Enhanced Disclosure Task Force

The Enhanced Disclosure Task Force (EDTF) was established by the Financial Stability Board to provide guidance and recommendations for best practice risk disclosures for banks. We have adopted these recommendations at BMO in order to prepare and deliver high-quality, transparent risk disclosures. The index below details these recommendations and references the presentation of the disclosures in our 2023 Annual Report, Supplementary Financial Information (SFI) and Supplementary Regulatory Capital Information (SRCI). Information on BMO's website, including information within the SFI or SRCI, is not, and should not be considered to be, incorporated by reference into this 2023 Annual Report.

Topic	EDTF Disclosure	Page number		
		Annual Report	SFI	SRCI
General	1. Risk-related information in each report, including an index for easy navigation	78-118	Index	Index
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	3. Top and emerging risks	78-80		
	4. Plans to meet new key regulatory ratios once applicable rules are finalized	72		
Risk Governance, Risk Management and Business Model	5. Risk management and governance framework, processes and key functions	82-86		
	6. Risk culture, risk appetite and procedures to support the culture	86		
	7. Risks that arise from business models and activities	84-85		
	8. Stress testing within the risk governance and capital frameworks	85-86		
Capital Adequacy and Risk-Weighted Assets (RWA)	9. Pillar 1 capital requirements	70-73		5-6,13
	10. Composition of capital components and reconciliation of the accounting balance sheet to the regulatory balance sheet. A main features template can be found at: https://www.bmo.com/main/about-bmo/investor-relations/regulatory-disclosure	73-74		5-7,16-17
	11. Flow statement of movements in regulatory capital, including changes in Common Equity Tier 1 Capital, Additional Tier 1 Capital and Tier 2 Capital			8
	12. Capital management and strategic planning	69,75-76		
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	15. Tabulate credit risk in the banking book for Basel asset classes and major portfolios			22-44,46-62, 84
	16. Flow statement that reconciles movements in RWA by credit risk and market risk			45,80
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Management's Discussion and Analysis

BMO's Chief Executive Officer and Chief Financial Officer have signed a statement outlining management's responsibility for financial information in the audited annual consolidated financial statements and Management's Discussion and Analysis (MD&A). The statement also explains the roles of the Audit and Conduct Review Committee and Board of Directors in respect of that financial information.

The MD&A comments on our operations and financial condition for the years ended October 31, 2023 and 2022. The MD&A should be read in conjunction with the audited annual consolidated financial statements for the year ended October 31, 2023. The MD&A commentary is as at November 30, 2023. Unless otherwise indicated, all amounts are stated in Canadian dollars and have been derived from audited annual consolidated financial statements prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board. We also comply with interpretations of IFRS by our regulator, the Office of the Superintendent of Financial Institutions (OSFI). References to generally accepted accounting principles (GAAP) mean IFRS.

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Regulatory Filings
BMO's continuous disclosure materials, including our interim consolidated financial statements and interim MD&A, audited annual consolidated financial statements and annual MD&A, Annual Information Form and Notice of Annual Meeting of Shareholders and Management Proxy Circular, are available on our website at www.bmo.com/investorrelations, on the Canadian Securities Administrators' website at www.sedarplus.ca and on the EDGAR section of the U.S. Securities and Exchange Commission's (SEC) website at www.sec.gov. BMO's Chief Executive Officer and Chief Financial Officer certify the appropriateness and fairness of BMO's annual and interim consolidated financial statements, annual MD&A and Annual Information Form, the effectiveness of BMO's disclosure controls and procedures and the effectiveness of, and any material weaknesses relating to, BMO's internal control over financial reporting. Information contained in, or otherwise accessible through, our website (www.bmo.com) or any third-party websites mentioned herein, does not form part of this document.

Caution
The About BMO, Financial Objectives and Value Measures, Supporting a Sustainable and Inclusive Future, Recent Acquisitions, Economic Developments and Outlook, Provision for Income Taxes and Other Taxes, 2024 Areas of Focus, Business Environment and Outlook, Enterprise-Wide Capital Management, Off-Balance Sheet Arrangements, Enterprise-Wide Risk Management, Future Changes in Accounting Policies and Other Regulatory Developments sections contain certain forward-looking statements. By their nature, forward-looking statements require us to make assumptions and are subject to inherent risks and uncertainties. Refer to the Caution Regarding Forward-Looking Statements section for a discussion of such risks and uncertainties and the material factors and assumptions related to the statements set forth in such sections.

Factors That May Affect Future Results

As noted in the following Caution Regarding Forward-Looking Statements, all forward-looking statements and information, by their nature, are subject to inherent risks and uncertainties, both general and specific, which may cause actual results to differ materially from the expectations expressed in any forward-looking statement. The Enterprise-Wide Risk Management section describes a number of risks, including credit and counterparty, market, insurance, liquidity and funding, operational non-financial, legal and regulatory, strategic, environmental and social, and reputation risk. Should our risk management framework prove ineffective, there could be a material impact on our financial position and results.

Caution Regarding Forward-Looking Statements

Bank of Montreal's public communications often include written or oral forward-looking statements. Statements of this type are included in this document, and may be included in other filings with Canadian securities regulators or the U.S. Securities and Exchange Commission, or in other communications. All such statements are made pursuant to the "safe harbor" provisions of, and are intended to be forward-looking statements under, the United States *Private Securities Litigation Reform Act of 1995* and any applicable Canadian securities legislation. Forward-looking statements in this document may include, but are not limited to, statements with respect to our objectives and priorities for fiscal 2024 and beyond, our strategies or future actions, our targets and commitments (including with respect to net zero emissions), expectations for our financial condition, capital position, the regulatory environment in which we operate, the results of, or outlook for, our operations or the Canadian, U.S. and international economies, plans for the combined operations of BMO and Bank of the West, and include statements made by our management. Forward-looking statements are typically identified by words such as "will", "would", "should", "believe", "expect", "anticipate", "project", "intend", "estimate", "plan", "goal", "commit", "target", "may", "might", "schedule", "forecast", "outlook", "timeline", "suggest", "seek" and "could" or negative or grammatical variations thereof.

By their nature, forward-looking statements require us to make assumptions and are subject to inherent risks and uncertainties, both general and specific in nature. There is significant risk that predictions, forecasts, conclusions or projections will not prove to be accurate, that our assumptions may not be correct, and that actual results may differ materially from such predictions, forecasts, conclusions or projections. We caution readers of this document not to place undue reliance on our forward-looking statements, as a number of factors – many of which are beyond our control and the effects of which can be difficult to predict – could cause actual future results, conditions, actions or events to differ materially from the targets, expectations, estimates or intentions expressed in the forward-looking statements.

