Royal Bank of Canada

Third Quarter 2023

RBC®

Royal Bank of Canada third quarter 2023 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 **$3.9 Billion** *Up 8% YoY*	Diluted EPS[1] **$2.73** *Up 9% YoY*	Total PCL[1] **$616 Million** *PCL on loans ratio[1] down 1 bp[1] QoQ*	ROE[1, 2] **14.6%** *Flat YoY*	CET1 Ratio[1] **14.1%** *Above regulatory requirements*
Adjusted Net income[3] **$4.0 Billion** *Up 11% YoY*	Adjusted Diluted EPS[3] **$2.84** *Up 11% YoY*	Total ACL[1] **$5.0 Billion** *ACL on loans ratio[1] up 2 bps[1] QoQ*	Adjusted ROE[3] **15.1% Up** *30 bps YoY*	LCR[1] 134% *Down slightly from 135% last quarter*

TORONTO, August 24, 2023 – Royal Bank of Canada[4] (RY on TSX and NYSE) today reported net income of $3.9 billion for the quarter ended July 31, 2023, up $295 million or 8% from the prior year. Diluted EPS was $2.73, up 9% over the same period. Adjusted net income[3] and adjusted EPS[3] of $4.0 billion and $2.84, respectively, were both up 11% from the prior year.

Results this quarter reflected higher provisions for credit losses, with a PCL on loans ratio of 29 bps. Results benefitted from lower taxes reflecting a favourable shift in earnings mix.

Pre-provision, pre-tax earnings[5] of $5.2 billion were up $353 million or 7% from a year ago, mainly due to higher revenue in Capital Markets, reflecting higher revenue in Corporate and Investment Banking, including the impact of loan underwriting markdowns in the prior period, as well as in Global Markets. Higher net interest income driven by higher interest rates and strong volume growth in Canadian Banking also contributed to the increase. These factors were partially offset by higher staff-related expenses, mainly due to higher salaries as well as higher variable and stock-based compensation, and higher professional fees. Ongoing technology investments and higher discretionary costs to support strong client-driven growth also contributed to higher expenses.

Compared to last quarter, net income was up 6% reflecting higher results in Personal & Commercial Banking and Insurance. Capital Markets results were relatively flat. These factors were partially offset by lower results in Wealth Management. Adjusted net income[3] was up 7% over the same period. Pre-provision, pre-tax earnings[5] were up 5% as higher revenue more than offset expense growth.

The number of full-time equivalent (FTE) employees was down 1% from last quarter, and we expect to further reduce FTE by approximately 1-2% next quarter.

Our capital position remains robust, with a CET1 ratio of 14.1%, supporting solid volume growth and $1.9 billion in common share dividends. We also have a strong average LCR of 134%.

> *"Despite a complex operating environment, our Q3 results exemplify RBC's ability to consistently deliver solid revenue and volume growth underpinned by prudent risk management. We remain focused on executing on our cost reduction strategy while leveraging our strong balance sheet and diversified business model to support our growth and bring long-term value to our clients, communities and shareholders."*
> ***– Dave McKay, President and Chief Executive Officer of Royal Bank of Canada***

	Reported:		Adjusted[3]:	
Q3 2023 Compared to Q3 2022	• Net income of $3,872 million • Diluted EPS of $2.73 • ROE of 14.6% • CET1 ratio of 14.1%	↑ 8% ↑ 9% → 0 bps ↑ 100 bps	• Net income of $4,017 million • Diluted EPS of $2.84 • ROE of 15.1%	↑ 11% ↑ 11% ↑ 30 bps
Q3 2023 Compared to Q2 2023	• Net income of $3,872 million • Diluted EPS of $2.73 • ROE of 14.6% • CET1 ratio of 14.1%	↑ 6% ↑ 6% ↑ 20 bps ↑ 40 bps	• Net income of $4,017 million • Diluted EPS of $2.84 • ROE of 15.1%	↑ 7% ↑ 7% ↑ 20 bps
YTD 2023 Compared to YTD 2022	• Net income of $10,735 million • Diluted EPS of $7.60 • ROE of 13.9%	↓ 10% ↓ 9% ↓ 280 bps	• Net income of $12,118 million • Diluted EPS of $8.59 • ROE of 15.7%	→ 0% ↑ 2% ↓ 120 bps

(1) See Glossary section of this Q3 2023 Report to Shareholders for composition of this measure.
(2) Return on equity (ROE). This measure does not have a standardized meaning under generally accepted accounting principles (GAAP). For further information, refer to the Key performance and non-GAAP measures section of this Q3 2023 Report to Shareholders.
(3) This is a non-GAAP measure. For further information, including a reconciliation, refer to the Key performance and non-GAAP measures section of this Q3 2023 Report to Shareholders.
(4) When we say "we", "us", "our", 'the bank" or "RBC", we mean Royal Bank of Canada and its subsidiaries, as applicable.
(5) Pre-provision, pre-tax (PPPT) earnings is calculated as income (July 31, 2023: $3,872 million; July 31, 2022: $3,577 million) before income taxes (July 31, 2023: $761 million; July 31, 2022: $979 million) and PCL (July 31, 2023: $616 million; July 31, 2022: $340 million). This is a non-GAAP measure. PPPT earnings do not have a standardized meaning under GAAP and may not be comparable to similar measures disclosed by other financial institutions. We use PPPT earnings to assess our ability to generate sustained earnings growth outside of credit losses, which are impacted by the cyclical nature of a credit cycle. We believe that certain non-GAAP measures are more reflective of our ongoing operating results and provide readers with a better understanding of management's perspective on our performance.

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Management's Discussion and Analysis

Management's Discussion and Analysis (MD&A) is provided to enable a reader to assess our results of operations and financial condition for the three and nine month periods ended or as at July 31, 2023, compared to the corresponding periods in the prior fiscal year and the three month period ended April 30, 2023. This MD&A should be read in conjunction with our unaudited Interim Condensed Consolidated Financial Statements for the quarter ended July 31, 2023 (Condensed Financial Statements) and related notes and our 2022 Annual Report. This MD&A is dated August 23, 2023. 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 2022 Annual Information Form, is available free of charge on our website at rbc.com/investorrelations, on the Canadian Securities Administrators' website at sedar.com and on the EDGAR section of the United States (U.S.) Securities and Exchange Commission's (SEC) website at sec.gov.

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

Caution regarding forward-looking statements

From time to time, we make written or oral forward-looking statements within the meaning of certain securities laws, including the "safe harbour" provisions of the *United States Private Securities Litigation Reform Act of 1995* and any applicable Canadian securities legislation. We may make forward-looking statements in this Q3 2023 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., U.K., European and global economies, the regulatory environment in which we operate, the impact from rising interest rates, the implementation of IFRS 17 *Insurance Contracts*, the expected closing of the transaction involving HSBC Bank Canada, the expected closing of the transaction involving the U.K. branch of RBC Investor Services Trust and the RBC Investor Services business in Jersey and the risk environment including our credit risk, market risk, liquidity and funding risk, 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", "commit", "target", "objective", "plan" and "project" and similar expressions of future or conditional verbs such as "will", "may", "might", "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 that our financial performance, environmental & social or other objectives, vision and strategic goals will not be achieved and that our actual results may differ materially from such predictions, forecasts, projections, expectations or conclusions.

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, competitive, model, legal and regulatory environment, systemic risks and other risks discussed in the risk sections of our 2022 Annual Report and the Risk management section of this Q3 2023 Report to Shareholders; including business and economic conditions in the geographic regions in which we operate, Canadian housing and household indebtedness, information technology and cyber risks, geopolitical uncertainty, environmental and social risk (including climate change), digital disruption and innovation, privacy, data and third-party related risks, regulatory changes, culture and conduct risks, 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, financial market conditions and our business operations, and financial results, condition and objectives. Additional factors that could cause actual results to differ materially from the expectations in such forward-looking statements can be found in the risk sections of our 2022 Annual Report.

We caution that the foregoing list of risk factors is not exhaustive and other factors could also adversely affect our results. When relying on our forward-looking statements to make decisions with respect to us, investors and others should carefully consider the foregoing factors and other uncertainties and potential events. Material economic assumptions underlying the forward-looking statements contained in this Q3 2023 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 sections in our 2022 Annual Report, as updated by the Economic, market and regulatory review and outlook section of this Q3 2023 Report to Shareholders. Except as required by law, we do not undertake to update any forward-looking statement, whether written or oral, that may be made from time to time by us or on our behalf.

Additional information about these and other factors can be found in the risk sections of our 2022 Annual Report and the Risk management section of this Q3 2023 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 97,000+ 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 more than 17 million clients in Canada, the U.S. and 27 other countries. Learn more at rbc.com.

Effective the first quarter of 2023, we simplified our reporting structure by eliminating the Investor & Treasury Services segment and moving its former businesses to existing segments. We moved our Investor Services business to our Wealth Management segment, and our Treasury Services and Transaction Banking businesses to our Capital Markets segment. From a reporting perspective, there were no changes to our Personal & Commercial Banking and Insurance segments. Comparative results in this MD&A have been revised to conform to our new basis of segment presentation.

Our business and reporting segments are described below.

Personal & Commercial Banking	Provides a broad suite of financial products and services in Canada, the Caribbean and the U.S. Our commitment to building and maintaining deep and meaningful relationships with our clients is underscored by the breadth of our product suite, our depth of expertise, and the features of our digital solutions.
Wealth Management	Serves affluent, high net worth (HNW) and ultra-high net worth (UHNW) clients from our offices in key financial centres mainly in Canada, the U.S., the United Kingdom (U.K.), Europe, and Asia. We offer a comprehensive suite of investment, trust, banking, credit and other advice-based solutions. We also provide asset management products to institutional and individual clients through our distribution channels and third-party distributors. Asset and payment services are also provided to financial institutions and asset owners worldwide.
Insurance	Offers a wide range of advice and solutions for individual and business clients including life, health, wealth, home, auto, travel, annuities and reinsurance.
Capital Markets	Provides expertise in advisory & origination, sales & trading, and lending & financing, and transaction banking to corporations, institutional clients, asset managers, private equity firms and governments globally. We serve clients from 63 offices in 18 countries across North America, the U.K. & Europe, and Australia, Asia & other regions.
Corporate Support	Corporate Support consists of Technology & Operations, which provides the technological and operational foundation required to effectively deliver products and services to our clients, Functions, which includes our finance, human resources, risk management, internal audit and other functional groups, as well as our Corporate Treasury function.

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 nine months ended	
	July 31 2023	April 30 2023	July 31 2022	**July 31 2023**	July 31 2022
Total revenue	$ **14,489**	$ 13,520	$ 12,132	$ **43,103**	$ 36,418
Provision for credit losses (PCL)	**616**	600	340	**1,748**	103
Insurance policyholder benefits, claims and acquisition expense (PBCAE)	**1,379**	1,006	850	**3,930**	1,667
Non-interest expense	**7,861**	7,494	6,386	**23,030**	19,400
Income before income taxes	**4,633**	4,420	4,556	**14,395**	15,248
Net income	$ **3,872**	$ 3,649	$ 3,577	$ **10,735**	$ 11,925
Net income adjusted (1)	$ **4,017**	$ 3,758	$ 3,623	$ **12,118**	$ 12,064
Segments – net income					
Personal & Commercial Banking	$ **2,134**	$ 1,915	$ 2,023	$ **6,175**	$ 6,231
Wealth Management (2)	**674**	742	821	**2,264**	2,451
Insurance	**227**	139	186	**514**	589
Capital Markets (2)	**938**	939	599	**3,100**	2,578
Corporate Support	**(101)**	(86)	(52)	**(1,318)**	76
Net income	$ **3,872**	$ 3,649	$ 3,577	$ **10,735**	$ 11,925
Selected information					
Earnings per share (EPS) – basic	$ **2.74**	$ 2.58	$ 2.52	$ **7.61**	$ 8.33
– diluted	**2.73**	2.58	2.51	**7.60**	8.31
Earnings per share (EPS) – basic adjusted (1)	**2.84**	2.66	2.55	**8.60**	8.43
– diluted adjusted (1)	**2.84**	2.65	2.55	**8.59**	8.41
Return on common equity (ROE) (3)	**14.6%**	14.4%	14.6%	**13.9%**	16.7%
Return on common equity (ROE) adjusted (1)	**15.1%**	14.9%	14.8%	**15.7%**	16.9%
Average common equity (3)	$ **103,850**	$ 101,850	$ 95,750	$ **101,800**	$ 93,850
Net interest margin (NIM) – on average earning assets, net (4)	**1.50%**	1.53%	1.52%	**1.50%**	1.46%
PCL on loans as a % of average net loans and acceptances	**0.29%**	0.30%	0.17%	**0.28%**	0.02%
PCL on performing loans as a % of average net loans and acceptances	**0.06%**	0.09%	0.09%	**0.08%**	(0.07)%
PCL on impaired loans as a % of average net loans and acceptances	**0.23%**	0.21%	0.08%	**0.20%**	0.09%
Gross impaired loans (GIL) as a % of loans and acceptances	**0.38%**	0.34%	0.25%	**0.38%**	0.25%
Liquidity coverage ratio (LCR) (4), (5)	**134%**	135%	123%	**134%**	123%
Net stable funding ratio (NSFR) (4), (5)	**112%**	113%	113%	**112%**	113%
Capital, Leverage and Total loss absorbing capacity (TLAC) ratios (4), (6)					
Common Equity Tier 1 (CET1) ratio	**14.1%**	13.7%	13.1%	**14.1%**	13.1%
Tier 1 capital ratio	**15.4%**	14.9%	14.3%	**15.4%**	14.3%
Total capital ratio	**17.3%**	16.8%	15.9%	**17.3%**	15.9%
Leverage ratio	**4.2%**	4.2%	4.6%	**4.2%**	4.6%
TLAC ratio	**30.9%**	31.0%	27.6%	**30.9%**	27.6%
TLAC leverage ratio	**8.5%**	8.7%	8.8%	**8.5%**	8.8%
Selected balance sheet and other information (7)					
Total assets	$ **1,957,734**	$ 1,940,302	$ 1,842,092	$ **1,957,734**	$ 1,842,092
Securities, net of applicable allowance	**372,625**	319,828	298,795	**372,625**	298,795
Loans, net of allowance for loan losses	**835,714**	831,187	796,314	**835,714**	796,314
Derivative related assets	**115,914**	124,149	122,058	**115,914**	122,058
Deposits	**1,215,671**	1,210,053	1,178,604	**1,215,671**	1,178,604
Common equity	**105,004**	103,937	96,570	**105,004**	96,570
Total risk-weighted assets (RWA) (4)	**585,899**	593,533	589,050	**585,899**	589,050
Assets under management (AUM) (4)	**1,095,400**	1,083,600	937,700	**1,095,400**	937,700
Assets under administration (AUA) (4), (8)	**4,415,700**	5,911,100	5,748,900	**4,415,700**	5,748,900
Common share information					
Shares outstanding (000s) – average basic	**1,393,515**	1,388,388	1,396,381	**1,388,217**	1,409,292
– average diluted	**1,394,939**	1,390,149	1,398,667	**1,389,857**	1,411,934
– end of period	**1,394,997**	1,389,730	1,390,629	**1,394,997**	1,390,629
Dividends declared per common share	$ **1.35**	$ 1.32	$ 1.28	$ **3.99**	$ 3.68
Dividend yield (4)	**4.2%**	4.0%	3.9%	**4.1%**	3.7%
Dividend payout ratio (4)	**49%**	51%	51%	**53%**	44%
Common share price (RY on TSX) (9)	$ **130.73**	$ 134.51	$ 124.86	$ **130.73**	$ 124.86
Market capitalization (TSX) (9)	**182,368**	186,933	173,634	**182,368**	173,634
Business information (number of)					
Employees (full-time equivalent) (FTE)	**93,753**	94,398	88,541	**93,753**	88,541
Bank branches	**1,257**	1,258	1,283	**1,257**	1,283
Automated teller machines (ATMs)	**4,353**	4,357	4,364	**4,353**	4,364
Period average US$ equivalent of C$1.00 (10)	**0.750**	0.737	0.783	**0.744**	0.786
Period-end US$ equivalent of C$1.00	**0.758**	0.738	0.781	**0.758**	0.781

(1) This is a non-GAAP measure, which is calculated excluding the impact of the Canada Recovery Dividend (CRD) and other tax related adjustments, HSBC Canada transaction and integration costs (net of tax), as well as the after-tax impact of amortization of acquisition-related intangibles. Amounts have been revised from those previously presented to conform to our basis of presentation for this non-GAAP measure. For further details, including a reconciliation, refer to the Key performance and non-GAAP measures section.
(2) Amounts have been revised from those previously presented to conform to our new basis of segment presentation. For further details, refer to the About Royal Bank of Canada section.
(3) 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.
(4) See Glossary for composition of this measure.
(5) The LCR and NSFR are calculated in accordance with the Office of the Superintendent of Financial Institutions' (OSFI) Liquidity Adequacy Requirements (LAR) guideline. LCR is the average for the three months ended for each respective period. For further details, refer to the Liquidity and funding risk section.
(6) Capital ratios are calculated using OSFI's Capital Adequacy Requirements (CAR) guideline, the Leverage ratio is calculated using OSFI's Leverage Requirements (LR) guideline, and both the TLAC and TLAC leverage ratios are calculated using OSFI's TLAC guideline. The results for the period ended July 31, 2023 and April 30, 2023 reflect our adoption of the revised CAR and LR guidelines that came into effect in Q2 2023 as part of OSFI's implementation of the Basel III reforms. For further details, refer to the Capital management section.
(7) Represents period-end spot balances.
(8) AUA includes $13 billion and $7 billion (April 30, 2023 – $15 billion and $8 billion; July 31, 2022 – $14 billion and $5 billion) of securitized residential mortgages and credit card loans, respectively.
(9) Based on TSX closing market price at period-end.
(10) Average amounts are calculated using month-end spot rates for the period.

Economic, market and regulatory review and outlook – data as at August 23, 2023

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

The near-term macroeconomic backdrop has been more resilient than expected with unemployment rates remaining low across most advanced economies despite increases in interest rates over the last calendar year. Inflation has slowed with energy prices falling below calendar year-ago levels and global supply chain pressures have substantially eased. However, inflation is unlikely to reduce to central bank target rates without some slowing in consumer spending and higher unemployment. Central banks have responded with additional interest rate increases. More recently, there have been early signs that economic growth is slowing. Consumer delinquency rates, as published by the Bank of Canada, have been edging higher and the unemployment rate has begun to rise in Canada. We continue to expect mild recessions in the U.S. and Canada beginning in the second half of calendar 2023.

Canada

Canadian GDP is expected to have increased 0.5%[1] in the second calendar quarter of 2023 after rising 3.1%[1] in the first calendar quarter of 2023. Near-term GDP growth has been supported by resilient consumer spending despite higher interest rates. However, GDP is expected to decline marginally over the second half of calendar 2023 as higher interest rates and associated increases in debt payments leave less household income available for spending. The rate of consumer price growth has slowed substantially, with energy prices below levels a calendar year ago and global supply chain disruptions easing. However, other measures of inflation, including the Bank of Canada (BoC)'s preferred trim and median core Consumer Price Index (CPI) measures, remain at levels above the central bank's target range. The unemployment rate rose by 0.5% over the three months ended July 2023 and is expected to continue to increase over the second half of calendar 2023. The BoC responded to persistent inflation with a 25-basis point interest rate increase in each of the June and July 2023 policy decisions, bringing the overnight rate to 5.0%. We expect no further increases in calendar 2023 contingent on slower consumer spending, further moderate increases in unemployment, and easing of broader inflation trends.

U.S.

U.S. GDP grew by 2.4%[1] in the second calendar quarter of 2023 after a 2%[1] increase in the first calendar quarter of 2023. Labour markets have remained strong with the unemployment rate trending around pre-pandemic levels during the first half of calendar 2023. However, the unemployment rate is projected to rise from current low levels during the second half of calendar 2023 and into calendar 2024. Higher interest rates are reducing household purchasing power and tighter financial conditions are expected to slow business spending and investment. As a result, we expect softening in GDP over the second half of calendar 2023. Consumer price growth continued to slow in the U.S., reflecting lower energy prices as well as a narrowing in the breadth of inflation pressures. Excluding food and energy products, year-over-year core CPI growth of 4.7% in July 2023 is still elevated but is down from a peak of 6.6% in September 2022. The Federal Reserve (Fed) increased the fed funds target range by 25 basis points in July to a 5.25% to 5.5% range. We expect the Fed will pause interest rate increases for the remainder of calendar year 2023.

Europe

Euro area GDP increased 0.3% in the second calendar quarter of 2023 after remaining flat in the first calendar quarter of 2023. Euro area inflation has been moderating after peaking in late 2022 as energy prices trend lower. However, core inflation remains elevated. Despite some signs of an economic slowdown, elevated core inflation is driving the European Central Bank (ECB) to raise interest rates. The ECB increased the deposit rate by 25 bps in July 2023 to 3.75%. We expect no further increases from the ECB for the remainder of calendar 2023. U.K. GDP rose 0.2% in the second calendar quarter of 2023 after rising 0.1% in the first calendar quarter of 2023. Inflation in the U.K. continues to be stronger than expected amid robust labour demand and elevated wage growth. The Bank of England (BoE) has continued to increase interest rates in response. We expect the BoE to raise interest rates to 5.5% by the end of calendar 2023. Higher interest rates are expected to slow consumer spending and labour demand over the second half of calendar 2023 for both the Euro area and the U.K., driving the unemployment rates in these regions higher.

Financial markets

Bond yields increased over the first half of calendar 2023 as a more robust than expected economic backdrop and persistent price pressure drove central banks to continue to raise interest rates. The spread between longer- and shorter-duration bond yields, which is a commonly used recession indicator, remains inverted in the U.S. and Canada, as markets continue to expect deterioration in the economic outlook. Equity markets have rebounded since the beginning of calendar 2023. Global inflation pressures have shown persistent signs of easing with headline inflation rates closer to target rates in some regions like the U.S. and Canada, in large part due to lower energy prices. However, underlying price pressures are not expected to fully ease until there is a more pronounced slowdown in domestic demand and the economy.

1 Annualized rate

Regulatory environment

We continue to monitor and prepare for regulatory developments and changes in a manner that seeks to ensure compliance with new requirements while mitigating adverse business or financial impacts. Such impacts could result from new or amended laws or 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 2022 Annual Report and updates are listed below.

Global uncertainty

Significant uncertainty about inflationary pressures and geopolitical tensions continues to pose risks to the global economic outlook. In July 2023, the International Monetary Fund (IMF) projected global growth of 3.0% in calendar 2023, up 0.2% from its April forecast. The recent resolution of the U.S. debt ceiling standoff, and decisive actions taken by global authorities to contain instability in the banking sector have reduced the immediate risks of financial turmoil. However, uncertainty remains regarding: the severity and impact of central banks' monetary policy tightening as they attempt to reduce persistent levels of elevated inflation; ongoing geopolitical tensions, including those between Russia and Ukraine; extreme weather-related events; and the potential re-emergence of financial sector instability as banks face regulatory reform in the U.S. Our diversified business model, as well as our product and geographic diversification, continue to help mitigate the risks posed by global uncertainty.

Climate-related regulatory activity

On March 7, 2023, OSFI released its final Guideline B-15 – Climate Risk Management, which sets out expectations for the management of climate-related risks for federally regulated financial institutions (FRFIs) and aims to support FRFIs in developing greater resilience to, and management of, these risks. The guideline will be effective starting fiscal 2024 and OSFI intends to review and amend the guideline as practices and standards evolve. We are currently assessing the impact of the guideline and have initiated a project to meet the requirements by the effective date. We will continue to monitor any updates and future developments.

Government of Canada 2023 budget

On March 28, 2023, the Government of Canada presented its 2023 budget ("Budget 2023"), which introduced a number of proposed measures including a proposal to deny the dividend received deduction in respect of dividends received by financial institutions after December 31, 2023 on shares of corporations resident in Canada where such shares are mark-to-market property for tax purposes, and a new 2% tax on net share buybacks for publicly listed corporations occurring on or after January 1, 2024. Budget 2023 also reinforced the Government of Canada's commitment to the Organization for Economic Co-operation and Development's two-pillar plan for international tax reform, including a global 15% minimum tax on multinational enterprises, and associated draft legislation for a Global Minimum Tax Act was published on August 4, 2023 and is open for public comment until September 29, 2023. Timing of enactment of these changes remains uncertain, and legislation remains subject to amendment prior to enactment. The ultimate impact of the proposed measures will depend on the final legislation.

Budget 2023 also introduced harmonized sales tax (HST) on payment card clearing services, to be applied prospectively in all cases and retroactively under certain circumstances. A bill with this legislation received royal assent and became law on June 22, 2023.

Third-party risk management

On April 24, 2023, OSFI released its final Guideline B-10 – Third-Party Risk Management, which sets out expectations for managing risks associated with third-party arrangements for FRFIs.

This guideline will be effective on May 1, 2024. We have assessed the requirements and do not anticipate any issues in complying with the requirements by the effective date.

Interest Rate Benchmark Reform

As part of the interest rate benchmark reform, the publication of all remaining USD London Interbank Offered Rate (LIBOR) settings ceased on June 30, 2023. As at July 31, 2023, and consistent with our transition plan, our exposure to financial instruments referencing USD LIBOR is no longer material to our Condensed Financial Statements.

Additionally, on July 27, 2023 the Canadian Alternative Reference Rate Working Group published a market notice confirming that effective November 1, 2023, no new CDOR or Bankers' Acceptance (BA) based lending will be permitted. This announcement does not impact the ability to draw on existing CDOR or BA loan facilities entered into prior to November 1, 2023. Our transition plan has been updated to reflect this announcement.

For a discussion on risk factors resulting from these and other developments which may affect our business and financial results, refer to the risk sections of our 2022 Annual Report. For further details on our framework and activities to manage risks, refer to the risk and Capital management sections of this Q3 2023 Report to Shareholders.

Key corporate events

HSBC Bank Canada

On November 29, 2022, we entered into an agreement to acquire 100% of the common shares of HSBC Bank Canada (HSBC Canada) for an all-cash purchase price of $13.5 billion. In addition, we will purchase all of the existing preferred shares and subordinated debt of HSBC Canada held directly or indirectly by HSBC Holdings plc at par value. HSBC Canada is a premier Canadian personal and commercial bank focused on globally connected clients.

The transaction is expected to close in the first calendar quarter of 2024 and is subject to the satisfaction of customary closing conditions, including regulatory approvals. For further details, refer to Note 6 of our Condensed Financial Statements.

RBC Investor Services

On July 3, 2023, we completed the previously announced sale of the European asset servicing activities of RBC Investor Services® and its associated Malaysian centre of excellence (the partial sale of RBC Investor Services operations) to CACEIS, the asset servicing banking group of Crédit Agricole S.A. and Banco Santander, S.A. As a result of the transaction, we recorded a pre-tax gain on disposal of $69 million in Non-Interest income within the Wealth Management segment ($77 million after-tax).

The completion of the sale of the business of the U.K. branch of RBC Investor Services Trust and the RBC Investor Services business in Jersey remains subject to customary closing conditions, including regulatory approvals. For further details, refer to Note 6 of our Condensed Financial Statements.

Financial performance

Overview

Q3 2023 vs. Q3 2022

Net income of $3,872 million was up $295 million or 8% from a year ago. Diluted EPS of $2.73 was up $0.22 or 9% and ROE of 14.6% was flat. Our CET1 ratio of 14.1% was up 100 bps from a year ago.

Adjusted net income of $4,017 million was up $394 million or 11% from a year ago. Adjusted diluted EPS of $2.84 was up $0.29 or 11% and adjusted ROE of 15.1% was up from 14.8% last year.

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

Q3 2023 vs. Q2 2023

Net income of $3,872 million was up $223 million or 6% from last quarter. Diluted EPS of $2.73 was up $0.15 or 6% and ROE of 14.6% was up from 14.4% in the prior quarter. Our CET1 ratio of 14.1% was up 40 bps from last quarter.

Adjusted net income of $4,017 million was up $259 million or 7% from last quarter. Adjusted diluted EPS of $2.84 was up $0.19 or 7% and adjusted ROE of 15.1% was up from 14.9% last quarter.

Our earnings reflect higher results in Personal & Commercial Banking and Insurance, as well as relatively flat results in Capital Markets, partially offset by lower earnings in Wealth Management.

Q3 2023 vs. Q3 2022 (Nine months ended)

Net income of $10,735 million was down $1,190 million or 10% from the same period last year. Diluted EPS of $7.60 was down $0.71 or 9% and ROE of 13.9% was down from 16.7% in the prior year.

Adjusted net income of $12,118 million was up $54 million from the same period last year. Adjusted diluted EPS of $8.59 was up $0.18 or 2% and adjusted ROE of 15.7% was down from 16.9% in the prior year.

Our earnings were down from the same period last year, primarily driven by the impact of the CRD and other tax related adjustments in the current period, which is reported in Corporate Support. Our results also reflect lower earnings in Wealth Management, Insurance and Personal & Commercial Banking. This was partially offset by higher results in Capital Markets. Current period results include higher PCL, reflecting higher provisions on impaired loans and provisions taken on performing loans as compared to releases of provisions on performing loans in the same period last year.

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

Adjusted results

Adjusted results exclude specified items, consisting of the CRD and other tax related adjustments and HSBC Canada transaction and integration costs (net of tax), as well as the after-tax impact of amortization of acquisition-related intangibles. Adjusted results are non-GAAP measures. For further details, including a reconciliation, refer to the Key performance and non-GAAP measures section.

Impact of foreign currency translation

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

	For the three months ended		For the nine months ended
(Millions of Canadian dollars, except per share amounts)	Q3 2023 vs. Q3 2022	Q3 2023 vs. Q2 2023	Q3 2023 vs. Q3 2022
Increase (decrease):			
Total revenue	$ 277	$ (84)	$ 812
PCL	10	(6)	25
Non-interest expense	187	(52)	515
Income taxes	(3)	–	6
Net income	83	(26)	266
Impact on EPS			
Basic	$ 0.06	$ (0.02)	$ 0.19
Diluted	0.06	(0.02)	0.19

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

	For the three months ended			For the nine months ended	
(Average foreign currency equivalent of C$1.00) (1)	**July 31 2023**	April 30 2023	July 31 2022	**July 31 2023**	July 31 2022
U.S. dollar	**0.750**	0.737	0.783	**0.744**	0.786
British pound	**0.592**	0.599	0.636	**0.601**	0.608
Euro	**0.690**	0.681	0.747	**0.690**	0.721

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

Total revenue

	For the three months ended			For the nine months ended	
(Millions of Canadian dollars, except percentage amounts)	**July 31 2023**	April 30 2023	July 31 2022	**July 31 2023**	July 31 2022
Interest and dividend income	**$ 22,834**	$ 20,318	$ 10,737	**$ 62,489**	$ 25,873
Interest expense	**16,548**	14,219	4,847	**43,902**	9,438
Net interest income	**$ 6,286**	$ 6,099	$ 5,890	**$ 18,587**	$ 16,435
NIM	**1.50%**	1.53%	1.52%	**1.50%**	1.46%
Insurance premiums, investment and fee income	**$ 1,848**	$ 1,347	$ 1,233	**$ 5,086**	$ 2,866
Trading revenue	**485**	430	(128)	**1,984**	475
Investment management and custodial fees	**2,099**	2,083	1,857	**6,238**	5,710
Mutual fund revenue	**1,034**	1,000	1,028	**3,049**	3,279
Securities brokerage commissions	**362**	377	344	**1,100**	1,132
Service charges	**529**	511	499	**1,551**	1,464
Underwriting and other advisory fees	**472**	458	369	**1,442**	1,577
Foreign exchange revenue, other than trading	**289**	322	250	**1,044**	772
Card service revenue	**334**	279	314	**938**	893
Credit fees	**342**	357	301	**1,078**	1,175
Net gains on investment securities	**27**	111	28	**191**	66
Share of profit in joint ventures and associates	**(37)**	12	33	**4**	86
Other	**419**	134	114	**811**	488
Non-interest income	**8,203**	7,421	6,242	**24,516**	19,983
Total revenue	**$ 14,489**	$ 13,520	$ 12,132	**$ 43,103**	$ 36,418
Additional trading information					
Net interest income (1)	**$ 510**	$ 469	$ 465	**$ 1,165**	$ 1,621
Non-interest income	**485**	430	(128)	**1,984**	475
Total trading revenue	**$ 995**	$ 899	$ 337	**$ 3,149**	$ 2,096

(1) Reflects net interest income arising from trading-related positions, including assets and liabilities that are classified or designated at fair value through profit or loss (FVTPL).

Q3 2023 vs. Q3 2022

Total revenue increased $2,357 million or 19% from a year ago, mainly due to higher Insurance premiums, investment and fee income (insurance revenue) and trading revenue, including the impact of loan underwriting markdowns in the prior year. Higher net interest income, other revenue, investment management and custodial fees as well as underwriting and other advisory fees also contributed to the increase. The impact of foreign exchange translation increased revenue by $277 million.

Net interest income increased $396 million or 7%, largely due to higher spreads and average volume growth in both deposits and loans in Canadian Banking. These factors were partially offset by lower revenue from non-trading derivatives, which was offset in Other revenue, in Capital Markets.

NIM was down 2 bps compared to last year, mainly due to higher funding costs in Capital Markets, with related revenue recorded in non-interest income, and an unfavourable shift in deposit mix in Canadian Banking. These factors were partially offset by the benefit of higher interest rates in Canadian Banking.

Insurance revenue increased $615 million or 50%, primarily due to higher group annuity sales and business growth across most products, partially offset by the change in fair value of investments backing policyholder liabilities, all of which are largely offset in PBCAE.

Trading revenue increased $613 million, as the prior year included the impact of loan underwriting markdowns, partially offset by lower equity trading revenue in the U.S. and Europe.

Investment management and custodial fees increased $242 million or 13%, mainly reflecting the inclusion of RBC Brewin Dolphin.

Underwriting and other advisory fees increased $103 million or 28%, largely due to higher debt origination across all regions.

Other revenue increased $305 million, mainly attributable to gains from our non-trading portfolios, which were offset in Net interest income, and 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 the gain on the partial sale of RBC Investor Services operations. These factors were partially offset by the impact of economic hedges.

Q3 2023 vs. Q2 2023

Total revenue increased $969 million or 7% from last quarter, largely due to higher insurance revenue, other revenue and net interest income.

Net interest income increased $187 million or 3%, primarily driven by the impact of three more days in the current quarter to Canadian Banking and Wealth Management, and higher spreads and average volume growth in Canadian Banking.

Insurance revenue increased $501 million or 37%, primarily due to higher group annuity sales, partially offset by the change in fair value of investments backing policyholder liabilities, both of which are largely offset in PBCAE.

Other revenue increased $285 million, mainly 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, gains from our non-trading portfolios and the gain on the partial sale of RBC Investor Services operations. These factors were partially offset by the impact of economic hedges.

