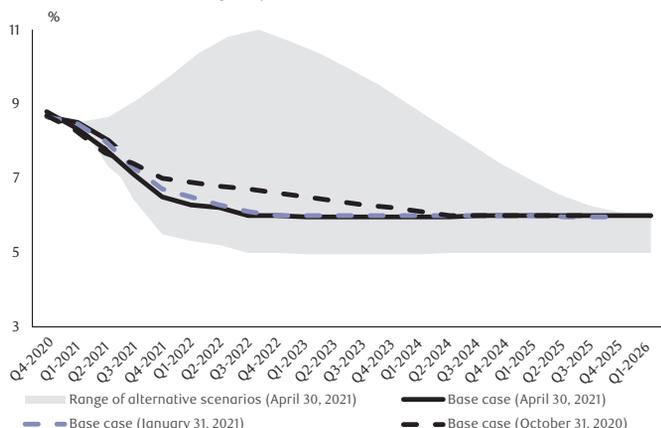
The upside scenario reflects a slightly faster and larger economic recovery than the base scenario, without prompting an offsetting monetary policy response, followed by a return to a long-run sustainable growth rate within the forecast period, at levels slightly above the base scenario.

Note 5 Loans and allowance for credit losses (continued)

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

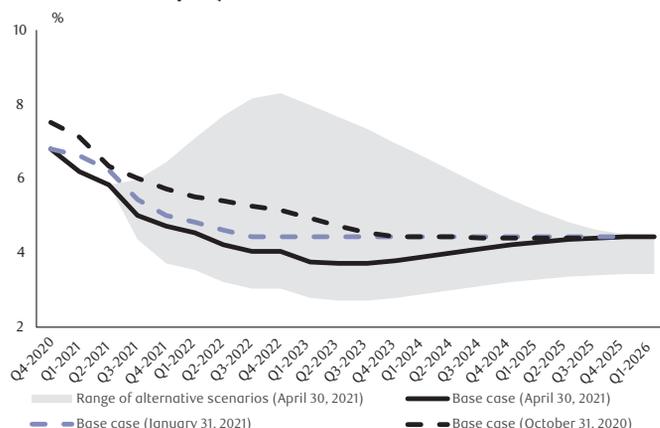
- Unemployment** – In our calendar Q2 2021 base forecast, unemployment rates are expected to decline to 7.8% in Canada and 5.8% in the U.S. We expect unemployment rates to continuously improve in both regions for the remainder of the year. We expect the Canadian unemployment rate to stabilize around its long run equilibrium by the latter half of calendar 2022 and for the U.S. unemployment rate to improve to better than the long run equilibrium beginning Q2 2022 through most of the remaining forecast horizon.

Canada Unemployment Rate (1)



(1) Represents the average quarterly unemployment level over the calendar quarters presented.

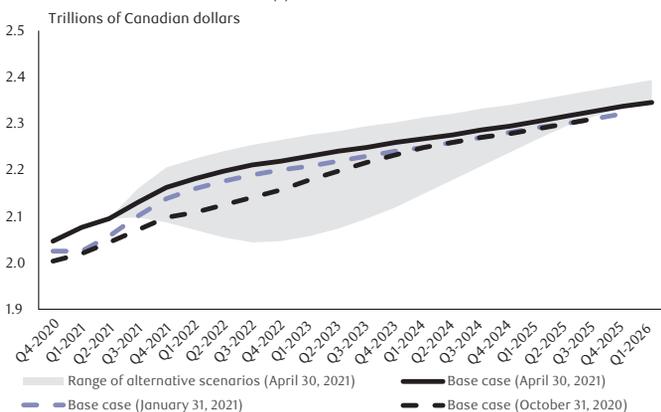
U.S. Unemployment Rate (1)



(1) Represents the average quarterly unemployment level over the calendar quarters presented.