The future outcomes that relate to forward-looking statements may be influenced by many factors, including, but not limited to: general economic and market conditions in the countries in which we operate, including labour challenges; the anticipated benefits from acquisitions, including Bank of the West, are not realized; changes to our credit ratings; the emergence or continuation of widespread health emergencies or pandemics, and their impact on local, national or international economies, as well as their heightening of certain risks that may affect our future results; cyber and cloud security, including the threat of data breaches, hacking, identity theft and corporate espionage, as well as the possibility of denial of service resulting from efforts targeted at causing system failure and service disruption; technology resiliency; failure of third parties to comply with their obligations to us; political conditions, including changes relating to, or affecting, economic or trade matters; climate change and other environmental and social risks; the Canadian housing market and consumer leverage; inflationary pressures; technological innovation and competition; changes in monetary, fiscal or economic policy; changes in laws, including tax legislation and interpretation, or in supervisory expectations or requirements, including capital, interest rate and liquidity requirements and guidance, and the effect of such changes on funding costs and capital requirements; weak, volatile or illiquid capital or credit markets; the level of competition in the geographic and business areas in which we operate; exposure to, and the resolution of, significant litigation or regulatory matters, our ability to successfully appeal adverse outcomes of such matters and the timing, determination and recovery of amounts related to such matters; the accuracy and completeness of the information we obtain with respect to our customers and counterparties; our ability to execute our strategic plans, complete proposed acquisitions or dispositions and integrate acquisitions, including obtaining regulatory approvals; critical accounting estimates and judgments, and the effects of changes to accounting standards, rules and interpretations on these estimates; operational and infrastructure risks, including with respect to reliance on third parties; global capital markets activities; the possible effects on our business of war or terrorist activities; natural disasters and disruptions to public infrastructure, such as transportation, communications, power or water supply; and our ability to anticipate and effectively manage risks arising from all of the foregoing factors.

We caution that the foregoing list is not exhaustive of all possible factors. Other factors and risks could adversely affect our results. For more information, please refer to the discussion in the Risks That May Affect Future Results section, and the sections related to credit and counterparty, market, insurance, liquidity and funding, operational non-financial, legal and regulatory, strategic, environmental and social, and reputation risk in the Enterprise-Wide Risk Management section, as updated by quarterly reports, all of which outline certain key factors and risks that may affect our future results. Investors and others should carefully consider these factors and risks, as well as other uncertainties and potential events, and the inherent uncertainty of forward-looking statements. We do not undertake to update any forward-looking statements, whether written or oral, that may be made from time to time by the organization or on its behalf, except as required by law. The forward-looking information contained in this document is presented for the purpose of assisting shareholders and analysts in understanding our financial position as at and for the periods ended on the dates presented, as well as our strategic priorities and objectives, and may not be appropriate for other purposes.

Material economic assumptions underlying the forward-looking statements contained in this document include those set out in the Economic Developments and Outlook section, and the Allowance for Credit Losses section, as updated by quarterly reports. Assumptions about the performance of the Canadian and U.S. economies, as well as overall market conditions and their combined effect on our business, are material factors we consider when determining our strategic priorities, objectives and expectations for our business. In determining our expectations for economic growth, we primarily consider historical economic data, past relationships between economic and financial variables, changes in government policies, and the risks to the domestic and global economy.

About BMO

Established in 1817, BMO Financial Group (BMO, Bank of Montreal, the bank, we, our, us) is the eighth largest bank in North America by assets, with total assets of $1.29 trillion. We are a highly diversified financial institution providing a broad range of personal and commercial banking, wealth management, global markets and investment banking products and services. We serve thirteen million customers across Canada and the United States, and in select markets globally, through three integrated operating groups: Personal and Commercial Banking, BMO Wealth Management and BMO Capital Markets.

At BMO, we continue to build a high-performing, digitally-enabled, future-ready bank with engaged employees and a winning culture. We are focused on helping our customers make real financial progress, and on financing our clients' growth and innovation, while also investing in our workforce. Anchored by our Purpose, we are driven by our strategic priorities for growth, strengthened by our approach to sustainability and guided by our values as we build a foundation of trust with our stakeholders.

Our Purpose: Boldly Grow the Good *in business and life*

BMO has a deep sense of purpose – to be a champion of progress and a catalyst for change. We are leveraging our position as a leading financial services provider in order to create opportunities for our communities and our stakeholders to make positive, sustainable change – because we believe that success can and must be mutual. Our bold commitments for a thriving economy, a sustainable future and an inclusive society are reflected in our active, direct response to today's most pressing challenges:

- **Thriving economy** – Providing access to capital and valuable financial advice – investing in businesses, supporting home ownership and strengthening the communities we serve, while driving innovation that makes banking easier.
- **Sustainable future** – Being our clients' lead partner in the transition to a net zero world, delivering on our commitments to sustainable financing and responsible investing.
- **Inclusive society** – Committing to zero barriers to inclusion through investments, financial products and services, and partnerships that remove systemic barriers for under-represented customers, employees and communities – and drive inclusion and equitable growth for everyone.

Our Strategic Priorities

The strength and consistency of our performance are essential to realizing our Purpose. We aim to deliver top-tier total shareholder return and achieve our financial objectives by aligning our operations with, and executing on, our strategic priorities. Keeping the fundamentals of our strategy consistent, we renewed our priorities for fiscal 2024 to reflect our strong momentum in an environment of ongoing transformation:

- **World-class** loyalty and growth, powered by One Client leadership, bringing the full suite of BMO's products, services and advice to our clients
- **Winning culture** driven by alignment, empowerment and recognition
- **Digital First** for speed, scale and the elimination of complexity
- **Be our clients' lead partner** in the **transition** to a **net zero world**
- **Superior management** of **risk, capital** and **funding** performance

Our group strategic priorities align with and support our enterprise-wide strategy, positioning us well to achieve competitive performance. The operating group strategies are outlined in the 2023 Operating Groups Performance Review.

Our Approach to Sustainability

Our commitment to sustainability is embedded in our strategy and is fundamental to our Purpose. We identify the most significant effects of our business operations, products and services on our stakeholders and the communities in which we operate. We take steps to manage our business in a manner that is consistent with our sustainability objectives, while also considering the interests of our stakeholders. We apply a variety of environmental, social and governance (ESG) practices and benchmarks to capture opportunities and manage risks in key areas such as sustainable finance, climate change, human rights, and diversity, equity and inclusion.