Q3 2023 vs. Q3 2022 (Nine months ended)

Total revenue increased $6,685 million or 18% from the same period last year, primarily driven by higher insurance revenue, net interest income and trading revenue, including the impact of loan underwriting markdowns in the prior year. Higher investment management and custodial fees, other revenue, as well as foreign exchange revenue, other than trading also contributed to the increase. These factors were partially offset by lower mutual fund revenue. The impact of foreign exchange translation increased revenue by $812 million.

Net interest income increased $2,152 million or 13%, largely due to higher spreads in Canadian Banking and Wealth Management and average volume growth in Canadian Banking. These factors were partially offset by lower revenue from non-trading derivatives, which was offset in Other revenue, and lower fixed income trading revenue, both in Capital Markets.

Insurance revenue increased $2,220 million or 77%, primarily due to the change in fair value of investments backing policyholder liabilities.

Trading revenue increased $1,509 million, mainly due to higher fixed income trading revenue across all regions. The prior year also included the impact of loan underwriting markdowns. This factor was partially offset by lower equity trading revenue across the U.S. and Europe.

Investment management and custodial fees increased $528 million or 9%, mainly reflecting the inclusion of RBC Brewin Dolphin.

Mutual fund revenue decreased $230 million or 7%, mainly reflecting lower average fee-based client assets driven by unfavourable market conditions in Wealth Management, and lower average mutual fund balances driving lower distribution fees in Canadian Banking.

Foreign exchange revenue, other than trading increased $272 million or 35%, primarily driven by foreign currency translation gains associated with certain foreign currency denominated funding, which was offset by the impact of economic hedges in Other revenue.

Other revenue increased $323 million or 66%, mainly attributable to gains from our non-trading portfolios, which were offset in Net interest income, and 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. These factors were partially offset by the impact of economic hedges.

Provision for credit losses (1)

	For the three months ended			For the nine months ended	
(Millions of Canadian dollars, except percentage amounts)	**July 31 2023**	April 30 2023	July 31 2022	**July 31 2023**	July 31 2022
Personal & Commercial Banking	**$ 2**	$ 124	$ 145	**$ 266**	$ (337)
Wealth Management (2)	**64**	2	13	**90**	(31)
Capital Markets (2)	**54**	47	20	**110**	(39)
Corporate Support and other (3)	**–**	–	(1)	**–**	–
PCL on performing loans	**120**	173	177	**466**	(407)
Personal & Commercial Banking	**$ 303**	$ 302	$ 185	**$ 867**	$ 523
Wealth Management (2)	**38**	26	1	**106**	2
Capital Markets (2)	**158**	113	(17)	**324**	(2)
Corporate Support and other (3)	**–**	–	1	**–**	1
PCL on impaired loans	**499**	441	170	**1,297**	524
PCL – Loans	**619**	614	347	**1,763**	117
PCL – Other (4)	**(3)**	(14)	(7)	**(15)**	(14)
Total PCL	**$ 616**	$ 600	$ 340	**$ 1,748**	$ 103
PCL on loans is comprised of:					
Retail	**$ (1)**	$ 97	$ 133	**$ 230**	$ (113)
Wholesale	**121**	76	44	**236**	(294)
PCL on performing loans	**120**	173	177	**466**	(407)
Retail	**270**	249	163	**758**	447
Wholesale	**229**	192	7	**539**	77
PCL on impaired loans	**499**	441	170	**1,297**	524
PCL – Loans	**$ 619**	$ 614	$ 347	**$ 1,763**	$ 117
PCL on loans as a % of average net loans and acceptances	**0.29%**	0.30%	0.17%	**0.28%**	0.02%
PCL on impaired loans as a % of average net loans and acceptances	**0.23%**	0.21%	0.08%	**0.20%**	0.09%

(1) Information on loans represents loans, acceptances and commitments.
(2) Amounts have been revised from those previously presented to conform to our new basis of segment presentation. For further details, refer to the About Royal Bank of Canada section.
(3) Includes PCL recorded in Corporate Support and Insurance.
(4) PCL – Other includes amounts related to debt securities measured at fair value through other comprehensive income (FVOCI) and amortized cost, accounts receivable, and financial and purchased guarantees.

Q3 2023 vs. Q3 2022

Total PCL increased $276 million or 81% from a year ago, primarily reflecting higher provisions in Capital Markets and Wealth Management. The PCL on loans ratio increased 12 bps.

PCL on performing loans decreased $57 million or 32%, primarily reflecting lower provisions in our Canadian Banking retail portfolios, mainly driven by favourable changes to our macroeconomic outlook, including the impact of a favourable revision to our Canadian housing price forecast. This was partially offset by higher provisions in U.S. Wealth Management (including City National) and Capital Markets, reflecting unfavourable changes to our credit quality and macroeconomic outlook.

PCL on impaired loans increased $329 million, mainly due to provisions taken in Capital Markets in the current quarter in a few sectors, including the real estate and related, transportation and industrial products sectors, compared to recoveries in the same quarter last year. Higher provisions in our Canadian Banking retail portfolios also contributed to the increase.

Q3 2023 vs. Q2 2023

Total PCL increased $16 million or 3% from last quarter, primarily reflecting higher provisions in Wealth Management and Capital Markets, largely offset by lower provisions in Personal & Commercial Banking. The PCL on loans ratio decreased 1 bp.

PCL on performing loans decreased $53 million or 31%, mainly due to lower provisions in our Canadian Banking retail portfolios, largely driven by favourable changes to our macroeconomic and credit quality outlook, including the impact of a favourable revision to our Canadian housing price forecast. This was partially offset by higher provisions in U.S. Wealth Management (including City National), primarily driven by unfavourable changes to our macroeconomic and credit quality outlook.

PCL on impaired loans increased $58 million or 13%, mainly due to higher provisions in Capital Markets in a few sectors.

Q3 2023 vs. Q3 2022 (Nine months ended)

Total PCL increased $1,645 million from the same period last year, mainly reflecting higher provisions in Personal & Commercial Banking. Provisions taken in the current period as compared to releases in the prior period in Capital Markets and Wealth Management also contributed to the increase. The PCL on loans ratio increased 26 bps.

PCL on performing loans was $466 million compared to $(407) million in the same period last year, primarily reflecting provisions taken in the current period driven by unfavourable changes to our credit quality and macroeconomic outlook as compared to releases in the prior period which reflected reduced uncertainty from the COVID-19 pandemic, in Personal & Commercial Banking, Capital Markets and U.S. Wealth Management (including City National).

PCL on impaired loans increased $773 million, largely due to higher provisions in our Canadian Banking portfolios. Higher provisions in Capital Markets in a few sectors, including the real estate and related, consumer discretionary and transportation sectors, also contributed to the increase.

Insurance policyholder benefits, claims and acquisition expense (PBCAE)
Q3 2023 vs. Q3 2022
PBCAE increased $529 million or 62% from a year ago, primarily due to higher group annuity sales and business growth, partially offset by the change in fair value of investments backing policyholder liabilities, all of which are largely offset in revenue. PBCAE also reflected higher favourable investment-related experience.

Q3 2023 vs. Q2 2023
PBCAE increased $373 million or 37% from last quarter, mainly due to higher group annuity sales, partially offset by the change in fair value of investments backing policyholder liabilities, both of which are largely offset in revenue. PBCAE also reflected higher favourable investment-related experience.

Q3 2023 vs. Q3 2022 (Nine months ended)
PBCAE increased $2,263 million from the same period last year, primarily reflecting the change in fair value of investments backing policyholder liabilities, which is largely offset in revenue. Higher group annuity sales, increased investment income, and business growth also contributed to the increase. These factors were partially offset by higher favourable investment-related experience.

Non-interest expense

	For the three months ended			For the nine months ended	
(Millions of Canadian dollars, except percentage amounts)	**July 31 2023**	April 30 2023	July 31 2022	**July 31 2023**	July 31 2022
Salaries	**$ 2,190**	$ 2,096	$ 1,820	**$ 6,323**	$ 5,316
Variable compensation	**1,815**	1,812	1,473	**5,652**	5,168
Benefits and retention compensation	**546**	560	497	**1,650**	1,529
Share-based compensation	**243**	132	68	**645**	132
Human resources	**4,794**	4,600	3,858	**14,270**	12,145
Equipment	**611**	589	514	**1,769**	1,528
Occupancy	**411**	408	381	**1,230**	1,153
Communications	**324**	317	277	**923**	763
Professional fees	**592**	521	373	**1,517**	1,039
Amortization of other intangibles	**369**	380	342	**1,118**	1,015
Other	**760**	679	641	**2,203**	1,757
Non-interest expense	**$ 7,861**	$ 7,494	$ 6,386	**$ 23,030**	$ 19,400
Efficiency ratio (1)	**54.3%**	55.4%	52.6%	**53.4%**	53.3%
Adjusted efficiency ratio (2), (3)	**58.5%**	58.8%	56.1%	**57.7%**	55.3%

(1) Efficiency ratio is calculated as Non-interest expense divided by Total revenue.
(2) This is a non-GAAP ratio. For further details, refer to the Key performance and non-GAAP measures section.
(3) Effective Q2 2023, we revised the composition of this non-GAAP ratio. Comparative adjusted amounts have been revised to conform with this presentation.

Q3 2023 vs. Q3 2022
Non-interest expense increased $1,475 million or 23% from a year ago, primarily due to higher staff costs, higher variable compensation commensurate with increased revenue, the inclusion of RBC Brewin Dolphin and related costs, the impact of foreign exchange translation, as well as higher professional fees. The change in the fair value of our U.S. share-based compensation plans, which was largely offset in Other revenue, transaction and integration costs relating to the planned acquisition of HSBC Canada and ongoing technology investments also contributed to the increase.

Our efficiency ratio of 54.3% increased 170 bps from 52.6% last year. Our adjusted efficiency ratio of 58.5% increased 240 bps from 56.1% last year.

Q3 2023 vs. Q2 2023
Non-interest expense increased $367 million or 5% from last quarter, mainly due to the change in the fair value of our U.S. share-based compensation plans, which was largely offset in Other revenue, as well as higher professional fees. Transaction and integration costs relating to the planned acquisition of HSBC Canada and higher staff costs also contributed to the increase. These factors were partially offset by the impact of foreign exchange translation.

Our efficiency ratio of 54.3% decreased 110 bps from 55.4% last quarter. Our adjusted efficiency ratio of 58.5% decreased 30 bps from 58.8% last quarter.

Q3 2023 vs. Q3 2022 (Nine months ended)
Non-interest expense increased $3,630 million or 19% from the same period last year, largely due to higher staff costs, the inclusion of RBC Brewin Dolphin and related costs and the impact of foreign exchange translation. The change in the fair value of our U.S. share-based compensation plans, which was largely offset in Other revenue, higher professional fees, ongoing technology investments, higher variable compensation as well as transaction and integration costs relating to the planned acquisition of HSBC Canada also contributed to the increase.

Our efficiency ratio of 53.4% increased 10 bps from 53.3% last year. Our adjusted efficiency ratio of 57.7% increased 240 bps from 55.3% last year.

Adjusted efficiency ratio is a non-GAAP ratio. For further details, including a reconciliation, refer to the Key performance and non-GAAP measures section.

Income taxes

	For the three months ended			For the nine months ended	
(Millions of Canadian dollars, except percentage amounts)	**July 31 2023**	April 30 2023	July 31 2022	**July 31 2023**	July 31 2022
Income taxes	**$ 761**	$ 771	$ 979	**$ 3,660**	$ 3,323
Income before income taxes	**4,633**	4,420	4,556	**14,395**	15,248
Effective income tax rate	**16.4%**	17.4%	21.5%	**25.4%**	21.8%
Adjusted effective income tax rate (1), (2)	**16.7%**	17.6%	21.5%	**18.2%**	21.8%

(1) This is a non-GAAP measure. For further details, including a reconciliation, refer to the Key performance and non-GAAP measures section.
(2) Effective Q2 2023, we revised the composition of this non-GAAP measure. Comparative adjusted amounts have been revised to conform with this presentation.

Q3 2023 vs. Q3 2022
Income tax expense decreased $218 million or 22% and the effective income tax rate of 16.4% decreased 5.1% from a year ago, primarily due to the impact of changes in earnings mix, partially offset by the impact of the 1.5% increase in the Canadian corporate tax rate enacted in the current year.

Q3 2023 vs. Q2 2023
Income tax expense decreased $10 million or 1% from last quarter, largely due to the net impact of tax adjustments as well as the impact of changes in earnings mix, partially offset by higher income before income taxes.

The effective income tax rate of 16.4% decreased 1.0%, primarily due to the net impact of tax adjustments.

Q3 2023 vs. Q3 2022 (Nine months ended)
Income tax expense increased $337 million or 10%, from the same period last year, primarily due to the impact of the CRD and other tax related adjustments and the 1.5% increase in the Canadian corporate tax rate in the current period. These factors were partially offset by the impact of changes in earnings mix and lower income before income taxes.

The effective income tax rate of 25.4% increased 3.6%, primarily due to the impact of the CRD and other tax related adjustments noted above and the 1.5% increase in the Canadian corporate tax rate. These factors were partially offset by the impact of changes in earnings mix. The adjusted effective income tax rate of 18.2% decreased 3.6% mainly due to the impact of changes in earnings mix, partially offset by the 1.5% increase in the Canadian corporate tax rate in the current period.

The adjusted effective income tax rate is a non-GAAP measure. For further details, including a reconciliation, refer to the Key performance and non-GAAP measures section.

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. Effective the first quarter of 2023, we simplified our reporting structure by eliminating the Investor & Treasury Services segment and moving its former businesses to existing segments. For further details, refer to the About Royal Bank of Canada section. Other than changes necessary to effect our new basis of segment presentation, our key methodologies and assumptions remain unchanged from October 31, 2022.

For further details on the key methodologies and assumptions used in our management reporting framework, refer to the How we measure and report our business segments section of our 2022 Annual Report.

Key performance and non-GAAP measures

Performance measures
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. Certain financial metrics, including ROE, do not have a standardized meaning under generally accepted accounting principles (GAAP) and may not be comparable to similar measures disclosed by other financial institutions.

Return on common equity
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.

Our consolidated ROE calculation is based on net income available to common shareholders divided by total average common equity for the period. Business segment ROE calculations are based on net income available to common shareholders divided by average attributed capital for the period. For each segment, average attributed capital includes the capital required to underpin various risks as described in the Capital management section and amounts invested in goodwill and intangibles.

The attribution of capital involves the use of assumptions, judgments and methodologies that are regularly reviewed and revised by management as deemed necessary. Changes to such assumptions, judgments and methodologies can have a material effect on the business segment ROE information that we report. Other companies that disclose information on similar attributions and related return measures may use different assumptions, judgments and methodologies.

The following table provides a summary of our ROE calculations:

	For the three months ended							
	July 31 2023						April 30 2023	July 31 2022
(Millions of Canadian dollars, except percentage amounts)	Personal & Commercial Banking	Wealth Management	Insurance	Capital Markets	Corporate Support	Total	Total	Total
Net income available to common shareholders	$ 2,115	$ 661	$ 226	$ 923	$ (113)	$ 3,812	$ 3,581	$ 3,517
Total average common equity (1), (2)	29,900	24,200	2,200	27,500	20,050	103,850	101,850	95,750
ROE (3)	28.1%	10.8%	40.7%	13.3%	n.m.	14.6%	14.4%	14.6%

	For the nine months ended						
	July 31 2023						July 31 2022
(Millions of Canadian dollars, except percentage amounts)	Personal & Commercial Banking	Wealth Management	Insurance	Capital Markets	Corporate Support	Total	Total
Net income available to common shareholders	$ 6,122	$ 2,224	$ 511	$ 3,055	$ (1,351)	$ 10,561	$ 11,738
Total average common equity (1), (2)	29,100	24,450	2,100	27,800	18,350	101,800	93,850
ROE (3)	28.1%	12.1%	32.3%	14.7%	n.m.	13.9%	16.7%

(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 (including non-GAAP ratios) are more reflective of our ongoing operating results and provide readers with a better understanding of management's perspective on our performance. These measures enhance the comparability of our financial performance for the three and nine months ended July 31, 2023 with the corresponding periods in the prior year and the three months ended April 30, 2023. 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.

Adjusted results

We believe that providing adjusted results and certain measures excluding the impact of the specified items discussed below and amortization of acquisition-related intangibles enhance comparability with prior periods and enables readers to better assess trends in the underlying businesses. Specified items impacting our results for the three and nine months ended July 31, 2023 and the three months ended April 30, 2023 are:

- CRD and other tax related adjustments: reflects the impact of the CRD and the 1.5% increase in the Canadian corporate tax rate applicable to fiscal 2022, net of deferred tax adjustments, which were announced in the Government of Canada's 2022 budget and enacted in the first quarter of 2023
- Transaction and integration costs relating to our planned acquisition of HSBC Canada

Adjusted efficiency ratio

The adjusted efficiency ratio is a non-GAAP ratio and is calculated based on adjusted Non-interest expense excluding HSBC Canada transaction and integration costs and amortization of acquisition-related intangibles divided by total revenue net of PBCAE, both of which are non-GAAP measures. We believe that the adjusted efficiency ratio is a useful measure as the change in fair value of investments backing policyholder liabilities can lead to volatility in revenue, which is largely offset within PBCAE, that could obscure trends in underlying business performance and reduce comparability with prior periods.

Consolidated results, reported and adjusted

The following table provides a reconciliation of adjusted results to our reported results and illustrates the calculation of adjusted measures presented. The adjusted results and measures presented below are non-GAAP measures or ratios.

	As at or for the three months ended			As at or for the nine months ended	
(Millions of Canadian dollars, except per share, number of and percentage amounts)	**July 31 2023**	April 30 2023	July 31 2022 (1)	**July 31 2023**	July 31 2022 (1)
Total revenue	**$ 14,489**	$ 13,520	$ 12,132	**$ 43,103**	$ 36,418
PCL	**616**	600	340	**1,748**	103
Non-interest expense	**7,861**	7,494	6,386	**23,030**	19,400
Income before income taxes	**4,633**	4,420	4,556	**14,395**	15,248
Income taxes	**761**	771	979	**3,660**	3,323
Net income	**$ 3,872**	$ 3,649	$ 3,577	**$ 10,735**	$ 11,925
Net income available to common shareholders	**$ 3,812**	$ 3,581	$ 3,517	**$ 10,561**	$ 11,738
Average number of common shares (thousands)	**1,393,515**	1,388,388	1,396,381	**1,388,217**	1,409,292
Basic earnings per share (in dollars)	**$ 2.74**	$ 2.58	$ 2.52	**$ 7.61**	$ 8.33
Average number of diluted common shares (thousands)	**1,394,939**	1,390,149	1,398,667	**1,389,857**	1,411,934
Diluted earnings per share (in dollars)	**$ 2.73**	$ 2.58	$ 2.51	**$ 7.60**	$ 8.31
ROE (2)	**14.6%**	14.4%	14.6%	**13.9%**	16.7%
Effective income tax rate	**16.4%**	17.4%	21.5%	**25.4%**	21.8%
Total adjusting items impacting net income (before-tax)	**$ 191**	$ 138	$ 62	**$ 426**	$ 188
Specified item: HSBC Canada transaction and integration costs (3)	**110**	56	–	**177**	–
Amortization of acquisition-related intangibles (4)	**81**	82	62	**249**	188
Total income taxes for adjusting items impacting net income	**$ 46**	$ 29	$ 16	**$ (957)**	$ 49
Specified item: CRD and other tax related adjustments (3), (5)	**–**	–	–	**(1,050)**	–
Specified item: HSBC Canada transaction and integration costs (3)	**26**	13	–	**42**	–
Amortization of acquisition-related intangibles (4)	**20**	16	16	**51**	49
Adjusted results (6)					
Income before income taxes – adjusted	**4,824**	4,558	4,618	**14,821**	15,436
Income taxes – adjusted	**807**	800	995	**2,703**	3,372
Net income – adjusted	**$ 4,017**	$ 3,758	$ 3,623	**$ 12,118**	$ 12,064
Net income available to common shareholders – adjusted	**$ 3,957**	$ 3,690	$ 3,563	**$ 11,944**	$ 11,877
Average number of common shares (thousands)	**1,393,515**	1,388,388	1,396,381	**1,388,217**	1,409,292
Basic earnings per share (in dollars) – adjusted	**$ 2.84**	$ 2.66	$ 2.55	**$ 8.60**	$ 8.43
Average number of diluted common shares (thousands)	**1,394,939**	1,390,149	1,398,667	**1,389,857**	1,411,934
Diluted earnings per share (in dollars) – adjusted	**$ 2.84**	$ 2.65	$ 2.55	**$ 8.59**	$ 8.41
ROE – adjusted	**15.1%**	14.9%	14.8%	**15.7%**	16.9%
Adjusted effective income tax rate	**16.7%**	17.6%	21.5%	**18.2%**	21.8%

Adjusted efficiency ratio (7)					
Total revenue	**$ 14,489**	$ 13,520	$ 12,132	**$ 43,103**	$ 36,418
Less: PBCAE	**1,379**	1,006	850	**3,930**	1,667
Total revenue – adjusted	**$ 13,110**	$ 12,514	$ 11,282	**$ 39,173**	$ 34,751
Non-interest expense	**$ 7,861**	$ 7,494	$ 6,386	**$ 23,030**	$ 19,400
Less specified item: HSBC Canada transaction and integration costs (before-tax) (3)	**110**	56	–	**177**	–
Less: Amortization of acquisition-related intangibles (before-tax) (4)	**81**	82	62	**249**	188
Non-interest expense – adjusted	**$ 7,670**	$ 7,356	$ 6,324	**$ 22,604**	$ 19,212
Efficiency ratio	**54.3%**	55.4%	52.6%	**53.4%**	53.3%
Efficiency ratio – adjusted	**58.5%**	58.8%	56.1%	**57.7%**	55.3%

(1) There were no specified items for the three months ended July 31, 2022 or for the nine months ended July 31, 2022.
(2) ROE is based on actual balances of average common equity before rounding.
(3) These amounts have been recognized in Corporate Support.
(4) Represents the impact of amortization of acquisition-related intangibles (excluding amortization of software), and any goodwill impairment.
(5) The impact of the CRD and other tax related adjustments does not include $0.2 billion recognized in other comprehensive income.
(6) Effective the second quarter of 2023, we included HSBC Canada transaction and integration costs and amortization of acquisition-related intangibles as adjusting items for non-GAAP measures and non-GAAP ratios. Therefore, comparative adjusted results have been revised from those previously presented to conform to our basis of presentation for this non-GAAP measure.
(7) Effective the second quarter of 2023, we revised the composition of this non-GAAP ratio, which is calculated based on adjusted Non-interest expense excluding HSBC Canada transaction and integration costs and amortization of acquisition-related intangibles divided by total revenue net of PBCAE. Therefore, comparative adjusted results have been revised from those previously presented to conform to our basis of presentation for this non-GAAP ratio.

Personal & Commercial Banking

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	As at or for the three months ended July 31 2023	April 30 2023	July 31 2022	As at or for the nine months ended July 31 2023	July 31 2022
Net interest income	**$ 4,062**	$ 3,817	$ 3,655	**$ 11,886**	$ 10,118
Non-interest income	**1,501**	1,481	1,527	**4,516**	4,606
Total revenue	**5,563**	5,298	5,182	**16,402**	14,724
PCL on performing assets	**5**	122	141	**268**	(339)
PCL on impaired assets	**300**	300	183	**860**	516
PCL	**305**	422	324	**1,128**	177
Non-interest expense	**2,319**	2,257	2,130	**6,805**	6,167
Income before income taxes	**2,939**	2,619	2,728	**8,469**	8,380
Net income	**$ 2,134**	$ 1,915	$ 2,023	**$ 6,175**	$ 6,231
Revenue by business					
Canadian Banking	**$ 5,292**	$ 5,040	$ 4,974	**$ 15,616**	$ 14,103
Caribbean & U.S. Banking	**271**	258	208	**786**	621
Selected balance sheet and other information					
ROE	**28.1%**	26.5%	29.2%	**28.1%**	31.0%
NIM	**2.74%**	2.70%	2.61%	**2.73%**	2.50%
Efficiency ratio (1)	**41.7%**	42.6%	41.1%	**41.5%**	41.9%
Operating leverage (1)	**(1.5)%**	(0.2)%	4.8%	**1.1%**	2.5%
Average total earning assets, net	**$ 588,400**	$ 579,800	$ 555,400	**$ 581,400**	$ 542,100
Average loans and acceptances, net	**596,000**	586,700	560,300	**588,200**	546,300
Average deposits	**601,100**	588,000	555,300	**589,600**	546,000
AUA (2)	**353,400**	351,100	346,500	**353,400**	346,500
Average AUA	**349,100**	347,900	343,500	**346,800**	361,400
PCL on impaired loans as a % of average net loans and acceptances	**0.20%**	0.21%	0.13%	**0.20%**	0.13%
Other selected information – Canadian Banking					
Net income	**$ 2,043**	$ 1,825	$ 1,971	**$ 5,924**	$ 6,025
NIM	**2.68%**	2.65%	2.60%	**2.69%**	2.49%
Efficiency ratio	**40.5%**	41.4%	39.7%	**40.3%**	40.6%
Operating leverage	**(2.0)%**	(0.6)%	4.5%	**0.8%**	2.1%

(1) See Glossary for composition of this measure.
(2) AUA represents period-end spot balances and includes securitized residential mortgages and credit card loans as at July 31, 2023 of $13 billion and $7 billion, respectively (April 30, 2023 – $15 billion and $8 billion; July 31, 2022 – $14 billion and $5 billion).

Financial performance

Q3 2023 vs. Q3 2022

Net income increased $111 million or 5% from a year ago, primarily attributable to higher net interest income reflecting higher spreads and average volume growth of 7% in Canadian Banking. These factors were partially offset by the retrospective impact of HST on payment card clearing services, which was announced in the Government of Canada's 2023 budget and enacted in the current quarter, as well as higher staff-related costs and ongoing technology investments.

Total revenue increased $381 million or 7%.

Canadian Banking revenue increased $318 million or 6%, primarily due to higher net interest income reflecting higher spreads and average volume growth of 8% in deposits and 6% in loans. Increased client activity contributed to higher service charges and foreign exchange revenue. These factors were partially offset by the retrospective impact of HST on payment card clearing services as described above.

Caribbean & U.S. Banking revenue increased $63 million or 30%, mainly due to higher net interest income reflecting improved spreads.

NIM was up 13 bps, mainly due to the impact of the rising interest rate environment, partially offset by an unfavourable shift in deposit mix.

PCL decreased $19 million or 6%, primarily reflecting lower provisions on performing loans in our Canadian Banking retail portfolios, mainly driven by favourable changes to our macroeconomic outlook, including the impact of a favourable revision to our Canadian housing price forecast. This was partially offset by higher provisions on impaired loans in our Canadian Banking retail portfolios, resulting in an increase of 7 bps in the PCL on impaired loans ratio.

Non-interest expense increased $189 million or 9%, primarily attributable to higher staff-related costs, ongoing technology investments and higher marketing costs.

Q3 2023 vs. Q2 2023

Net income increased $219 million or 11% from last quarter, primarily attributable to higher net interest income driven by the impact of three more days in the current quarter, higher spreads and average volume growth of 2% in Canadian Banking. Lower PCL on performing loans, mainly in our Canadian Banking retail portfolios driven by favourable changes to our macroeconomic and credit quality outlook, including the impact of a favourable revision to our Canadian housing price forecast, and higher card service revenue also contributed to the increase. These factors were partially offset by the retrospective impact of HST on payment card clearing services as described above, as well as ongoing technology investments.

NIM was up 4 bps, mainly due to the impact of the rising interest rate environment.

Q3 2023 vs. Q3 2022 (Nine months ended)

Net income decreased $56 million or 1% from the same period last year, primarily attributable to higher PCL, higher staff-related costs and ongoing technology investments. A higher effective tax rate reflecting the 1.5% increase in the Canadian corporate tax rate also contributed to the decrease. These factors were largely offset by higher net interest income.

Total revenue increased $1,678 million or 11%, mainly due to higher net interest income reflecting higher spreads and average volume growth in Canadian Banking of 8% in both deposits and loans.

PCL increased $951 million, mainly reflecting provisions taken on performing loans in the current period, primarily in our Canadian Banking portfolios, driven by unfavourable changes to our credit quality and macroeconomic outlook as compared to releases in the prior period which reflected reduced uncertainty relating to the COVID-19 pandemic. The current period also reflected higher provisions on impaired loans, primarily in our Canadian Banking retail portfolios, resulting in an increase of 7 bps in the PCL on impaired loans ratio.

Non-interest expense increased $638 million or 10%, primarily attributable to higher staff-related costs and ongoing technology investments.

Wealth Management

(Millions of Canadian dollars, except number of, percentage amounts and as otherwise noted)	As at or for the three months ended July 31 2023	April 30 2023	July 31 2022 (1)	As at or for the nine months ended July 31 2023	July 31 2022 (1)
Net interest income	$ 1,007	$ 1,096	$ 1,051	$ 3,328	$ 2,782
Non-interest income	3,411	3,328	2,971	10,099	9,259
Total revenue	4,418	4,424	4,022	13,427	12,041
PCL on performing assets	64	2	13	90	(31)
PCL on impaired assets	38	26	1	106	2
PCL	102	28	14	196	(29)
Non-interest expense	3,498	3,447	2,929	10,379	8,844
Income before income taxes	818	949	1,079	2,852	3,226
Net income	$ 674	$ 742	$ 821	$ 2,264	$ 2,451
Revenue by business					
Canadian Wealth Management	$ 1,111	$ 1,094	$ 1,070	$ 3,316	$ 3,213
U.S. Wealth Management (including City National)	1,969	2,005	1,878	6,102	5,380
U.S. Wealth Management (including City National) (US$ millions)	1,477	1,477	1,470	4,539	4,228
Global Asset Management	635	634	609	1,952	2,023
International Wealth Management	324	323	98	935	257
Investor Services (2)	379	368	367	1,122	1,168
Selected balance sheet and other information					
ROE	10.8%	12.1%	15.7%	12.1%	16.3%
NIM	2.29%	2.44%	2.59%	2.46%	2.30%
Pre-tax margin (3)	18.5%	21.5%	26.8%	21.2%	26.8%
Number of advisors (4)	6,239	6,246	5,622	6,239	5,622
Average total earning assets, net	$ 174,200	$ 184,000	$ 161,300	$ 181,200	$ 161,800
Average loans and acceptances, net	119,300	121,600	111,600	121,100	106,500
Average deposits (2)	154,300	158,600	194,600	166,300	198,800
AUA (2), (5)	4,043,600	5,540,900	5,385,000	4,043,600	5,385,000
U.S. Wealth Management (including City National) (5)	756,300	737,500	683,400	756,300	683,400
U.S. Wealth Management (including City National) (US$ millions) (5)	573,500	544,300	533,600	573,500	533,600
Investor Services (5)	2,544,500	4,067,800	4,089,900	2,544,500	4,089,900
AUM (5)	1,086,800	1,074,900	929,600	1,086,800	929,600
Average AUA (2)	4,987,300	5,499,000	5,540,800	5,301,000	5,797,100
Average AUM	1,074,600	1,060,300	922,000	1,054,000	974,400
PCL on impaired loans as a % of average net loans and acceptances	0.13%	0.09%	0.00%	0.12%	0.00%

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 Q3 2023 vs. Q3 2022	Q3 2023 vs. Q2 2023	For the nine months ended Q3 2023 vs. Q3 2022
Increase (decrease):			
Total revenue	$ 131	$ (34)	$ 380
PCL	3	(3)	8
Non-interest expense	111	(30)	315
Net income	15	(1)	46
Percentage change in average U.S. dollar equivalent of C$1.00	(4)%	2%	(5)%
Percentage change in average British pound equivalent of C$1.00	(7)%	(1)%	(1)%
Percentage change in average Euro equivalent of C$1.00	(8)%	1%	(4)%

(1) Amounts have been revised from those previously presented to conform to our new basis of segment presentation. For further details, refer to the About Royal Bank of Canada section.
(2) On July 3, 2023, we completed the partial sale of RBC Investor Services operations. The completion of the sale of the business of the U.K. branch of RBC Investor Services Trust and the RBC Investor Services business in Jersey remains subject to customary closing conditions, including regulatory approvals. For further details, refer to Note 6 of our Condensed Financial Statements.
(3) Pre-tax margin is defined as Income before income taxes divided by Total revenue.
(4) Represents client-facing advisors across all of our Wealth Management businesses.
(5) Represents period-end spot balances.

Financial performance

Q3 2023 vs. Q3 2022

Net income decreased $147 million or 18% from a year ago, mainly reflecting continued investments in the operational infrastructure of City National and higher PCL, partly offset by the gain on the partial sale of RBC Investor Services operations.

Total revenue increased $396 million or 10%.

Canadian Wealth Management revenue increased $41 million or 4%, primarily due to higher average fee-based client assets reflecting market appreciation and net sales.

U.S. Wealth Management (including City National) revenue increased $91 million or 5%. In U.S. dollars, revenue increased $7 million, as benefits from hedging activities in the current quarter and higher revenue from sweep deposits more than offset the impact of spread compression driven by higher funding costs.

Global Asset Management revenue increased $26 million or 4%, primarily due to the impact of foreign exchange translation.

International Wealth Management revenue increased $226 million, mainly reflecting the inclusion of RBC Brewin Dolphin, as well as an increase in net interest income driven by higher spreads.

Investor Services revenue increased $12 million or 3%, primarily due to the gain on the partial sale of RBC Investor Services operations, partially offset by reduced revenue due to the sale.

PCL increased $88 million, primarily in U.S. Wealth Management (including City National), reflecting higher provisions on performing loans, mainly driven by unfavourable changes to our credit quality and macroeconomic outlook. Higher provisions on impaired loans, primarily in the real estate and related sector, also contributed to an increase of 13 bps in the PCL on impaired loans ratio.

Non-interest expense increased $569 million or 19%, largely due to the inclusion of RBC Brewin Dolphin and related costs. Continued investments in the operational infrastructure of City National, including higher professional fees and staff costs, as well as the impact of foreign exchange translation, also contributed to the increase. The current quarter also reflects lower expenses due to the partial sale of RBC Investor Services operations.

Q3 2023 vs. Q2 2023

Net income decreased $68 million or 9% from last quarter, primarily due to higher PCL on performing loans, largely driven by unfavourable changes to our macroeconomic and credit quality outlook. Lower net interest income, largely reflecting the impact of lower spreads and deposit volume and an increase in non-interest expenses also contributed to the decrease. These factors were partially offset by the gain on the partial sale of RBC Investor Services operations and higher average fee-based client assets reflecting market appreciation.

Q3 2023 vs. Q3 2022 (Nine months ended)

Net income decreased $187 million or 8% from the same period last year, mainly due to lower average fee-based client assets, higher PCL as well as higher staff costs and professional fees. These factors were partially offset by an increase in net interest income and higher revenue from sweep deposits.