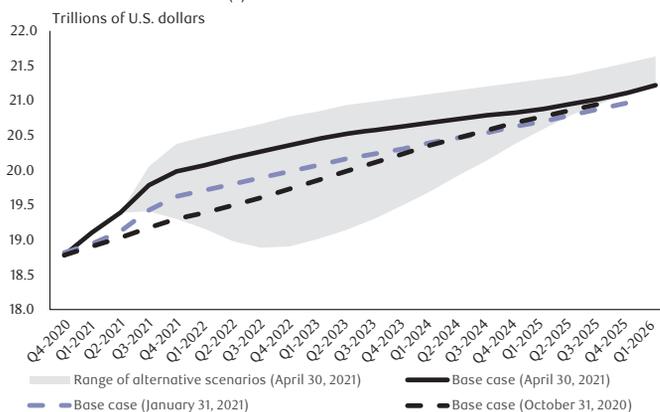
- Gross Domestic Product (GDP)** – In our base forecast, we expect GDP in calendar Q2 2021 to be 1% below pre-shock levels in Canada and 0.7% above such levels in the U.S. Canadian and U.S. GDP are expected to be 2.2% and 3.8% above pre-shock levels by the end of calendar 2021.

Canada Real GDP (1)



(1) Represents the seasonally adjusted annual rate indexed to 2012 Canadian dollars over the calendar quarters presented.

U.S. Real GDP (1)



(1) Represents the seasonally adjusted annual rate indexed to 2012 U.S. dollars over the calendar quarters presented.

- Oil price (West Texas Intermediate in US\$)** – In our base forecast, we expect oil prices to average \$61 per barrel over the next 12 months and \$53 per barrel in the following 2 to 5 years. The range of average prices in our alternative downside and upside scenarios is \$25 to \$74 per barrel for the next 12 months and \$35 to \$55 per barrel for the following 2 to 5 years. As at October 31, 2020, our base forecast included an average price of \$43 per barrel for the next 12 months and \$48 per barrel for the following 2 to 5 years.
- Canadian housing price index** – In our base forecast, we expect housing prices to increase by 3.0% over the next 12 months, with a compound annual growth rate of 3.7% 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 10.9% over the next 12 months and 4.2% to 11.1% for the following 2 to 5 years. As at October 31, 2020, our base forecast included housing price growth of 0.6% for the next 12 months and 4.5% for the following 2 to 5 years.

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 2020 Annual Report.