Our Values

Four core values shape our culture and underpin our choices and actions:

- **Integrity**
- **Diversity**
- **Responsibility**
- **Empathy**

Caution

This About BMO section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

Financial Objectives and Value Measures

Results and measures in this section are presented on a reported and an adjusted basis, as well as a gross and net revenue basis, and management considers all of these to be useful in assessing our performance. We believe that the non-GAAP measures and ratios presented here, read together with our GAAP results, provide readers with a better understanding of how management assesses results and are a better reflection of ongoing business performance.

Adjusted results and measures in this section, including earnings per share (EPS), EPS growth, return on equity (ROE), return on tangible common equity (ROTCE), net income, revenue, non-interest expense, efficiency ratio and operating leverage, are non-GAAP amounts, measures and ratios, and are discussed in the Non-GAAP and Other Financial Measures section.

We also present reported and adjusted revenue on a basis that is net of insurance claims, commissions and changes in policy benefit liabilities (CCPB), and we calculate our efficiency ratio and operating leverage on a similar basis. Insurance revenue can experience variability arising from fluctuations in the fair value of insurance assets, caused by movements in interest rates and equity markets, that is largely offset in CCPB. Presenting our revenue, efficiency ratio and operating leverage on a net basis allows for a better assessment of operating results.

Measures and ratios on a net revenue basis are non-GAAP amounts. For more information on CCPB, refer to the Non-GAAP and Other Financial Measures section. Information regarding the composition of each of these measures is also provided in the Glossary of Financial Terms.

Financial Objectives

As at and for the periods ended October 31, 2023	Financial objectives (adjusted)	Reported basis 1-year	Reported basis 3-year (2)	Reported basis 5-year (2)	Adjusted basis (1) 1-year	Adjusted basis (1) 3-year (2)	Adjusted basis (1) 5-year (2)
Earnings per share growth (%)	7-10%	(71.6)	(9.1)	(7.0)	(11.4)	15.0	5.5
Average return on equity (%)	15% or more	6.0	14.6	13.3	12.3	14.7	13.6
Average return on tangible common equity (%)	18% or more	8.2	16.8	15.5	15.8	17.1	15.9
Operating leverage, net of CCPB (%) (3)	2% or more	(45.9)	(6.8)	(3.2)	(8.2)	–	0.7
Common Equity Tier 1 Ratio (%)	Exceed regulatory requirement	12.5	na	na	na	na	na
Total shareholder return (%)	Top-tier	(12.5)	14.3	5.6	na	na	na

(1) Adjusted results and measures are non-GAAP amounts and measures and are discussed in the Non-GAAP and Other Financial Measures section.
(2) The 3-year and 5-year EPS growth rate and operating leverage, net of CCPB, reflect compound annual growth rates (CAGR).
(3) Operating leverage, net of CCPB, on a reported and adjusted basis presented in this table are non-GAAP measures and are discussed in the Non-GAAP and Other Financial Measures section.
na – not applicable

BMO's business planning process is rigorous, sets ambitious goals and considers prevailing economic conditions, our risk appetite, our customers' evolving needs and the opportunities available across our lines of business. It includes clear and direct accountability for annual performance that is measured against both internal and external benchmarks and progress toward our strategic priorities.

We have established medium-term financial objectives for certain important performance measures, which are set out above. Medium-term is generally defined as three to five years, and performance is assessed on an adjusted basis. We aim to deliver top-tier total shareholder return and achieve our financial objectives by aligning our operations with, and executing on, our strategic priorities.

These objectives serve as guideposts and they assume a normal business environment. Our ability to meet these objectives in any single period may be adversely affected by changes in the economic environment, or extraordinary developments. We recognize that in managing our operations and our exposure to risk, current profitability and our ability to meet these objectives in a single period must be balanced with the need to invest in our businesses for long-term sustainability and future growth.

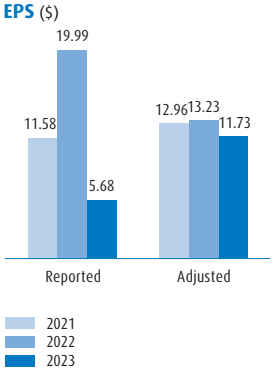
Our financial objectives and our performance against these objectives are outlined in the table above and described in the sections that follow.

Earnings per Share Growth

All references to earnings per share (EPS) are to diluted EPS, unless otherwise indicated.

EPS was $5.68 in 2023, a decrease of $14.31 or 72% from $19.99 in 2022. Adjusted EPS was $11.73, a decrease of $1.50 or 11% from $13.23 in 2022. The decrease in EPS reflected lower earnings and a higher number of common shares outstanding. Net income available to common shareholders decreased 70% year-over-year on a reported basis, and decreased 5% on an adjusted basis. The average number of diluted common shares outstanding increased 7% from 2022, reflecting common shares issued during the year through a public offering, private placements, the dividend reinvestment plan, acquisitions and the stock option plan.

Earnings per Share (EPS) is calculated by dividing net income attributable to bank shareholders, after deducting preferred share dividends and distributions on other equity instruments, by the average number of common shares outstanding. Adjusted EPS is calculated in the same manner, using adjusted net income attributable to bank shareholders. Diluted EPS, which is BMO's basis for measuring performance, adjusts for possible conversions of financial instruments into common shares if those conversions would reduce EPS, and is more fully explained in Note 23 of the audited annual consolidated financial statements.



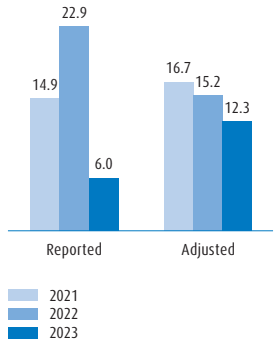
Return on Equity and Return on Tangible Common Equity

Reported return on equity (ROE) was 6.0% in 2023 and adjusted ROE was 12.3%, compared with 22.9% and 15.2%, respectively, in 2022. Reported ROE decreased due to lower net income, primarily due to lower revenue in the current year resulting from the impact of fair value management actions related to the acquisition of Bank of the West, and higher expenses in the current year due to higher acquisition and integration-related costs. Reported and adjusted ROE decreased due to the impact of share issuances, as well as lower earnings.