Total revenue increased $1,386 million or 12%, mainly due to the inclusion of RBC Brewin Dolphin as well as an increase in net interest income driven by higher spreads reflecting higher interest rates, which also drove higher revenue from sweep deposits. The impact of foreign exchange translation also contributed to the increase. These factors were partially offset by lower average fee-based client assets driven by unfavourable market conditions.

PCL was $196 million, compared to $(29) million in the same period last year, primarily in U.S. Wealth Management (including City National), mainly attributable to provisions taken on performing loans in the current period driven by unfavourable changes to our credit quality and macroeconomic outlook as compared to releases in the prior period which reflected reduced uncertainty relating to the COVID-19 pandemic. The current period also reflected higher provisions on impaired loans in a few sectors, including the real estate and related and other services sectors resulting in an increase of 12 bps in the PCL on impaired loans ratio.

Non-interest expense increased $1,535 million or 17%, largely due to the inclusion of RBC Brewin Dolphin and related costs and the impact of foreign exchange translation. Higher staff costs and professional fees, including continued investments in the operational infrastructure of City National as well as the impact of a legal provision release in U.S. Wealth Management (including City National) in the same period last year also contributed to the increase.

Insurance

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	As at or for the three months ended July 31 2023	April 30 2023	July 31 2022	As at or for the nine months ended July 31 2023	July 31 2022
Non-interest income					
Net earned premiums	$ 1,773	$ 1,195	$ 936	$ 4,010	$ 3,745
Investment income, gains/(losses) on assets supporting insurance policyholder liabilities (1)	18	103	245	919	(1,029)
Fee income	57	49	52	157	150
Total revenue	1,848	1,347	1,233	5,086	2,866
Insurance policyholder benefits and claims (1)	1,295	923	773	3,683	1,426
Insurance policyholder acquisition expense	84	83	77	247	241
Non-interest expense	165	159	139	480	431
Income before income taxes	304	182	244	676	768
Net income	$ 227	$ 139	$ 186	$ 514	$ 589
Revenue by business					
Canadian Insurance	$ 1,184	$ 695	$ 597	$ 3,176	$ 783
International Insurance	664	652	636	1,910	2,083
Selected balances and other information					
ROE	40.7%	26.9%	32.3%	32.3%	33.1%
Premiums and deposits (2)	$ 1,974	$ 1,419	$ 1,155	$ 4,632	$ 4,427
Fair value changes on investments backing policyholder liabilities (1)	(99)	12	115	576	(1,448)

(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

Q3 2023 vs. Q3 2022

Net income increased $41 million or 22% from a year ago, primarily due to higher favourable investment-related experience, partially offset by higher capital funding costs.

Total revenue increased $615 million or 50%.

Canadian Insurance revenue increased $587 million or 98%, primarily due to higher group annuity sales and business growth across most products, partially offset by the change in fair value of investments backing policyholder liabilities, all of which are largely offset in PBCAE as indicated below.

International Insurance revenue increased $28 million or 4%, primarily due to business growth in longevity reinsurance, which is largely offset in PBCAE as indicated below.

PBCAE increased $529 million or 62%, primarily due to higher group annuity sales and business growth, partially offset by the change in fair value of investments backing policyholder liabilities, all of which are largely offset in revenue. PBCAE also reflected higher favourable investment-related experience.

Non-interest expense increased $26 million or 19%, largely due to higher staff-related costs and ongoing technology investments.

Q3 2023 vs. Q2 2023

Net income increased $88 million or 63% from last quarter, primarily due to higher favourable investment-related experience.

Q3 2023 vs. Q3 2022 (Nine months ended)

Net income decreased $75 million or 13% from the same period last year, primarily due to higher capital funding costs, partially offset by higher favourable investment-related experience.

Total revenue increased $2,220 million or 77%, primarily due to the change in fair value of investments backing policyholder liabilities.

PBCAE increased $2,263 million, primarily reflecting the change in fair value of investments backing policyholder liabilities, which is largely offset in revenue. Higher group annuity sales, increased investment income, and business growth also contributed to the increase. These factors were partially offset by higher favourable investment-related experience.

Non-interest expense increased $49 million or 11%, largely due to higher staff-related costs and ongoing technology investments.

Capital Markets

(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	As at or for the three months ended July 31 2023	April 30 2023	July 31 2022 (1)	As at or for the nine months ended July 31 2023	July 31 2022 (1)
Net interest income (2)	$ 891	$ 920	$ 1,233	$ 2,579	$ 3,760
Non-interest income (2)	1,772	1,712	631	5,837	3,599
Total revenue (2)	2,663	2,632	1,864	8,416	7,359
PCL on performing assets	51	37	19	100	(52)
PCL on impaired assets	158	113	(17)	324	6
PCL	209	150	2	424	(46)
Non-interest expense	1,620	1,510	1,186	4,831	4,136
Income before income taxes	834	972	676	3,161	3,269
Net income	$ 938	$ 939	$ 599	$ 3,100	$ 2,578
Revenue by business					
Corporate and Investment Banking	$ 1,260	$ 1,331	$ 725	$ 3,890	$ 3,381
Global Markets	1,484	1,393	1,258	4,762	4,302
Other	(81)	(92)	(119)	(236)	(324)
Selected balance sheet and other information					
ROE	13.3%	13.7%	8.4%	14.7%	12.7%
Average total assets	$ 1,082,600	$ 994,800	$ 1,033,900	$ 1,088,400	$ 1,025,100
Average trading securities	157,400	143,000	134,700	151,900	139,900
Average loans and acceptances, net	136,700	139,000	127,600	138,100	120,700
Average deposits	285,500	296,800	281,700	296,400	280,800
PCL on impaired loans as a % of average net loans and acceptances	0.46%	0.33%	(0.05)%	0.31%	0.00%

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 Q3 2023 vs. Q3 2022	Q3 2023 vs. Q2 2023	For the nine months ended Q3 2023 vs. Q3 2022
Increase (decrease):			
Total revenue	$ 111	$ (33)	$ 318
PCL	8	(3)	17
Non-interest expense	61	(15)	151
Net income	48	(16)	147
Percentage change in average U.S. dollar equivalent of C$1.00	(4)%	2%	(5)%
Percentage change in average British pound equivalent of C$1.00	(7)%	(1)%	(1)%
Percentage change in average Euro equivalent of C$1.00	(8)%	1%	(4)%

(1) Amounts have been revised from those previously presented to conform to our new basis of segment presentation. For further details, refer to the About Royal Bank of Canada section.
(2) The taxable equivalent basis (teb) adjustment for the three months ended July 31, 2023 was $113 million (April 30, 2023 – $213 million; July 31, 2022 – $143 million) and for the nine months ended July 31, 2023 was $442 million (July 31, 2022 – $430 million). For further discussion, refer to the How we measure and report our business segments section of our 2022 Annual Report.

Financial performance

Q3 2023 vs. Q3 2022

Net income increased $339 million or 57% from a year ago, primarily driven by higher revenue in Corporate and Investment Banking, lower taxes reflecting changes in earnings mix and higher revenue in Global Markets. These factors were partially offset by higher compensation on increased results and higher PCL.

Total revenue increased $799 million or 43%.

Corporate and Investment Banking revenue increased $535 million or 74%, as the prior year included the impact of loan underwriting markdowns. The impact of foreign exchange translation, higher debt origination across all regions, and improved margins in our transaction banking business also contributed to the increase. These factors were partially offset by lower lending revenue across most regions.

Global Markets revenue increased $226 million or 18%, largely due to higher fixed income trading revenue across all regions, partially offset by lower equity trading revenue across all regions.

Other revenue improved $38 million or 32%, primarily reflecting lower residual funding costs.

PCL increased $207 million, primarily reflecting provisions taken on impaired loans in the current quarter in a few sectors, including the real estate and related, transportation and industrial products sectors, compared to recoveries in the same quarter last year resulting in an increase of 51 bps in the PCL on impaired loans ratio.

Non-interest expense increased $434 million or 37%, mainly driven by higher compensation on improved results, the impact of foreign exchange translation and ongoing technology investments.

Q3 2023 vs. Q2 2023

Net income remained relatively flat from last quarter as lower taxes reflecting changes in earnings mix and higher revenue, mainly reflecting higher equity and fixed income trading revenue, were offset by higher expenses and higher PCL on impaired loans in a few sectors.

Q3 2023 vs. Q3 2022 (Nine months ended)
Net income increased $522 million or 20% from the same period last year, mainly driven by lower taxes reflecting changes in earnings mix, as well as higher revenue in Corporate and Investment Banking and Global Markets. These factors were partially offset by higher PCL and higher compensation on increased results.

Total revenue increased $1,057 million or 14%, mainly due to higher fixed income trading revenue across all regions. The prior year also included the impact of loan underwriting markdowns. The impact of foreign exchange translation also contributed to the increase. These factors were partially offset by lower equity trading revenue across all regions.

PCL was $424 million compared to $(46) million in the same period last year, largely reflecting higher provisions on impaired loans in a few sectors, including the real estate and related, consumer discretionary and transportation sectors, resulting in an increase of 31 bps in the PCL on impaired loans ratio. Provisions taken on performing loans in the current period driven by unfavourable changes to our credit quality and macroeconomic outlook as compared to releases in the prior period, which reflected reduced uncertainty relating to the COVID-19 pandemic, also contributed to the increase.

Non-interest expense increased $695 million or 17%, mainly driven by higher compensation on improved results, the impact of foreign exchange translation and ongoing technology investments.

Corporate Support

	For the three months ended			For the nine months ended	
(Millions of Canadian dollars)	**July 31 2023**	April 30 2023	July 31 2022	**July 31 2023**	July 31 2022
Net interest income (loss) (1)	**$ 326**	$ 266	$ (49)	**$ 794**	$ (225)
Non-interest income (loss) (1), (2)	**(329)**	(447)	(120)	**(1,022)**	(347)
Total revenue (1), (2)	**(3)**	(181)	(169)	**(228)**	(572)
PCL	**–**	–	–	**–**	1
Non-interest expense (2)	**259**	121	2	**535**	(178)
Income (loss) before income taxes (1)	**(262)**	(302)	(171)	**(763)**	(395)
Income taxes (recoveries) (1)	**(161)**	(216)	(119)	**555**	(471)
Net income (loss)	**$ (101)**	$ (86)	$ (52)	**$ (1,318)**	$ 76

(1) Teb adjusted.
(2) Revenue for the three months ended July 31, 2023 included gains of $129 million (April 30, 2023 and July 31, 2022 – gains of $11 million and losses of $22 million, respectively) on economic hedges of our U.S. Wealth Management (including City National) share-based compensation plans, and non-interest expense included $118 million (April 30, 2023 and July 31, 2022 – $19 million and $(15) million, respectively) of share-based compensation expense driven by changes in the fair value of liabilities relating to our U.S. Wealth Management (including City National) share-based compensation plans. Revenue for the nine months ended July 31, 2023 included gains of $261 million (July 31, 2022 – losses of $265 million) on economic hedges of our U.S. Wealth Management (including City National) share-based compensation plans, and non-interest expense included $237 million (July 31, 2022 – $(208) million) of share-based compensation expense driven by changes in the fair value of liabilities relating to our U.S. Wealth Management (including City National) share-based compensation plans.

Due to the nature of activities and consolidation adjustments reported in this segment, we believe that a comparative period analysis is not relevant.

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

The teb amount for the three months ended July 31, 2023 was $113 million, compared to $213 million in the prior quarter and $143 million in the same quarter last year. The teb amount for the nine months ended July 31, 2023 was $442 million, compared to $430 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.

Q3 2023
Net loss was $101 million, primarily due to transaction and integration costs of $84 million relating to the planned acquisition of HSBC Canada (for further details on this specified item, refer to the Key performance and non-GAAP measures section).

Q2 2023
Net loss was $86 million, primarily due to residual unallocated items, as well as transaction and integration costs of $43 million relating to the planned acquisition of HSBC Canada (for further details on this specified item, refer to the Key performance and non-GAAP measures section).

Q3 2022
Net loss was $52 million, primarily due to residual unallocated items and unfavourable tax adjustments.

Q3 2023 (Nine months ended)
Net loss was $1,318 million, primarily due to the impact of the CRD and other tax related adjustments of $1,050 million, as well as transaction and integration costs of $135 million relating to the planned acquisition of HSBC Canada (for further details on these specified items, refer to the Key performance and non-GAAP measures section).

Q3 2022 (Nine months ended)
Net income was $76 million, mainly due to net favourable tax adjustments.

Quarterly results and trend analysis

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

Quarterly results (1)

(Millions of Canadian dollars, except per share and percentage amounts)	2023 Q3	2023 Q2	2023 Q1	2022 Q4	2022 Q3	2022 Q2	2022 Q1	2021 Q4
Personal & Commercial Banking	$ 5,563	$ 5,298	$ 5,541	$ 5,419	$ 5,182	$ 4,739	$ 4,803	$ 4,605
Wealth Management (2)	4,418	4,424	4,585	4,308	4,022	4,001	4,018	3,862
Insurance	1,848	1,347	1,891	644	1,233	234	1,399	1,501
Capital Markets (2), (3)	2,663	2,632	3,121	2,484	1,864	2,503	2,992	2,428
Corporate Support (3)	(3)	(181)	(44)	(288)	(169)	(257)	(146)	(20)
Total revenue	14,489	13,520	15,094	12,567	12,132	11,220	13,066	12,376
PCL	616	600	532	381	340	(342)	105	(227)
PBCAE	1,379	1,006	1,545	116	850	(180)	997	1,032
Non-interest expense	7,861	7,494	7,675	7,209	6,386	6,434	6,580	6,583
Income before income taxes	4,633	4,420	5,342	4,861	4,556	5,308	5,384	4,988
Income taxes	761	771	2,128	979	979	1,055	1,289	1,096
Net income	$ 3,872	$ 3,649	$ 3,214	$ 3,882	$ 3,577	$ 4,253	$ 4,095	$ 3,892
EPS – basic	$ 2.74	$ 2.58	$ 2.29	$ 2.75	$ 2.52	$ 2.97	$ 2.84	$ 2.68
– diluted	2.73	2.58	2.29	2.74	2.51	2.96	2.84	2.68
Effective income tax rate	16.4%	17.4%	39.8%	20.1%	21.5%	19.9%	23.9%	22.0%
Period average US$ equivalent of C$1.00	$ 0.750	$ 0.737	$ 0.745	$ 0.739	$ 0.783	$ 0.789	$ 0.787	$ 0.796

(1) Fluctuations in the Canadian dollar relative to other foreign currencies have affected our consolidated results over the period.
(2) Amounts have been revised from those previously presented to conform to our new basis of segment presentation. For further details, refer to the About Royal Bank of Canada section.
(3) Teb adjusted. For further discussion, refer to the How we measure and report our business segments section of our 2022 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 over the period have been impacted by the factors noted below.

Personal & Commercial Banking revenue has benefitted from solid volume growth in loans and deposits over the period. NIM has been favourably impacted over the majority of the period by the rising interest rate environment, whereas a low interest rate environment persisted in the earlier part of the period. Towards the end of the period, NIM has been adversely impacted by a shift in product mix.

Wealth Management revenue has generally benefitted from growth in average fee-based client assets, which is impacted by market conditions, and volume growth in loans over the period. The rising interest rate environment also favourably impacted revenue over the recent quarters, whereas a low interest rate environment persisted in the earlier part of the period. The revenue of RBC Brewin Dolphin has been included since the acquisition closed on September 27, 2022. On July 3, 2023, we completed the sale of the European asset servicing activities of RBC Investor Services and its associated Malaysian centre of excellence.

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. Group annuity sales can vary significantly by quarter and are generally higher in the first half of the fiscal year.

Capital Markets revenue is influenced, to a large extent, by market conditions that impact client activity. Beginning in the second quarter of 2022, there was a decline in global investment banking fee pools. Sales and trading results were impacted notably in the third quarter of 2022 amidst challenging market conditions, driving lower fixed income trading revenue, including the impact from loan underwriting markdowns. In 2023, we saw improvement in sales and trading, reflecting strong client activity.

PCL is comprised of provisions taken on performing assets and provisions taken on impaired assets. PCL on performing assets fluctuated over the period as it is impacted by changes in credit quality, macroeconomic conditions, and exposures. Throughout the last quarter of 2021 and the first half of 2022, we saw improvements in our macroeconomic and credit quality outlook, as the economic impact from the COVID-19 pandemic eased in most regions, resulting in releases of provisions on performing assets. Since the second quarter of 2022 we have seen increases in provisions on performing assets generally reflecting unfavourable changes in our macroeconomic and credit quality outlook. PCL on impaired assets remained low during the early part of the period, but began to trend upwards over the latter half of the period.

PBCAE has fluctuated over the period reflecting changes in the fair value of investments backing policyholder liabilities, which is impacted by changes in market conditions, as well as group annuity sales, both of which are largely offset in revenue. PBCAE has also fluctuated due to the impact of 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 been impacted by fluctuations in variable compensation over the period, commensurate with fluctuations in revenue and earnings. Changes in the fair value of our U.S. share-based compensation plans, which are largely offset in revenue, have also contributed to fluctuations over the period and are impacted by market conditions. While we continue to focus on efficiency management activities, expenses over the period also reflect investments in staff and technology. The fourth quarter of 2021 included a legal provision in U.S. Wealth Management (including City National) that was partially released in the first quarter of 2022. Non-interest expenses of RBC Brewin Dolphin have been included since the acquisition closed on September 27, 2022.

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 and fourth quarters of 2022 reflected the impact of net favourable tax adjustments and an increase in income from lower tax rate jurisdictions, respectively. The first quarter of 2023 reflects the impact of the CRD and other tax related adjustments.

Financial condition

Condensed balance sheets

(Millions of Canadian dollars)	As at July 31 2023	As at October 31 2022
Assets		
Cash and due from banks	$ 80,358	$ 72,397
Interest-bearing deposits with banks	87,650	108,011
Securities, net of applicable allowance (1)	372,625	318,223
Assets purchased under reverse repurchase agreements and securities borrowed	347,151	317,845
Loans		
Retail	561,212	549,751
Wholesale	278,997	273,967
Allowance for loan losses	(4,495)	(3,753)
Other – Derivatives	115,914	154,439
– Other (2)	118,322	126,339
Total assets	$ 1,957,734	$ 1,917,219
Liabilities		
Deposits	$ 1,215,671	$ 1,208,814
Other – Derivatives	117,244	153,491
– Other (2)	501,188	436,714
Subordinated debentures	11,202	10,025
Total liabilities	1,845,305	1,809,044
Equity attributable to shareholders	112,334	108,064
Non-controlling interests	95	111
Total equity	112,429	108,175
Total liabilities and equity	$ 1,957,734	$ 1,917,219

(1) Securities are comprised of trading and investment securities.
(2) Other – Other assets and liabilities include Segregated fund net assets and liabilities, respectively.

Q3 2023 vs. Q4 2022

Total assets increased $41 billion or 2% from October 31, 2022. Foreign exchange translation decreased total assets by $46 billion.

Cash and due from banks was up $8 billion or 11%, mainly due to higher deposits with central banks, reflecting our short-term cash management activities.

Interest-bearing deposits with banks decreased $20 billion or 19%, primarily reflecting the impact of the partial sale of RBC Investor Services operations. For further details, refer to Note 6 of our Condensed Financial Statements.

Securities, net of applicable allowance, were up $54 billion or 17%, largely due to higher government debt securities, mainly reflecting business activities. Higher equity trading and corporate debt securities also contributed to the increase.

Assets purchased under reverse repurchase agreements (reverse repos) and securities borrowed increased $29 billion or 9%, primarily due to increased client demand.

Loans (net of Allowance for loan losses) were up $16 billion or 2%, primarily due to volume growth in residential mortgages and wholesale loans.

Derivative assets were down $39 billion or 25%, primarily attributable to the impact of foreign exchange translation.

Other assets were down $8 billion or 6%, primarily reflecting lower cash collateral.

Total liabilities increased $36 billion or 2%. Foreign exchange translation decreased total liabilities by $46 billion.

Deposits increased $7 billion due to an increase in term deposits attributable to higher interest rates and issuances of long-term notes for funding requirements. These factors were partially offset by a decrease in demand deposits, the impact of the partial sale of RBC Investor Services operations, and the impact of foreign exchange translation.

Derivative liabilities were down $36 billion or 24%, primarily attributable to the impact of foreign exchange translation.

Other liabilities were up $64 billion or 15%, primarily due to higher obligations related to repurchase agreements (repos) reflecting increased client demand.

Total equity increased $4 billion or 4%, primarily reflecting earnings, net of dividends.

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 purchase or issuance of guarantees. These transactions give rise to, among other risks, varying degrees of market, credit, and liquidity and funding risks, which are discussed in the Risk management section of this Q3 2023 Report to Shareholders.

The following provides an update to our significant off-balance sheet transactions, which are described on pages 56 to 58 of our 2022 Annual Report.

Involvement with unconsolidated structured entities

RBC-administered multi-seller conduits

We administer multi-seller conduits which are used primarily for the securitization of our clients' financial assets. Our maximum exposure to loss under these transactions primarily relates to backstop liquidity and partial credit enhancement facilities extended to the conduits. As at July 31, 2023, the total assets of the multi-seller conduits were $52 billion (October 31, 2022 – $47 billion) and our maximum exposure to loss was $53 billion (October 31, 2022 – $48 billion). The increase reflects higher securitization activities since October 31, 2022 in most asset classes. This was partially offset by the impact of foreign exchange translation.

As at July 31, 2023, the total asset-backed commercial paper (ABCP) issued by the conduits amounted to $36 billion (October 31, 2022 – $33 billion). The rating agencies that rate the ABCP rated 100% (October 31, 2022 – 100%) of the total amount issued within the top ratings category.

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 Enterprise Credit Risk Management Framework (ECRMF) 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 ECRMF as described in our 2022 Annual Report.

Residential mortgages and home equity lines of credit (insured vs. uninsured) (1)

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 July 31, 2023					Home equity lines of credit (2)
	Residential mortgages					
	Insured (3)		Uninsured		Total	Total
Region (4)						
Canada						
Atlantic provinces	$ 8,394	44%	$ 10,558	56%	$ 18,952	$ 1,620
Quebec	11,988	28	31,502	72	43,490	3,111
Ontario	30,708	16	165,545	84	196,253	16,556
Alberta	19,039	46	22,471	54	41,510	4,516
Saskatchewan and Manitoba	8,621	42	11,811	58	20,432	1,793
B.C. and territories	12,036	16	61,603	84	73,639	7,081
Total Canada (5)	90,786	23	303,490	77	394,276	34,677
U.S.	–	–	32,124	100	32,124	1,976
Other International	–	–	3,023	100	3,023	1,564
Total International	–	–	35,147	100	35,147	3,540
Total	$ 90,786	21%	$ 338,637	79%	$ 429,423	$ 38,217

(Millions of Canadian dollars, except percentage amounts)	As at April 30, 2023					Home equity lines of credit (2)
	Residential mortgages					
	Insured (3)		Uninsured		Total	Total
Region (4)						
Canada						
Atlantic provinces	$ 8,329	45%	$ 10,329	55%	$ 18,658	$ 1,619
Quebec	12,008	28	30,957	72	42,965	3,192
Ontario	30,868	16	161,255	84	192,123	16,716
Alberta	19,325	46	22,251	54	41,576	4,655
Saskatchewan and Manitoba	8,651	42	11,790	58	20,441	1,833
B.C. and territories	12,106	17	60,313	83	72,419	7,159
Total Canada (5)	91,287	24	296,895	76	388,182	35,174
U.S.	–	–	32,663	100	32,663	2,089
Other International	–	–	3,065	100	3,065	1,703
Total International	–	–	35,728	100	35,728	3,792
Total	$ 91,287	22%	$ 332,623	78%	$ 423,910	$ 38,966

(1) Disclosure is provided in accordance with the requirements of OSFI's Guideline B-20 (Residential Mortgage Underwriting Practices and Procedures).
(2) Includes $38,197 million and $20 million of uninsured and insured home equity lines of credit, respectively (April 30, 2023 – $38,945 million and $21 million, respectively), reported within the personal loan category. The amounts in U.S. and Other International include term loans collateralized by residential properties.
(3) Insured residential mortgages are mortgages whereby our exposure to default is mitigated by insurance through the Canadian Mortgage and Housing Corporation or other private mortgage default insurers.
(4) 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; B.C. and territories are comprised of British Columbia, Nunavut, Northwest Territories and Yukon.
(5) Total consolidated residential mortgages in Canada of $394 billion (April 30, 2023 – $388 billion) includes $12 billion (April 30, 2023 – $12 billion) of mortgages with commercial clients in Canadian Banking, of which $9 billion (April 30, 2023 – $9 billion) are insured, and $18 billion (April 30, 2023 – $18 billion) of residential mortgages in Capital Markets, of which $17 billion (April 30, 2023 – $17 billion) are held for securitization purposes. All of the residential mortgages held for securitization purposes are insured (April 30, 2023 – all insured).

Residential mortgages portfolio by amortization period (1)

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

	As at					
	July 31 2023			April 30 2023		
	Canada (2)	U.S. and other International	Total	Canada (2)	U.S. and other International	Total
Amortization period						
≤ 25 years	57%	26%	55%	57%	25%	54%
> 25 years ≤ 30 years	19	74	23	17	75	22
> 30 years ≤ 35 years	1	–	1	1	–	1
> 35 years	23	–	21	25	–	23
Total	100%	100%	100%	100%	100%	100%

(1) Disclosure is provided in accordance with the requirements of OSFI's Guideline B-20 (Residential Mortgage Underwriting Practices and Procedures).
(2) Our policy is to originate mortgages with amortization periods of 30 years or less. Amortization periods greater than 30 years reflect the impact of increases in interest rates on our variable rate mortgage portfolios. For these loans, the amortization period resets to the original amortization schedule upon renewal. We do not originate mortgage products with a structure that would result in negative amortization, as payments on variable rate mortgages automatically increase to ensure accrued interest is covered.

Average loan-to-value (LTV) ratios (1)

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, as well as the respective LTV ratios for our total Canadian Banking residential mortgage portfolio outstanding.

	For the three months ended				For the nine months ended	
	July 31 2023		April 30 2023		**July 31 2023**	
	Uninsured		Uninsured		**Uninsured**	
	Residential mortgages (2)	**RBC Homeline Plan products** (3)	Residential mortgages (2)	RBC Homeline Plan products (3)	**Residential mortgages** (2)	**RBC Homeline Plan products** (3)
Average of newly originated and acquired for the period, by region (4)						
Atlantic provinces	**71%**	**71%**	71%	72%	**71%**	**71%**
Quebec	**71**	**71**	70	70	**70**	**70**
Ontario	**70**	**64**	71	64	**71**	**64**
Alberta	**72**	**71**	73	71	**72**	**71**
Saskatchewan and Manitoba	**73**	**73**	73	73	**73**	**73**
B.C. and territories	**68**	**62**	67	63	**68**	**63**
U.S.	**73**	**n.m.**	75	n.m.	**74**	**n.m.**
Other International	**70**	**n.m.**	69	n.m.	**70**	**n.m.**
Average of newly originated and acquired for the period (5), (6)	**70%**	**66%**	71%	66%	**71%**	**66%**
Total Canadian Banking residential mortgages portfolio (7)	**56%**	**49%**	57%	50%	**56%**	**49%**

(1) Disclosure is provided in accordance with the requirements of OSFI's Guideline B-20 (Residential Mortgage Underwriting Practices and Procedures).
(2) Residential mortgages exclude residential mortgages within the RBC Homeline Plan products.
(3) RBC Homeline Plan products are comprised of both residential mortgages and home equity lines of credit.
(4) 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; B.C. and territories are comprised of British Columbia, Nunavut, Northwest Territories and Yukon.
(5) 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.
(6) 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.
(7) Weighted by mortgage balances and adjusted for property values based on the Teranet-National Bank National *House Price Index*‡.
n.m. not meaningful

Net International wholesale exposure by region, asset type and client type (1), (2)

The following table provides a breakdown of our credit risk exposure by region, asset type and client type.

	As at								
	July 31 2023								April 30 2023
	Asset type				**Client type**				
(Millions of Canadian dollars)	**Loans Outstanding**	**Securities** (3)	**Repo-style transactions**	**Derivatives**	**Financials**	**Sovereign**	**Corporate**	**Total**	Total
Europe (excluding U.K.)	**$ 13,993**	**$ 27,795**	**$ 1,828**	**$ 1,757**	**$ 16,526**	**$ 16,077**	**$ 12,770**	**$ 45,373**	$ 66,497
U.K.	**7,132**	**23,682**	**683**	**2,697**	**10,320**	**17,747**	**6,127**	**34,194**	41,860
Caribbean	**7,852**	**10,591**	**381**	**278**	**7,312**	**3,983**	**7,807**	**19,102**	19,768
Asia-Pacific	**6,737**	**32,731**	**1,031**	**697**	**13,682**	**22,502**	**5,012**	**41,196**	43,061
Other (4)	**362**	**1,790**	**314**	**39**	**445**	**1,606**	**454**	**2,505**	2,706
Net International exposure (5), (6)	**$ 36,076**	**$ 96,589**	**$ 4,237**	**$ 5,468**	**$ 48,285**	**$ 61,915**	**$ 32,170**	**$ 142,370**	$ 173,892

(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 $344 billion against repo-style transactions (April 30, 2023 – $370 billion) and $13 billion against derivatives (April 30, 2023 – $13 billion).
(3) Securities include $14 billion of trading securities (April 30, 2023 – $14 billion), $43 billion of deposits (April 30, 2023 – $72 billion), and $40 billion of investment securities (April 30, 2023 – $37 billion).
(4) Includes exposures in the Middle East, Africa and Latin America.
(5) Excludes $4,972 million (April 30, 2023 – $6,186 million) of exposures to supranational agencies.
(6) Reflects $2,529 million of mitigation through credit default swaps, which are largely used to hedge single name exposures and market risk (April 30, 2023 – $2,147 million).

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:

Gross impaired loans

(Millions of Canadian dollars, except percentage amounts)	As at and for the three months ended July 31 2023	April 30 2023	October 31 2022
Personal & Commercial Banking	$ **1,701**	$ 1,653	$ 1,362
Wealth Management	**396**	404	278
Capital Markets	**1,187**	836	559
Total GIL	$ **3,284**	$ 2,893	$ 2,199
Impaired loans, beginning balance	$ **2,893**	$ 2,599	$ 2,059
Classified as impaired during the period (new impaired) (1)	**1,255**	767	592
Net repayments (1)	**(219)**	(109)	(130)
Amounts written off	**(446)**	(361)	(362)
Other (2)	**(199)**	(3)	40
Impaired loans, balance at end of period	$ **3,284**	$ 2,893	$ 2,199
GIL as a % of related loans and acceptances			
Total GIL as a % of related loans and acceptances	**0.38%**	0.34%	0.26%
Personal & Commercial Banking	**0.28%**	0.28%	0.23%
Canadian Banking	**0.23%**	0.23%	0.18%
Caribbean Banking	**3.62%**	3.80%	3.93%
Wealth Management (3)	**0.34%**	0.33%	0.23%
Capital Markets (3)	**0.88%**	0.61%	0.42%

(1) 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.
(2) Includes return to performing status during the period, recoveries of loans and advances previously written off, sold, and foreign exchange translation and other movements.
(3) Amounts have been revised from those previously presented to conform to our new basis of segment presentation. For further details, refer to the About Royal Bank of Canada section.

Q3 2023 vs. Q2 2023

Total GIL increased $391 million or 14% from last quarter, and the total GIL ratio increased 4 bps, primarily due to higher impaired loans in Capital Markets.

GIL in Personal & Commercial Banking increased $48 million or 3%, primarily due to higher impaired loans in our Canadian Banking retail portfolios. This was partially offset by lower impaired loans in our Caribbean Banking portfolios.

GIL in Capital Markets increased $351 million or 42%, mainly due to higher impaired loans in the real estate and related sector.

Allowance for credit losses (ACL)

(Millions of Canadian dollars)	As at July 31 2023	April 30 2023	October 31 2022
Personal & Commercial Banking	$ **3,552**	$ 3,543	$ 3,200
Wealth Management (1)	**473**	421	384
Capital Markets (1)	**934**	813	597
ACL on loans	**4,959**	4,777	4,181
ACL on other financial assets (2)	**31**	31	33
Total ACL	$ **4,990**	$ 4,808	$ 4,214
ACL on loans is comprised of:			
Retail	$ **2,518**	$ 2,521	$ 2,285
Wholesale	**1,441**	1,341	1,227
ACL on performing loans	$ **3,959**	$ 3,862	$ 3,512
ACL on impaired loans	**1,000**	915	669

(1) Amounts have been revised from those previously presented to conform to our new basis of segment presentation. For further details, refer to the About Royal Bank of Canada section.
(2) ACL on other financial assets mainly represents allowances on debt securities measured at FVOCI and amortized cost, accounts receivable and financial guarantees.

Q3 2023 vs. Q2 2023

Total ACL increased $182 million or 4% from last quarter, reflecting an increase in ACL on loans.

ACL on performing loans increased $97 million or 3%, primarily due to higher ACL in Wealth Management and Capital Markets attributable to unfavourable changes in our macroeconomic and credit quality outlook.

ACL on impaired loans increased $85 million or 9%, primarily due to higher ACL in Capital Markets.

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

Market risk

Market risk is defined to be the impact of market factors and prices upon our financial condition. This includes potential financial 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 Management Framework from the framework described in our 2022 Annual Report. Using that framework, we continuously seek to ensure that our market risk exposure is consistent with risk appetite constraints set by the Board of Directors.

Market risk controls include limits on probabilistic measures of potential loss in trading positions, such as Value-at-Risk (VaR), Stressed Value-at-Risk (SVaR), stress testing and Incremental Risk Charge (IRC). Market risk controls are also in place to manage Interest Rate Risk in the Banking Book (IRRBB). 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 2022 Annual Report. For further details on our approach to the management of market risk, refer to the Market risk section of our 2022 Annual Report.