(Millions of Canadian dollars)	As at							
	April 30, 2021				October 31, 2020			
	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Retail								
Loans outstanding – Residential mortgages								
Low risk	\$ 287,863	\$ 2,291	\$ –	\$ 290,154	\$ 270,396	\$ 2,848	\$ –	\$ 273,244
Medium risk	14,628	2,685	–	17,313	15,230	3,307	–	18,537
High risk	4,755	1,184	–	5,939	4,346	1,467	–	5,813
Not rated (1)	42,641	1,010	–	43,651	43,176	936	–	44,112
Impaired	–	–	703	703	–	–	638	638
Total	349,887	7,170	703	357,760	333,148	8,558	638	342,344
Items not subject to impairment (2)				243				253
Total				\$ 358,003				\$ 342,597
Loans outstanding – Personal								
Low risk	\$ 69,836	\$ 711	\$ –	\$ 70,547	\$ 71,245	\$ 1,084	\$ –	\$ 72,329
Medium risk	3,827	5,187	–	9,014	3,974	5,415	–	9,389
High risk	860	1,347	–	2,207	817	1,416	–	2,233
Not rated (1)	8,370	130	–	8,500	7,704	144	–	7,848
Impaired	–	–	251	251	–	–	212	212
Total	\$ 82,893	\$ 7,375	\$ 251	\$ 90,519	\$ 83,740	\$ 8,059	\$ 212	\$ 92,011
Loans outstanding – Credit cards								
Low risk	\$ 11,373	\$ 25	\$ –	\$ 11,398	\$ 11,824	\$ 63	\$ –	\$ 11,887
Medium risk	1,455	2,006	–	3,461	1,596	2,360	–	3,956
High risk	137	1,078	–	1,215	132	1,105	–	1,237
Not rated (1)	468	54	–	522	490	56	–	546
Total	\$ 13,433	\$ 3,163	\$ –	\$ 16,596	\$ 14,042	\$ 3,584	\$ –	\$ 17,626
Loans outstanding – Small business (3)								
Low risk	\$ 7,527	\$ 295	\$ –	\$ 7,822	\$ 2,034	\$ 172	\$ –	\$ 2,206
Medium risk	1,611	1,014	–	2,625	1,976	1,143	–	3,119
High risk	306	240	–	546	126	192	–	318
Not rated (1)	3	–	–	3	9	–	–	9
Impaired	–	–	116	116	–	–	90	90
Total	\$ 9,447	\$ 1,549	\$ 116	\$ 11,112	\$ 4,145	\$ 1,507	\$ 90	\$ 5,742
Undrawn loan commitments – Retail								
Low risk	\$ 224,206	\$ 713	\$ –	\$ 224,919	\$ 214,176	\$ 887	\$ –	\$ 215,063
Medium risk	10,350	131	–	10,481	10,402	291	–	10,693
High risk	1,276	116	–	1,392	1,141	129	–	1,270
Not rated (1)	4,733	110	–	4,843	5,238	117	–	5,355
Total	\$ 240,565	\$ 1,070	\$ –	\$ 241,635	\$ 230,957	\$ 1,424	\$ –	\$ 232,381
Wholesale – Loans outstanding (3)								
Investment grade	\$ 50,970	\$ 265	\$ –	\$ 51,235	\$ 50,998	\$ 328	\$ –	\$ 51,326
Non-investment grade	111,018	21,136	–	132,154	112,434	26,575	–	139,009
Not rated (1)	8,292	436	–	8,728	7,093	432	–	7,525
Impaired	–	–	1,707	1,707	–	–	2,235	2,235
Total	170,280	21,837	1,707	193,824	170,525	27,335	2,235	200,095
Items not subject to impairment (2)				8,603				8,560
Total				\$ 202,427				\$ 208,655
Undrawn loan commitments – Wholesale								
Investment grade	\$ 238,391	\$ 164	\$ –	\$ 238,555	\$ 242,244	\$ 1,022	\$ –	\$ 243,266
Non-investment grade	105,539	11,242	–	116,781	92,262	21,581	–	113,843
Not rated (1)	3,419	–	–	3,419	3,918	–	–	3,918
Total	\$ 347,349	\$ 11,406	\$ –	\$ 358,755	\$ 338,424	\$ 22,603	\$ –	\$ 361,027

(1) 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.

(3) Commencing Q2 2021, certain loans are now classified as Retail – Small business and were previously classified as Wholesale, reflecting an alignment with capital measurement and reporting.

Note 5 Loans and allowance for credit losses (continued)**Loans past due but not impaired (1), (2)**

(Millions of Canadian dollars)	As at					
	April 30, 2021			October 31, 2020		
	30 to 89 days	90 days and greater	Total	30 to 89 days	90 days and greater	Total
Retail	\$ 1,007	\$ 158	\$ 1,165	\$ 1,013	\$ 129	\$ 1,142
Wholesale	433	10	443	574	13	587
	\$ 1,440	\$ 168	\$ 1,608	\$ 1,587	\$ 142	\$ 1,729

- (1) Excludes loans less than 30 days past due as they are not generally representative of the borrowers' ability to meet their payment obligations.
- (2) Loans in our payment deferral programs established to help clients manage through the challenges of the COVID-19 pandemic have been re-aged to current and are not aged further during the deferral period. Subsequent to the payment deferral period, loans will commence re-aging from current. 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 refinance, which can fluctuate based on business volumes. Past due loans arising from administrative processes are not representative of the borrowers' ability to meet their payment obligations.