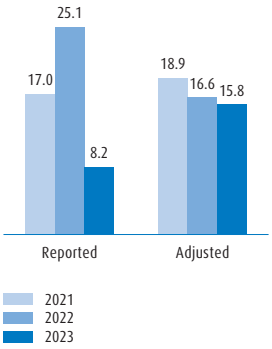
There was a decrease of $9,272 million in reported net income available to common shareholders and a decrease of $476 million in adjusted net income available to common shareholders in the current year. Average common shareholders' equity increased $9.4 billion or 16% from 2022, primarily due to the issuance of common shares and growth in retained earnings, partially offset by a decrease in accumulated other comprehensive income.

Reported return on tangible common equity (ROTCE) was 8.2%, compared with 25.1% in 2022, and adjusted ROTCE was 15.8%, compared with 16.6% in 2022. Reported and adjusted ROTCE decreased due to lower earnings, partially offset by lower tangible common equity. Book value per share increased 2% from the prior year to $97.17, reflecting the increase in shareholders' equity.

ROE (%)



ROTCE (%)



Return on Common Shareholders' Equity (ROE) is calculated as net income, less preferred dividends and distributions on other equity instruments, as a percentage of average common shareholders' equity. Common shareholders' equity comprises common share capital, contributed surplus, accumulated other comprehensive income (loss) and retained earnings. Adjusted ROE is calculated using adjusted net income rather than reported net income.

Return on Tangible Common Equity (ROTCE) is calculated as net income available to common shareholders, adjusted for the amortization of acquisition-related intangible assets, as a percentage of average tangible common equity. Average tangible common equity comprises common shareholders' equity, less goodwill and acquisition-related intangible assets, net of related deferred tax liabilities. Adjusted ROTCE is calculated using adjusted net income rather than reported net income.

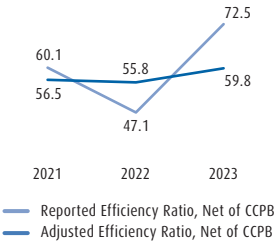
Efficiency Ratio and Operating Leverage

BMO's reported gross efficiency ratio was 68.0% in 2023, compared with 48.0% in 2022. On a net revenue basis (1), the reported efficiency ratio was 72.5%, compared with 47.1% in 2022, and the adjusted efficiency ratio was 59.8%, compared with 55.8% in 2022. The increase in the efficiency ratio reflected revenue growth that was more than offset by higher expense growth, as well as the impact of Bank of the West, which operated at a higher efficiency ratio.

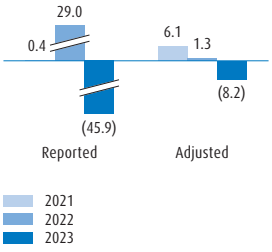
Reported operating leverage was negative 38.5%. On a net revenue basis, reported operating leverage was negative 45.9%, and adjusted operating leverage was negative 8.2%.

(1) Net revenue comprises revenue, net of insurance claims, commissions and changes in policy benefit liabilities (CCPB).

Efficiency Ratio, Net of CCPB (%)



Operating Leverage, Net of CCPB (%)



Efficiency Ratio (or expense-to-revenue ratio) is a measure of productivity. It is calculated as non-interest expense divided by total revenue (on a taxable equivalent basis in the operating groups), expressed as a percentage.

Efficiency Ratio, net of insurance claims, commissions and changes in policy benefits (CCPB), is calculated as non-interest expense divided by total revenue, net of CCPB (on a taxable equivalent basis in the operating groups), expressed as a percentage. Adjusted efficiency ratio, net of CCPB, is calculated in the same manner as efficiency ratio, net of CCPB, utilizing adjusted revenue, net of CCPB, and adjusted non-interest expense.

Operating Leverage is the difference between the growth rates of revenue and non-interest expense, and adjusted operating leverage is the difference between the growth rates of adjusted revenue and adjusted non-interest expense.

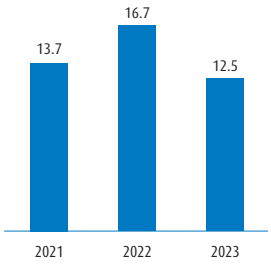
Operating Leverage, net of insurance claims, commissions and changes in policy benefit liabilities (CCPB), is the difference between the growth rates of revenue, net of CCPB (net revenue) and non-interest expense. Adjusted operating leverage, net of CCPB, is calculated using the growth rates of adjusted net revenue and adjusted non-interest expense. The bank evaluates performance using adjusted net revenue.

Common Equity Tier 1 Ratio

Our Common Equity Tier 1 (CET1) Ratio was 12.5% as at October 31, 2023, compared with 16.7% as at October 31, 2022. Our CET1 Ratio was elevated at the end of fiscal 2022, primarily driven by fair value management actions related to the acquisition of Bank of the West. The CET1 Ratio decreased from the prior year, primarily as a result of the acquisition and integration of Bank of the West.

Common Equity Tier 1 (CET1) Ratio is calculated as CET1 capital, which comprises common shareholders' equity, net of deductions for goodwill, intangible assets, pension assets, certain deferred tax assets and other items (which may include a portion of expected credit loss provisions), divided by risk-weighted assets. The CET1 Ratio is calculated in accordance with OSFI's Capital Adequacy Requirements (CAR) Guideline.

CET1 Ratio (%)



Total Shareholder Return

For the year ended October 31	2023	2022	2021	2020	2019	3-year CAGR (1)	5-year CAGR (1)
Closing market price per common share ($)	**104.79**	125.49	134.37	79.33	97.50	**9.7**	**1.3**
Dividends paid ($ per share)	**5.72**	5.11	4.24	4.21	3.99	**10.8**	**9.0**
Dividend yield (%)	**5.5**	4.3	3.2	5.3	4.2	**nm**	**nm**
Increase (decrease) in share price (%)	**(16.5)**	(6.6)	69.4	(18.6)	(0.9)	**nm**	**nm**
Total annual shareholder return (%) (2)	**(12.5)**	(3.1)	75.9	(14.6)	3.2	**14.3**	**5.6**
Canadian peer group average (excluding BMO) (3)	**(8.8)**	(6.2)	56.1	(11.5)	11.4	**10.0**	**5.5**

(1) Compound annual growth rate (CAGR) expressed as a percentage.
(2) Total annual shareholder return assumes reinvestment of quarterly dividends and therefore does not equal the sum of dividend and share price returns in the table.
(3) As at October 31, 2023; peers: BNS, CIBC, NB, RBC, TD.

nm – not meaningful

The average annual total shareholder return (TSR) is a key measure of shareholder value, and over time, we expect that execution on our strategic priorities will drive value creation for our shareholders. The one-year, three-year and five-year average annual TSR was negative 12.5%, positive 14.3% and positive 5.6%, respectively, compared with our Canadian peer group average (excluding BMO) of negative 8.8%, positive 10.0% and positive 5.5%, respectively.