Market risk measures – FVTPL positions

VaR and SVaR

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

	July 31, 2023				April 30, 2023		July 31, 2022	
		For the three months ended				For the three months ended		For the three months ended
(Millions of Canadian dollars)	**As at**	**Average**	**High**	**Low**	As at	Average	As at	Average
Equity	**$ 16**	**$ 15**	**$ 21**	**$ 11**	$ 18	$ 18	$ 38	$ 36
Foreign exchange	**5**	**4**	**6**	**2**	3	3	4	3
Commodities	**5**	**5**	**5**	**4**	4	5	5	5
Interest rate (1)	**32**	**36**	**52**	**29**	40	45	42	31
Credit specific (2)	**6**	**5**	**6**	**4**	5	5	7	7
Diversification (3)	**(37)**	**(29)**	**n.m.**	**n.m.**	(29)	(29)	(34)	(32)
Market risk VaR (4)	**$ 27**	**$ 36**	**$ 49**	**$ 27**	$ 41	$ 47	$ 62	$ 50
Market risk Stressed VaR (4)	**$ 35**	**$ 63**	**$ 103**	**$ 31**	$ 68	$ 108	$ 150	$ 102

	July 31, 2023				July 31, 2022	
		For the nine months ended				For the nine months ended
(Millions of Canadian dollars)	**As at**	**Average**	**High**	**Low**	As at	Average
Equity	**$ 16**	**$ 23**	**$ 47**	**$ 11**	$ 38	$ 34
Foreign exchange	**5**	**3**	**6**	**2**	4	4
Commodities	**5**	**5**	**8**	**4**	5	4
Interest rate (1)	**32**	**41**	**58**	**29**	42	31
Credit specific (2)	**6**	**5**	**6**	**4**	7	8
Diversification (3)	**(37)**	**(31)**	**0**	**0**	(34)	(30)
Market risk VaR (5)	**$ 27**	**$ 46**	**$ 65**	**$ 27**	$ 62	$ 51
Market risk Stressed VaR (5)	**$ 35**	**$ 116**	**$ 205**	**$ 31**	$ 150	$ 84

(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 risk factor diversification.
(4) The average market risk VaR and average SVaR for the three months ended July 31, 2023 includes $9 million and $24 million, respectively (April 30, 2023 – $22 million and $96 million; July 31, 2022 – $7 million and $32 million), related to loan underwriting commitments.
(5) The average market risk VaR and average SVaR for the nine months ended July 31, 2023 includes $17 million and $79 million, respectively (July 31, 2022 – $6 million and $21 million), related to loan underwriting commitments.
n.m. not meaningful

Q3 2023 vs. Q3 2022

Average market risk VaR of $36 million decreased $14 million and average SVaR of $63 million decreased $39 million from a year ago, primarily driven by exposure changes in our equity derivative portfolio.

Q3 2023 vs. Q2 2023

Average market risk VaR of $36 million decreased $11 million and average SVaR of $63 million decreased $45 million from last quarter. This was driven by exposure changes in both our loan underwriting commitments and equity derivatives portfolio.

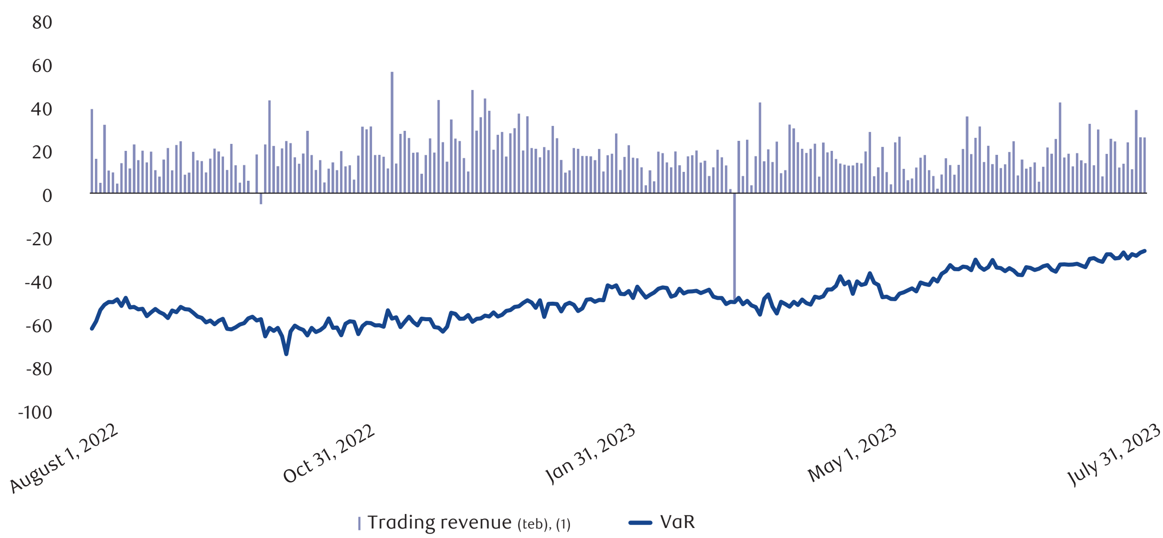
Q3 2023 vs. Q3 2022 (Nine months ended)

Average market risk VaR of $46 million decreased $5 million from the same period last year. This was driven by prior year VaR levels being elevated due to the impact of the Q2 2020 period of significant market volatility in our two-year historical VaR period. This effect was partially offset by the effects of unfavourable market conditions in the first half of this year, which impacted loan underwriting commitments.

Average SVaR of $116 million increased $32 million, due to the effects of unfavourable market conditions which impacted loan underwriting commitments, as noted above.

The following chart displays a bar graph of our daily trading profit and loss and a line graph of our daily market risk VaR. We incurred no net trading losses in the three months ended July 31, 2023 and 1 day of net trading loss in the three months ended April 30, 2023, largely associated with stresses in the U.S. regional banking sector, which did not exceed VaR.

Trading revenue (teb), (1) **and VaR** (Millions of Canadian dollars)



(1) Trading revenue (teb) in the chart above excludes the impact of 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 PBCAE. As at July 31, 2023, we held assets in support of $13 billion of liabilities with respect to insurance obligations (April 30, 2023 – $12 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. Interest rate risk measures are based on current on and off-balance sheet positions which can change over time in response to business activity and management actions.

	July 31 2023						April 30 2023		July 31 2022	
	EVE risk			NII risk (1)						
(Millions of Canadian dollars)	Canadian dollar impact	U.S. dollar impact	Total	Canadian dollar impact	U.S. dollar impact	Total	EVE risk	NII risk (1)	EVE risk	NII risk (1)
Before-tax impact of:										
100 bps increase in rates	$ (1,480)	$ (519)	$ (1,999)	$ 441	$ 139	$ 580	$ (1,726)	$ 824	$ (1,411)	$ 1,091
100 bps decrease in rates	1,455	334	1,789	(475)	(173)	(648)	1,507	(894)	914	(1,189)

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

As at July 31, 2023, an immediate and sustained -100 bps shock would have had a negative impact to our NII of $648 million, down from $894 million last quarter. An immediate and sustained +100 bps shock as at July 31, 2023 would have had a negative impact to the bank's EVE of $1,999 million, up from $1,726 million last quarter. Quarter-over-quarter NII sensitivity decreased and EVE sensitivity increased as a result of a marginal increase in fixed rate assets held within banking books. During the third quarter of 2023, NII and EVE risks remained within approved limits.

Linkage of market risk to selected balance sheet items

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

	As at July 31, 2023			
		Market risk measure		
(Millions of Canadian dollars)	Balance sheet amount	Traded risk (1)	Non-traded risk (2)	Non-traded risk primary risk sensitivity
Assets subject to market risk				
Cash and due from banks	$ 80,358	$ –	$ 80,358	Interest rate
Interest-bearing deposits with banks	87,650	81,356	6,294	Interest rate
Securities				
Trading	176,603	164,175	12,428	Interest rate, credit spread
Investment, net of applicable allowance	196,022	–	196,022	Interest rate, credit spread, equity
Assets purchased under reverse repurchase agreements and securities borrowed	347,151	296,430	50,721	Interest rate
Loans				
Retail	561,212	6,807	554,405	Interest rate
Wholesale	278,997	7,193	271,804	Interest rate
Allowance for loan losses	(4,495)	–	(4,495)	Interest rate
Segregated fund net assets	2,921	–	2,921	Interest rate
Other				
Derivatives	115,914	111,315	4,599	Interest rate, foreign exchange
Other assets	100,510	7,776	92,734	Interest rate
Assets not subject to market risk (3)	14,891			
Total assets	$ 1,957,734	$ 675,052	$ 1,267,791	
Liabilities subject to market risk				
Deposits	$ 1,215,671	$ 127,401	$ 1,088,270	Interest rate
Segregated fund liabilities	2,921	–	2,921	Interest rate
Other				
Obligations related to securities sold short	36,653	36,653	–	
Obligations related to assets sold under repurchase agreements and securities loaned	334,465	300,901	33,564	Interest rate
Derivatives	117,244	105,064	12,180	Interest rate, foreign exchange
Other liabilities	106,791	11,799	94,992	Interest rate
Subordinated debentures	11,202	–	11,202	Interest rate
Liabilities not subject to market risk (4)	20,358			
Total liabilities	$ 1,845,305	$ 581,818	$ 1,243,129	
Total equity	112,429			
Total liabilities and equity	$ 1,957,734			

(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, SVaR, IRC 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.

	As at April 30, 2023			
		Market risk measure		
(Millions of Canadian dollars)	Balance sheet amount	Traded risk (1)	Non-traded risk (2)	Non-traded risk primary risk sensitivity
Assets subject to market risk				
Cash and due from banks	$ 99,199	$ –	$ 99,199	Interest rate
Interest-bearing deposits with banks	81,880	77,609	4,271	Interest rate
Securities				
Trading	136,207	123,967	12,240	Interest rate, credit spread
Investment, net of applicable allowance	183,621	–	183,621	Interest rate, credit spread, equity
Assets purchased under reverse repurchase agreements and securities borrowed	335,239	284,637	50,602	Interest rate
Loans				
Retail	554,139	6,837	547,302	Interest rate
Wholesale	281,380	7,162	274,218	Interest rate
Allowance for loan losses	(4,332)	–	(4,332)	Interest rate
Segregated fund net assets	2,883	–	2,883	Interest rate
Other				
Derivatives	124,149	119,757	4,392	Interest rate, foreign exchange
Other assets	130,639	8,421	122,218	Interest rate
Assets not subject to market risk (3)	15,298			
Total assets	$ 1,940,302	$ 628,390	$ 1,296,614	
Liabilities subject to market risk				
Deposits	$ 1,210,053	$ 135,014	$ 1,075,039	Interest rate
Segregated fund liabilities	2,883	–	2,883	Interest rate
Other				
Obligations related to securities sold short	36,048	36,048	–	
Obligations related to assets sold under repurchase agreements and securities loaned	291,558	262,165	29,393	Interest rate
Derivatives	123,898	113,531	10,367	Interest rate, foreign exchange
Other liabilities	132,427	12,102	120,325	Interest rate
Subordinated debentures	11,565	–	11,565	Interest rate
Liabilities not subject to market risk (4)	20,516			
Total liabilities	$ 1,828,948	$ 558,860	$ 1,249,572	
Total equity	111,354			
Total liabilities and equity	$ 1,940,302			

(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, SVaR, IRC 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.

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 2022 Annual Report.

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

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.

	As at July 31, 2023				
(Millions of Canadian dollars)	Bank-owned liquid assets	Securities received as collateral from securities financing and derivative transactions	Total liquid assets	Encumbered liquid assets	Unencumbered liquid assets
Cash and deposits with banks (1)	$ 170,468	$ –	$ 170,468	$ 3,343	$ 167,125
Securities issued or guaranteed by sovereigns, central banks or multilateral development banks (2)	291,972	359,408	651,380	428,372	223,008
Other securities	125,284	123,650	248,934	151,850	97,084
Other liquid assets (3)	28,484	–	28,484	26,127	2,357
Total liquid assets	$ 616,208	$ 483,058	$ 1,099,266	$ 609,692	$ 489,574

	As at April 30, 2023				
(Millions of Canadian dollars)	Bank-owned liquid assets	Securities received as collateral from securities financing and derivative transactions	Total liquid assets	Encumbered liquid assets	Unencumbered liquid assets
Cash and deposits with banks (1)	$ 202,692	$ –	$ 202,692	$ 3,936	$ 198,756
Securities issued or guaranteed by sovereigns, central banks or multilateral development banks (2)	248,352	339,071	587,423	386,613	200,810
Other securities	115,107	128,447	243,554	145,627	97,927
Other liquid assets (3)	33,619	–	33,619	30,816	2,803
Total liquid assets	$ 599,770	$ 467,518	$ 1,067,288	$ 566,992	$ 500,296

	As at	
(Millions of Canadian dollars)	July 31 2023	April 30 2023
Royal Bank of Canada	$ 205,432	$ 205,189
Foreign branches	101,799	97,977
Subsidiaries	182,343	197,130
Total unencumbered liquid assets	$ 489,574	$ 500,296

(1) Includes balances that are classified as held for sale and presented in Other assets. For further details, refer to Note 6 of our Condensed Financial Statements.
(2) 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).
(3) Encumbered liquid assets amount represents cash collateral and margin deposit amounts pledged related to over-the-counter and exchange-traded derivative transactions.

The liquidity reserve is typically most affected by routine flows of retail and commercial client banking activities, where liquid asset portfolios reflect changes in deposit and loan balances, as well as business strategies and client flows related to the activities in Capital Markets. Corporate Treasury and Capital Markets activities also affect liquidity reserves through the management of funding issuances where reserves absorb timing mismatches between debt issuances and deployment into business activities.

Q3 2023 vs. Q2 2023

Total unencumbered liquid assets decreased $11 billion or 2% from last quarter, mainly due to a decrease in cash and deposits with banks, which was largely driven by the partial sale of RBC Investor Services operations.

Asset encumbrance

The table below provides a summary of our on- and off-balance sheet amounts for cash, securities and other assets, distinguishing between those that are encumbered or available-for-sale or use as collateral in secured funding transactions. Other assets, such as mortgages and credit card receivables, can also be monetized, albeit over longer timeframes than those required for marketable securities. As at July 31, 2023, our unencumbered assets available as collateral comprised 24% of total assets (April 30, 2023 – 25%).

	As at									
	July 31 2023					April 30 2023				
	Encumbered		Unencumbered			Encumbered		Unencumbered		
(Millions of Canadian dollars)	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 deposits with banks (4)	$ –	$ 3,343	$ 167,125	$ –	$ 170,468	$ –	$ 3,936	$ 198,756	$ –	$ 202,692
Securities										
Trading	93,240	–	92,971	2,317	188,528	64,544	–	78,517	2,411	145,472
Investment, net of applicable allowance	7,853	–	188,169	–	196,022	11,096	–	173,213	–	184,309
Assets purchased under reverse repurchase agreements and securities borrowed (5)	498,928	24,687	3,910	2,123	529,648	476,663	22,843	13,707	3,248	516,461
Loans										
Retail										
Mortgage securities	27,418	–	27,012	–	54,430	27,952	–	27,406	–	55,358
Mortgage loans	72,983	–	31,411	270,599	374,993	73,961	–	28,736	265,855	368,552
Non-mortgage loans	7,190	–	–	124,599	131,789	7,385	–	–	122,844	130,229
Wholesale	–	–	9,050	270,150	279,200	–	–	9,445	272,429	281,874
Allowance for loan losses	–	–	–	(4,495)	(4,495)	–	–	–	(4,332)	(4,332)
Segregated fund net assets	–	–	–	2,921	2,921	–	–	–	2,883	2,883
Other										
Derivatives	–	–	–	115,914	115,914	–	–	–	124,317	124,317
Others (6)	26,127	–	2,357	84,254	112,738	30,816	–	2,803	85,837	119,456
Total assets	$ 733,739	$ 28,030	$ 522,005	$ 868,382	$ 2,152,156	$ 692,417	$ 26,779	$ 532,583	$ 875,492	$ 2,127,271

(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 National Housing Act Mortgage-Backed Securities (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.
(4) Includes balances that are classified as held for sale and presented in Other assets. For further details, refer to Note 6 of our Condensed Financial Statements.
(5) Includes bank-owned liquid assets and securities received as collateral from off-balance sheet securities financing, derivative transactions, and margin lending. Includes $25 billion (April 30, 2023 – $23 billion) of collateral received through reverse repurchase transactions that cannot be rehypothecated in its current legal form.
(6) The Pledged as collateral amount represents cash collateral and margin deposit amounts pledged related to OTC and exchange-traded derivative transactions.

Funding

Funding strategy

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

Deposit and funding profile

As at July 31, 2023, relationship-based deposits, which are the primary source of funding for retail and commercial lending, were $822 billion or 51% of our total funding (April 30, 2023 – $826 billion or 53%). 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 July 31, 2023, the notional value of issued and outstanding long-term debt subject to conversion under the Bail-in regime was $107 billion (April 30, 2023 – $101 billion).

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

Long-term debt issuance

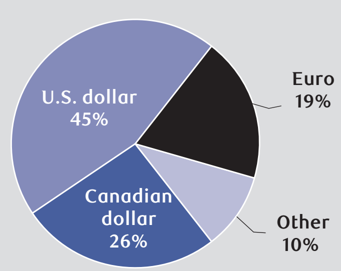
Our wholesale funding activities are well-diversified by geography, investor segment, instrument, currency, structure and maturity. We maintain an ongoing presence in different funding markets, which allows us to continuously monitor market developments and trends, identify opportunities and risks, and 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
• Canadian Shelf Program – $25 billion	• U.S. Shelf Program – US$50 billion	• European Debt Issuance Program – US$75 billion • Global Covered Bond Program – €75 billion • Japanese Issuance Programs – ¥1 trillion

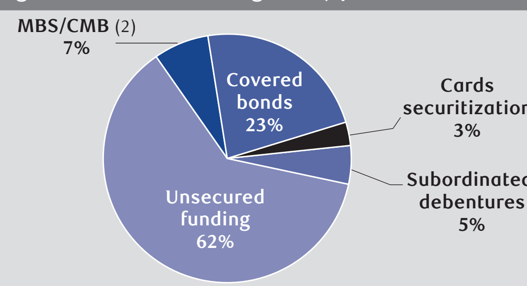
We also raise long-term funding using Canadian Senior Notes, Canadian National Housing Act MBS, Canada Mortgage Bonds, credit card receivable-backed securities, Kangaroo Bonds (issued in the Australian domestic market by foreign firms) and Yankee Certificates of Deposit (issued in the U.S. domestic market 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) Includes unsecured and secured long-term funding and subordinated debentures with an original term to maturity greater than 1 year

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



(1) Includes unsecured and secured long-term funding and subordinated debentures with an original term to maturity greater than 1 year
(2) Mortgage-backed securities and Canada Mortgage Bonds

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

Composition of wholesale funding (1)

	As at July 31, 2023							
(Millions of Canadian dollars)	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)	$ 5,807	$ –	$ 586	$ 484	$ 6,877	$ –	$ –	$ 6,877
Certificates of deposit and commercial paper	9,595	16,391	16,345	20,296	62,627	–	–	62,627
Asset-backed commercial paper (3)	4,110	4,852	4,757	1,259	14,978	–	–	14,978
Senior unsecured medium-term notes (4)	232	9,333	6,205	13,672	29,442	22,520	54,101	106,063
Senior unsecured structured notes (5)	2,256	1,616	2,244	2,967	9,083	5,291	12,018	26,392
Mortgage securitization	–	1,992	532	1,448	3,972	2,667	9,381	16,020
Covered bonds/asset-backed securities (6)	791	–	3,173	–	3,964	9,114	45,711	58,789
Subordinated liabilities	–	–	–	1,490	1,490	2,722	7,669	11,881
Other (7)	6,883	6,448	7,823	3,635	24,789	11,094	68	35,951
Total	$ 29,674	$ 40,632	$ 41,665	$ 45,251	$ 157,222	$ 53,408	$ 128,948	$ 339,578
Of which:								
– Secured	$ 9,838	$ 12,299	$ 12,592	$ 2,707	$ 37,436	$ 11,781	$ 55,092	$ 104,309
– Unsecured	19,836	28,333	29,073	42,544	119,786	41,627	73,856	235,269

(Millions of Canadian dollars)	As at April 30, 2023 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)	$ 5,060	$ 1,216	$ 553	$ 902	$ 7,731	$ –	$ –	$ 7,731
Certificates of deposit and commercial paper	10,098	15,149	25,783	17,523	68,553	–	–	68,553
Asset-backed commercial paper (3)	3,606	2,663	6,098	952	13,319	–	227	13,546
Senior unsecured medium-term notes (4)	2,935	2,258	9,739	6,428	21,360	28,489	52,585	102,434
Senior unsecured structured notes (5)	983	1,854	2,792	3,055	8,684	5,053	11,468	25,205
Mortgage securitization	–	613	1,994	912	3,519	3,327	9,308	16,154
Covered bonds/asset-backed securities (6)	–	2,239	813	3,265	6,317	5,323	47,740	59,380
Subordinated liabilities	–	110	–	–	110	2,963	8,978	12,051
Other (7)	6,498	6,060	10,284	5,777	28,619	10,063	39	38,721
Total	$ 29,180	$ 32,162	$ 58,056	$ 38,814	$ 158,212	$ 55,218	$ 130,345	$ 343,775
Of which:								
– Secured	$ 8,984	$ 10,239	$ 16,533	$ 5,129	$ 40,885	$ 8,650	$ 57,275	$ 106,810
– Unsecured	20,196	21,923	41,523	33,685	117,327	46,568	73,070	236,965

(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 $5,288 million (April 30, 2023 – $5,740 million), bearer deposit notes (unsecured) of $5,160 million (April 30, 2023 – $4,908 million), floating rate notes (unsecured) of $1,675 million (April 30, 2023 – $1,675 million), other long-term structured deposits (unsecured) of $14,385 million (April 30, 2023 – $14,207 million) and FHLB advances (secured) of $9,233 million (April 30, 2023 – $11,991 million) and wholesale guaranteed interest certificates of $210 million (April 30, 2023 – $200 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 2022 Annual Report.

Credit ratings (1)

	As at August 23, 2023 Short-term debt	Legacy senior long-term debt (2)	Senior long-term debt (3)	Outlook
Moody's (4)	**P-1**	**Aa1**	**A1**	**stable**
Standard & Poor's (5)	**A-1+**	**AA-**	**A**	**stable**
Fitch Ratings (6)	**F1+**	**AA**	**AA-**	**stable**
DBRS (7)	**R-1 (high)**	**AA (high)**	**AA**	**stable**

(1) Credit ratings are not recommendations to purchase, sell or hold a financial obligation in as much 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) In December 2022, Moody's affirmed our ratings and assessments with a stable outlook following the announcement of the acquisition of HSBC Canada.
(5) On May 25, 2023, Standard & Poor's affirmed our ratings with a stable outlook.
(6) On June 20, 2023, Fitch Ratings affirmed our ratings with a stable outlook.
(7) On May 12, 2023, 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.

	As at					
	July 31 2023			April 30 2023		
(Millions of Canadian dollars)	**One-notch downgrade**	**Two-notch downgrade**	**Three-notch downgrade**	One-notch downgrade	Two-notch downgrade	Three-notch downgrade
Contractual derivatives funding or margin requirements	**$ 149**	**$ 63**	**$ 175**	$ 137	$ 56	$ 136
Other contractual funding or margin requirements (1)	**34**	**50**	**26**	42	35	24

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

Liquidity Coverage Ratio (LCR)

The LCR is a Basel III metric that measures the sufficiency of high-quality liquid assets (HQLA) available to meet liquidity needs over a 30-day period in an acute stress scenario. The Basel Committee on Banking Supervision (BCBS) and OSFI regulatory minimum coverage level for LCR is 100%.

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

Liquidity coverage ratio common disclosure template (1)

	For the three months ended	
	July 31 2023	
(Millions of Canadian dollars, except percentage amounts)	Total unweighted value (average) (2)	Total weighted value (average)
High-quality liquid assets		
Total high-quality liquid assets (HQLA)		$ 382,789
Cash outflows		
Retail deposits and deposits from small business customers, of which:	$ 357,948	$ 33,722
Stable deposits (3)	122,742	3,682
Less stable deposits	235,206	30,040
Unsecured wholesale funding, of which:	409,457	198,361
Operational deposits (all counterparties) and deposits in networks of cooperative banks (4)	158,415	37,558
Non-operational deposits	219,541	129,302
Unsecured debt	31,501	31,501
Secured wholesale funding		36,983
Additional requirements, of which:	340,393	75,693
Outflows related to derivative exposures and other collateral requirements	67,577	18,297
Outflows related to loss of funding on debt products	10,674	10,674
Credit and liquidity facilities	262,142	46,722
Other contractual funding obligations (5)	24,871	24,871
Other contingent funding obligations (6)	763,194	12,312
Total cash outflows		$ 381,942
Cash inflows		
Secured lending (e.g., reverse repos)	$ 300,753	$ 52,017
Inflows from fully performing exposures	17,816	10,793
Other cash inflows	33,605	33,605
Total cash inflows		$ 96,415
		Total adjusted value
Total HQLA		$ 382,789
Total net cash outflows		285,527
Liquidity coverage ratio		134%

(Millions of Canadian dollars, except percentage amounts)	April 30 2023 Total adjusted value
Total HQLA	$ 390,546
Total net cash outflows	288,446
Liquidity coverage ratio	135%

(1) The LCR is calculated in accordance with OSFI's LAR guideline, which, in turn, reflects liquidity-related requirements issued by the BCBS. The LCR for the quarter ended July 31, 2023 is calculated as an average of 64 daily positions.
(2) With the exception of other contingent funding obligations, unweighted inflow and outflow amounts are items maturing or callable in 30 days or less. Other contingent funding obligations also include debt securities with remaining maturity greater than 30 days.
(3) As defined by the BCBS, stable deposits from retail and small business customers are deposits that are insured and are either held in transactional accounts or the bank has an established relationship with the client making the withdrawal unlikely.
(4) Operational deposits from customers other than retail and small and medium-sized enterprises, 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 88% of total HQLA. These assets consist of cash, placements with central banks and highly rated securities issued or guaranteed by governments, central banks and supranational entities.

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

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

Q3 2023 vs. Q2 2023

The average LCR for the quarter ended July 31, 2023 was 134%, which translates into a surplus of approximately $97 billion, compared to 135% and a surplus of approximately $102 billion last quarter. LCR levels decreased compared to the prior quarter mainly due to the partial sale of RBC Investor Services operations and loan growth, partially offset by an increase in deposits.

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.

OSFI requires Canadian Domestic Systemically Important Banks (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 LAR guideline and are not necessarily aligned with the classification requirements prescribed under IFRS.

Net Stable Funding Ratio common disclosure template (1)

(Millions of Canadian dollars, except percentage amounts)	As at July 31, 2023				
	Unweighted value by residual maturity (2)				
	No maturity	< 6 months	6 months to < 1 year	≥ 1 year	Weighted value
Available Stable Funding (ASF) Item					
Capital:	$ 112,315	$ –	$ –	$ 10,879	$ 123,194
Regulatory Capital	112,315	–	–	10,879	123,194
Other Capital Instruments	–	–	–	–	–
Retail deposits and deposits from small business customers:	301,943	99,784	46,522	49,424	460,947
Stable deposits (3)	98,898	42,403	23,907	22,372	179,319
Less stable deposits	203,045	57,381	22,615	27,052	281,628
Wholesale funding:	277,942	526,214	52,808	146,153	342,371
Operational deposits (4)	157,652	–	–	–	78,826
Other wholesale funding	120,290	526,214	52,808	146,153	263,545
Liabilities with matching interdependent assets (5)	90	4,780	2,885	20,528	–
Other liabilities:	42,139		217,885		12,358
NSFR derivative liabilities			26,233		
All other liabilities and equity not included in the above categories	42,139	179,084	420	12,148	12,358
Total ASF					$ 938,870
Required Stable Funding (RSF) Item					
Total NSFR high-quality liquid assets (HQLA)					$ 39,817
Deposits held at other financial institutions for operational purposes	–	1,404	–	–	702
Performing loans and securities:	209,271	319,512	108,201	524,112	689,988
Performing loans to financial institutions secured by Level 1 HQLA	–	143,841	14,202	660	15,227
Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	4,310	87,968	36,368	26,203	58,123
Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and PSEs, of which:	131,074	59,841	29,706	165,638	295,911
With a risk weight of less than or equal to 35% under the Basel II standardized approach for credit risk	–	815	738	2,180	2,194
Performing residential mortgages, of which:	37,131	24,641	25,877	312,617	270,705
With a risk weight of less than or equal to 35% under the Basel II standardized approach for credit risk	37,131	24,621	25,861	311,645	269,861
Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	36,756	3,221	2,048	18,994	50,022
Assets with matching interdependent liabilities (5)	90	4,780	2,885	20,528	–
Other assets:	2,232		287,719		75,831
Physical traded commodities, including gold	2,232				1,897
Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs			18,268		15,528
NSFR derivative assets			19,515		–
NSFR derivative liabilities before deduction of variation margin posted			61,192		3,060
All other assets not included in the above categories	–	135,450	169	53,125	55,346
Off-balance sheet items			757,602		28,444
Total RSF					$ 834,782
Net Stable Funding Ratio (%)					112%

(Millions of Canadian dollars, except percentage amounts)	As at April 30, 2023 Weighted value
Total ASF	$ 939,683
Total RSF	829,777
Net Stable Funding Ratio (%)	113%

(1) The NSFR is calculated in accordance with OSFI's LAR guideline, which, in turn, reflects liquidity-related requirements issued by the BCBS.
(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 central counterparties (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 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.

Q3 2023 vs. Q2 2023

The NSFR as at July 31, 2023 was 112%, which translates into a surplus of approximately $104 billion, compared to 113% and a surplus of approximately $110 billion last quarter. NSFR decreased compared to the prior quarter primarily due to loan growth and the partial sale of RBC Investor Services operations, partially offset by an increase in deposits and stable funding.

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 2022 Annual Report.

	As at July 31, 2023									
(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	$ 165,753	$ 17	$ –	$ –	$ –	$ –	$ –	$ –	$ 2,238	$ 168,008
Securities										
Trading (1)	105,650	88	102	23	20	129	171	10,139	60,281	176,603
Investment, net of applicable allowance	6,607	6,660	4,540	3,313	7,404	35,464	51,662	79,454	918	196,022
Assets purchased under reverse repurchase agreements and securities borrowed (2)	165,182	80,855	34,719	27,584	16,647	934	–	–	21,230	347,151
Loans, net of applicable allowance	26,514	24,184	31,631	31,641	38,463	192,089	329,148	74,050	87,994	835,714
Other										
Customers' liability under acceptances	12,174	7,230	2	–	–	–	–	–	(41)	19,365
Derivatives	7,000	9,852	8,907	6,006	4,842	16,093	26,939	36,273	2	115,914
Other financial assets	38,084	1,704	2,022	468	590	177	248	2,407	3,565	49,265
Total financial assets	526,964	130,590	81,923	69,035	67,966	244,886	408,168	202,323	176,187	1,908,042
Other non-financial assets	5,482	1,689	250	(336)	137	5,612	2,694	5,061	29,103	49,692
Total assets	$ 532,446	$ 132,279	$ 82,173	$ 68,699	$ 68,103	$ 250,498	$ 410,862	$ 207,384	$ 205,290	$ 1,957,734
Liabilities and equity										
Deposits (3)										
Unsecured borrowing	$ 105,383	$ 68,197	$ 70,277	$ 56,195	$ 75,349	$ 53,805	$ 76,279	$ 28,143	$ 579,441	$ 1,113,069
Secured borrowing	5,040	9,726	6,559	1,908	2,273	5,928	14,659	8,305	–	54,398
Covered bonds	–	–	2,490	–	–	8,933	30,593	6,188	–	48,204
Other										
Acceptances	12,175	7,230	2	–	–	–	–	–	–	19,407
Obligations related to securities sold short	36,653	–	–	–	–	–	–	–	–	36,653
Obligations related to assets sold under repurchase agreements and securities loaned (2)	197,507	106,321	5,672	974	–	938	–	–	23,053	334,465
Derivatives	7,419	12,466	9,177	6,377	4,929	15,145	26,811	34,920	–	117,244
Other financial liabilities	40,208	7,422	6,289	1,470	1,638	857	2,248	12,258	4,016	76,406
Subordinated debentures	–	–	–	–	–	–	1,841	9,361	–	11,202
Total financial liabilities	404,385	211,362	100,466	66,924	84,189	85,606	152,431	99,175	606,510	1,811,048
Other non-financial liabilities	952	1,025	5,192	316	152	1,056	1,945	13,834	9,785	34,257
Equity	–	–	–	–	–	–	–	–	112,429	112,429
Total liabilities and equity	$ 405,337	$ 212,387	$ 105,658	$ 67,240	$ 84,341	$ 86,662	$ 154,376	$ 113,009	$ 728,724	$ 1,957,734
Off-balance sheet items										
Financial guarantees	$ 512	$ 3,015	$ 2,660	$ 3,367	$ 4,090	$ 1,262	$ 5,901	$ 1,123	$ 22	$ 21,952
Commitments to extend credit	4,620	8,011	15,917	15,702	18,433	58,048	199,303	22,194	5,196	347,424
Other credit-related commitments	12,628	966	1,667	1,614	1,823	189	389	47	86,102	105,425
Other commitments	7	9	15	15	15	56	128	177	897	1,319
Total off-balance sheet items	$ 17,767	$ 12,001	$ 20,259	$ 20,698	$ 24,361	$ 59,555	$ 205,721	$ 23,541	$ 92,217	$ 476,120

(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 April 30, 2023									
(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	$ 178,490	$ 5	$ –	$ –	$ –	$ –	$ –	$ –	$ 2,584	$ 181,079
Securities										
Trading (1)	70,150	1,115	24	76	23	141	130	10,015	54,533	136,207
Investment, net of applicable allowance	4,797	6,216	3,823	4,599	3,823	21,330	54,591	83,486	956	183,621
Assets purchased under reverse repurchase agreements and securities borrowed (2)	135,148	67,541	66,718	18,388	23,429	–	–	–	24,015	335,239
Loans, net of applicable allowance	29,831	29,719	31,452	31,034	30,733	183,187	329,594	76,651	88,986	831,187
Other										
Customers' liability under acceptances	11,944	8,275	5	2	–	–	–	–	(41)	20,185
Derivatives	6,370	10,713	6,923	7,989	5,898	17,236	27,446	41,573	1	124,149
Other financial assets	63,216	6,662	1,792	114	675	165	241	2,385	3,512	78,762
Total financial assets	499,946	130,246	110,737	62,202	64,581	222,059	412,002	214,110	174,546	1,890,429
Other non-financial assets	5,805	1,661	239	(389)	193	4,319	1,620	5,451	30,974	49,873
Total assets	$ 505,751	$ 131,907	$ 110,976	$ 61,813	$ 64,774	$ 226,378	$ 413,622	$ 219,561	$ 205,520	$ 1,940,302
Liabilities and equity										
Deposits (3)										
Unsecured borrowing	$ 112,270	$ 59,775	$ 79,544	$ 66,729	$ 54,570	$ 57,916	$ 72,665	$ 28,859	$ 575,209	$ 1,107,537
Secured borrowing	4,486	4,974	10,366	2,478	860	7,002	15,369	8,282	–	53,817
Covered bonds	–	2,229	–	2,543	–	5,233	32,297	6,397	–	48,699
Other										
Acceptances	11,945	8,275	5	2	–	–	–	–	1	20,228
Obligations related to securities sold short	36,048	–	–	–	–	–	–	–	–	36,048
Obligations related to assets sold under repurchase agreements and securities loaned (2)	233,535	33,718	1,026	717	907	1	–	–	21,654	291,558
Derivatives	6,923	13,269	6,399	8,161	5,788	16,078	27,525	39,755	–	123,898
Other financial liabilities	44,611	6,622	9,511	1,356	1,530	916	2,329	12,849	22,805	102,529
Subordinated debentures	–	110	–	–	–	–	1,919	9,536	–	11,565
Total financial liabilities	449,818	128,972	106,851	81,986	63,655	87,146	152,104	105,678	619,669	1,795,879
Other non-financial liabilities	973	1,083	182	4,453	322	968	1,844	13,347	9,897	33,069
Equity	–	–	–	–	–	–	–	–	111,354	111,354
Total liabilities and equity	$ 450,791	$ 130,055	$ 107,033	$ 86,439	$ 63,977	$ 88,114	$ 153,948	$ 119,025	$ 740,920	$ 1,940,302
Off-balance sheet items										
Financial guarantees	$ 880	$ 2,147	$ 3,400	$ 2,907	$ 3,458	$ 1,098	$ 5,968	$ 1,070	$ 25	$ 20,953
Commitments to extend credit	5,644	11,750	12,600	16,202	17,862	57,647	204,060	21,147	11,911	358,823
Other credit-related commitments	8,951	995	1,505	1,703	1,532	570	411	48	88,944	104,659
Other commitments	7	11	16	16	15	55	127	188	851	1,286
Total off-balance sheet items	$ 15,482	$ 14,903	$ 17,521	$ 20,828	$ 22,867	$ 59,370	$ 210,566	$ 22,453	$ 101,731	$ 485,721

(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.