Note 6 Deposits

(Millions of Canadian dollars)	As at							
	April 30, 2021				October 31, 2020			
	Demand (1)	Notice (2)	Term (3)	Total	Demand (1)	Notice (2)	Term (3)	Total
Personal	\$ 194,114	\$ 62,462	\$ 91,538	\$ 348,114	\$ 182,745	\$ 61,761	\$ 98,546	\$ 343,052
Business and government	333,729	19,085	291,469	644,283	315,472	16,585	292,254	624,311
Bank	13,872	686	26,368	40,926	12,502	956	31,064	44,522
	\$ 541,715	\$ 82,233	\$ 409,375	\$ 1,033,323	\$ 510,719	\$ 79,302	\$ 421,864	\$ 1,011,885
Non-interest-bearing (4)								
Canada	\$ 139,665	\$ 7,871	\$ 518	\$ 148,054	\$ 123,402	\$ 7,390	\$ 368	\$ 131,160
United States	46,606	–	–	46,606	43,831	–	–	43,831
Europe (5)	447	–	–	447	654	–	–	654
Other International	7,143	–	–	7,143	7,372	–	–	7,372
Interest-bearing (4)								
Canada	300,002	19,698	288,866	608,566	287,046	19,036	310,492	616,574
United States	6,605	53,856	72,017	132,478	7,190	52,046	57,037	116,273
Europe (5)	34,740	808	36,390	71,938	33,810	830	37,250	71,890
Other International	6,507	–	11,584	18,091	7,414	–	16,717	24,131
	\$ 541,715	\$ 82,233	\$ 409,375	\$ 1,033,323	\$ 510,719	\$ 79,302	\$ 421,864	\$ 1,011,885

- (1) 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 April 30, 2021, deposits denominated in U.S. dollars, British pounds, Euro and other foreign currencies were \$355.0 billion, \$30.5 billion, \$41.8 billion and \$28.1 billion, respectively (October 31, 2020 – \$347.5 billion, \$31.9 billion, \$46.6 billion and \$33.4 billion, respectively).
- (5) Europe includes the United Kingdom, Luxembourg, the Channel Islands, France and Italy.

Contractual maturities of term deposits

(Millions of Canadian dollars)	As at	
	April 30 2021	October 31 2020 (1)
Within 1 year:		
less than 3 months	\$ 129,516	\$ 123,290
3 to 6 months	49,929	65,782
6 to 12 months	86,826	80,737
1 to 2 years	32,304	34,400
2 to 3 years	35,986	42,907
3 to 4 years	25,332	21,136
4 to 5 years	21,179	22,885
Over 5 years	28,303	30,727
	\$ 409,375	\$ 421,864
Aggregate amount of term deposits in denominations of one hundred thousand dollars or more	\$ 378,000	\$ 388,000

- (1) Amounts previously presented were reclassified to reflect the contractual maturities of certain term deposits.

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

(Millions of Canadian dollars)	For the three months ended			
	Pension plans		Other post-employment benefit plans	
	April 30 2021	April 30 2020	April 30 2021	April 30 2020
Current service costs	\$ 90	\$ 91	\$ 11	\$ 12
Net interest expense (income)	2	5	14	15
Remeasurements of other long term benefits	–	–	(11)	–
Administrative expense	3	5	–	–
Defined benefit pension expense	95	101	14	27
Defined contribution pension expense	57	55	–	–
	\$ 152	\$ 156	\$ 14	\$ 27

(Millions of Canadian dollars)	For the six months ended			
	Pension plans		Other post-employment benefit plans	
	April 30 2021	April 30 2020	April 30 2021	April 30 2020
Current service costs	\$ 180	\$ 183	\$ 22	\$ 23
Net interest expense (income)	4	10	28	30
Remeasurements of other long term benefits	–	–	(10)	4
Administrative expense	6	9	–	–
Defined benefit pension expense	190	202	40	57
Defined contribution pension expense	123	118	–	–
	\$ 313	\$ 320	\$ 40	\$ 57