The table above summarizes dividends paid on BMO's common shares over the past five years and the movements in our share price. An investment of $1,000 in BMO common shares made at the beginning of fiscal 2019 would have been worth $1,315 as at October 31, 2023, assuming reinvestment of dividends, for a total return of 31.5%.

Dividends declared per common share in fiscal 2023 totalled $5.80, an increase of $0.36 from $5.44 in the prior year. Dividends paid over a five-year period have increased at an average annual compound rate of approximately 9%.

The annual **Total Shareholder Return (TSR)** represents the average annual total return earned on an investment in BMO common shares made at the beginning of the respective period. The return includes the change in share price and assumes dividends received were reinvested in additional common shares.

Caution
This Financial Objectives and Value Measures section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

Supporting a Sustainable and Inclusive Future

In support of our customers, communities and employees, in 2023 we:

- Launched BMO EMpower™ 2.0, pledging more than US$40 billion to support organizations in communities across the United States focused on advancing home ownership, growing small businesses, strengthening communities, and creating a more equitable society.
- Exceeded BMO's annual Employee Giving Campaign target with our employees contributing more than $31 million to the United Way and thousands of other community organizations across North America, while also setting a new record for pledges.
- Announced the 2022 recipients of $150,000 in grants awarded to twelve Canadian women entrepreneurs as part of the BMO Celebrating Women Grant Program for women-owned businesses across Canada, in collaboration with Deloitte. The program is in its third year and has supported 56 women-owned businesses to date in Canada, with grants totalling $530,000.
- Were named to the United Nations Principles for Responsible Banking, Nature Target Setting Working Group, focused on developing guidance for setting biodiversity and nature targets – the only Canadian bank among 34 signatories from 24 countries.
- Invested $15 million in the Feel Out Loud campaign, sponsored by Kids Help Phone to expand access to clinical care and services in Canada through its e-mental health platform for youth. As a founding partner of Kids Help Phone, and with the help of our employees, we have raised more than $40 million to support this campaign to date.
- Continued to drive progress for mental health treatment with a $5 million donation to the Centre for Addiction and Mental Health (CAMH) to support independent research at its Krembil Centre for Neuroinformatics and help build a research centre. We also donated $2 million to the Royal Ottawa Health Care Group (The Royal) to support the newly-established BMO Innovative Clinic for Depression, providing more treatment options for people living with depression.
- Released Wîcihitowin, our third annual Indigenous Partnerships and Progress Report, highlighting our focus on advancing education, employment and economic empowerment in First Nations, Inuit and Métis communities. In addition, we announced six new members of our Indigenous Advisory Council (IAC), which now includes leaders from across Canada.

BMO's leadership continues to be recognized in a significant number of rankings, including:

- Ranked among the most sustainable companies on the Dow Jones Sustainability Indices (DJSI). In addition, BMO ranked in the 95th percentile among banks globally and earned the highest possible score in the areas of Environmental Reporting, Social Reporting and Financial Inclusion.
- Named one of *Corporate Knights*' 2023 Global 100 Most Sustainable Corporations in the World and, for the fourth consecutive year, ranked as North America's most sustainable bank. We ranked eighth in the world and in the top 15% of banks globally for Sustainable Revenue and received high marks for diversity on our Board of Directors and the representation of diversity in our senior leadership.
- Included in *Corporate Knights'* list of Canada's Best 50 Corporate Citizens, with top-quartile scores in board gender diversity and the representation of visible minorities in our executive leadership – the only Canadian bank named to this listing. We also received a top-quartile Sustainable Revenue score, demonstrating our ongoing commitment to sustainable financing and responsible investing.
- Recognized by the World Benchmarking Alliance (WBA) as the world's top-ranked financial institution for supporting progress toward a just and sustainable economy.
- Included for the eighth consecutive year in the Bloomberg Gender-Equality Index (GEI), in recognition of BMO's global leadership in gender equity and inclusion within the workplace and the community, and for publicly demonstrating our commitment to equality and the advancement of women.
- Recognized by Ethisphere Institute as one of the World's Most Ethical Companies for the sixth consecutive year, remaining the only Canadian bank to be honoured with this designation since its inception in 2007. The designation affirms our commitment to doing what is right and operating with transparency, good governance and integrity in support of a thriving economy, a sustainable future and an inclusive society.
- Included for the third consecutive year in the 2023 Women Lead Here list published by the *Globe and Mail* in its Report on Business magazine to recognize Canadian businesses for excellence in gender diversity in executive roles. Our objective for gender equality in our senior leadership has been above 40% since 2016, and we continue to support advancing diversity, equity and inclusion across the bank.
- Received a top score on the Disability Equality Index (DEI) for the eighth consecutive year. BMO was named one of the Best Places to Work for Disability Inclusion by Disability:IN and the American Association of People with Disabilities (AAPD), in recognition of our continued focus and progress on building an inclusive society for our employees and the communities we serve.

Caution

This Supporting a Sustainable and Inclusive Future section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