Capital management

We continue to manage our capital in accordance with our Capital Management Framework as described in our 2022 Annual Report. In addition, we continue to monitor for new regulatory capital developments, including OSFI guidance relating to the BCBS Basel III reforms, in order to ensure compliance with these requirements as disclosed in the Capital management section in our 2022 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 Internal Ratings Based (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 RWA) of 1% consistent with the D-SIB requirement.

OSFI's Total Loss Absorbing Capacity (TLAC) guideline establishes two minimum standards: the risk-based TLAC ratio, which builds on the risk-based capital ratios described in the CAR guideline, and the TLAC leverage ratio, which builds on the leverage ratio described in OSFI's LR guideline. The TLAC requirement is intended to address the sufficiency of a D-SIB'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 external 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.

OSFI's revised capital, leverage, and disclosure guidelines incorporating and implementing OSFI's first phase of the adoption of the final BCBS Basel III reforms came into effect in Q2 2023. The second phase of OSFI's implementation of the final BCBS Basel III reforms relating to the revised credit valuation adjustment (CVA) and market risk chapters of the CAR guideline will be effective for us in Q1 2024. The revised CAR and LR guidelines implemented beginning in Q2 2023 include the following notable changes:

- For IRB portfolios, elimination of a 6% regulatory scaling factor applied to RWA generated by internal models and introduction of prescribed supervisory parameters applicable to certain asset classes within our wholesale portfolio.
- Adoption of a new operational risk SA framework based on 3 years of average income and 10 years of historical losses.
- Adoption of a new SA framework enhancing risk sensitivity.
- Prescribed revisions to the existing regulatory capital floor from 70% to 65% requiring a transition to a new regulatory capital floor of 72.5% of RWA under the SA by 2026. This new regulatory floor will be transitioned over three years, reflecting a regulatory capital floor requirement of 67.5%, 70% and 72.5% in, fiscal 2024, 2025 and 2026, respectively.
- Application of a 50 bps leverage ratio buffer to all D-SIBs.

On June 20, 2023, OSFI announced an increase in the Domestic Stability Buffer's (DSB) level from the current 3% to 3.5% of total RWA effective November 1, 2023.

For further details, refer to the Capital management section of our 2022 Annual Report. We have incorporated the effective adjustments and guidance, as applicable, into our results and in our ongoing 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, leverage and TLAC requirements imposed by OSFI:

Basel III capital, leverage and TLAC ratios	OSFI regulatory target requirements for large banks under Basel III					RBC capital, leverage and TLAC ratios as at July 31, 2023	Domestic Stability Buffer (3)	Minimum including Capital Buffers, D-SIB/G-SIB surcharge and Domestic Stability Buffer as at July 31, 2023
	Minimum	Capital Buffers	Minimum including Capital Buffers	D-SIB/G-SIB surcharge (2)	Minimum including Capital Buffers and D-SIB/G-SIB surcharge (1), (2)			
Common Equity Tier 1	4.5%	2.6%	7.1%	1.0%	8.1%	14.1%	3.0%	11.1%
Tier 1 capital	6.0%	2.6%	8.6%	1.0%	9.6%	15.4%	3.0%	12.6%
Total capital	8.0%	2.6%	10.6%	1.0%	11.6%	17.3%	3.0%	14.6%
Leverage ratio	3.5%	n.a.	3.5%	n.a.	3.5%	4.2%	n.a.	3.5%
TLAC ratio	21.6%	n.a.	21.6%	n.a.	21.6%	30.9%	3.0%	24.6%
TLAC leverage ratio	7.25%	n.a.	7.25%	n.a.	7.25%	8.5%	n.a.	7.25%

(1) The capital buffers include the capital conservation buffer of 2.5% and the countercyclical capital buffer (CCyB) as prescribed by OSFI. The CCyB, calculated in accordance with OSFI's CAR guidelines, was 0.06% as at July 31, 2023 (April 30, 2023 - 0.04% and October 31, 2022 – 0.01%).
(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) The DSB can range from 0% to 4% of total RWA and as at July 31, 2023 is set at 3% by OSFI. Effective November 1, 2023, the DSB level will increase by 50 bps.
n.a. not applicable

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

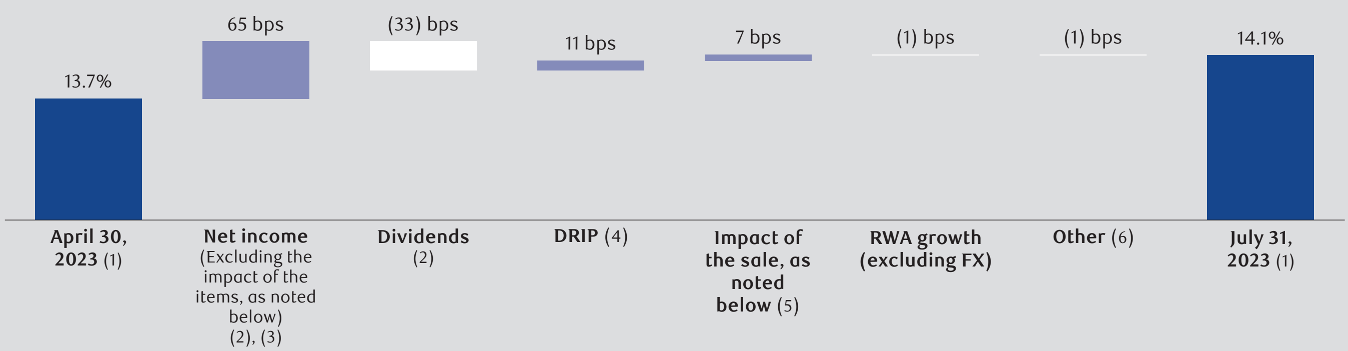
	As at		
(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	July 31 2023	April 30 2023	October 31 2022
Capital (1)			
CET1 capital	$ 82,892	$ 81,103	$ 76,945
Tier 1 capital	90,193	88,400	84,242
Total capital	101,072	99,540	93,850
RWA used in calculation of capital ratios (1)			
Credit risk	$ 470,732	$ 479,953	$ 496,898
Market risk	37,426	37,685	35,342
Operational risk	77,741	75,895	77,639
Total RWA	$ 585,899	$ 593,533	$ 609,879
Capital ratios and Leverage ratio (1)			
CET1 ratio	14.1%	13.7%	12.6%
Tier 1 capital ratio	15.4%	14.9%	13.8%
Total capital ratio	17.3%	16.8%	15.4%
Leverage ratio	4.2%	4.2%	4.4%
Leverage ratio exposure (billions)	$ 2,142	$ 2,116	$ 1,898
TLAC available and ratios (2)			
TLAC available	$ 181,035	$ 183,978	$ 160,961
TLAC ratio	30.9%	31.0%	26.4%
TLAC leverage ratio	8.5%	8.7%	8.5%

(1) Capital, RWA, and capital ratios are calculated using OSFI's CAR guideline and the Leverage ratio is calculated using OSFI's LR guideline. Both the CAR guideline and LR guideline are based on the Basel III framework. The results for the period ended July 31, 2023 and April 30, 2023 reflect our adoption of the revised CAR and LR guidelines that came into effect in Q2 2023 as part of OSFI's implementation of the Basel III reforms.

(2) TLAC available and TLAC ratios are calculated using OSFI's TLAC guideline. The TLAC standard is applied at the resolution entity level which for us is deemed to be Royal Bank of Canada and its subsidiaries. A resolution entity and its subsidiaries are collectively called a resolution group. The TLAC ratio and TLAC leverage ratio are calculated using the TLAC available as a percentage of total RWA and leverage exposure, respectively.

Q3 2023 vs. Q2 2023

Continuity of CET1 ratio (Basel III)



(1) Represents rounded figures.
(2) Represents net internal capital generation of $1.9 billion or 32 bps consisting of Net income available to shareholders excluding the impact of the specified item and the partial sale of RBC Investor Services operations, less common and preferred share dividends and distributions on other equity instruments.
(3) Excludes the specified item for the transaction and integration costs relating to our planned acquisition of HSBC Canada and the impact of the partial sale of RBC Investor Services operations.
(4) For further details about the Dividend reinvestment plan (DRIP), refer to Note 10 of our Condensed Financial Statements.
(5) On July 3, 2023, we completed the partial sale of RBC Investor Services operations. For further details, refer to Note 6 of our Condensed Financial Statements.
(6) Includes the impact of the specified item for the transaction and integration costs relating to our planned acquisition of HSBC Canada.

Our CET1 ratio was 14.1%, up 40 bps from last quarter, mainly reflecting net internal capital generation, share issuances under the DRIP and the impact of the partial sale of RBC Investor Services operations.

Total RWA decreased by $8 billion, primarily reflecting the impact of foreign exchange translation, favourable models and methodology updates, as well as the impact of the partial sale of RBC Investor Services operations. These factors were partially offset by the net impact of business growth, including growth in personal and commercial lending in Canada that was partly offset by a reduction in trading activities. In our CET1 ratio, the impact of foreign exchange translation on RWA is largely mitigated with economic hedges.

Our Tier 1 capital ratio of 15.4% was up 50 bps and our Total capital ratio of 17.3% was up 50 bps, mainly reflecting factors noted above under CET1 ratio.

Our Leverage ratio of 4.2% was unchanged from last quarter, as net internal capital generation, the impact of the sale, as noted above and share issuances under the DRIP were offset by business-driven growth in leverage exposures.

Leverage exposures increased by $26 billion, mainly driven by business growth primarily in securities and repo-style transactions. This was partially offset by the impact of foreign exchange translation, as well as the impact of the partial sale of RBC Investor Services operations.

Our TLAC ratio of 30.9% was down 10 bps, reflecting the factors noted above under the Total capital ratio, as well as an unfavourable impact from a net decrease in eligible external TLAC instruments.

Our TLAC leverage ratio of 8.5% was down 20 bps, reflecting the factors noted above under the Leverage ratio, as well as an unfavourable impact from a net decrease in eligible external TLAC instruments.

External TLAC instruments include long-term debt subject to conversion under the Bail-in regime. For further details, refer to Deposit and funding profile in the Liquidity and funding risk section.

Selected capital management activity

The following table provides our selected capital management activity:

	For the three months ended July 31, 2023			For the nine months ended July 31, 2023	
(Millions of Canadian dollars, except number of shares)	Issuance or redemption date	Number of shares (000s)	Amount	Number of shares (000s)	Amount
Tier 1 capital					
Common shares activity					
Issued in connection with share-based compensation plans (1)		174	$ 16	678	$ 61
Issued under the DRIP (2)		5,355	670	9,959	1,291
Tier 2 capital					
Issuance of February 1, 2033 subordinated debentures (3), (4)	January 31, 2023		$ –		$ 1,500

(1) Amounts include cash received for stock options exercised during the period and fair value adjustments to stock options.
(2) During the three months ended July 31, 2023 and April 30, 2023, the requirements of the DRIP were satisfied through shares issued from treasury.
(3) For further details, refer to Note 10 of our Condensed Financial Statements.
(4) Non-Viability Contingent Capital (NVCC) instruments.

As at July 31, 2023, we did not have an active normal course issuer bid (NCIB).

On January 31, 2023, we issued $1,500 million of NVCC subordinated debentures. The notes bear interest at a fixed rate of 5.01% per annum until February 1, 2028, and at the Daily Compounded Canadian Overnight Repo Rate Average plus 2.12% thereafter until their maturity on February 1, 2033.

Selected share data (1)

(Millions of Canadian dollars, except number of shares and as otherwise noted)	As at July 31, 2023		
	Number of shares (000s)	Amount	Dividends declared per share
Common shares issued	1,396,228	$ 18,670	$ 1.35
Treasury shares – common shares (2)	(1,231)	(158)	
Common shares outstanding	1,394,997	$ 18,512	
Stock options and awards			
Outstanding	7,922		
Exercisable	3,891		
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 BO (3), (4)	14,000	350	0.30
Non-cumulative Series BT (3), (4), (5)	750	750	4.20%
Non-cumulative Series C-2 (6)	15	23	US$ 16.88
Other equity instruments issued			
Limited recourse capital notes Series 1 (3), (4), (7), (8)	1,750	1,750	4.50%
Limited recourse capital notes Series 2 (3), (4), (7), (8)	1,250	1,250	4.00%
Limited recourse capital notes Series 3 (3), (4), (7), (8)	1,000	1,000	3.65%
Preferred shares and other equity instruments issued	106,765	7,323	
Treasury instruments – preferred shares and other equity instruments (2)	6	7	
Preferred shares and other equity instruments outstanding	106,771	$ 7,330	
Dividends on common shares		$ 1,885	
Dividends on preferred shares and distributions on other equity instruments (9)		58	

(1) For further details about our capital management activity, refer to Note 10 of our Condensed Financial Statements.
(2) Positive amounts represent a short position and negative amounts represent a long position.
(3) Dividend rate will reset every five years.
(4) NVCC instruments.
(5) The dividends declared per share represent the per annum dividend rate applicable to the shares issued as at the reporting date.
(6) Represents 615,400 depositary shares relating to preferred shares Series C-2. Each depositary share represents one-fortieth interest in a share of Series C-2.
(7) For Limited Recourse Capital Notes (LRCN) Series, 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.
(8) 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); 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); and in connection with the issuance of LRCN Series 3, on June 8, 2021, we issued $1,000 million of First Preferred Shares Series BS (Series BS). The Series BQ, BR and BS preferred shares were issued at a price of $1,000 per share and were issued to a consolidated trust to be held as trust assets in connection with the LRCN structure. For further details, refer to Note 20 of our 2022 Annual Consolidated Financial Statements.
(9) Excludes distributions to non-controlling interests.

As at August 18, 2023, the number of outstanding common shares was 1,395,266,075, net of treasury shares held of 969,114, and the number of stock options and awards was 7,916,225.

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 July 31, 2023, which were the preferred shares Series AZ, BB, BD, BF, BH, BI, BO, BT, LRCN Series 1, LRCN Series 2, LRCN Series 3 and subordinated debentures due on January 27, 2026, July 25, 2029, December 23, 2029, June 30, 2030, January 28, 2033, November 3, 2031, May 3, 2032, and February 1, 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 4,982 million common shares, in aggregate, which would represent a dilution impact of 78.13% based on the number of common shares outstanding as at July 31, 2023.

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 2022 Annual Consolidated Financial Statements.

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 2022 Annual Consolidated Financial Statements and updates are provided below.

IFRS 17 *Insurance Contracts* (IFRS 17)
In May 2017, the IASB issued IFRS 17 to establish a comprehensive insurance standard which provides guidance on the recognition, measurement, presentation and disclosure of insurance contracts issued and reinsurance contracts held and will replace the existing IFRS 4 *Insurance Contracts* (IFRS 4). In June 2020, the IASB issued amendments to IFRS 17, including deferral of the effective date by two years. This new standard is effective for us on November 1, 2023 and is to be applied retrospectively.

Under IFRS 17, insurance contracts are contracts under which we accept significant insurance risk from a policyholder by agreeing to compensate the policyholder if a specified uncertain future event adversely affects the policyholder. Embedded derivatives, investment components and promises to provide non-insurance services, provided specific criteria are met, are separated from the measurement of insurance and reinsurance contracts. Insurance and reinsurance contracts are aggregated into portfolios that are subject to similar risks and are managed together, and then divided into groups based on the period of issuance and profitability. Groups are separately recognized and measured using one of three measurement models depending on the characteristics of the contracts:

- For insurance contracts with direct participating features, the contracts are measured using the variable fee approach (VFA).
- For insurance contracts and reinsurance contracts held with a short duration of one year or less, the premium allocation approach (PAA) may be elected.
- The general measurement method (GMM) is applied to all remaining contracts.

Under the GMM and VFA, the liabilities for remaining coverage and incurred claims for groups of contracts are measured as the sum of the fulfilment cash flows and the contractual service margin (CSM), which are recalculated at the end of each reporting period. The fulfilment cash flows consist of the present value of future cash flows and a risk adjustment for non-financial risk. For insurance contracts, the CSM represents the unearned profit for providing insurance coverage. For reinsurance contracts held, the CSM represents the net cost or net gain of purchasing reinsurance. Under the PAA, the liability for remaining coverage for each group is measured as the premiums received less insurance revenue recognized for services provided, while the liability for incurred claims is measured as the fulfillment cash flows for incurred claims plus adjustment on any financing components. Losses from the recognition of onerous groups of insurance contracts, regardless of the measurement model applied, are recognized in the Consolidated Statements of Income immediately.

The following are key differences between IFRS 17 and IFRS 4:

- New business profits are deferred and measured as the CSM component of the insurance contract liabilities and amortized into income as insurance contract services are provided, while losses are recognized into income immediately. Under IFRS 4, gains and losses are recognized in income immediately. On July 18, 2023, OSFI released regulatory guidance to allow the inclusion of the CSM in calculating CET1 capital and related ratios, and therefore, we expect no impact on the capital metrics from such reduction in retained earnings resulting from the CSM.
- Discount rates used in calculating the present value of insurance contract liabilities are based on the characteristics of the insurance contracts unlike IFRS 4 which is based on the assets supporting the liabilities.
- Presentation and disclosure changes are expected due to the new requirements.

The overall impact of establishing the CSM, as well as other measurement impacts on our assets and liabilities, is expected to result in a reduction to retained earnings on adoption of IFRS 17. While IFRS 17 impacts the timing of profit recognition of insurance contracts, it will have no impact on total profit recognized over the lifetime of these contracts.

Governance
We are in the advanced stages of implementation for IFRS 17. As part of the implementation process, a comprehensive program and governance structure led by Finance and the Insurance business was established to focus on the evaluation of the impacts of the standard and implementation of policies, systems and processes required for the adoption. Regular updates are provided to senior management as well as the Audit Committee and Board of Directors to ensure escalation of key issues and risks. We have enhanced existing controls, and designed and implemented new controls and governance procedures to support the implementation of IFRS 17, including controls over data and systems, key assumptions, and measurement approaches.

Transition

Upon the adoption of IFRS 17, we will apply IFRS 17 retrospectively by adjusting our Consolidated Balance Sheets as at November 1, 2022 and restating the comparative information as at and for the year ended October 31, 2023. The full retrospective approach will be applied for all insurance and reinsurance contracts unless it is impracticable to do so. When impracticable, the fair value approach will be applied, which calculates the CSM or loss component of the liability for remaining coverage as the difference between the fair value of a group of contracts and the fulfillment cash flows measured at the date of transition.

As permitted by IFRS 17, we also expect to change the classification and measurement of certain eligible financial assets held in respect of an activity that relates to insurance contracts upon the adoption of IFRS 17. We will apply these changes retrospectively by adjusting our Consolidated Balance Sheets as at November 1, 2023, the date of the initial application of IFRS 17, with no restatement of comparative information.

The quantification of the transition impacts is in progress, and we expect to provide an estimate in our 2023 Annual Report.

Controls and procedures

Disclosure controls and procedures

As of July 31, 2023, 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 Canadian securities regulatory authorities and the U.S. SEC. Based on that evaluation, the President and Chief Executive Officer and the Chief Financial Officer concluded that our disclosure controls and procedures were effective as of July 31, 2023.

Internal control over financial reporting

No changes were made in our internal control over financial reporting during the quarter ended July 31, 2023 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 2022 Annual Consolidated Financial Statements.

Glossary

Acceptances
A bill of exchange or negotiable instrument drawn by the borrower for payment at maturity and accepted by a bank. The acceptance constitutes a guarantee of payment by the bank and can be traded in the money market. The bank earns a "stamping fee" for providing this guarantee.

Allowance for credit losses (ACL)
The amount deemed adequate by management to absorb expected credit losses as at the balance sheet date. The allowance is established for all financial assets subject to impairment assessment, including certain loans, debt securities, customers' liability under acceptances, financial guarantees, and undrawn loan commitments. The allowance is changed by the amount of provision for credit losses recorded, which is charged to income, and decreased by the amount of write-offs net of recoveries in the period.

ACL on loans ratio
ACL on loans ratio is calculated as ACL on loans as a percentage of total loans and acceptances.

Asset-backed securities (ABS)
Securities created through the securitization of a pool of assets, for example auto loans or credit card loans.

Assets under administration (AUA)
Assets administered by us, which are beneficially owned by clients, unless otherwise noted. Services provided in respect of assets under administration are of an administrative nature, including safekeeping, collecting investment income, settling purchase and sale transactions, and record keeping.

Assets under management (AUM)
Assets managed by us, which are beneficially owned by clients, unless otherwise noted. Services provided in respect of assets under management include the selection of investments and the provision of investment advice. We have assets under management that are also administered by us and included in assets under administration.

Attributed capital
Attributed capital is based on the Basel III regulatory capital requirements and economic capital.

Auction rate securities (ARS)
Debt securities whose interest rates are regularly reset through an auction process.

Average earning assets, net
Average earning assets include interest-bearing deposits with other banks, securities, net of applicable allowance, assets purchased under reverse repurchase agreements and securities borrowed, loans, net of allowance, cash collateral and margin deposits. Insurance assets, and all other assets not specified are excluded. The averages are based on the daily balances for the period.

Basis point (bp)
One one-hundredth of a percentage point (.01%).

Collateral
Assets pledged as security for a loan or other obligation. Collateral can take many forms, such as cash, highly rated securities, property, inventory, equipment and receivables.

Collateralized debt obligation (CDO)
Securities with multiple tranches that are issued by structured entities and collateralized by debt obligations including bonds and loans. Each tranche offers a varying degree of risk and return so as to meet investor demand.

Commercial mortgage-backed securities (CMBS)
Securities created through the securitization of commercial mortgages.

Commitments to extend credit
Unutilized amount of credit facilities available to clients either in the form of loans, bankers' acceptances and other on-balance sheet financing, or through off-balance sheet products such as guarantees and letters of credit.

Common Equity Tier 1 (CET1) capital
A regulatory Basel III capital measure comprised mainly of common shareholders' equity less regulatory deductions and adjustments for goodwill and intangibles, defined benefit pension fund assets, shortfall in allowances and other specified items.

Common Equity Tier 1 capital ratio
A risk-based capital measure calculated as CET1 capital divided by risk-weighted assets.

Covered bonds
Full recourse on-balance sheet obligations issued by banks and credit institutions that are fully collateralized by assets over which investors enjoy a priority claim in the event of an issuer's insolvency.

Credit default swaps (CDS)
A derivative contract that provides the purchaser with a one-time payment should the referenced entity/entities default (or a similar triggering event occur).

Derivative
A contract between two parties, which requires little or no initial investment and where payments between the parties are dependent upon the movements in price of an underlying instrument, index or financial rate. Examples of derivatives include swaps, options, forward rate agreements and futures. The notional amount of the derivative is the contract amount used as a reference point to calculate the payments to be exchanged between the two parties, and the notional amount itself is generally not exchanged by the parties.

Dividend payout ratio
Common dividends as a percentage of net income available to common shareholders.

Dividend yield
Dividends per common share divided by the average of the high and low share price in the relevant period.

Earnings per share (EPS), basic
Calculated as net income available to common shareholders divided by the average number of shares outstanding.

Earnings per share (EPS), diluted
Calculated as net income available to common shareholders divided by the average number of shares outstanding adjusted for the dilutive effects of stock options and other convertible securities.

Efficiency Ratio
Non-interest expense as a percentage of total revenue.

Expected credit losses
The difference between the contractual cash flows due to us in accordance with the relevant contractual terms and the cash flows that we expect to receive, discounted to the balance sheet date.

Fair value
Fair value of a financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Funding Valuation Adjustment
Funding valuation adjustments are calculated to incorporate cost and benefit of funding in the valuation of uncollateralized and under-collateralized OTC derivatives. Future expected cash flows of these derivatives are discounted to reflect the cost and benefit of funding the derivatives by using a funding curve, implied volatilities and correlations as inputs.

Guarantees and standby letters of credit
These primarily represent irrevocable assurances that a bank will make payments in the event that its client cannot meet its financial obligations to third parties. Certain other guarantees, such as bid and performance bonds, represent non-financial undertakings.

Hedge
A risk management technique used to mitigate exposure from market, interest rate or foreign currency exchange risk arising from normal banking operations. The elimination or reduction of such exposure is accomplished by establishing offsetting positions. For example, assets denominated in foreign currencies can be offset with liabilities in the same currencies or through the use of foreign exchange hedging instruments such as futures, options or foreign exchange contracts.

Hedge funds
A type of investment fund, marketed to accredited high net worth investors, that is subject to limited regulation and restrictions on its investments compared to retail mutual funds, and that often utilize aggressive strategies such as selling short, leverage, program trading, swaps, arbitrage and derivatives.

High-quality liquid assets (HQLA)
HQLA are cash or assets that can be converted into cash quickly through sales (or by being pledged as collateral) with no significant loss of value.

Impaired loans
Loans are classified as impaired when there has been a deterioration of credit quality to the extent that management no longer has reasonable assurance of timely collection of the full amount of principal and interest in accordance with the contractual terms of the loan agreement. Credit card balances are not classified as impaired as they are directly written off after payments are 180 days past due.

International Financial Reporting Standards (IFRS)
IFRS are principles-based standards, interpretations and the framework adopted by the International Accounting Standards Board.

Leverage ratio
A Basel III regulatory measure, the ratio divides Tier 1 capital by the sum of total assets plus specified off-balance sheet items.

Liquidity Coverage Ratio (LCR)
The Liquidity Coverage Ratio is a Basel III metric designed to ensure banks hold a sufficient reserve of high-quality liquidity assets (HQLA) to allow them to service a period of significant liquidity stress lasting 30 calendar days.

Loan-to-value (LTV) ratio
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.

Master netting agreement
An agreement between us and a counterparty designed to reduce the credit risk of multiple derivative transactions through the creation of a legal right of offset of exposure in the event of a default.

Net interest income
The difference between what is earned on assets such as loans and securities and what is paid on liabilities such as deposits and subordinated debentures.

Net interest margin (NIM) on average earning assets, net
Calculated as net interest income divided by average earning assets, net.

Net Stable Funding Ratio (NSFR)
The Net Stable Funding Ratio is a Basel III metric defined as the amount of available stable funding (ASF) relative to the amount of requested stable funding (RSF). The ratio should be at least equal to 100% on an ongoing basis.

Normal course issuer bid (NCIB)
A program for the repurchase of our own shares for cancellation through a stock exchange that is subject to the various rules of the relevant stock exchange and securities commission.

Notional amount
The contract amount used as a reference point to calculate payments for derivatives.

Off-balance sheet financial instruments
A variety of arrangements offered to clients, which include credit derivatives, written put options, backstop liquidity facilities, stable value products, financial standby letters of credit, performance guarantees, credit enhancements, mortgage loans sold with recourse, commitments to extend credit, securities lending, documentary and commercial letters of credit, sponsor member guarantees, securities lending indemnifications and indemnifications.

Office of the Superintendent of Financial Institutions Canada (OSFI)
The primary regulator of federally chartered financial institutions and federally administered pension plans in Canada. OSFI's mission is to safeguard policyholders, depositors and pension plan members from undue loss.

Operating leverage
The difference between our revenue growth rate and non-interest expense growth rate.

Options
A contract or a provision of a contract that gives one party (the option holder) the right, but not the obligation, to perform a specified transaction with another party (the option issuer or option writer) according to specified terms.

Provision for credit losses (PCL)
The amount charged to income necessary to bring the allowance for credit losses to a level determined appropriate by management. This includes provisions on performing and impaired financial assets.

PCL on loans ratio
PCL on loans ratio is calculated using PCL on loans as a percentage of average net loans and acceptances.

RBC Homeline Plan products
This is comprised of residential mortgages and secured personal loans whereby the borrower pledges real estate as collateral.

Repurchase agreements
These involve the sale of securities for cash and the simultaneous repurchase of the securities for value at a later date. These transactions normally do not constitute economic sales and therefore are treated as collateralized financing transactions.

Return on common equity (ROE)
Net income available to common shareholders, expressed as a percentage of average common equity.

Reverse repurchase agreements
These involve the purchase of securities for cash and the simultaneous sale of the securities for value at a later date. These transactions normally do not constitute economic sales and therefore are treated as collateralized financing transactions.

Risk-weighted assets (RWA)
Assets adjusted by a regulatory risk-weight factor to reflect the riskiness of on and off-balance sheet exposures. Certain assets are not risk-weighted, but deducted from capital. The calculation is defined by OSFI's Capital Adequacy Requirements guidelines. For more details, refer to the Capital management section.

Securities lending
Transactions in which the owner of securities agrees to lend it under the terms of a prearranged contract to a borrower for a fee. Collateral for the loan consists of either high quality securities or cash and collateral value must be at least equal to the market value of the loaned securities. Borrowers pay a negotiated fee for loans collateralized by securities, whereas for cash collateral lenders pay borrowers interest at a negotiated rate and reinvest the cash collateral to earn a return. An intermediary such as a bank often acts as agent lender for the owner of the security in return for a share of the revenue earned by the owner from lending securities. Most often, agent lenders indemnify the owner against the risk of the borrower's failure to redeliver the loaned securities – counterparty credit risk if a borrower defaults and market risk if the value of the non-cash collateral declines. The agent lender does not indemnify against the investment risk of re-investing cash collateral which is borne by the owner.

Securities sold short
A transaction in which the seller sells securities and then borrows the securities in order to deliver them to the purchaser upon settlement. At a later date, the seller buys identical securities in the market to replace the borrowed securities.

Securitization
The process by which various financial assets are packaged into newly issued securities backed by these assets.

Standardized Approach (SA)
Risk weights prescribed by OSFI are used to calculate RWA for the credit risk exposures. Credit assessments by OSFI-recognized external credit rating agencies of S&P, Moody's, Fitch, and DBRS are used to risk-weight our Sovereign and Bank exposures based on the standards and guidelines issued by OSFI. For our Business and Retail exposures, we use the standard risk weights prescribed by OSFI.

Structured entities
A structured entity is an entity in which voting or similar rights are not the dominant factor in deciding who controls the entity, such as when the activities that significantly affect the entity's returns are directed by means of contractual arrangements. Structured entities often have restricted activities, narrow and well defined objectives, insufficient equity to finance their activities, and financing in the form of multiple contractually-linked instruments.

Taxable equivalent basis (teb)
Income from certain specified tax advantaged sources (eligible Canadian taxable corporate dividends) is increased to a level that would make it comparable to income from taxable sources. There is an offsetting adjustment in the tax provision, thereby generating the same after-tax net income.

Tier 1 capital
Tier 1 capital comprises predominantly of CET1 capital, with additional Tier 1 items such as preferred shares, limited recourse capital notes and non-controlling interests in subsidiaries Tier 1 instruments.

Tier 2 capital
Tier 2 capital consists mainly of subordinated debentures that meet certain criteria, certain loan loss allowances and non-controlling interests in subsidiaries' Tier 2 instruments.

Total Loss Absorbing Capacity (TLAC)
The aggregate of Tier 1 capital, Tier 2 capital, and external TLAC instruments which allow conversion in whole or in part into common shares under the Canada Deposit Insurance Corporation Act and meet all of the eligibility criteria under the guideline.

TLAC ratio
The risk-based TLAC ratio is defined as TLAC divided by total risk-weighted assets.

TLAC leverage ratio
The TLAC leverage ratio is defined as TLAC divided by the Leverage ratio exposure.

Total capital and total capital ratio
Total capital is defined as the total of Tier 1 and Tier 2 capital. The total capital ratio is calculated by dividing total capital by risk-weighted assets.

Tranche
A security class created whereby the risks and returns associated with a pool of assets are packaged into several classes of securities offering different risk and return profiles from those of the underlying asset pool. Tranches are typically rated by ratings agencies, and reflect both the credit quality of underlying collateral as well as the level of protection based on the tranches' relative subordination.

Unattributed capital
Unattributed capital represents common equity in excess of common equity attributed to our business segments and is reported in the Corporate Support segment.

Value-at-Risk (VaR)
A generally accepted risk-measurement concept that uses statistical models based on historical information to estimate within a given level of confidence the maximum loss in market value we would experience in our trading portfolio from an adverse one-day movement in market rates and prices.

Enhanced Disclosure Task Force recommendations index

We aim to present transparent, high-quality risk disclosures by providing disclosures in our 2022 Annual Report, Q3 2023 Report to Shareholders (RTS), Supplementary Financial Information package (SFI), and Pillar 3 Report, in accordance with recommendations from the FSB's Enhanced Disclosure Task Force (EDTF). Information within the SFI and Pillar 3 Report is not and should not be considered incorporated by reference into our Q3 2023 Report to Shareholders.