Pension and other post-employment benefit remeasurements ⁽¹⁾

(Millions of Canadian dollars)	For the three months ended			
	Defined benefit pension plans		Other post-employment benefit plans	
	April 30 2021	April 30 2020	April 30 2021	April 30 2020
Actuarial (gains) losses:				
Changes in financial assumptions ⁽²⁾	\$ (1,380)	\$ (1,009)	\$ (113)	\$ (95)
Experience adjustments	–	–	(3)	(2)
Return on plan assets (excluding interest based on discount rate)	227	484	–	–
	\$ (1,153)	\$ (525)	\$ (116)	\$ (97)

(Millions of Canadian dollars)	For the six months ended			
	Defined benefit pension plans		Other post-employment benefit plans	
	April 30 2021	April 30 2020	April 30 2021	April 30 2020
Actuarial (gains) losses:				
Changes in financial assumptions ⁽²⁾	\$ (1,392)	\$ 38	\$ (135)	\$ 1
Experience adjustments	–	–	(3)	(2)
Return on plan assets (excluding interest based on discount rate)	(797)	(23)	–	–
	\$ (2,189)	\$ 15	\$ (138)	\$ (1)

(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 second quarter of 2021, we received proposal letters (the Proposals) from the Canada Revenue Agency (CRA), in respect of the 2016 taxation year which suggests that Royal Bank of Canada owes additional taxes of approximately \$298 million as they 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 as described in Note 22 of our 2020 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.

During the first quarter of 2021, we received a reassessment that is consistent with the previously received proposal letters from the CRA in respect of the 2015 taxation year.

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 November 2, 2020, we issued \$1,250 million of Limited Recourse Capital Notes Series 2 (LRCN Series 2) 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 \$1,250 million of our First Preferred Shares, Series BR (Series BR Preferred Shares), issued concurrently with LRCN Series 2 at a price of \$1,000 per Series BR Preferred Share.

The price per LRCN Series 2 note is \$1,000 and will bear interest paid semi-annually at a fixed rate of 4.0% per annum until February 24, 2026 and thereafter at a rate per annum, reset every fifth year, equal to the 5-year Government of Canada Yield plus 3.617% until maturity on February 24, 2081. 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 2, (iii) non-payment of principal at the maturity of LRCN Series 2, 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 2.

LRCN Series 2 are redeemable on or prior to maturity to the extent we redeem Series BR Preferred Shares on certain redemption dates as set out in the terms of Series BR Preferred Shares and subject to the consent and approval of the Office of the Superintendent of Financial Institutions (OSFI).

The terms of Series BR Preferred Shares and LRCN Series 2 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 2 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 BR Preferred Shares. The terms of Series BR 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 BR Preferred Shares will be determined by dividing the share value of Series BR 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 2 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 BR 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.

Subordinated debentures

On January 20, 2021, we redeemed all \$1,500 million of our outstanding 3.31% subordinated debentures due on January 20, 2026 for 100% of their principal amount plus interest accrued to, but excluding, the redemption date.

On January 28, 2021, we issued \$1,000 million of NVCC subordinated debentures. The notes bear interest at a fixed rate of 1.67% per annum until January 28, 2028, and at the three-month Canadian Dollar Offered Rate plus 0.55% thereafter until their maturity on January 28, 2033.

Common shares issued ⁽¹⁾

	For the three months ended			
	April 30, 2021		April 30, 2020	
	Number of shares (thousands)	Amount	Number of shares (thousands)	Amount
(Millions of Canadian dollars, except number of shares)				
Issued in connection with share-based compensation plans ⁽²⁾	324	\$ 25	314	\$ 26
Purchased for cancellation ⁽³⁾	–	–	(867)	(11)
	324	\$ 25	(553)	\$ 15