Financial Highlights

(Canadian $ in millions, except as noted)	2023	2022
Summary Income Statement (1)		
Net interest income	**18,681**	15,885
Non-interest revenue	**12,518**	17,825
Revenue	**31,199**	33,710
Insurance claims, commissions and changes in policy benefit liabilities (CCPB)	**1,939**	(683)
Revenue, net of CCPB (2)	**29,260**	34,393
Provision for credit losses on impaired loans	**1,180**	502
Provision for (recovery of) credit losses on performing loans	**998**	(189)
Total provision for credit losses (PCL)	**2,178**	313
Non-interest expense	**21,219**	16,194
Provision for income taxes	**1,486**	4,349
Net income	**4,377**	13,537
Net income available to common shareholders	**4,034**	13,306
Adjusted net income	**8,675**	9,039
Adjusted net income available to common shareholders	**8,332**	8,808
Common Share Data ($, except as noted) (1)		
Basic earnings per share	**5.69**	20.04
Diluted earnings per share	**5.68**	19.99
Adjusted diluted earnings per share	**11.73**	13.23
Book value per share	**97.17**	95.60
Closing share price	**104.79**	125.49
Number of common shares outstanding (in millions)		
End of period	**720.9**	677.1
Average basic	**709.4**	664.0
Average diluted	**710.5**	665.7
Market capitalization ($ billions)	**75.5**	85.0
Dividends declared per share	**5.80**	5.44
Dividend yield (%)	**5.5**	4.3
Dividend payout ratio (%)	**102.0**	27.1
Adjusted dividend payout ratio (%)	**49.4**	41.0
Financial Measures and Ratios (%) (1)		
Return on equity	**6.0**	22.9
Adjusted return on equity	**12.3**	15.2
Return on tangible common equity	**8.2**	25.1
Adjusted return on tangible common equity	**15.8**	16.6
Efficiency ratio	**68.0**	48.0
Adjusted efficiency ratio, net of CCPB (2)	**59.8**	55.8
Operating leverage	**(38.5)**	19.6
Adjusted operating leverage, net of CCPB (2)	**(8.2)**	1.3
Net interest margin on average earning assets	**1.63**	1.62
Net interest margin on average earning assets excluding trading revenue and trading assets	**1.82**	1.72
Effective tax rate	**25.3**	24.3
Adjusted effective tax rate	**22.3**	22.8
Total PCL-to-average net loans and acceptances	**0.35**	0.06
PCL on impaired loans-to-average net loans and acceptances	**0.19**	0.10
Liquidity coverage ratio (LCR) (3)	**128**	135
Net stable funding ratio (NSFR) (3)	**115**	114
Balance Sheet and Other Information (as at October 31, $ millions, except as noted)		
Assets	**1,293,276**	1,139,199
Average earning assets	**1,145,632**	979,341
Gross loans and acceptances	**668,396**	567,191
Net loans and acceptances	**664,589**	564,574
Deposits	**909,676**	769,478
Common shareholders' equity	**70,051**	64,730
Total risk-weighted assets (4)	**424,197**	363,997
Assets under administration	**808,985**	744,442
Assets under management	**332,947**	305,462
Capital Ratios (%) (4)		
Common Equity Tier 1 Ratio	**12.5**	16.7
Tier 1 Capital Ratio	**14.1**	18.4
Total Capital Ratio	**16.2**	20.7
Leverage Ratio	**4.2**	5.6
TLAC Ratio	**27.0**	33.1
Foreign Exchange Rates ($)		
As at October 31, Canadian/U.S. dollar	**1.3868**	1.3625
Average Canadian/U.S. dollar	**1.3492**	1.2918

(1) Adjusted results exclude certain items from reported results and are used to calculate our adjusted measures as presented in the above table. Management assesses performance on a reported basis and an adjusted basis, and considers both to be useful. Revenue, net of CCPB, as well as reported ratios calculated net of CCPB, and adjusted results, measures and ratios in this table are non-GAAP amounts. For further information, refer to the Non-GAAP and Other Financial Measures section; for details on the composition of non-GAAP amounts, measures and ratios, as well as supplementary financial measures, refer to the Glossary of Financial Terms.

(2) We present revenue, efficiency ratio and operating leverage on a basis that is net of CCPB, which reduces the variability in insurance revenue resulting from changes in fair value that are largely offset by changes in the fair value of policy benefit liabilities, the impact of which is reflected in CCPB. For further information, refer to the Insurance Claims, Commissions and Changes in Policy Benefits section.

(3) LCR and NSFR are disclosed in accordance with the Liquidity Adequacy Requirements (LAR) Guideline as set out by the Office of the Superintendent of Financial Institutions (OSFI), as applicable.

(4) Capital ratios and risk-weighted assets are disclosed in accordance with the Capital Adequacy Requirements (CAR) Guideline, as set out by OSFI, as applicable.

Non-GAAP and Other Financial Measures

Results and measures in this document are presented on a generally accepted accounting principles (GAAP) basis. Unless otherwise indicated, all amounts are in Canadian dollars and have been derived from our audited annual consolidated financial statements prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board. References to GAAP mean IFRS. We use a number of financial measures to assess our performance, as well as the performance of our operating segments, including amounts, measures and ratios that are presented on a non-GAAP basis, as described below. We believe that these non-GAAP amounts, measures and ratios, read together with our GAAP results, provide readers with a better understanding of how management assesses results.

Non-GAAP amounts, measures and ratios do not have standardized meanings under GAAP. They are unlikely to be comparable to similar measures presented by other companies and should not be viewed in isolation from, or as a substitute for, GAAP results.

For further information regarding the composition of non-GAAP and other financial measures, including supplementary financial measures, refer to the Glossary of Financial Terms.

Our non-GAAP measures broadly fall into the following categories:

Adjusted measures and ratios

Management considers both reported and adjusted results and measures to be useful in assessing underlying ongoing business performance. Adjusted results and measures remove certain specified items from revenue, non-interest expense, provision for credit losses and income taxes, as detailed in the following table. Adjusted results and measures presented in this document are non-GAAP amounts. Presenting results on both a reported basis and an adjusted basis permits readers to assess the impact of certain items on results for the periods presented, and to better assess results excluding those items that may not be reflective of ongoing business performance. As such, the presentation may facilitate readers' analysis of trends. Except as otherwise noted, management's discussion of changes in reported results in this document applies equally to changes in the corresponding adjusted results.

Measures net of insurance claims, commissions and changes in policy benefit liabilities

We also present reported and adjusted revenue on a basis that is net of insurance claims, commissions and changes in policy benefit liabilities (CCPB), and our efficiency ratio and operating leverage are calculated on a similar basis. Measures and ratios presented on a basis net of CCPB are non-GAAP amounts. Insurance revenue can experience variability arising from fluctuations in the fair value of insurance assets caused by movements in interest rates and equity markets. The investments that support policy benefit liabilities are predominantly fixed income assets recorded at fair value, with changes in fair value recorded in insurance revenue in the Consolidated Statement of Income. These fair value changes are largely offset by changes in the fair value of policy benefit liabilities, the impact of which is reflected in CCPB. The presentation and discussion of revenue, efficiency ratios and operating leverage on a net basis reduces this variability, which allows for a better assessment of operating results. For more information, refer to the Insurance Claims, Commissions and Changes in Policy Benefit Liabilities section.

Tangible common equity and return on tangible common equity

Tangible common equity is calculated as common shareholders' equity, less goodwill and acquisition-related intangible assets, net of related deferred tax liabilities. Return on tangible common equity is commonly used in the North American banking industry and is meaningful because it measures the performance of businesses consistently, whether they were acquired or developed organically.