The following index summarizes our disclosure by EDTF recommendation:

Type of Risk	Recommendation	Disclosure	Location of disclosure: RTS page	Location of disclosure: Annual Report page	Location of disclosure: SFI page
General	1	Table of contents for EDTF risk disclosure	49	128	1
	2	Define risk terminology and measures		60-65, 126-127	–
	3	Top and emerging risks		58-60	–
	4	New regulatory ratios	40-43	105-110	–
Risk governance, risk management and business model	5	Risk management organization		60-65	–
	6	Risk culture		60-65	–
	7	Risk in the context of our business activities		113	–
	8	Stress testing		63-64, 76	–
Capital adequacy and risk-weighted assets (RWA)	9	Minimum Basel III capital ratios and Domestic systemically important bank surcharge	41	105-110	–
	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		–	19
	12	Capital strategic planning		105-110	–
	13	RWA by business segments		–	20
	14	Analysis of capital requirement, and related measurement model information		66-69	*
	15	RWA credit risk and related risk measurements		–	*
	16	Movement of RWA by risk type		–	20
	17	Basel back-testing		63, 66-67	31
Liquidity	18	Quantitative and qualitative analysis of our liquidity reserve	32-33	83-84, 88-89	–
Funding	19	Encumbered and unencumbered assets by balance sheet category, and contractual obligations for rating downgrades	33, 35	84, 87	–
	20	Maturity analysis of consolidated total assets, liabilities and off-balance sheet commitments analyzed by remaining contractual maturity at the balance sheet date	39-40	91-92	–
	21	Sources of funding and funding strategy	33-35	84-86	–
Market risk	22	Relationship between the market risk measures for trading and non-trading portfolios and the balance sheet	30-31	80-81	–
	23	Decomposition of market risk factors	28-29	76-81	–
	24	Market risk validation and back-testing		76	–
	25	Primary risk management techniques beyond reported risk measures and parameters		76-79	–
Credit risk	26	Bank's credit risk profile	24-27	66-75, 175-182	21-31,*
		Quantitative summary of aggregate credit risk exposures that reconciles to the balance sheet	65-71	120-125	*
	27	Policies for identifying impaired loans		68-70, 115, 147-149	–
	28	Reconciliation of the opening and closing balances of impaired loans and impairment allowances during the year		–	23, 28
	29	Quantification of gross notional exposure for over-the-counter derivatives or exchange-traded derivatives		71	32
	30	Credit risk mitigation, including collateral held for all sources of credit risk		69-70	*
Other	31	Other risk types		94-104	–
	32	Publicly known risk events		98-99, 219-220	–

* These disclosure requirements are satisfied or partially satisfied by disclosures provided in our Pillar 3 Report for the quarter ended July 31, 2023 and for the year ended October 31, 2022.

Interim Condensed Consolidated Financial Statements (unaudited)

Interim Condensed Consolidated Balance Sheets (unaudited)

	As at	
(Millions of Canadian dollars)	July 31 2023	October 31 2022
Assets		
Cash and due from banks	$ 80,358	$ 72,397
Interest-bearing deposits with banks	87,650	108,011
Securities		
Trading	176,603	148,205
Investment, net of applicable allowance (Note 4)	196,022	170,018
	372,625	318,223
Assets purchased under reverse repurchase agreements and securities borrowed	347,151	317,845
Loans (Note 5)		
Retail	561,212	549,751
Wholesale	278,997	273,967
	840,209	823,718
Allowance for loan losses (Note 5)	(4,495)	(3,753)
	835,714	819,965
Segregated fund net assets	2,921	2,638
Other		
Customers' liability under acceptances	19,365	17,827
Derivatives	115,914	154,439
Premises and equipment	6,793	7,214
Goodwill	12,299	12,277
Other intangibles	5,892	6,083
Other assets (Note 6)	71,052	80,300
	231,315	278,140
Total assets	$ 1,957,734	$ 1,917,219
Liabilities and equity		
Deposits (Note 7)		
Personal	$ 434,047	$ 404,932
Business and government	736,730	759,870
Bank	44,894	44,012
	1,215,671	1,208,814
Segregated fund net liabilities	2,921	2,638
Other		
Acceptances	19,407	17,872
Obligations related to securities sold short	36,653	35,511
Obligations related to assets sold under repurchase agreements and securities loaned	334,465	273,947
Derivatives	117,244	153,491
Insurance claims and policy benefit liabilities	12,700	11,511
Other liabilities (Note 6)	95,042	95,235
	615,511	587,567
Subordinated debentures (Note 10)	11,202	10,025
Total liabilities	1,845,305	1,809,044
Equity attributable to shareholders		
Preferred shares and other equity instruments	7,330	7,318
Common shares (Note 10)	18,512	16,984
Retained earnings	82,011	78,037
Other components of equity	4,481	5,725
	112,334	108,064
Non-controlling interests	95	111
Total equity	112,429	108,175
Total liabilities and equity	$ 1,957,734	$ 1,917,219

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

Interim Condensed Consolidated Statements of Income (unaudited)

	For the three months ended		For the nine months ended	
(Millions of Canadian dollars, except per share amounts)	**July 31 2023**	July 31 2022	**July 31 2023**	July 31 2022
Interest and dividend income (Note 3)				
Loans	**$ 11,219**	$ 6,761	**$ 31,600**	$ 18,025
Securities	**3,751**	1,822	**9,932**	4,597
Assets purchased under reverse repurchase agreements and securities borrowed	**6,063**	1,601	**15,736**	2,506
Deposits and other	**1,801**	553	**5,221**	745
	22,834	10,737	**62,489**	25,873
Interest expense (Note 3)				
Deposits and other	**9,775**	2,786	**26,203**	5,554
Other liabilities	**6,599**	1,984	**17,218**	3,707
Subordinated debentures	**174**	77	**481**	177
	16,548	4,847	**43,902**	9,438
Net interest income	**6,286**	5,890	**18,587**	16,435
Non-interest income				
Insurance premiums, investment and fee income	**1,848**	1,233	**5,086**	2,866
Trading revenue	**485**	(128)	**1,984**	475
Investment management and custodial fees	**2,099**	1,857	**6,238**	5,710
Mutual fund revenue	**1,034**	1,028	**3,049**	3,279
Securities brokerage commissions	**362**	344	**1,100**	1,132
Service charges	**529**	499	**1,551**	1,464
Underwriting and other advisory fees	**472**	369	**1,442**	1,577
Foreign exchange revenue, other than trading	**289**	250	**1,044**	772
Card service revenue	**334**	314	**938**	893
Credit fees	**342**	301	**1,078**	1,175
Net gains on investment securities	**27**	28	**191**	66
Share of profit in joint ventures and associates	**(37)**	33	**4**	86
Other	**419**	114	**811**	488
	8,203	6,242	**24,516**	19,983
Total revenue	**14,489**	12,132	**43,103**	36,418
Provision for credit losses (Notes 4 and 5)	**616**	340	**1,748**	103
Insurance policyholder benefits, claims and acquisition expense	**1,379**	850	**3,930**	1,667
Non-interest expense				
Human resources (Note 8)	**4,794**	3,858	**14,270**	12,145
Equipment	**611**	514	**1,769**	1,528
Occupancy	**411**	381	**1,230**	1,153
Communications	**324**	277	**923**	763
Professional fees	**592**	373	**1,517**	1,039
Amortization of other intangibles	**369**	342	**1,118**	1,015
Other	**760**	641	**2,203**	1,757
	7,861	6,386	**23,030**	19,400
Income before income taxes	**4,633**	4,556	**14,395**	15,248
Income taxes (Note 9)	**761**	979	**3,660**	3,323
Net income	**$ 3,872**	$ 3,577	**$ 10,735**	$ 11,925
Net income attributable to:				
Shareholders	**$ 3,870**	$ 3,575	**$ 10,730**	$ 11,918
Non-controlling interests	**2**	2	**5**	7
	$ 3,872	$ 3,577	**$ 10,735**	$ 11,925
Basic earnings per share (in dollars) (Note 11)	**$ 2.74**	$ 2.52	**$ 7.61**	$ 8.33
Diluted earnings per share (in dollars) (Note 11)	**2.73**	2.51	**7.60**	8.31
Dividends per common share (in dollars)	**1.35**	1.28	**3.99**	3.68

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

Interim Condensed Consolidated Statements of Comprehensive Income (unaudited)

	For the three months ended		For the nine months ended	
(Millions of Canadian dollars)	**July 31 2023**	July 31 2022	**July 31 2023**	July 31 2022
Net income	**$ 3,872**	$ 3,577	**$ 10,735**	$ 11,925
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	**(85)**	(247)	**527**	(1,392)
Provision for credit losses recognized in income	**(3)**	(2)	**(3)**	(13)
Reclassification of net losses (gains) on debt securities and loans at fair value through other comprehensive income to income	**(21)**	(5)	**(134)**	(34)
	(109)	(254)	**390**	(1,439)
Foreign currency translation adjustments				
Unrealized foreign currency translation gains (losses)	**(1,878)**	(459)	**(1,296)**	1,213
Net foreign currency translation gains (losses) from hedging activities	**722**	213	**175**	(157)
Reclassification of losses (gains) on foreign currency translation to income	**(160)**	–	**(160)**	(18)
Reclassification of losses (gains) on net investment hedging activities to income	**146**	–	**146**	17
	(1,170)	(246)	**(1,135)**	1,055
Net change in cash flow hedges				
Net gains (losses) on derivatives designated as cash flow hedges	**10**	(296)	**(581)**	671
Reclassification of losses (gains) on derivatives designated as cash flow hedges to income	**(7)**	46	**79**	194
	3	(250)	**(502)**	865
Items that will not be reclassified subsequently to income:				
Remeasurement gains (losses) on employee benefit plans (1), (Note 8)	**147**	(319)	**(212)**	729
Net gains (losses) from fair value changes due to credit risk on financial liabilities designated at fair value through profit or loss	**(388)**	324	**(875)**	1,357
Net gains (losses) on equity securities designated at fair value through other comprehensive income	**–**	10	**18**	53
	(241)	15	**(1,069)**	2,139
Total other comprehensive income (loss), net of taxes	**(1,517)**	(735)	**(2,316)**	2,620
Total comprehensive income (loss)	**$ 2,355**	$ 2,842	**$ 8,419**	$ 14,545
Total comprehensive income attributable to:				
Shareholders	**$ 2,356**	$ 2,841	**$ 8,417**	$ 14,536
Non-controlling interests	**(1)**	1	**2**	9
	$ 2,355	$ 2,842	**$ 8,419**	$ 14,545

(1) Includes $(9) million that was reclassified from other comprehensive income to retained earnings.

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

	For the three months ended		For the nine months ended	
(Millions of Canadian dollars)	**July 31 2023**	July 31 2022	**July 31 2023**	July 31 2022
Income taxes on other comprehensive income				
Net unrealized gains (losses) on debt securities and loans at fair value through other comprehensive income	**$ (71)**	$ (20)	**$ 120**	$ (388)
Provision for credit losses recognized in income	**(1)**	–	**–**	(2)
Reclassification of net losses (gains) on debt securities and loans at fair value through other comprehensive income to income	**(8)**	(3)	**(38)**	(7)
Unrealized foreign currency translation gains (losses)	**(1)**	–	**–**	–
Net foreign currency translation gains (losses) from hedging activities	**267**	75	**203**	(43)
Reclassification of losses (gains) on net investment hedging activities to income	**45**	–	**45**	6
Net gains (losses) on derivatives designated as cash flow hedges	**10**	(112)	**(130)**	251
Reclassification of losses (gains) on derivatives designated as cash flow hedges to income	**(2)**	17	**32**	70
Remeasurement gains (losses) on employee benefit plans	**55**	(115)	**(17)**	252
Net gains (losses) from fair value changes due to credit risk on financial liabilities designated at fair value through profit or loss	**(150)**	114	**(337)**	480
Net gains (losses) on equity securities designated at fair value through other comprehensive income	**(1)**	(7)	**14**	(8)
Total income tax expenses (recoveries)	**$ 143**	$ (51)	**$ (108)**	$ 611

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 July 31, 2023											
						Other components of equity						
(Millions of Canadian dollars)	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
Balance at beginning of period	$ 7,323	$ 17,984	$ (4)	$ (127)	$ 80,326	$ (1,858)	$ 5,723	$ 1,889	$ 5,754	$ 111,256	$ 98	$ 111,354
Changes in equity												
Issues of share capital and other equity instruments	–	686	–	–	–	–	–	–	–	686	–	686
Common shares purchased for cancellation	–	–	–	–	–	–	–	–	–	–	–	–
Redemption of preferred shares and other equity instruments	–	–	–	–	–	–	–	–	–	–	–	–
Sales of treasury shares and other equity instruments	–	–	72	883	–	–	–	–	–	955	–	955
Purchases of treasury shares and other equity instruments	–	–	(61)	(914)	–	–	–	–	–	(975)	–	(975)
Share-based compensation awards	–	–	–	–	–	–	–	–	–	–	–	–
Dividends on common shares	–	–	–	–	(1,885)	–	–	–	–	(1,885)	–	(1,885)
Dividends on preferred shares and distributions on other equity instruments	–	–	–	–	(58)	–	–	–	–	(58)	(2)	(60)
Other	–	–	–	–	(1)	–	–	–	–	(1)	–	(1)
Net income	–	–	–	–	3,870	–	–	–	–	3,870	2	3,872
Total other comprehensive income (loss), net of taxes	–	–	–	–	(241)	(109)	(1,167)	3	(1,273)	(1,514)	(3)	(1,517)
Balance at end of period	$ 7,323	$ 18,670	$ 7	$ (158)	$ 82,011	$ (1,967)	$ 4,556	$ 1,892	$ 4,481	$ 112,334	$ 95	$ 112,429

	For the three months ended July 31, 2022											
						Other components of equity						
(Millions of Canadian dollars)	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
Balance at beginning of period	$ 7,323	$ 17,488	$ (25)	$ (174)	$ 75,931	$ (1,273)	$ 3,353	$ 1,681	$ 3,761	$ 104,304	$ 101	$ 104,405
Changes in equity												
Issues of share capital and other equity instruments	–	8	–	–	–	–	–	–	–	8	–	8
Common shares purchased for cancellation	–	(129)	–	–	(1,209)	–	–	–	–	(1,338)	–	(1,338)
Redemption of preferred shares and other equity instruments	–	–	–	–	–	–	–	–	–	–	–	–
Sales of treasury shares and other equity instruments	–	–	194	1,181	–	–	–	–	–	1,375	–	1,375
Purchases of treasury shares and other equity instruments	–	–	(164)	(1,282)	–	–	–	–	–	(1,446)	–	(1,446)
Share-based compensation awards	–	–	–	–	–	–	–	–	–	–	–	–
Dividends on common shares	–	–	–	–	(1,784)	–	–	–	–	(1,784)	–	(1,784)
Dividends on preferred shares and distributions on other equity instruments	–	–	–	–	(58)	–	–	–	–	(58)	(2)	(60)
Other	–	–	–	–	(4)	–	–	–	–	(4)	–	(4)
Net income	–	–	–	–	3,575	–	–	–	–	3,575	2	3,577
Total other comprehensive income (loss), net of taxes	–	–	–	–	15	(254)	(245)	(250)	(749)	(734)	(1)	(735)
Balance at end of period	$ 7,323	$ 17,367	$ 5	$ (275)	$ 76,466	$ (1,527)	$ 3,108	$ 1,431	$ 3,012	$ 103,898	$ 100	$ 103,998

(Millions of Canadian dollars)	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
	For the nine months ended July 31, 2023					Other components of equity						
Balance at beginning of period	$ 7,323	$ 17,318	$ (5)	$ (334)	$ 78,037	$ (2,357)	$ 5,688	$ 2,394	$ 5,725	$ 108,064	$ 111	$ 108,175
Changes in equity												
Issues of share capital and other equity instruments	–	1,352	–	–	1	–	–	–	–	1,353	–	1,353
Common shares purchased for cancellation	–	–	–	–	–	–	–	–	–	–	–	–
Redemption of preferred shares and other equity instruments	–	–	–	–	–	–	–	–	–	–	–	–
Sales of treasury shares and other equity instruments	–	–	461	2,960	–	–	–	–	–	3,421	–	3,421
Purchases of treasury shares and other equity instruments	–	–	(449)	(2,784)	–	–	–	–	–	(3,233)	–	(3,233)
Share-based compensation awards	–	–	–	–	4	–	–	–	–	4	–	4
Dividends on common shares	–	–	–	–	(5,550)	–	–	–	–	(5,550)	–	(5,550)
Dividends on preferred shares and distributions on other equity instruments	–	–	–	–	(169)	–	–	–	–	(169)	(18)	(187)
Other	–	–	–	–	27	–	–	–	–	27	–	27
Net income	–	–	–	–	10,730	–	–	–	–	10,730	5	10,735
Total other comprehensive income (loss), net of taxes	–	–	–	–	(1,069)	390	(1,132)	(502)	(1,244)	(2,313)	(3)	(2,316)
Balance at end of period	$ 7,323	$ 18,670	$ 7	$ (158)	$ 82,011	$ (1,967)	$ 4,556	$ 1,892	$ 4,481	$ 112,334	$ 95	$ 112,429

(Millions of Canadian dollars)	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
	For the nine months ended July 31, 2022					Other components of equity						
Balance at beginning of period	$ 6,723	$ 17,728	$ (39)	$ (73)	$ 71,795	$ (88)	$ 2,055	$ 566	$ 2,533	$ 98,667	$ 95	$ 98,762
Changes in equity												
Issues of share capital and other equity instruments	750	50	–	–	(1)	–	–	–	–	799	–	799
Common shares purchased for cancellation	–	(411)	–	–	(4,033)	–	–	–	–	(4,444)	–	(4,444)
Redemption of preferred shares and other equity instruments	(150)	–	–	–	(5)	–	–	–	–	(155)	–	(155)
Sales of treasury shares and other equity instruments	–	–	502	3,888	–	–	–	–	–	4,390	–	4,390
Purchases of treasury shares and other equity instruments	–	–	(458)	(4,090)	–	–	–	–	–	(4,548)	–	(4,548)
Share-based compensation awards	–	–	–	–	2	–	–	–	–	2	–	2
Dividends on common shares	–	–	–	–	(5,172)	–	–	–	–	(5,172)	–	(5,172)
Dividends on preferred shares and distributions on other equity instruments	–	–	–	–	(180)	–	–	–	–	(180)	(4)	(184)
Other	–	–	–	–	3	–	–	–	–	3	–	3
Net income	–	–	–	–	11,918	–	–	–	–	11,918	7	11,925
Total other comprehensive income (loss), net of taxes	–	–	–	–	2,139	(1,439)	1,053	865	479	2,618	2	2,620
Balance at end of period	$ 7,323	$ 17,367	$ 5	$ (275)	$ 76,466	$ (1,527)	$ 3,108	$ 1,431	$ 3,012	$ 103,898	$ 100	$ 103,998

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 July 31 2023	For the three months ended July 31 2022	For the nine months ended July 31 2023	For the nine months ended July 31 2022
Cash flows from operating activities				
Net income	$ 3,872	$ 3,577	$ 10,735	$ 11,925
Adjustments for non-cash items and others				
Provision for credit losses	616	340	1,748	103
Depreciation	324	314	952	941
Deferred income taxes	168	(237)	(183)	408
Amortization and impairment of other intangibles	383	343	1,155	1,022
Net changes in investments in joint ventures and associates	37	(33)	(3)	(85)
Losses (Gains) on investment securities	(27)	(28)	(191)	(66)
Losses (Gains) on disposition of businesses	(92)	(11)	(92)	(100)
Adjustments for net changes in operating assets and liabilities				
Insurance claims and policy benefit liabilities	457	(40)	1,189	(783)
Net change in accrued interest receivable and payable	(168)	(167)	1,784	(246)
Current income taxes	(749)	29	(158)	(3,061)
Derivative assets	8,235	34,146	38,362	(26,517)
Derivative liabilities	(6,654)	(31,673)	(35,837)	28,429
Trading securities	(40,396)	1,810	(28,398)	(2,716)
Loans, net of securitizations	(4,690)	(21,959)	(17,120)	(78,916)
Assets purchased under reverse repurchase agreements and securities borrowed	(11,912)	(1,867)	(29,306)	(10,662)
Obligations related to assets sold under repurchase agreements and securities loaned	42,907	1,811	60,518	18,948
Obligations related to securities sold short	605	(960)	1,142	663
Deposits, net of securitizations	5,618	26,954	27,974	78,323
Brokers and dealers receivable and payable	1,290	3,032	(1,879)	4,131
Other	9,212	(2,261)	4,810	550
Net cash from (used in) operating activities	9,036	13,120	37,202	22,291
Cash flows from investing activities				
Change in interest-bearing deposits with banks	(5,770)	(29,316)	2,179	(18,507)
Proceeds from sales and maturities of investment securities	39,464	25,257	116,661	72,752
Purchases of investment securities	(56,943)	(30,653)	(145,776)	(86,876)
Net acquisitions of premises and equipment and other intangibles	(557)	(586)	(1,962)	(1,729)
Net proceeds from (cash transferred for) dispositions	1,712	(408)	1,712	(313)
Net cash from (used in) investing activities	(22,094)	(35,706)	(27,186)	(34,673)
Cash flows from financing activities				
Issuance of subordinated debentures	–	–	1,500	1,000
Repayment of subordinated debentures	(110)	–	(170)	–
Issue of common shares, net of issuance costs	16	8	58	46
Common shares purchased for cancellation	–	(1,338)	–	(4,444)
Issue of preferred shares and other equity instruments, net of issuance costs	–	–	–	749
Redemption of preferred shares and other equity instruments	–	–	–	(155)
Sales of treasury shares and other equity instruments	955	1,375	3,421	4,390
Purchases of treasury shares and other equity instruments	(975)	(1,446)	(3,233)	(4,548)
Dividends paid on shares and distributions paid on other equity instruments	(1,234)	(1,754)	(4,327)	(5,118)
Dividends/distributions paid to non-controlling interests	(2)	(2)	(18)	(4)
Change in short-term borrowings of subsidiaries	(2,758)	128	(376)	129
Repayment of lease liabilities	(167)	(166)	(496)	(483)
Net cash from (used in) financing activities	(4,275)	(3,195)	(3,641)	(8,438)
Effect of exchange rate changes on cash and due from banks	(1,508)	(1,038)	1,586	(3,916)
Net change in cash and due from banks	(18,841)	(26,819)	7,961	(24,736)
Cash and due from banks at beginning of period (1)	99,199	115,929	72,397	113,846
Cash and due from banks at end of period (1)	$ 80,358	$ 89,110	$ 80,358	$ 89,110
Cash flows from operating activities include:				
Amount of interest paid	$ 16,018	$ 3,705	$ 39,040	$ 7,233
Amount of interest received	21,696	9,223	58,252	22,824
Amount of dividends received	921	746	2,541	2,291
Amount of income taxes paid	1,470	1,130	3,878	6,466

(1) We are required to maintain balances due to regulatory requirements or contractual restrictions from central banks, other regulatory authorities, and other counterparties. The total balances were $2 billion as at July 31, 2023 (April 30, 2023 – $3 billion; October 31, 2022 – $2 billion; July 31, 2022 – $2 billion; October 31, 2021 – $2 billion).

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

Note 1 General information

Royal Bank of Canada and its subsidiaries (the Bank) provide diversified financial services including Personal & Commercial Banking, Wealth Management, Insurance and Capital Markets products and services on a global basis. Refer to Note 13 for further details on our business segments.

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 2022 Annual Consolidated Financial Statements and the accompanying notes included on pages 138 to 229 in our 2022 Annual Report. Unless otherwise stated, monetary amounts are stated in Canadian dollars. Tabular information is stated in millions of dollars, except as noted. On August 23, 2023, the Board of Directors authorized the Condensed Financial Statements for issue.

Note 2 Summary of significant accounting policies, estimates and judgments

The Condensed Financial Statements have been prepared using the same accounting policies and methods used in the preparation of our audited 2022 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 2022 Annual Consolidated Financial Statements and updates are provided below.

Future changes in accounting policy and disclosure

IFRS 17 *Insurance Contracts* (IFRS 17)

In May 2017, the IASB issued IFRS 17 to establish a comprehensive insurance standard which provides guidance on the recognition, measurement, presentation and disclosure of insurance contracts issued and reinsurance contracts held and will replace the existing IFRS 4 *Insurance Contracts* (IFRS 4). In June 2020, the IASB issued amendments to IFRS 17, including deferral of the effective date by two years. This new standard is effective for us on November 1, 2023 and is to be applied retrospectively.

Under IFRS 17, insurance contracts are contracts under which we accept significant insurance risk from a policyholder by agreeing to compensate the policyholder if a specified uncertain future event adversely affects the policyholder. Embedded derivatives, investment components and promises to provide non-insurance services, provided specific criteria are met, are separated from the measurement of insurance and reinsurance contracts. Insurance and reinsurance contracts are aggregated into portfolios that are subject to similar risks and are managed together, and then divided into groups based on the period of issuance and profitability. Groups are separately recognized and measured using one of three measurement models depending on the characteristics of the contracts:

- For insurance contracts with direct participating features, the contracts are measured using the variable fee approach (VFA).
- For insurance contracts and reinsurance contracts held with a short duration of one year or less, the premium allocation approach (PAA) may be elected.
- The general measurement method (GMM) is applied to all remaining contracts.

Under the GMM and VFA, the liabilities for remaining coverage and incurred claims for groups of contracts are measured as the sum of the fulfilment cash flows and the contractual service margin (CSM), which are recalculated at the end of each reporting period. The fulfilment cash flows consist of the present value of future cash flows and a risk adjustment for non-financial risk. For insurance contracts, the CSM represents the unearned profit for providing insurance coverage. For reinsurance contracts held, the CSM represents the net cost or net gain of purchasing reinsurance. Under the PAA, the liability for remaining coverage for each group is measured as the premiums received less insurance revenue recognized for services provided, while the liability for incurred claims is measured as the fulfillment cash flows for incurred claims plus adjustment on any financing components. Losses from the recognition of onerous groups of insurance contracts, regardless of the measurement model applied, are recognized in the Consolidated Statements of Income immediately.

The following are key differences between IFRS 17 and IFRS 4:

- New business profits are deferred and measured as the CSM component of the insurance contract liabilities and amortized into income as insurance contract services are provided, while losses are recognized into income immediately. Under IFRS 4, gains and losses are recognized in income immediately. On July 18, 2023, OSFI released regulatory guidance to allow the inclusion of the CSM in calculating CET1 capital and related ratios, and therefore, we expect no impact on the capital metrics from such reduction in retained earnings resulting from the CSM.
- Discount rates used in calculating the present value of insurance contract liabilities are based on the characteristics of the insurance contracts unlike IFRS 4 which is based on the assets supporting the liabilities.
- Presentation and disclosure changes are expected due to the new requirements.

The overall impact of establishing the CSM, as well as other measurement impacts on our assets and liabilities, is expected to result in a reduction to retained earnings on adoption of IFRS 17. While IFRS 17 impacts the timing of profit recognition of insurance contracts, it will have no impact on total profit recognized over the lifetime of these contracts.

Transition

Upon the adoption of IFRS 17, we will apply IFRS 17 retrospectively by adjusting our Consolidated Balance Sheets as at November 1, 2022 and restating the comparative information as at and for the year ended October 31, 2023. The full retrospective approach will be applied for all insurance and reinsurance contracts unless it is impracticable to do so. When impracticable, the fair value approach will be applied, which calculates the CSM or loss component of the liability for remaining coverage as the difference between the fair value of a group of contracts and the fulfillment cash flows measured at the date of transition.

As permitted by IFRS 17, we also expect to change the classification and measurement of certain eligible financial assets held in respect of an activity that relates to insurance contracts upon the adoption of IFRS 17. We will apply these changes retrospectively by adjusting our Consolidated Balance Sheets as at November 1, 2023, the date of the initial application of IFRS 17, with no restatement of comparative information.

The quantification of the transition impacts is in progress, and we expect to provide an estimate in our 2023 Annual Report.

Interest Rate Benchmark Reform

As part of the interest rate benchmark reform, the publication of all remaining USD London Interbank Offered Rate (LIBOR) settings ceased on June 30, 2023. As at July 31, 2023, and consistent with our transition plan, our exposure to financial instruments referencing USD LIBOR is no longer material to our Condensed Financial Statements.

Note 3 Fair value of financial instruments

Carrying value and fair value of financial instruments

The following tables provide a comparison of the carrying 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 2022 Annual Consolidated Financial Statements for a description of the valuation techniques and inputs used in the fair value measurement of our financial instruments. There have been no significant changes to our determination of fair value during the quarter.

	As at July 31, 2023							
	Carrying value and fair value				Carrying value	Fair value		
(Millions of Canadian dollars)	Financial instruments classified as FVTPL	Financial instruments designated as FVTPL	Financial instruments classified as FVOCI	Financial instruments designated as FVOCI	Financial instruments measured at amortized cost	Financial instruments measured at amortized cost	Total carrying amount	Total fair value
Financial assets								
Interest-bearing deposits with banks	$ –	$ 81,356	$ –	$ –	$ 6,294	$ 6,294	$ 87,650	$ 87,650
Securities								
Trading	165,913	10,690	–	–	–	–	176,603	176,603
Investment, net of applicable allowance	–	–	116,382	942	78,698	72,692	196,022	190,016
	165,913	10,690	116,382	942	78,698	72,692	372,625	366,619
Assets purchased under reverse repurchase agreements and securities borrowed	296,430	–	–	–	50,721	50,721	347,151	347,151
Loans, net of applicable allowance								
Retail	94	378	277	–	557,876	534,243	558,625	534,992
Wholesale	5,851	3,069	571	–	267,598	261,382	277,089	270,873
	5,945	3,447	848	–	825,474	795,625	835,714	805,865
Other								
Derivatives	115,914	–	–	–	–	–	115,914	115,914
Other assets (1)	4,365	5	–	–	61,594	61,594	65,964	65,964
Financial liabilities								
Deposits								
Personal	$ 309	$ 26,452			$ 407,286	$ 405,156	$ 434,047	$ 431,917
Business and government (2)	201	139,696			596,833	595,211	736,730	735,108
Bank (3)	–	10,517			34,377	34,323	44,894	44,840
	510	176,665			1,038,496	1,034,690	1,215,671	1,211,865
Other								
Obligations related to securities sold short	36,653	–			–	–	36,653	36,653
Obligations related to assets sold under repurchase agreements and securities loaned	–	301,752			32,713	32,713	334,465	334,465
Derivatives	117,244	–			–	–	117,244	117,244
Other liabilities (4)	(877)	19			89,225	89,193	88,367	88,335
Subordinated debentures	–	–			11,202	11,072	11,202	11,072

Note 3 Fair value of financial instruments (continued)

	As at October 31, 2022							
	Carrying value and fair value				Carrying value	Fair value		
(Millions of Canadian dollars)	Financial instruments classified as FVTPL	Financial instruments designated as FVTPL	Financial instruments classified as FVOCI	Financial instruments designated as FVOCI	Financial instruments measured at amortized cost	Financial instruments measured at amortized cost	Total carrying amount	Total fair value
Financial assets								
Interest-bearing deposits with banks	$ –	$ 84,468	$ –	$ –	$ 23,543	$ 23,543	$ 108,011	$ 108,011
Securities								
Trading	138,507	9,698	–	–	–	–	148,205	148,205
Investment, net of applicable allowance	–	–	92,063	828	77,127	70,073	170,018	162,964
	138,507	9,698	92,063	828	77,127	70,073	318,223	311,169
Assets purchased under reverse repurchase agreements and securities borrowed	264,665	–	–	–	53,180	53,180	317,845	317,845
Loans, net of applicable allowance								
Retail	73	375	218	–	546,767	521,428	547,433	522,094
Wholesale	6,914	3,222	563	–	261,833	253,816	272,532	264,515
	6,987	3,597	781	–	808,600	775,244	819,965	786,609
Other								
Derivatives	154,439	–	–	–	–	–	154,439	154,439
Other assets (1)	3,377	–	–	–	73,084	73,084	76,461	76,461
Financial liabilities								
Deposits								
Personal	$ 298	$ 21,959			$ 382,675	$ 380,396	$ 404,932	$ 402,653
Business and government (2)	447	152,119			607,304	605,102	759,870	757,668
Bank (3)	–	7,196			36,816	36,758	44,012	43,954
	745	181,274			1,026,795	1,022,256	1,208,814	1,204,275
Other								
Obligations related to securities sold short	35,511	–			–	–	35,511	35,511
Obligations related to assets sold under repurchase agreements and securities loaned	–	248,835			25,112	25,112	273,947	273,947
Derivatives	153,491	–			–	–	153,491	153,491
Other liabilities (4)	(360)	69			90,348	90,160	90,057	89,869
Subordinated debentures	–	–			10,025	9,668	10,025	9,668

(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.

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

	As at									
	July 31, 2023					October 31, 2022				
	Fair value measurements using					Fair value measurements using				
(Millions of Canadian dollars)	Level 1	Level 2	Level 3	Netting adjustments	Fair value	Level 1	Level 2	Level 3	Netting adjustments	Fair value
Financial assets										
Interest-bearing deposits with banks	$ –	$ 81,356	$ –	$	$ 81,356	$ –	$ 84,468	$ –	$	$ 84,468
Securities										
Trading										
Debt issued or guaranteed by:										
Canadian government (1)										
Federal	18,595	2,067	–		20,662	15,024	3,779	–		18,803
Provincial and municipal	–	14,148	–		14,148	–	13,257	–		13,257
U.S. federal, state, municipal and agencies (1), (2)	3,507	48,288	–		51,795	1,254	35,570	4		36,828
Other OECD government (3)	2,919	2,790	–		5,709	1,325	3,452	–		4,777
Mortgage-backed securities (1)	–	2	–		2	–	2	–		2
Asset-backed securities										
Non-CDO securities (4)	–	1,239	–		1,239	–	1,308	2		1,310
Corporate debt and other debt	–	22,767	–		22,767	–	21,162	7		21,169
Equities	55,847	2,255	2,179		60,281	46,592	3,593	1,874		52,059
	80,868	93,556	2,179		176,603	64,195	82,123	1,887		148,205
Investment										
Debt issued or guaranteed by:										
Canadian government (1)										
Federal	1,175	3,659	–		4,834	1,226	2,555	–		3,781
Provincial and municipal	–	2,582	–		2,582	–	2,124	–		2,124
U.S. federal, state, municipal and agencies (1)	102	62,377	–		62,479	440	43,918	–		44,358
Other OECD government	–	6,417	–		6,417	–	5,144	–		5,144
Mortgage-backed securities (1)	–	2,521	30		2,551	–	2,860	28		2,888
Asset-backed securities										
CDO	–	7,618	–		7,618	–	7,524	–		7,524
Non-CDO securities	–	432	–		432	–	524	–		524
Corporate debt and other debt	–	29,328	141		29,469	–	25,569	151		25,720
Equities	37	474	431		942	36	395	397		828
	1,314	115,408	602		117,324	1,702	90,613	576		92,891
Assets purchased under reverse repurchase agreements and securities borrowed	–	296,430	–		296,430	–	264,665	–		264,665
Loans	–	7,929	2,311		10,240	–	9,673	1,692		11,365
Other										
Derivatives										
Interest rate contracts	–	35,685	237		35,922	–	39,804	263		40,067
Foreign exchange contracts	–	65,792	7		65,799	–	99,424	13		99,437
Credit derivatives	–	298	–		298	–	388	–		388
Other contracts	2,811	13,327	98		16,236	3,939	14,786	62		18,787
Valuation adjustments	–	(1,484)	3		(1,481)	–	(2,100)	45		(2,055)
Total gross derivatives	2,811	113,618	345		116,774	3,939	152,302	383		156,624
Netting adjustments				(860)	(860)				(2,185)	(2,185)
Total derivatives					115,914					154,439
Other assets	1,453	2,906	11		4,370	1,221	2,141	15		3,377
	$ 86,446	$ 711,203	$ 5,448	$ (860)	$ 802,237	$ 71,057	$ 685,985	$ 4,553	$ (2,185)	$ 759,410
Financial liabilities										
Deposits										
Personal	$ –	$ 26,480	$ 281	$	$ 26,761	$ –	$ 22,016	$ 241	$	$ 22,257
Business and government	–	139,897	–		139,897	–	152,566	–		152,566
Bank	–	10,517	–		10,517	–	7,196	–		7,196
Other										
Obligations related to securities sold short	15,005	21,648	–		36,653	16,383	19,128	–		35,511
Obligations related to assets sold under repurchase agreements and securities loaned	–	301,752	–		301,752	–	248,835	–		248,835
Derivatives										
Interest rate contracts	–	36,323	869		37,192	–	39,592	1,122		40,714
Foreign exchange contracts	–	58,164	53		58,217	–	94,310	145		94,455
Credit derivatives	–	109	–		109	–	125	–		125
Other contracts	3,408	19,256	539		23,203	3,847	16,663	847		21,357
Valuation adjustments	–	(609)	(8)		(617)	–	(967)	(8)		(975)
Total gross derivatives	3,408	113,243	1,453		118,104	3,847	149,723	2,106		155,676
Netting adjustments				(860)	(860)				(2,185)	(2,185)
Total derivatives					117,244					153,491
Other liabilities	400	(1,258)	–		(858)	341	(632)	–		(291)
	$ 18,813	$ 612,279	$ 1,734	$ (860)	$ 631,966	$ 20,571	$ 598,832	$ 2,347	$ (2,185)	$ 619,565

(1) As at July 31, 2023, residential and commercial mortgage-backed securities (MBS) included in all fair value levels of trading securities were $13,037 million and $nil (October 31, 2022 – $12,273 million and $nil), respectively, and in all fair value levels of Investment securities were $21,641 million and $2,462 million (October 31, 2022 – $23,362 million and $2,755 million), respectively.
(2) United States (U.S.).
(3) Organisation for Economic Co-operation and Development (OECD).
(4) Collateralized debt obligations (CDO).