	For the six months ended			
	April 30, 2021		April 30, 2020	
	Number of shares (thousands)	Amount	Number of shares (thousands)	Amount
(Millions of Canadian dollars, except number of shares)				
Issued in connection with share-based compensation plans ⁽²⁾	820	\$ 61	547	\$ 44
Purchased for cancellation ⁽³⁾	–	–	(7,860)	(97)
	820	\$ 61	(7,313)	\$ (53)

- (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 six months ended April 30, 2021 and April 30, 2020, 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 and six months ended April 30, 2021, we did not purchase for cancellation any common shares. During the three months ended April 30, 2020, we purchased for cancellation common shares at a total fair value of \$87 million (average cost of \$100.34 per share), with a book value of \$11 million (book value of \$12.35 per share). During the six months ended April 30, 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).

Note 10 Earnings per share

	For the three months ended		For the six months ended	
	April 30 2021	April 30 2020	April 30 2021	April 30 2020
(Millions of Canadian dollars, except share and per share amounts)				
Basic earnings per share				
Net income	\$ 4,015	\$ 1,481	\$ 7,862	\$ 4,990
Dividends on preferred shares and distributions on other equity instruments	(76)	(64)	(134)	(129)
Net income attributable to non-controlling interests	(1)	3	(3)	(2)
Net income available to common shareholders	3,938	1,420	7,725	4,859
Weighted average number of common shares (in thousands)	1,424,889	1,422,754	1,424,107	1,425,203
Basic earnings per share (in dollars)	\$ 2.76	\$ 1.00	\$ 5.42	\$ 3.41
Diluted earnings per share				
Net income available to common shareholders	\$ 3,938	\$ 1,420	\$ 7,725	\$ 4,859
Dilutive impact of exchangeable shares	–	3	–	7
Net income available to common shareholders including dilutive impact of exchangeable shares	3,938	1,423	7,725	4,866
Weighted average number of common shares (in thousands)	1,424,889	1,422,754	1,424,107	1,425,203
Stock options (1)	1,533	906	1,362	1,280
Issuable under other share-based compensation plans	685	753	714	751
Exchangeable shares	–	3,458	–	3,234
Average number of diluted common shares (in thousands)	1,427,107	1,427,871	1,426,183	1,430,468
Diluted earnings per share (in dollars)	\$ 2.76	\$ 1.00	\$ 5.42	\$ 3.40

(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 April 30, 2021, no outstanding options were excluded from the calculation of diluted earnings per share. For the three months ended April 30, 2020, an average of 2,941,928 outstanding options with an average exercise price of \$101.06 were excluded from the calculation of diluted earnings per share. For the six months ended April 30, 2021, no outstanding options were excluded from the calculation of diluted earnings per share. For the six months ended April 30, 2020, an average of 1,584,011 outstanding options with an average exercise price of \$103.55 were excluded from the calculation of diluted earnings per share.

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 25 of our 2020 Annual Consolidated Financial Statements as updated below.

Royal Bank of Canada Trust Company (Bahamas) Limited proceedings

On January 6, 2021, the French Supreme Court issued a judgment reversing the decision of the French Court of Appeal dated June 29, 2018 and sent the case back to the French Court of Appeal for rehearing.

Interchange fees litigation

A settlement agreement has been reached with class counsel, contingent on court approval. This settlement upon final court approval would resolve the claims of all Canadian merchants subject to limited rights to opt-out for Quebec merchants.

Foreign exchange matters

Royal Bank of Canada and multiple other foreign exchange dealers were named in an action filed in the U.K. by several institutional investors alleging, among other things, collusive behaviour in global foreign exchange trading.