Caution

This Non-GAAP and Other Financial Measures section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

Non-GAAP and Other Financial Measures

(Canadian $ in millions, except as noted)	2023	2022	2021
Reported Results			
Net interest income	**18,681**	15,885	14,310
Non-interest revenue	**12,518**	17,825	12,876
Revenue	**31,199**	33,710	27,186
Insurance claims, commissions and changes in policy benefit liabilities (CCPB)	**(1,939)**	683	(1,399)
Revenue, net of CCPB	**29,260**	34,393	25,787
Provision for credit losses	**(2,178)**	(313)	(20)
Non-interest expense	**(21,219)**	(16,194)	(15,509)
Income before income taxes	**5,863**	17,886	10,258
Provision for income taxes	**(1,486)**	(4,349)	(2,504)
Net income	**4,377**	13,537	7,754
Diluted EPS ($)	**5.68**	19.99	11.58
Adjusting Items Impacting Revenue (Pre-tax)			
Impact of divestitures (1)	**–**	(21)	29
Management of fair value changes on the purchase of Bank of the West (2)	**(2,011)**	7,713	–
Legal provision (including related interest expense and legal fees) (3)	**(30)**	(515)	–
Impact of Canadian tax measures (4)	**(138)**	–	–
Impact of adjusting items on revenue (pre-tax)	**(2,179)**	7,177	29
Adjusting Items Impacting Provision for Credit Losses (Pre-tax)			
Initial provision for credit losses on purchased performing loans (pre-tax) (5)	**(705)**	–	–
Adjusting Items Impacting Non-Interest Expense (Pre-tax)			
Acquisition and integration costs (6)	**(2,045)**	(326)	(9)
Amortization of acquisition-related intangible assets (7)	**(357)**	(31)	(88)
Impact of divestitures (1)	**–**	(16)	(886)
Legal provision (including related interest expense and legal fees) (3)	**3**	(627)	–
Restructuring (costs) reversals (8)	**–**	–	24
Impact of Canadian tax measures (4)	**(22)**	–	–
Impact of adjusting items on non-interest expense (pre-tax)	**(2,421)**	(1,000)	(959)
Impact of adjusting items on reported net income (pre-tax)	**(5,305)**	6,177	(930)
Adjusting Items Impacting Revenue (After-tax)			
Impact of divestitures (1)	**–**	(23)	22
Management of fair value changes on the purchase of Bank of the West (2)	**(1,461)**	5,667	–
Legal provision (including related interest expense and legal fees) (3)	**(23)**	(382)	–
Impact of Canadian tax measures (4)	**(115)**	–	–
Impact of adjusting items on revenue (after-tax)	**(1,599)**	5,262	22
Adjusting Items Impacting Provision for Credit Losses (After-tax)			
Initial provision for credit losses on purchased performing loans (after-tax) (5)	**(517)**	–	–
Adjusting Items Impacting Non-Interest Expense (After-tax)			
Acquisition and integration costs (6)	**(1,533)**	(245)	(7)
Amortization of acquisition-related intangible assets (7)	**(264)**	(23)	(66)
Impact of divestitures (1)	**–**	(32)	(864)
Legal provision (including related interest expense and legal fees) (3)	**2**	(464)	–
Restructuring (costs) reversals (8)	**–**	–	18
Impact of Canadian tax measures (4)	**(16)**	–	–
Impact of adjusting items on non-interest expense (after-tax)	**(1,811)**	(764)	(919)
Adjusting Items Impacting Provision for Income Taxes			
Impact of Canadian tax measures (4)	**(371)**	–	–
Impact of adjusting items on reported net income (after-tax)	**(4,298)**	4,498	(897)
Impact on diluted EPS ($)	**(6.05)**	6.76	(1.38)
Adjusted Results			
Net interest income	**19,094**	16,352	14,310
Non-interest revenue	**14,284**	10,181	12,847
Revenue	**33,378**	26,533	27,157
Insurance claims, commissions and changes in policy benefit liabilities (CCPB)	**(1,939)**	683	(1,399)
Revenue, net of CCPB	**31,439**	27,216	25,758
Provision for credit losses	**(1,473)**	(313)	(20)
Non-interest expense	**(18,798)**	(15,194)	(14,550)
Income before income taxes	**11,168**	11,709	11,188
Provision for income taxes	**(2,493)**	(2,670)	(2,537)
Net income	**8,675**	9,039	8,651
Diluted EPS ($)	**11.73**	13.23	12.96

(1) Reported net income included the impact of divestitures related to the sale of our EMEA and U.S. Asset Management businesses and our Private Banking business. Fiscal 2022 included a gain of $6 million ($8 million pre-tax) related to the transfer of certain U.S. asset management clients and a $29 million (pre-tax and after-tax) loss related to foreign currency translation reclassified from accumulated other comprehensive income, both recorded in non-interest revenue, and expenses of $32 million ($16 million pre-tax), including taxes of $22 million on closing of the sale of the business recorded in non-interest expense. Fiscal 2021 included a $779 million (pre-tax and after-tax) write-down of goodwill related to the sale of our EMEA and U.S. Asset Management businesses recorded in non-interest expense, a $22 million ($29 million pre-tax) net gain on the sale of our Private Banking business recorded in non-interest revenue, and $85 million ($107 million pre-tax) of divestiture-related costs for both transactions recorded in non-interest expense. These amounts were recorded in Corporate Services.

(2) Fiscal 2023 reported net income included a loss of $1,461 million ($2,011 million pre-tax) related to the acquisition of Bank of the West resulting from the management of the impact of interest rate changes between the announcement and closing of the acquisition on its fair value and goodwill, comprising $1,628 million of mark-to-market losses on certain interest rate swaps recorded in trading revenue and $383 million of losses on a portfolio of primarily U.S. treasuries and other balance sheet instruments recorded in net interest income. Fiscal 2022 included revenue of $5,667 million ($7,713 million pre-tax), comprising $7,665 million of mark-to-market gains and $48 million of non-trading interest income. These amounts were recorded in Corporate Services. For further information on this acquisition, refer to the Recent Acquisitions section.

(3) Fiscal 2023 reported net income included the impact of a lawsuit associated with a predecessor bank, M&I Marshall and Ilsley Bank, of $21 million ($27 million pre-tax), comprising interest expense of $30 million and a net non-interest expense recovery of $3 million. Fiscal 2022 included a provision of $846 million ($1,142 million pre-tax), comprising interest expense of $515 million and non-interest expense of $627 million. These amounts were recorded in Corporate Services. For further information, refer to the Provisions and Contingent Liabilities section in Note 24 of the audited annual consolidated financial statements.