Note 3 Fair value of financial instruments (continued)

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

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

During the three months ended July 31, 2023, there were no significant changes made to the valuation techniques and ranges and weighted averages of unobservable inputs used in the determination of fair value of Level 3 financial instruments. As at July 31, 2023, 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 audited 2022 Annual Consolidated Financial Statements.

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

	For the three months ended July 31, 2023								
(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	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –	$ –
Asset-backed securities									
Non-CDO securities	–	–	–	–	–	–	–	–	–
Corporate debt and other debt	19	–	–	–	(16)	–	(3)	–	–
Equities	2,177	(37)	(28)	70	(9)	6	–	2,179	(13)
	2,196	(37)	(28)	70	(25)	6	(3)	2,179	(13)
Investment									
Mortgage-backed securities	27	–	3	–	–	–	–	30	n.a.
Corporate debt and other debt	150	–	(9)	–	–	–	–	141	n.a.
Equities	436	–	(6)	1	–	–	–	431	n.a.
	613	–	(12)	1	–	–	–	602	n.a.
Loans	2,410	(28)	(58)	61	(71)	2	(5)	2,311	(13)
Other									
Net derivative balances (3)									
Interest rate contracts	(638)	(14)	1	1	19	7	(8)	(632)	(8)
Foreign exchange contracts	(56)	3	(1)	(9)	11	–	6	(46)	2
Other contracts	(413)	(43)	11	(23)	17	(37)	47	(441)	(45)
Valuation adjustments	16	–	–	–	(5)	–	–	11	–
Other assets	13	–	–	–	(2)	–	–	11	–
	$ 4,141	$ (119)	$ (87)	$ 101	$ (56)	$ (22)	$ 37	$ 3,995	$ (77)
Liabilities									
Deposits	$ (250)	$ 1	$ 1	$ (80)	$ 13	$ (16)	$ 50	$ (281)	$ 5
Other									
Other liabilities	–	–	–	–	–	–	–	–	–
	$ (250)	$ 1	$ 1	$ (80)	$ 13	$ (16)	$ 50	$ (281)	$ 5

(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
	For the three months ended July 31, 2022								
Assets									
Securities									
Trading									
Debt issued or guaranteed by:									
U.S. state, municipal and agencies	$ 16	$ –	$ –	$ –	$ (6)	$ –	$ –	$ 10	$ –
Asset-backed securities									
Non-CDO securities	2	–	–	–	–	–	–	2	–
Corporate debt and other debt	5	–	–	–	(2)	9	–	12	–
Equities	1,759	(4)	(4)	84	(16)	–	–	1,819	(5)
	1,782	(4)	(4)	84	(24)	9	–	1,843	(5)
Investment									
Mortgage-backed securities	21	–	1	–	–	–	–	22	n.a.
Corporate debt and other debt	149	–	3	–	–	–	–	152	n.a.
Equities	349	–	(2)	2	–	–	–	349	n.a.
	519	–	2	2	–	–	–	523	n.a.
Loans	782	4	(1)	136	(3)	9	(33)	894	7
Other									
Net derivative balances (3)									
Interest rate contracts	(663)	6	–	(7)	(8)	15	2	(655)	–
Foreign exchange contracts	24	(13)	(2)	1	(2)	9	10	27	(1)
Other contracts	(436)	10	2	(23)	–	10	42	(395)	16
Valuation adjustments	28	–	–	(7)	–	–	–	21	–
Other assets	15	–	–	–	–	–	–	15	–
	$ 2,051	$ 3	$ (3)	$ 186	$ (37)	$ 52	$ 21	$ 2,273	$ 17
Liabilities									
Deposits	$ (157)	$ 3	$ –	$ (7)	$ 6	$ (39)	$ 13	$ (181)	$ 5
Other									
Other liabilities	(3)	–	–	–	–	–	–	(3)	–
	$ (160)	$ 3	$ –	$ (7)	$ 6	$ (39)	$ 13	$ (184)	$ 5

(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
	For the nine months ended July 31, 2023								
Assets									
Securities									
Trading									
Debt issued or guaranteed by:									
U.S. state, municipal and agencies	$ 4	$ –	$ –	$ –	$ (4)	$ –	$ –	$ –	$ –
Asset-backed securities									
Non-CDO securities	2	–	–	–	(2)	–	–	–	–
Corporate debt and other debt	7	–	–	2	(16)	17	(10)	–	–
Equities	1,874	(159)	(34)	491	(41)	48	–	2,179	(130)
	1,887	(159)	(34)	493	(63)	65	(10)	2,179	(130)
Investment									
Mortgage-backed securities	28	–	1	1	–	–	–	30	n.a.
Corporate debt and other debt	151	–	(2)	–	(8)	–	–	141	n.a.
Equities	397	–	34	1	(1)	–	–	431	n.a.
	576	–	33	2	(9)	–	–	602	n.a.
Loans	1,692	(54)	(35)	1,300	(452)	30	(170)	2,311	–
Other									
Net derivative balances (3)									
Interest rate contracts	(859)	(10)	6	(7)	194	30	14	(632)	(9)
Foreign exchange contracts	(132)	4	10	(8)	48	–	32	(46)	(2)
Other contracts	(785)	(6)	21	(61)	83	(96)	403	(441)	(35)
Valuation adjustments	53	–	–	–	(42)	–	–	11	–
Other assets	15	–	–	–	(4)	–	–	11	–
	$ 2,447	$ (225)	$ 1	$ 1,719	$ (245)	$ 29	$ 269	$ 3,995	$ (176)
Liabilities									
Deposits	$ (241)	$ (26)	$ 1	$ (157)	$ 19	$ (67)	$ 190	$ (281)	$ (8)
Other									
Other liabilities	–	–	–	–	–	–	–	–	–
	$ (241)	$ (26)	$ 1	$ (157)	$ 19	$ (67)	$ 190	$ (281)	$ (8)

Note 3 Fair value of financial instruments (continued)

	For the nine months ended July 31, 2022								
(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	$ 25	$ –	$ 1	$ –	$ (16)	$ –	$ –	$ 10	$ –
Asset-backed securities									
Non-CDO securities	2	–	–	–	–	–	–	2	–
Corporate debt and other debt	25	(2)	–	–	(7)	9	(13)	12	–
Equities	1,530	74	30	245	(61)	1	–	1,819	75
	1,582	72	31	245	(84)	10	(13)	1,843	75
Investment									
Mortgage-backed securities	20	–	2	–	–	–	–	22	n.a.
Corporate debt and other debt	152	–	–	–	–	–	–	152	n.a.
Equities	334	–	41	10	(1)	–	(35)	349	n.a.
	506	–	43	10	(1)	–	(35)	523	n.a.
Loans	1,077	(9)	(33)	353	(465)	25	(54)	894	(54)
Other									
Net derivative balances (3)									
Interest rate contracts	(635)	(151)	(2)	93	58	15	(33)	(655)	38
Foreign exchange contracts	47	(60)	(1)	22	10	9	–	27	(49)
Other contracts	(393)	194	(9)	(138)	48	(183)	86	(395)	218
Valuation adjustments	20	–	–	(7)	(11)	19	–	21	–
Other assets	–	–	–	15	–	–	–	15	–
	$ 2,204	$ 46	$ 29	$ 593	$ (445)	$ (105)	$ (49)	$ 2,273	$ 228
Liabilities									
Deposits	$ (151)	$ (6)	$ (1)	$ (86)	$ 23	$ (75)	$ 115	$ (181)	$ 10
Other									
Other liabilities	(7)	–	–	–	4	–	–	(3)	–
	$ (158)	$ (6)	$ (1)	$ (86)	$ 27	$ (75)	$ 115	$ (184)	$ 10

(1) These amounts include the foreign currency translation gains or losses arising on consolidation of foreign subsidiaries relating to the Level 3 instruments, where applicable. The unrealized gains on Investment securities recognized in other comprehensive income (OCI) were $3 million for the three months ended July 31, 2023 (July 31, 2022 – gains of $9 million) and gains of $33 million for the nine months ended July 31, 2023 (July 31, 2022 – gains of $53 million), excluding the translation gains or losses arising on consolidation.
(2) Other includes amortization of premiums or discounts recognized in net income.
(3) Net derivatives as at July 31, 2023 included derivative assets of $345 million (July 31, 2022 – $571 million) and derivative liabilities of $1,453 million (July 31, 2022 – $1,573 million).
n.a. not applicable

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

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

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

During the three months ended July 31, 2023, transfers out of Level 1 to Level 2 included Obligations related to securities sold short of $151 million. During the three months ended July 31, 2022, there were no significant transfers out of Level 1 to Level 2.

During the three months ended July 31, 2023 and July 31, 2022, there were no significant transfers out of Level 2 to Level 1.

During the nine months ended July 31, 2023, transfers out of Level 1 to Level 2 included Investment U.S. federal, state, municipal and agencies debt of $435 million, Obligations related to securities sold short of $151 million, and Trading U.S. federal, state, municipal and agencies debt of $112 million. During the nine months ended July 31, 2022, there were no significant transfers out of Level 1 to Level 2.

During the nine months ended July 31, 2023 and July 31, 2022, there were no significant transfers out of Level 2 to Level 1.

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

During the three months ended July 31, 2023 and July 31, 2022, there were no significant transfers out of Level 2 to Level 3 or out of Level 3 to Level 2.

During the nine months ended July 31, 2023, there were no significant transfers out of Level 2 to Level 3. During the nine months ended July 31, 2022, significant transfers out of Level 2 to Level 3 included Other contracts due to changes in the market observability of inputs.

During the nine months ended July 31, 2023, significant transfers out of Level 3 to Level 2 included Other contracts and Loans due to changes in the market observability of inputs and changes in the significance of unobservable inputs. During the nine months ended July 31, 2022, there were no significant transfers out of Level 3 to Level 2.

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 July 31 2023	July 31 2022	For the nine months ended July 31 2023	July 31 2022
Interest and dividend income (1), (2)				
Financial instruments measured at fair value through profit or loss	$ **8,546**	$ 2,879	$ **22,203**	$ 5,873
Financial instruments measured at fair value through other comprehensive income	**1,383**	312	**3,439**	513
Financial instruments measured at amortized cost	**12,905**	7,546	**36,847**	19,487
	22,834	10,737	**62,489**	25,873
Interest expense (1)				
Financial instruments measured at fair value through profit or loss	**7,531**	2,346	**20,046**	4,292
Financial instruments measured at amortized cost	**9,017**	2,501	**23,856**	5,146
	16,548	4,847	**43,902**	9,438
Net interest income	$ **6,286**	$ 5,890	$ **18,587**	$ 16,435

(1) Excludes the following amounts related to our insurance operations and included in Insurance premiums, investment and fee income in the Interim Condensed Consolidated Statements of Income: for the three months ended July 31, 2023, Interest income of $112 million (July 31, 2022 – $143 million), and Interest expense of $13 million (July 31, 2022 – $1 million); for the nine months ended July 31, 2023, Interest income of $344 million (July 31, 2022 – $486 million), and Interest expense of $25 million (July 31, 2022 – $4 million).
(2) Includes dividend income for the three months ended July 31, 2023 of $803 million (July 31, 2022 – $730 million) and for the nine months ended July 31, 2023 of $2,396 million (July 31, 2022 – $2,170 million), which is presented in Interest and dividend income in the Interim Condensed Consolidated Statements of Income.

Note 4 Securities

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

	As at							
	July 31, 2023				October 31, 2022			
(Millions of Canadian dollars)	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	$ **5,144**	$ **2**	$ **(312)**	$ **4,834**	$ 4,081	$ 1	$ (301)	$ 3,781
Provincial and municipal	**3,117**	**5**	**(540)**	**2,582**	2,685	6	(567)	2,124
U.S. federal, state, municipal and agencies	**63,945**	**209**	**(1,675)**	**62,479**	46,034	343	(2,019)	44,358
Other OECD government	**6,419**	**3**	**(5)**	**6,417**	5,154	7	(17)	5,144
Mortgage-backed securities	**2,608**	**1**	**(58)**	**2,551**	2,985	1	(98)	2,888
Asset-backed securities								
CDO	**7,674**	**4**	**(60)**	**7,618**	7,741	3	(220)	7,524
Non-CDO securities	**439**	**2**	**(9)**	**432**	547	–	(23)	524
Corporate debt and other debt	**29,496**	**47**	**(74)**	**29,469**	25,852	51	(183)	25,720
Equities	**627**	**321**	**(6)**	**942**	551	284	(7)	828
	$ **119,469**	$ **594**	$ **(2,739)**	$ **117,324**	$ 95,630	$ 696	$ (3,435)	$ 92,891

(1) Excludes $78,698 million of held-to-collect securities as at July 31, 2023 that are carried at amortized cost, net of allowance for credit losses (October 31, 2022 – $77,127 million).
(2) Gross unrealized gains and losses includes $(23) million of allowance for credit losses on debt securities at FVOCI as at July 31, 2023 (October 31, 2022 – $(19) million) recognized in income and Other components of equity.

Allowance for credit losses on investment securities

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

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

Note 4 Securities (continued)

Allowance for credit losses – securities at FVOCI (1)

	For the three months ended							
	July 31, 2023				July 31, 2022			
	Performing		Impaired		Performing		Impaired	
(Millions of Canadian dollars)	Stage 1	Stage 2	Stage 3 (2)	Total	Stage 1	Stage 2	Stage 3 (2)	Total
Balance at beginning of period	$ 3	$ 2	$ (25)	$ (20)	$ 2	$ 2	$ (17)	$ (13)
Provision for credit losses								
Transfers to stage 1	1	(1)	–	–	1	(1)	–	–
Transfers to stage 2	–	–	–	–	–	–	–	–
Transfers to stage 3	–	–	–	–	–	–	–	–
Purchases	1	–	–	1	1	–	–	1
Sales and maturities	–	(1)	–	(1)	–	–	–	–
Changes in risk, parameters and exposures	(2)	(1)	(2)	(5)	(2)	–	(2)	(4)
Exchange rate and other	–	1	1	2	–	–	–	–
Balance at end of period	$ 3	$ –	$ (26)	$ (23)	$ 2	$ 1	$ (19)	$ (16)

	For the nine months ended							
	July 31, 2023				July 31, 2022			
	Performing		Impaired		Performing		Impaired	
(Millions of Canadian dollars)	Stage 1	Stage 2	Stage 3 (2)	Total	Stage 1	Stage 2	Stage 3 (2)	Total
Balance at beginning of period	$ 3	$ 1	$ (23)	$ (19)	$ 2	$ 1	$ (12)	$ (9)
Provision for credit losses								
Transfers to stage 1	1	(1)	–	–	1	(1)	–	–
Transfers to stage 2	–	–	–	–	–	–	–	–
Transfers to stage 3	–	–	–	–	–	–	–	–
Purchases	4	–	–	4	2	–	–	2
Sales and maturities	(1)	(1)	–	(2)	(1)	–	–	(1)
Changes in risk, parameters and exposures	(3)	1	(7)	(9)	(1)	–	(7)	(8)
Exchange rate and other	(1)	–	4	3	(1)	1	–	–
Balance at end of period	$ 3	$ –	$ (26)	$ (23)	$ 2	$ 1	$ (19)	$ (16)

(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

	For the three months ended							
	July 31, 2023				July 31, 2022			
	Performing		Impaired		Performing		Impaired	
(Millions of Canadian dollars)	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Balance at beginning of period	$ 9	$ 13	$ –	$ 22	$ 9	$ 16	$ –	$ 25
Provision for credit losses								
Transfers to stage 1	–	–	–	–	–	–	–	–
Transfers to stage 2	–	–	–	–	–	–	–	–
Transfers to stage 3	–	–	–	–	–	–	–	–
Purchases	3	–	–	3	1	–	–	1
Sales and maturities	–	–	–	–	–	–	–	–
Changes in risk, parameters and exposures	(1)	2	–	1	(3)	(2)	–	(5)
Exchange rate and other	(1)	(1)	–	(2)	–	1	–	1
Balance at end of period	$ 10	$ 14	$ –	$ 24	$ 7	$ 15	$ –	$ 22

	For the nine months ended							
	July 31, 2023				July 31, 2022			
	Performing		Impaired		Performing		Impaired	
(Millions of Canadian dollars)	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Balance at beginning of period	$ 8	$ 14	$ –	$ 22	$ 5	$ 18	$ –	$ 23
Provision for credit losses								
Model changes	–	–	–	–	–	–	–	–
Transfers to stage 1	–	–	–	–	–	–	–	–
Transfers to stage 2	–	–	–	–	–	–	–	–
Transfers to stage 3	–	–	–	–	–	–	–	–
Purchases	8	–	–	8	9	–	–	9
Sales and maturities	–	–	–	–	(1)	–	–	(1)
Changes in risk, parameters and exposures	(6)	1	–	(5)	(6)	(4)	–	(10)
Exchange rate and other	–	(1)	–	(1)	–	1	–	1
Balance at end of period	$ 10	$ 14	$ –	$ 24	$ 7	$ 15	$ –	$ 22

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 2022 Annual Report.

	As at							
	July 31, 2023				October 31, 2022			
	Performing		Impaired		Performing		Impaired	
(Millions of Canadian dollars)	Stage 1	Stage 2	Stage 3 (1)	Total	Stage 1	Stage 2	Stage 3 (1)	Total
Investment securities								
Securities at FVOCI								
Investment grade	$ 115,552	$ 1	$ –	$ 115,553	$ 91,177	$ 56	$ –	$ 91,233
Non-investment grade	688	–	–	688	680	–	–	680
Impaired	–	–	141	141	–	–	150	150
	116,240	1	141	116,382	91,857	56	150	92,063
Items not subject to impairment (2)				942				828
				$ 117,324				$ 92,891
Securities at amortized cost								
Investment grade	$ 77,572	$ –	$ –	$ 77,572	$ 76,035	$ –	$ –	$ 76,035
Non-investment grade	948	202	–	1,150	898	216	–	1,114
Impaired	–	–	–	–	–	–	–	–
	78,520	202	–	78,722	76,933	216	–	77,149
Allowance for credit losses	10	14	–	24	8	14	–	22
	$ 78,510	$ 188	$ –	$ 78,698	$ 76,925	$ 202	$ –	$ 77,127

(1) Reflects $141 million of purchased credit impaired securities (October 31, 2022 – $150 million).
(2) Investment securities at FVOCI not subject to impairment represent equity securities designated as FVOCI.

Note 5 Loans and allowance for credit losses

Allowance for credit losses

	For the three months ended									
	July 31, 2023					July 31, 2022				
(Millions of Canadian dollars)	Balance at beginning of period	Provision for credit losses	Net write-offs	Exchange rate and other	Balance at end of period	Balance at beginning of period	Provision for credit losses	Net write-offs	Exchange rate and other	Balance at end of period
Retail										
Residential mortgages	$ 480	$ (5)	$ (4)	$ (8)	$ 463	$ 388	$ 51	$ (7)	$ (3)	$ 429
Personal	1,165	97	(106)	(4)	1,152	943	107	(60)	–	990
Credit cards	980	154	(117)	–	1,017	795	128	(89)	1	835
Small business	225	23	(11)	(2)	235	179	10	(5)	3	187
Wholesale	1,886	349	(117)	(67)	2,051	1,541	63	(39)	(25)	1,540
Customers' liability under acceptances	41	1	–	(1)	41	41	(12)	–	1	30
	$ 4,777	$ 619	$ (355)	$ (82)	$ 4,959	$ 3,887	$ 347	$ (200)	$ (23)	$ 4,011
Presented as:										
Allowance for loan losses	$ 4,332				$ 4,495	$ 3,566				$ 3,667
Other liabilities – Provisions	397				416	275				309
Customers' liability under acceptances	41				41	41				30
Other components of equity	7				7	5				5

Note 5 Loans and allowance for credit losses (continued)

	For the nine months ended									
	July 31, 2023					July 31, 2022				
(Millions of Canadian dollars)	Balance at beginning of period	Provision for credit losses	Net write-offs	Exchange rate and other	Balance at end of period	Balance at beginning of period	Provision for credit losses	Net write-offs	Exchange rate and other	Balance at end of period
Retail										
Residential mortgages	$ 432	$ 57	$ (13)	$ (13)	$ 463	$ 416	$ 29	$ (19)	$ 3	$ 429
Personal	1,043	402	(287)	(6)	1,152	1,079	86	(172)	(3)	990
Credit cards	893	459	(334)	(1)	1,017	875	201	(243)	2	835
Small business	194	70	(27)	(2)	235	177	18	(15)	7	187
Wholesale	1,574	779	(188)	(114)	2,051	1,797	(171)	(60)	(26)	1,540
Customers' liability under acceptances	45	(4)	–	–	41	75	(46)	–	1	30
	$ 4,181	$ 1,763	$ (849)	$ (136)	$ 4,959	$ 4,419	$ 117	$ (509)	$ (16)	$ 4,011
Presented as:										
Allowance for loan losses	$ 3,753				$ 4,495	$ 4,089				$ 3,667
Other liabilities – Provisions	378				416	241				309
Customers' liability under acceptances	45				41	75				30
Other components of equity	5				7	14				5

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

- Transfers between stages, which are presumed to occur before any corresponding remeasurements of the allowance.
- Originations, which reflect the allowance related to assets newly recognized during the period, including those assets that were derecognized following a modification of terms.
- Maturities, which reflect the allowance related to assets derecognized during the period without a credit loss being incurred, including those assets that were derecognized following a modification of terms.
- Changes in risk, parameters and exposures, which comprise the impact of changes in model inputs or assumptions, including changes in forward-looking macroeconomic conditions; partial repayments and additional draws on existing facilities; changes in the measurement following a transfer between stages; and unwinding of the time value discount due to the passage of time in stage 1 and stage 2.

Allowance for credit losses – Retail and wholesale loans

	For the three months ended							
	July 31, 2023				July 31, 2022			
	Performing		Impaired		Performing		Impaired	
(Millions of Canadian dollars)	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Residential mortgages								
Balance at beginning of period	$ 238	$ 103	$ 139	$ 480	$ 184	$ 71	$ 133	$ 388
Provision for credit losses								
Transfers to stage 1	38	(38)	–	–	22	(17)	(5)	–
Transfers to stage 2	(4)	6	(2)	–	(2)	3	(1)	–
Transfers to stage 3	–	(4)	4	–	–	(5)	5	–
Originations	22	–	–	22	55	–	–	55
Maturities	(4)	(4)	–	(8)	(6)	(1)	–	(7)
Changes in risk, parameters and exposures	(63)	29	15	(19)	(21)	21	3	3
Write-offs	–	–	(7)	(7)	–	–	(9)	(9)
Recoveries	–	–	3	3	–	–	2	2
Exchange rate and other	–	(2)	(6)	(8)	(2)	–	(1)	(3)
Balance at end of period	$ 227	$ 90	$ 146	$ 463	$ 230	$ 72	$ 127	$ 429
Personal								
Balance at beginning of period	$ 298	$ 747	$ 120	$ 1,165	$ 310	$ 550	$ 83	$ 943
Provision for credit losses								
Transfers to stage 1	177	(177)	–	–	132	(131)	(1)	–
Transfers to stage 2	(20)	21	(1)	–	(30)	30	–	–
Transfers to stage 3	–	(13)	13	–	–	(12)	12	–
Originations	31	–	–	31	30	–	–	30
Maturities	(10)	(32)	–	(42)	(16)	(24)	–	(40)
Changes in risk, parameters and exposures	(182)	189	101	108	(133)	200	50	117
Write-offs	–	–	(135)	(135)	–	–	(94)	(94)
Recoveries	–	–	29	29	–	–	34	34
Exchange rate and other	(2)	1	(3)	(4)	–	–	–	–
Balance at end of period	$ 292	$ 736	$ 124	$ 1,152	$ 293	$ 613	$ 84	$ 990
Credit cards								
Balance at beginning of period	$ 199	$ 781	$ –	$ 980	$ 169	$ 626	$ –	$ 795
Provision for credit losses								
Transfers to stage 1	120	(120)	–	–	99	(99)	–	–
Transfers to stage 2	(31)	31	–	–	(21)	21	–	–
Transfers to stage 3	–	(103)	103	–	(1)	(87)	88	–
Originations	3	–	–	3	1	–	–	1
Maturities	(3)	(9)	–	(12)	(1)	(8)	–	(9)
Changes in risk, parameters and exposures	(92)	241	14	163	(71)	207	–	136
Write-offs	–	–	(164)	(164)	–	–	(132)	(132)
Recoveries	–	–	47	47	–	–	43	43
Exchange rate and other	–	–	–	–	–	–	1	1
Balance at end of period	$ 196	$ 821	$ –	$ 1,017	$ 175	$ 660	$ –	$ 835
Small business								
Balance at beginning of period	$ 76	$ 79	$ 70	$ 225	$ 77	$ 66	$ 36	$ 179
Provision for credit losses								
Transfers to stage 1	9	(9)	–	–	9	(9)	–	–
Transfers to stage 2	(4)	4	–	–	(4)	4	–	–
Transfers to stage 3	1	(3)	2	–	(1)	–	1	–
Originations	12	–	–	12	8	–	–	8
Maturities	(4)	(4)	–	(8)	(6)	(7)	–	(13)
Changes in risk, parameters and exposures	(13)	11	21	19	(8)	12	11	15
Write-offs	–	–	(14)	(14)	–	–	(7)	(7)
Recoveries	–	–	3	3	–	–	2	2
Exchange rate and other	1	–	(3)	(2)	3	3	(3)	3
Balance at end of period	$ 78	$ 78	$ 79	$ 235	$ 78	$ 69	$ 40	$ 187
Wholesale								
Balance at beginning of period	$ 668	$ 632	$ 586	$ 1,886	$ 483	$ 590	$ 468	$ 1,541
Provision for credit losses								
Transfers to stage 1	45	(44)	(1)	–	66	(66)	–	–
Transfers to stage 2	(28)	29	(1)	–	(14)	15	(1)	–
Transfers to stage 3	(3)	(17)	20	–	–	(21)	21	–
Originations	169	–	–	169	165	–	–	165
Maturities	(129)	(76)	–	(205)	(103)	(68)	–	(171)
Changes in risk, parameters and exposures	(34)	208	211	385	(48)	130	(13)	69
Write-offs	–	–	(126)	(126)	–	–	(48)	(48)
Recoveries	–	–	9	9	–	–	9	9
Exchange rate and other	(10)	(10)	(47)	(67)	(5)	(5)	(15)	(25)
Balance at end of period	$ 678	$ 722	$ 651	$ 2,051	$ 544	$ 575	$ 421	$ 1,540

Note 5 Loans and allowance for credit losses (continued)

	For the nine months ended							
	July 31, 2023				July 31, 2022			
	Performing		Impaired		Performing		Impaired	
(Millions of Canadian dollars)	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Residential mortgages								
Balance at beginning of period	$ 235	$ 65	$ 132	$ 432	$ 186	$ 92	$ 138	$ 416
Provision for credit losses								
Transfers to stage 1	70	(70)	–	–	82	(67)	(15)	–
Transfers to stage 2	(23)	31	(8)	–	(8)	10	(2)	–
Transfers to stage 3	(1)	(9)	10	–	(1)	(20)	21	–
Originations	65	–	–	65	114	–	–	114
Maturities	(12)	(6)	–	(18)	(18)	(5)	–	(23)
Changes in risk, parameters and exposures	(107)	80	37	10	(125)	60	3	(62)
Write-offs	–	–	(23)	(23)	–	–	(29)	(29)
Recoveries	–	–	10	10	–	–	10	10
Exchange rate and other	–	(1)	(12)	(13)	–	2	1	3
Balance at end of period	$ 227	$ 90	$ 146	$ 463	$ 230	$ 72	$ 127	$ 429
Personal								
Balance at beginning of period	$ 285	$ 661	$ 97	$ 1,043	$ 422	$ 569	$ 88	$ 1,079
Provision for credit losses								
Transfers to stage 1	474	(473)	(1)	–	459	(457)	(2)	–
Transfers to stage 2	(63)	65	(2)	–	(91)	91	–	–
Transfers to stage 3	(1)	(38)	39	–	(1)	(37)	38	–
Originations	79	–	–	79	78	–	–	78
Maturities	(32)	(82)	–	(114)	(54)	(74)	–	(128)
Changes in risk, parameters and exposures	(450)	604	283	437	(520)	521	135	136
Write-offs	–	–	(371)	(371)	–	–	(269)	(269)
Recoveries	–	–	84	84	–	–	97	97
Exchange rate and other	–	(1)	(5)	(6)	–	–	(3)	(3)
Balance at end of period	$ 292	$ 736	$ 124	$ 1,152	$ 293	$ 613	$ 84	$ 990
Credit cards								
Balance at beginning of period	$ 177	$ 716	$ –	$ 893	$ 233	$ 642	$ –	$ 875
Provision for credit losses								
Transfers to stage 1	409	(409)	–	–	374	(374)	–	–
Transfers to stage 2	(73)	73	–	–	(72)	72	–	–
Transfers to stage 3	(1)	(295)	296	–	(2)	(238)	240	–
Originations	10	–	–	10	7	–	–	7
Maturities	(5)	(24)	–	(29)	(4)	(22)	–	(26)
Changes in risk, parameters and exposures	(320)	760	38	478	(362)	580	2	220
Write-offs	–	–	(465)	(465)	–	–	(370)	(370)
Recoveries	–	–	131	131	–	–	127	127
Exchange rate and other	(1)	–	–	(1)	1	–	1	2
Balance at end of period	$ 196	$ 821	$ –	$ 1,017	$ 175	$ 660	$ –	$ 835
Small business								
Balance at beginning of period	$ 73	$ 73	$ 48	$ 194	$ 88	$ 55	$ 34	$ 177
Provision for credit losses								
Transfers to stage 1	27	(27)	–	–	18	(18)	–	–
Transfers to stage 2	(11)	11	–	–	(12)	12	–	–
Transfers to stage 3	–	(7)	7	–	(1)	(2)	3	–
Originations	28	–	–	28	25	–	–	25
Maturities	(11)	(14)	–	(25)	(17)	(19)	–	(36)
Changes in risk, parameters and exposures	(31)	39	59	67	(31)	36	24	29
Write-offs	–	–	(35)	(35)	–	–	(22)	(22)
Recoveries	–	–	8	8	–	–	7	7
Exchange rate and other	3	3	(8)	(2)	8	5	(6)	7
Balance at end of period	$ 78	$ 78	$ 79	$ 235	$ 78	$ 69	$ 40	$ 187
Wholesale								
Balance at beginning of period	$ 597	$ 585	$ 392	$ 1,574	$ 566	$ 794	$ 437	$ 1,797
Provision for credit losses								
Transfers to stage 1	145	(144)	(1)	–	334	(331)	(3)	–
Transfers to stage 2	(63)	65	(2)	–	(55)	56	(1)	–
Transfers to stage 3	(7)	(44)	51	–	(2)	(48)	50	–
Originations	481	–	–	481	448	–	–	448
Maturities	(345)	(205)	–	(550)	(301)	(259)	–	(560)
Changes in risk, parameters and exposures	(120)	477	491	848	(444)	354	31	(59)
Write-offs	–	–	(212)	(212)	–	–	(97)	(97)
Recoveries	–	–	24	24	–	–	37	37
Exchange rate and other	(10)	(12)	(92)	(114)	(2)	9	(33)	(26)
Balance at end of period	$ 678	$ 722	$ 651	$ 2,051	$ 544	$ 575	$ 421	$ 1,540

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 and Note 5 of our audited 2022 Annual Consolidated Financial Statements.

Our base scenario reflects rising unemployment rates, high but declining inflation, and high central bank policy interest rates, which result in mild recessions in Canada and the U.S. in calendar 2023. Expectations are that there will be no further increases in central bank interest rates, in Canada and the U.S. Our base scenario also reflects a favourable Canadian housing price outlook and commercial real estate price declines in the near term.

Downside scenarios, including two additional and more severe downside scenarios designed for the energy and real estate sectors, reflect the possibility of a more severe macroeconomic shock beginning in calendar Q4 2023 relative to our base scenario. In these scenarios, conditions are expected to deteriorate from calendar Q3 2023 levels for up to 18 months, followed by a recovery for the remainder of the period. These scenarios assume monetary policy responses that return the economy to a long-run, sustainable growth rate within the forecast period. The possibility of a deeper recession and a more prolonged recovery as compared to our base scenario, including further monetary policy responses to elevated inflation rates which may increase credit risk, is reflected in our general downside scenario.

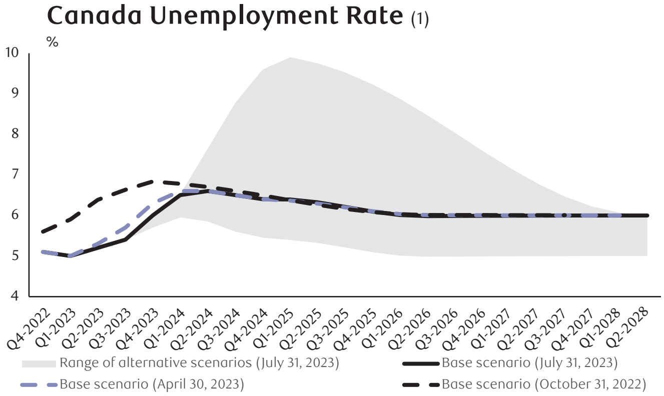
The upside scenario reflects slightly stronger economic growth than the base scenario, without prompting a further offsetting monetary policy response as compared to our base scenario, followed by a return to a long-run sustainable growth rate within the forecast period.