Note 12 Results by business segment

(Millions of Canadian dollars)	For the three months ended April 30, 2021						
	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets (1)	Corporate Support (1)	Total
Net interest income (2)	\$ 3,085	\$ 666	\$ –	\$ 87	\$ 1,121	\$ (105)	\$ 4,854
Non-interest income	1,442	2,728	536	447	1,597	14	6,764
Total revenue	4,527	3,394	536	534	2,718	(91)	11,618
Provision for credit losses	35	(2)	–	(2)	(127)	–	(96)
Insurance policyholder benefits, claims and acquisition expense	–	–	149	–	–	–	149
Non-interest expense	1,915	2,495	140	375	1,468	(14)	6,379
Income (loss) before income taxes	2,577	901	247	161	1,377	(77)	5,186
Income taxes (recoveries)	669	210	60	41	306	(115)	1,171
Net income	\$ 1,908	\$ 691	\$ 187	\$ 120	\$ 1,071	\$ 38	\$ 4,015
Non-interest expense includes:							
Depreciation and amortization	\$ 229	\$ 218	\$ 15	\$ 47	\$ 126	\$ 1	\$ 636

(Millions of Canadian dollars)	For the three months ended April 30, 2020						
	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets (1)	Corporate Support (1)	Total
Net interest income (2)	\$ 3,149	\$ 737	\$ –	\$ 74	\$ 1,456	\$ 49	\$ 5,465
Non-interest income	1,251	2,085	197	635	857	(157)	4,868
Total revenue	4,400	2,822	197	709	2,313	(108)	10,333
Provision for credit losses	1,706	91	1	14	1,017	1	2,830
Insurance policyholder benefits, claims and acquisition expense	–	–	(177)	–	–	–	(177)
Non-interest expense	1,947	2,169	148	392	1,291	(5)	5,942
Income (loss) before income taxes	747	562	225	303	5	(104)	1,738
Income taxes (recoveries)	215	138	45	77	(100)	(118)	257
Net income	\$ 532	\$ 424	\$ 180	\$ 226	\$ 105	\$ 14	\$ 1,481
Non-interest expense includes:							
Depreciation and amortization	\$ 223	\$ 223	\$ 14	\$ 54	\$ 127	\$ –	\$ 641

(Millions of Canadian dollars)	For the six months ended April 30, 2021						
	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets (1)	Corporate Support (1)	Total
Net interest income (2)	\$ 6,246	\$ 1,332	\$ –	\$ 178	\$ 2,320	\$ (187)	\$ 9,889
Non-interest income	2,844	5,449	2,345	921	3,106	7	14,672
Total revenue	9,090	6,781	2,345	1,099	5,426	(180)	24,561
Provision for credit losses	200	(31)	–	(4)	(150)	(1)	14
Insurance policyholder benefits, claims and acquisition expense	–	–	1,555	–	–	–	1,555
Non-interest expense	3,893	5,058	289	776	2,909	(4)	12,921
Income (loss) before income taxes	4,997	1,754	501	327	2,667	(175)	10,071
Income taxes (recoveries)	1,296	414	113	84	529	(227)	2,209
Net income	\$ 3,701	\$ 1,340	\$ 388	\$ 243	\$ 2,138	\$ 52	\$ 7,862
Non-interest expense includes:							
Depreciation and amortization	\$ 453	\$ 438	\$ 29	\$ 96	\$ 251	\$ 2	\$ 1,269

(Millions of Canadian dollars)	For the six months ended April 30, 2020						
	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets (1)	Corporate Support (1)	Total
Net interest income (2)	\$ 6,375	\$ 1,475	\$ –	\$ 132	\$ 2,617	\$ 87	\$ 10,686
Non-interest income	2,635	4,513	2,191	1,174	2,244	(274)	12,483
Total revenue	9,010	5,988	2,191	1,306	4,861	(187)	23,169
Provision for credit losses	2,048	89	1	14	1,096	1	3,249
Insurance policyholder benefits, claims and acquisition expense	–	–	1,437	–	–	–	1,437
Non-interest expense	3,931	4,539	301	794	2,726	29	12,320
Income (loss) before income taxes	3,031	1,360	452	498	1,039	(217)	6,163
Income taxes (recoveries)	813	313	91	129	52	(225)	1,173
Net income	\$ 2,218	\$ 1,047	\$ 361	\$ 369	\$ 987	\$ 8	\$ 4,990
Non-interest expense includes:							
Depreciation and amortization	\$ 457	\$ 433	\$ 29	\$ 104	\$ 254	\$ –	\$ 1,277

(1) Taxable equivalent basis.

(2) Interest revenue is reported net of interest expense as we rely primarily on net interest income as a performance measure.

Total assets and total liabilities by business segment

(Millions of Canadian dollars)	As at April 30, 2021						
	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total
Total assets	\$ 523,063	\$ 133,488	\$ 21,011	\$ 217,607	\$ 669,157	\$ 50,990	\$ 1,615,316
Total liabilities	522,979	133,468	21,263	217,519	668,854	(41,589)	1,522,494

(Millions of Canadian dollars)	As at October 31, 2020						
	Personal & Commercial Banking	Wealth Management	Insurance	Investor & Treasury Services	Capital Markets	Corporate Support	Total
Total assets	\$ 509,679	\$ 129,706	\$ 21,253	\$ 230,695	\$ 688,054	\$ 45,161	\$ 1,624,548
Total liabilities	509,682	129,673	21,311	230,618	688,314	(41,817)	1,537,781

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 second quarter of 2021, we complied with all capital and leverage requirements, including the domestic stability buffer, imposed by OSFI.

	As at	
	April 30 2021	October 31 2020
(Millions of Canadian dollars, except percentage amounts and as otherwise noted)		
Capital ⁽¹⁾		
CET1 capital	\$ 70,970	\$ 68,082
Tier 1 capital	78,139	74,005
Total capital	87,636	84,928
Risk-weighted assets (RWA) used in calculation of capital ratios ⁽¹⁾		
Credit risk	\$ 452,857	\$ 448,821
Market risk	30,617	27,374
Operational risk	72,133	70,047
Total RWA	\$ 555,607	\$ 546,242
Capital ratios and Leverage ratio ⁽¹⁾		
CET1 ratio	12.8%	12.5%
Tier 1 capital ratio	14.1%	13.5%
Total capital ratio	15.8%	15.5%
Leverage ratio	5.0%	4.8%
Leverage ratio exposure (billions)	\$ 1,576.3	\$ 1,552.9

(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 by OSFI in response to the COVID-19 pandemic. Both the CAR guideline and Leverage Requirements Guideline are based on the Basel III framework.

Note 14 Subsequent events

On May 24, 2021, we redeemed all 29 million of our issued and outstanding Non-Cumulative 5-Year Rate Reset First Preferred Shares Series BK at a price of \$25 per share.

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)

Preferred shares AZ, BB, BD, BF,
BH, BI, BJ, BM and BO are listed on
the TSX. 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 514-982-7555
(International)
Fax: 1-888-453-0330 (Canada and
the U.S.) or 416-263-9394
(International)
email: service@computershare.com

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.

Dividend dates for 2021

Subject to approval by the Board of Directors

	Record dates	Payment dates
Common and preferred shares series AZ, BB, BD, BF, BH, BI, BJ, BM and BO	January 26 April 22 July 26 October 26	February 24 May 21 August 24 November 24
Preferred shares series C-2 (US\$)	January 26 April 27 July 27 October 26	February 5 May 7 August 6 November 5

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.

Common share repurchases

As at April 30, 2021, we do not
have an active normal course
issuer bid (NCIB). For further
details, refer to the Capital
management section.

2021 Quarterly earnings release dates

First quarter	February 24
Second quarter	May 27
Third quarter	August 25
Fourth quarter	December 1

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.

Trademarks used in this report include the LION & GLOBE Symbol, ROYAL BANK OF CANADA, RBC, RBC INSURANCE and RBC HOMELINE PLAN which are trademarks of Royal Bank of Canada used by Royal Bank of Canada and/or by its subsidiaries under license. All other trademarks mentioned in this report, which are not the property of Royal Bank of Canada, are owned by their respective holders.