We increased weight to our downside scenarios relative to April 30, 2023 in order to reflect elevated uncertainty over interest rate expectations and an increased likelihood of more severe recessions as reflected in our downside scenarios relative to the mild recession in our base scenario.

The following provides additional detail about our calendar quarter forecasts for certain key macroeconomic variables used in the models to estimate the allowance for credit losses:

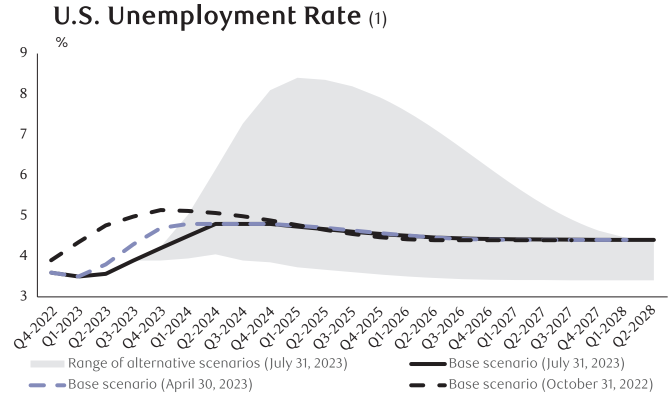
- ***Unemployment rates*** – In our base forecast, calendar Q3 2023 unemployment rates are expected to rise to 5.4% in Canada and 3.9% in the U.S., peaking in Q2 2024 at 6.6% in Canada and at 4.8% in the U.S. and reverting to long run equilibrium towards the latter end of the forecast horizon.

Canada Unemployment Rate (1)



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

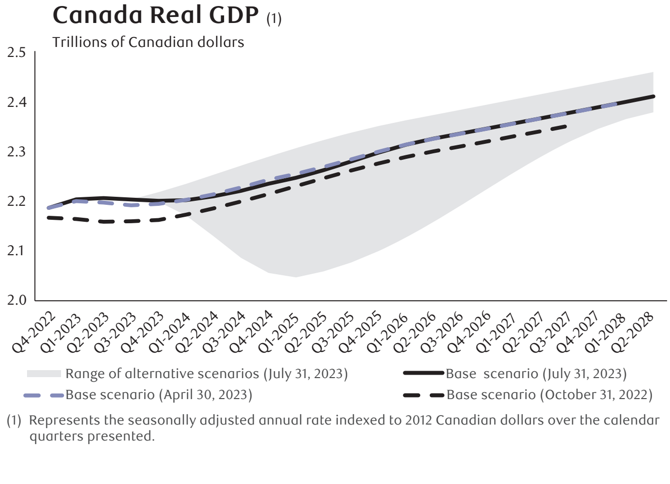
U.S. Unemployment Rate (1)



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

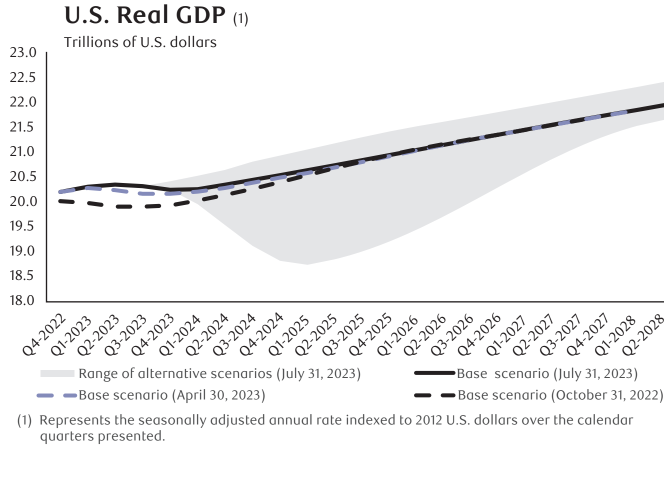
- ***Gross Domestic Product (GDP)*** – In our base forecast, we expect Canadian and U.S. GDP growth to slow, with both Canada and the U.S. expected to experience mild recessions during calendar Q3 and Q4 2023. GDP in calendar Q4 2023 is expected to be 0.7% and 0.2% above Q4 2022 levels in Canada and the U.S., respectively.

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.

Note 5 Loans and allowance for credit losses (continued)

- ***Oil price (West Texas Intermediate in US$)*** – In our base forecast, we expect oil prices to average $75 per barrel over the next 12 months from calendar Q3 2023 and $68 per barrel in the following 2 to 5 years. The range of average prices in our alternative downside and upside scenarios is $27 to $91 per barrel for the next 12 months and $42 to $72 per barrel for the following 2 to 5 years. As at April 30, 2023, our base forecast included an average price of $82 per barrel for the next 12 months and $70 per barrel for the following 2 to 5 years. As at October 31, 2022, our base forecast included an average price of $88 per barrel for the next 12 months and $72 per barrel for the following 2 to 5 years.
- ***Canadian housing price index*** – In our base forecast, we expect housing prices to increase by 2.3% over the next 12 months from calendar Q3 2023, with a compound annual growth rate of 4.2% for the following 2 to 5 years. The range of annual housing price growth (contraction) in our alternative real estate downside and upside scenarios is (30.0)% to 10.9% over the next 12 months and 4.2% to 9.6% for the following 2 to 5 years. As at April 30, 2023, our base forecast included housing price growth of 1.8% for the next 12 months and 4.8% for the following 2 to 5 years. As at October 31, 2022, our base forecast included housing price contraction of (1.0)% from calendar Q4 2022 for the next 12 months and housing price growth of 5.2% 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 *Financial Instruments*. 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 2022 Annual Report.

	As at							
	July 31, 2023				October 31, 2022			
(Millions of Canadian dollars)	Stage 1	Stage 2	Stage 3	Total	Stage 1	Stage 2	Stage 3	Total
Retail								
Loans outstanding – Residential mortgages								
Low risk	$ 345,290	$ 3,861	$ –	$ 349,151	$ 340,716	$ 2,573	$ –	$ 343,289
Medium risk	18,059	1,734	–	19,793	15,035	1,932	–	16,967
High risk	1,523	4,437	–	5,960	1,188	3,125	–	4,313
Not rated (1)	52,291	1,137	–	53,428	51,915	1,304	–	53,219
Impaired	–	–	619	619	–	–	560	560
	417,163	11,169	619	428,951	408,854	8,934	560	418,348
Items not subject to impairment (2)				472				448
Total				$ 429,423				$ 418,796
Loans outstanding – Personal								
Low risk	$ 73,973	$ 2,459	$ –	$ 76,432	$ 73,339	$ 2,575	$ –	$ 75,914
Medium risk	4,833	3,150	–	7,983	5,482	3,780	–	9,262
High risk	450	1,988	–	2,438	836	1,660	–	2,496
Not rated (1)	9,008	131	–	9,139	9,733	104	–	9,837
Impaired	–	–	245	245	–	–	200	200
Total	$ 88,264	$ 7,728	$ 245	$ 96,237	$ 89,390	$ 8,119	$ 200	$ 97,709
Loans outstanding – Credit cards								
Low risk	$ 16,104	$ 122	$ –	$ 16,226	$ 15,088	$ 83	$ –	$ 15,171
Medium risk	1,683	1,991	–	3,674	1,418	1,911	–	3,329
High risk	40	1,577	–	1,617	39	1,255	–	1,294
Not rated (1)	762	33	–	795	751	32	–	783
Total	$ 18,589	$ 3,723	$ –	$ 22,312	$ 17,296	$ 3,281	$ –	$ 20,577
Loans outstanding – Small business								
Low risk	$ 8,522	$ 924	$ –	$ 9,446	$ 8,571	$ 838	$ –	$ 9,409
Medium risk	1,949	988	–	2,937	1,512	1,130	–	2,642
High risk	94	523	–	617	102	375	–	477
Not rated (1)	8	–	–	8	3	–	–	3
Impaired	–	–	232	232	–	–	138	138
Total	$ 10,573	$ 2,435	$ 232	$ 13,240	$ 10,188	$ 2,343	$ 138	$ 12,669
Undrawn loan commitments – Retail								
Low risk	$ 261,434	$ 1,318	$ –	$ 262,752	$ 247,620	$ 1,041	$ –	$ 248,661
Medium risk	10,529	293	–	10,822	9,021	246	–	9,267
High risk	886	401	–	1,287	876	367	–	1,243
Not rated (1)	6,408	129	–	6,537	5,668	118	–	5,786
Total	$ 279,257	$ 2,141	$ –	$ 281,398	$ 263,185	$ 1,772	$ –	$ 264,957
Wholesale – Loans outstanding								
Investment grade	$ 88,108	$ 586	$ –	$ 88,694	$ 88,513	$ 202	$ –	$ 88,715
Non-investment grade	150,845	18,531	–	169,376	145,908	15,758	–	161,666
Not rated (1)	9,547	272	–	9,819	11,789	360	–	12,149
Impaired	–	–	2,188	2,188	–	–	1,301	1,301
	248,500	19,389	2,188	270,077	246,210	16,320	1,301	263,831
Items not subject to impairment (2)				8,920				10,136
Total				$ 278,997				$ 273,967
Undrawn loan commitments – Wholesale								
Investment grade	$ 301,814	$ 225	$ –	$ 302,039	$ 284,481	$ 179	$ –	$ 284,660
Non-investment grade	124,422	12,251	–	136,673	126,225	10,657	–	136,882
Not rated (1)	4,190	–	–	4,190	3,692	1	–	3,693
Total	$ 430,426	$ 12,476	$ –	$ 442,902	$ 414,398	$ 10,837	$ –	$ 425,235

(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.

Loans past due but not impaired (1), (2)

	As at					
	July 31, 2023			October 31, 2022		
(Millions of Canadian dollars)	30 to 89 days	90 days and greater	Total	30 to 89 days	90 days and greater	Total
Retail	$ 1,643	$ 167	$ 1,810	$ 1,328	$ 168	$ 1,496
Wholesale	1,062	63	1,125	1,279	2	1,281
	$ 2,705	$ 230	$ 2,935	$ 2,607	$ 170	$ 2,777

(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) Amounts presented may include loans past due as a result of administrative processes, such as mortgage loans on which payments are restrained pending payout due to sale or refinancing, 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 Significant acquisition and disposition

Acquisition

HSBC Bank Canada

On November 29, 2022, we entered into an agreement to acquire 100% of the common shares of HSBC Bank Canada (HSBC Canada) for an all-cash purchase price of $13.5 billion. In addition, we will purchase all of the existing preferred shares and subordinated debt of HSBC Canada held directly or indirectly by HSBC Holdings plc at par value ($2.1 billion as of June 30, 2023). HSBC Canada is a premier Canadian personal and commercial bank focused on globally connected clients.

The transaction is expected to close in the first calendar quarter of 2024 and is subject to the satisfaction of customary closing conditions, including regulatory approvals. The results of the acquired business will be consolidated from the date of close.

Disposition

Wealth Management

On July 3, 2023, we completed the previously announced sale of the European asset servicing activities of RBC Investor Services® and its associated Malaysian centre of excellence to CACEIS, the asset servicing banking group of Crédit Agricole S.A. and Banco Santander, S.A. As a result of the transaction, we recorded a pre-tax gain on disposal of $69 million in Non-Interest income within the Wealth Management segment ($77 million after-tax).

The completion of the sale of the business of the U.K. branch of RBC Investor Services Trust and the RBC Investor Services business in Jersey remains subject to customary closing conditions, including regulatory approvals. The disposal group consists of $2.7 billion of assets, primarily consisting of cash and due from banks, and $2.7 billion of liabilities, primarily consisting of deposits, and remains classified as held-for-sale, presented in Other assets and Other liabilities.

Note 7 Deposits

	As at							
	July 31, 2023				October 31, 2022			
(Millions of Canadian dollars)	Demand (1)	Notice (2)	Term (3)	Total	Demand (1)	Notice (2)	Term (3)	Total
Personal	$ 188,600	$ 56,910	$ 188,537	$ 434,047	$ 203,645	$ 64,743	$ 136,544	$ 404,932
Business and government	307,865	16,864	412,001	736,730	348,004	17,855	394,011	759,870
Bank	8,309	893	35,692	44,894	10,458	490	33,064	44,012
	$ 504,774	$ 74,667	$ 636,230	$ 1,215,671	$ 562,107	$ 83,088	$ 563,619	$ 1,208,814
Non-interest-bearing (4)								
Canada	$ 134,054	$ 6,535	$ 182	$ 140,771	$ 149,737	$ 7,797	$ 466	$ 158,000
United States	39,060	–	–	39,060	52,702	–	–	52,702
Europe (5)	131	–	–	131	620	–	–	620
Other International	7,177	–	–	7,177	7,840	–	–	7,840
Interest-bearing (4)								
Canada	298,923	15,090	478,242	792,255	305,779	17,982	409,586	733,347
United States	14,751	52,593	85,048	152,392	11,410	57,055	85,111	153,576
Europe (5)	5,244	359	54,012	59,615	28,276	254	52,144	80,674
Other International	5,434	90	18,746	24,270	5,743	–	16,312	22,055
	$ 504,774	$ 74,667	$ 636,230	$ 1,215,671	$ 562,107	$ 83,088	$ 563,619	$ 1,208,814

(1) Demand deposits are deposits for which we do not have the right to require notice of withdrawal, which include both savings and chequing accounts.
(2) Notice deposits are deposits for which we can legally require notice of withdrawal. These deposits are primarily savings accounts.
(3) Term deposits are deposits payable on a fixed date, and include term deposits, guaranteed investment certificates and similar instruments.
(4) The geographical splits of the deposits are based on the point of origin of the deposits and where the revenue is recognized. As at July 31, 2023, deposits denominated in U.S. dollars, British pounds, Euro and other foreign currencies were $439 billion, $36 billion, $48 billion and $31 billion, respectively (October 31, 2022 – $465 billion, $35 billion, $50 billion and $30 billion, respectively).
(5) Europe includes the United Kingdom, the Channel Islands, France and Luxembourg.

Contractual maturities of term deposits

(Millions of Canadian dollars)	As at July 31 2023	As at October 31 2022
Within 1 year:		
less than 3 months	$ 188,346	$ 159,602
3 to 6 months	79,326	61,996
6 to 12 months	135,725	156,531
1 to 2 years	68,666	49,225
2 to 3 years	47,961	42,809
3 to 4 years	35,921	27,609
4 to 5 years	37,649	33,835
Over 5 years	42,636	32,012
	$ 636,230	$ 563,619
Aggregate amount of term deposits in denominations of one hundred thousand dollars or more	$ 583,000	$ 521,000

Note 8 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 OCI:

Pension and other post-employment benefit expense

	For the three months ended			
	Pension plans		Other post-employment benefit plans	
(Millions of Canadian dollars)	July 31 2023	July 31 2022	July 31 2023	July 31 2022
Current service costs	$ 48	$ 77	$ 8	$ 11
Past service costs	–	–	–	–
Net interest expense (income)	(40)	(21)	19	16
Remeasurements of other long-term benefits	–	–	(1)	(10)
Administrative expense	3	3	–	–
Defined benefit pension expense	11	59	26	17
Defined contribution pension expense	84	58	–	–
	$ 95	$ 117	$ 26	$ 17

	For the nine months ended			
	Pension plans		Other post-employment benefit plans	
(Millions of Canadian dollars)	July 31 2023	July 31 2022	July 31 2023	July 31 2022
Current service costs	$ 146	$ 232	$ 24	$ 28
Past service costs	–	(1)	–	2
Net interest expense (income)	(121)	(63)	58	47
Remeasurements of other long-term benefits	–	–	2	(23)
Administrative expense	9	10	–	–
Defined benefit pension expense	34	178	84	54
Defined contribution pension expense	245	188	–	–
	$ 279	$ 366	$ 84	$ 54

Note 8 Employee benefits – Pension and other post-employment benefits (continued)

Pension and other post-employment benefit remeasurements (1)

	For the three months ended			
	Defined benefit pension plans		Other post-employment benefit plans	
(Millions of Canadian dollars)	**July 31 2023**	July 31 2022	**July 31 2023**	July 31 2022
Actuarial (gains) losses:				
Changes in financial assumptions (2)	**$ (483)**	$ 81	**$ (45)**	$ 16
Experience adjustments	**1**	–	**–**	(1)
Return on plan assets (excluding interest based on discount rate)	**313**	338	**–**	–
	$ (169)	$ 419	**$ (45)**	$ 15

	For the nine months ended			
	Defined benefit pension plans		Other post-employment benefit plans	
(Millions of Canadian dollars)	**July 31 2023**	July 31 2022	**July 31 2023**	July 31 2022
Actuarial (gains) losses:				
Changes in financial assumptions (2)	**$ 421**	$ (2,917)	**$ 45**	$ (241)
Experience adjustments	**1**	1	**(2)**	(4)
Return on plan assets (excluding interest based on discount rate)	**(248)**	2,180	**–**	–
	$ 174	$ (736)	**$ 43**	$ (245)

(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 9 Income taxes

On December 15, 2022, Bill C-32, Fall Economic Statement Implementation Act, 2022 (the Bill), tabled by the Government of Canada, received royal assent. The Bill amends the Income Tax Act (Canada) to implement a Canada Recovery Dividend (CRD) and a permanent increase in the Canadian corporate tax rate on banks and life insurer groups.

The CRD is a one-time 15% tax for 2022 determined based on the average taxable income above $1 billion for taxation years 2020 and 2021 and payable in equal installments over five years. The CRD resulted in an increase in income taxes of $1.2 billion for the three months ended January 31, 2023, of which $1 billion was recognized in net income and $0.2 billion was recognized in other comprehensive income.

The permanent increase in the Canadian corporate tax rate is 1.5% on taxable income above $100 million and applies to taxation years that end after April 7, 2022, resulting in an increase in the Canadian statutory tax rate from 26.2% to 27.7% for the year ending October 31, 2023.

Tax examinations and assessments

During the third quarter of 2023, we received proposal letters (the Proposals) from the Canada Revenue Agency (CRA), in respect of the 2018 taxation year, which suggest that Royal Bank of Canada owes additional taxes of approximately $228 million as the CRA 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 2022 Annual Consolidated Financial Statements. It is possible that the CRA will reassess us for significant additional income taxes for subsequent years on the same basis. In all cases, we are confident that our tax filing position was appropriate and intend to defend ourselves vigorously.

Note 10 Significant capital and funding transactions

Subordinated debentures

On January 31, 2023, we issued $1,500 million of non-viability contingent capital (NVCC) subordinated debentures. The notes bear interest at a fixed rate of 5.01% per annum until February 1, 2028, and at the Daily Compounded Canadian Overnight Repo Rate Average plus 2.12% thereafter until their maturity on February 1, 2033.

On June 8, 2023, all $110 million of outstanding 9.30% subordinated debentures matured. The principal plus accrued interest were paid to the noteholders on the maturity date.

Common shares issued

	For the three months ended			
	July 31, 2023		July 31, 2022	
(Millions of Canadian dollars, except number of shares)	Number of shares (thousands)	Amount	Number of shares (thousands)	Amount
Issued in connection with share-based compensation plans (1)	**174**	**$ 16**	100	$ 8
Issued in connection with dividend reinvestment plan (2)	**5,355**	**670**	–	–
Purchased for cancellation (3)	**–**	**–**	(10,445)	(129)
	5,529	**$ 686**	(10,345)	$ (121)

	For the nine months ended			
	July 31, 2023		July 31, 2022	
(Millions of Canadian dollars, except number of shares)	Number of shares (thousands)	Amount	Number of shares (thousands)	Amount
Issued in connection with share-based compensation plans (1)	**678**	**$ 61**	612	$ 50
Issued in connection with dividend reinvestment plan (2)	**9,959**	**1,291**	–	–
Purchased for cancellation (3)	**–**	**–**	(33,016)	(411)
	10,637	**$ 1,352**	(32,404)	$ (361)

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

(2) The requirements of our dividend reinvestment plan (DRIP) are satisfied through either open market share purchases or shares issued from treasury. During the three months ended July 31, 2023 our DRIP requirements were satisfied through shares issued from treasury. During the nine months ended July 31, 2023 our DRIP requirements were satisfied through open market share purchases in the first three months and through shares issued from treasury in the last six months. During the three and nine months ended July 31, 2022 our DRIP requirements were satisfied through open market share purchases.

(3) During the three and nine months ended July 31, 2023, we did not purchase for cancellation any common shares. During the three months ended July 31, 2022, we purchased for cancellation common shares at a total fair value of $1,338 million (average cost of $128.20 per share), with a book value of $129 million (book value of $12.47 per share). During the nine months ended July 31, 2022, we purchased for cancellation common shares at a total fair value of $4,444 million (average cost of $134.60 per share), with a book value of $411 million (book value of $12.46 per share).

Note 11 Earnings per share

	For the three months ended		For the nine months ended	
(Millions of Canadian dollars, except share and per share amounts)	July 31 2023	July 31 2022	July 31 2023	July 31 2022
Basic earnings per share				
Net income	**$ 3,872**	$ 3,577	**$ 10,735**	$ 11,925
Dividends on preferred shares and distributions on other equity instruments	**(58)**	(58)	**(169)**	(180)
Net income attributable to non-controlling interests	**(2)**	(2)	**(5)**	(7)
Net income available to common shareholders	**$ 3,812**	$ 3,517	**$ 10,561**	$ 11,738
Weighted average number of common shares (in thousands)	**1,393,515**	1,396,381	**1,388,217**	1,409,292
Basic earnings per share (in dollars)	**$ 2.74**	$ 2.52	**$ 7.61**	$ 8.33
Diluted earnings per share				
Net income available to common shareholders	**$ 3,812**	$ 3,517	**$ 10,561**	$ 11,738
Weighted average number of common shares (in thousands)	**1,393,515**	1,396,381	**1,388,217**	1,409,292
Stock options (1)	**1,398**	1,680	**1,614**	2,039
Issuable under other share-based compensation plans	**26**	606	**26**	603
Average number of diluted common shares (in thousands)	**1,394,939**	1,398,667	**1,389,857**	1,411,934
Diluted earnings per share (in dollars)	**$ 2.73**	$ 2.51	**$ 7.60**	$ 8.31

(1) The dilutive effect of stock options was calculated using the treasury stock method. When the exercise price of options outstanding is greater than the average market price of our common shares, the options are excluded from the calculation of diluted earnings per share. For the three months ended July 31, 2023, an average of 2,244,505 outstanding options with an average exercise price of $130.78 were excluded from the calculation of diluted earnings per share. For the three months ended July 31, 2022, an average of 1,181,140 outstanding options with an average exercise price of $129.99 were excluded from the calculation of diluted earnings per share. For the nine months ended July 31, 2023, an average of 917,036 outstanding options with an average exercise price of $131.64 were excluded from the calculation of diluted earnings per share. For the nine months ended July 31, 2022, no outstanding options were excluded from the calculation of diluted earnings per share.

Note 12 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. In many proceedings, it is inherently difficult to determine whether any loss is probable or to reliably estimate the amount of any loss. 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 provisions 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 audited 2022 Annual Consolidated Financial Statements and as updated below.

Vacation pay class action

On December 29, 2022, the Ontario Superior Court of Justice certified a class in an action against RBC Dominion Securities Limited and RBC Dominion Securities Inc. (together, RBC DS). The action commenced in July 2020, asserting claims relating to statutory vacation pay and public holiday pay for investment advisors, associates and assistants in our Canadian Wealth Management business, with the exception of those employed in Alberta and British Columbia. On January 13, 2023, RBC DS served a notice of motion for leave to appeal the court's certification decision. Based on the facts currently known, it is not possible at this time to predict the ultimate outcome of these proceedings or the timing of their resolution.

Foreign exchange matters

On March 29, 2023, the parties executed a settlement agreement resolving all claims in both the U.S. Opt Out Action and the U.K. action, and in May 2023 these actions were dismissed.

London interbank offered rate (LIBOR) litigation

On July 21, 2023, Royal Bank of Canada and several other defendants executed a settlement agreement resolving one of the LIBOR class actions brought on behalf of certain plaintiffs that purchased U.S. dollar LIBOR-based instruments. The settlement was preliminarily approved on August 1, 2023 and remains subject to final court approval.

U.K. Competition and Markets Authority investigation and U.K. Government Bonds litigation

Royal Bank of Canada and RBC Europe Limited are engaging with the U.K. Competition and Markets Authority (CMA) in respect of an investigation involving alleged anti-competitive conduct in relation to U.K. government bonds and related derivatives between 2009 and 2013. In May 2023, the CMA issued a statement of objections to Royal Bank of Canada and RBC Europe Limited, and certain other financial institutions. Royal Bank of Canada and RBC Europe Limited are contesting the CMA's case.

In June 2023, RBC Europe Limited and RBC Capital Markets, LLC, among other financial institutions, were named as defendants in a putative class action filed in the U.S. by plaintiffs alleging anti-competitive conduct in the U.K. government bonds market.

The outcome and resulting financial impact of these matters is unknown and not reliably estimable.

Note 13 Results by business segment

Composition of business segments

For management purposes, based on the products and services offered, we are organized into four business segments: Personal & Commercial Banking, Wealth Management, Insurance and Capital Markets. Effective the first quarter of 2023, we simplified our reporting structure by eliminating the Investor & Treasury Services segment and moving its former businesses to existing segments. We moved our Investor Services business to our Wealth Management segment, and our Treasury Services and Transaction Banking businesses to our Capital Markets segment. From a reporting perspective, there were no changes to our Personal & Commercial Banking and Insurance segments. Comparative results have been revised to conform to our new basis of segment presentation.

	For the three months ended July 31, 2023					
(Millions of Canadian dollars)	Personal & Commercial Banking	Wealth Management	Insurance	Capital Markets (1)	Corporate Support (1)	Total
Net interest income (2)	$ 4,062	$ 1,007	$ –	$ 891	$ 326	$ 6,286
Non-interest income	1,501	3,411	1,848	1,772	(329)	8,203
Total revenue	5,563	4,418	1,848	2,663	(3)	14,489
Provision for credit losses	305	102	–	209	–	616
Insurance policyholder benefits, claims and acquisition expense	–	–	1,379	–	–	1,379
Non-interest expense	2,319	3,498	165	1,620	259	7,861
Income (loss) before income taxes	2,939	818	304	834	(262)	4,633
Income taxes (recoveries)	805	144	77	(104)	(161)	761
Net income	$ 2,134	$ 674	$ 227	$ 938	$ (101)	$ 3,872
Non-interest expense includes:						
Depreciation and amortization	$ 240	$ 312	$ 15	$ 126	$ –	$ 693

	For the three months ended July 31, 2022					
(Millions of Canadian dollars)	Personal & Commercial Banking	Wealth Management (3)	Insurance	Capital Markets (1), (3)	Corporate Support (1)	Total
Net interest income (2)	$ 3,655	$ 1,051	$ –	$ 1,233	$ (49)	$ 5,890
Non-interest income	1,527	2,971	1,233	631	(120)	6,242
Total revenue	5,182	4,022	1,233	1,864	(169)	12,132
Provision for credit losses	324	14	–	2	–	340
Insurance policyholder benefits, claims and acquisition expense	–	–	850	–	–	850
Non-interest expense	2,130	2,929	139	1,186	2	6,386
Income (loss) before income taxes	2,728	1,079	244	676	(171)	4,556
Income taxes (recoveries)	705	258	58	77	(119)	979
Net income	$ 2,023	$ 821	$ 186	$ 599	$ (52)	$ 3,577
Non-interest expense includes:						
Depreciation and amortization	$ 239	$ 271	$ 14	$ 129	$ 3	$ 656

Note 13 Results by business segment (continued)

	For the nine months ended July 31, 2023					
(Millions of Canadian dollars)	Personal & Commercial Banking	Wealth Management	Insurance	Capital Markets (1)	Corporate Support (1)	Total
Net interest income (2)	$ 11,886	$ 3,328	$ –	$ 2,579	$ 794	$ 18,587
Non-interest income	4,516	10,099	5,086	5,837	(1,022)	24,516
Total revenue	16,402	13,427	5,086	8,416	(228)	43,103
Provision for credit losses	1,128	196	–	424	–	1,748
Insurance policyholder benefits, claims and acquisition expense	–	–	3,930	–	–	3,930
Non-interest expense	6,805	10,379	480	4,831	535	23,030
Income (loss) before income taxes	8,469	2,852	676	3,161	(763)	14,395
Income taxes (recoveries)	2,294	588	162	61	555	3,660
Net income	$ 6,175	$ 2,264	$ 514	$ 3,100	$ (1,318)	$ 10,735
Non-interest expense includes:						
Depreciation and amortization	$ 721	$ 925	$ 43	$ 381	$ –	$ 2,070

	For the nine months ended July 31, 2022					
(Millions of Canadian dollars)	Personal & Commercial Banking	Wealth Management (3)	Insurance	Capital Markets (1), (3)	Corporate Support (1)	Total
Net interest income (2)	$ 10,118	$ 2,782	$ –	$ 3,760	$ (225)	$ 16,435
Non-interest income	4,606	9,259	2,866	3,599	(347)	19,983
Total revenue	14,724	12,041	2,866	7,359	(572)	36,418
Provision for credit losses	177	(29)	–	(46)	1	103
Insurance policyholder benefits, claims and acquisition expense	–	–	1,667	–	–	1,667
Non-interest expense	6,167	8,844	431	4,136	(178)	19,400
Income (loss) before income taxes	8,380	3,226	768	3,269	(395)	15,248
Income taxes (recoveries)	2,149	775	179	691	(471)	3,323
Net income	$ 6,231	$ 2,451	$ 589	$ 2,578	$ 76	$ 11,925
Non-interest expense includes:						
Depreciation and amortization	$ 704	$ 820	$ 43	$ 382	$ 7	$ 1,956

(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.
(3) Amounts have been revised from those previously presented to conform to our new basis of segment presentation.

Total assets and total liabilities by business segment

	As at July 31, 2023					
(Millions of Canadian dollars)	Personal & Commercial Banking	Wealth Management	Insurance	Capital Markets	Corporate Support	Total
Total assets	$ 624,943	$ 180,674	$ 24,680	$ 1,065,952	$ 61,485	$ 1,957,734
Total liabilities	624,851	180,529	25,332	1,066,223	(51,630)	1,845,305

	As at October 31, 2022					
(Millions of Canadian dollars)	Personal & Commercial Banking	Wealth Management (1)	Insurance	Capital Markets (1)	Corporate Support	Total
Total assets	$ 602,824	$ 206,466	$ 21,918	$ 1,025,892	$ 60,119	$ 1,917,219
Total liabilities	602,741	206,415	22,588	1,025,603	(48,303)	1,809,044

(1) Amounts have been revised from those previously presented to conform to our new basis of segment presentation.

Note 14 Capital management

Regulatory capital and capital ratios

OSFI formally establishes risk-based capital and leverage minimums and Total Loss Absorbing Capacity (TLAC) ratios for deposit-taking institutions in Canada. During the third quarter of 2023, we complied with all applicable capital, leverage and TLAC requirements, including the Domestic Stability Buffer, imposed by OSFI.

	As at	
(Millions of Canadian dollars, except percentage amounts and as otherwise noted)	July 31 2023	October 31 2022
Capital (1)		
CET1 capital	$ 82,892	$ 76,945
Tier 1 capital	90,193	84,242
Total capital	101,072	93,850
Risk-weighted assets (RWA) used in calculation of capital ratios (1)		
Credit risk	$ 470,732	$ 496,898
Market risk	37,426	35,342
Operational risk	77,741	77,639
Total RWA	$ 585,899	$ 609,879
Capital ratios and Leverage ratio (1)		
CET1 ratio	14.1%	12.6%
Tier 1 capital ratio	15.4%	13.8%
Total capital ratio	17.3%	15.4%
Leverage ratio	4.2%	4.4%
Leverage ratio exposure (billions)	$ 2,142	$ 1,898
TLAC available and ratios (2)		
TLAC available	$ 181,035	$ 160,961
TLAC ratio	30.9%	26.4%
TLAC leverage ratio	8.5%	8.5%

(1) Capital, RWA, and capital ratios are calculated using OSFI's Capital Adequacy Requirements (CAR) guideline and the Leverage ratio is calculated using OSFI's Leverage Requirements (LR) guideline. Both the CAR guideline and LR guideline are based on the Basel III framework. The results for the period ended July 31, 2023 reflect our adoption of the revised CAR and LR guidelines that came into effect in Q2 2023 as part of OSFI's implementation of the Basel III reforms.

(2) TLAC available and TLAC ratios are calculated using OSFI's TLAC guideline. The TLAC standard is applied at the resolution entity level which for us is deemed to be Royal Bank of Canada and its subsidiaries. A resolution entity and its subsidiaries are collectively called a resolution group. The TLAC ratio and TLAC leverage ratio are calculated using the TLAC available as percentage of total RWA and leverage exposure, respectively.

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:
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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)

Preferred shares AZ, BB, BD, BF, BH, BI 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
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200 Bay Street
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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.

International shareholders (other than holders in the U.S. or Canada) may be able to receive their dividend and/or distribution payments in the currency of their choice. Computershare offers an International Currency Exchange service that enables RBC's international shareholders to receive their dividend and/or distribution payments in the currency of their choice. Please refer to investorcentre.com/rbc.

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

Common share repurchases
As at July 31, 2023, we did not have an active normal course issuer bid (NCIB). For further details, refer to the Capital management section.

Dividend dates for 2023
Subject to approval by the Board of Directors

	Record dates	Payment dates
Common and preferred shares series AZ, BB, BD, BF, BH, BI and BO	January 26 April 25 July 26 October 26	February 24 May 24 August 24 November 24
Preferred shares series C-2 (US$)	January 27 April 28 July 28 October 27	February 7 May 8 August 8 November 7
Preferred shares series BT	February 15 August 17	February 24 August 24

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.

2023 Quarterly earnings release dates

First quarter	March 1
Second quarter	May 25
Third quarter	August 24
Fourth quarter	November 30

2024 Annual Meeting
The Annual Meeting of Common Shareholders will be held on Thursday, April 11, 2024.

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.

CEO AND CFO CERTIFICATIONS

SOX 302 Certification

I, David McKay, certify that:

1. I have reviewed this quarterly report for the period ended July 31, 2023 (the “report”) of Royal Bank of Canada (the “registrant”);

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: August 24, 2023

/s/ David McKay

Name: David McKay
Title: President and Chief Executive Officer

SOX 302 Certification

I, Nadine Ahn, certify that:

1. I have reviewed this quarterly report for the period ended July 31, 2023 (the "report") of Royal Bank of Canada (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 24, 2023

/s/ Nadine Ahn

Name: Nadine Ahn
Title: Chief Financial Officer