(4) Fiscal 2023 reported net income included the impact of certain tax measures enacted by the Canadian government. These tax measures included a one-time tax expense of $371 million, comprising a Canada Recovery Dividend (CRD) of $312 million and $59 million related to the pro-rated fiscal 2022 impact of the 1.5% tax rate increase, net of a deferred tax asset remeasurement, and a charge of $131 million ($160 million pre-tax) related to the amended GST/HST definition for financial services, comprising $138 million recorded in non-interest revenue and $22 million recorded in non-interest expense. These amounts were recorded in Corporate Services.

(5) Fiscal 2023 reported net income included a provision for credit losses of $517 million ($705 million pre-tax) on the purchased Bank of the West performing loan portfolio, recorded in Corporate Services.

(6) Fiscal 2023 reported net income included acquisition and integration costs of $1,533 million ($2,045 million pre-tax), comprising $1,520 million ($2,027 million pre-tax) related to Bank of the West, $4 million ($5 million pre-tax) related to Radicle and Clearpool, and $9 million ($13 million pre-tax) related to AIR MILES. Fiscal 2022 included acquisition and integration costs of $245 million ($326 million pre-tax), comprising $237 million ($316 million pre-tax) related to Bank of the West and $8 million ($10 million pre-tax) related to Radicle, Clearpool and KGS-Alpha. Fiscal 2021 included acquisition and integration costs of $7 million ($9 million pre-tax) related to Clearpool and KGS-Alpha. These amounts were recorded in non-interest expense. Bank of the West acquisition and integration costs were recorded in Corporate Services; Radicle, Clearpool and KGS-Alpha costs were recorded in BMO Capital Markets; and AIR MILES costs were recorded in Canadian P&C.

(7) Amortization of acquisition-related intangible assets of $264 million ($357 million pre-tax) in fiscal 2023, $23 million ($31 million pre-tax) in fiscal 2022, and $66 million ($88 million pre-tax) in fiscal 2021 were recorded in non-interest expense in the related operating group.

(8) Fiscal 2021 reported net income included a partial reversal of $18 million ($24 million pre-tax) of restructuring charges related to severance recorded in 2019 in non-interest expense, in Corporate Services.

Summary of Reported and Adjusted Results by Operating Segment

(Canadian $ in millions, except as noted)	Canadian P&C	U.S. P&C	Total P&C	BMO Wealth Management	BMO Capital Markets	Corporate Services	Total Bank	U.S. Segment (1) (US$ in millions)
2023								
Reported net income (loss)	**3,718**	**2,724**	**6,442**	**1,126**	**1,682**	**(4,873)**	**4,377**	**90**
Acquisition and integration costs	**9**	**–**	**9**	**–**	**4**	**1,520**	**1,533**	**1,124**
Amortization of acquisition-related intangible assets	**6**	**234**	**240**	**4**	**20**	**–**	**264**	**186**
Management of fair value changes on the purchase of Bank of the West	**–**	**–**	**–**	**–**	**–**	**1,461**	**1,461**	**1,093**
Legal provision (including related interest expense and legal fees)	**–**	**–**	**–**	**–**	**–**	**21**	**21**	**15**
Impact of Canadian tax measures	**–**	**–**	**–**	**–**	**–**	**502**	**502**	**–**
Initial provision for credit losses on purchased performing loans	**–**	**–**	**–**	**–**	**–**	**517**	**517**	**379**
Adjusted net income (loss)	**3,733**	**2,958**	**6,691**	**1,130**	**1,706**	**(852)**	**8,675**	**2,887**
2022								
Reported net income	3,826	2,497	6,323	1,251	1,772	4,191	13,537	6,079
Acquisition and integration costs	–	–	–	–	8	237	245	185
Amortization of acquisition-related intangible assets	1	5	6	3	14	–	23	17
Impact of divestitures	–	–	–	–	–	55	55	(45)
Management of fair value changes on the purchase of Bank of the West	–	–	–	–	–	(5,667)	(5,667)	(4,312)
Legal provision (including related interest expense and legal fees)	–	–	–	–	–	846	846	621
Adjusted net income (loss)	3,827	2,502	6,329	1,254	1,794	(338)	9,039	2,545

(1) U.S. segment reported and adjusted results comprise net income recorded in U.S. P&C and our U.S. operations in BMO Wealth Management, BMO Capital Markets and Corporate Services.

Refer to footnotes (1) to (8) in the Non-GAAP and Other Financial Measures table for further information on adjusting items.

Net Revenue, Efficiency Ratio and Operating Leverage

(Canadian $ in millions, except as noted) For the year ended October 31	2023	2022	2021
Reported			
Net interest income	**18,681**	15,885	14,310
Non-interest revenue	**12,518**	17,825	12,876
Revenue	**31,199**	33,710	27,186
Insurance claims, commissions and changes in policy benefit liabilities (CCPB)	**1,939**	(683)	1,399
Revenue, net of CCPB	**29,260**	34,393	25,787
Non-interest expense	**21,219**	16,194	15,509
Efficiency ratio (%)	**68.0**	48.0	57.0
Efficiency ratio, net of CCPB (%)	**72.5**	47.1	60.1
Revenue growth (%)	**(7.5)**	24.0	7.9
Revenue growth, net of CCPB (%)	**(14.9)**	33.4	9.8
Non-interest expense growth (%)	**31.0**	4.4	9.4
Operating leverage (%)	**(38.5)**	19.6	(1.5)
Operating leverage, net of CCPB (%)	**(45.9)**	29.0	0.4
Adjusted (1)			
Net interest income	**19,094**	16,352	14,310
Non-interest revenue	**14,284**	10,181	12,847
Revenue	**33,378**	26,533	27,157
Insurance claims, commissions and changes in policy benefit liabilities (CCPB)	**1,939**	(683)	1,399
Revenue, net of CCPB	**31,439**	27,216	25,758
Non-interest expense	**18,798**	15,194	14,550
Efficiency ratio (%)	**56.3**	57.3	53.6
Efficiency ratio, net of CCPB (%)	**59.8**	55.8	56.5
Revenue growth, net of CCPB (%)	**15.5**	5.7	9.7
Non-interest expense growth (%)	**23.7**	4.4	3.6
Operating leverage, net of CCPB (%)	**(8.2)**	1.3	6.1

(1) Refer to footnotes (1) to (8) in the Non-GAAP and Other Financial Measures table for further information on adjusting items.

Return on Equity and Return on Tangible Common Equity

(Canadian $ in millions, except as noted) For the year ended October 31	2023	2022	2021
Reported net income	**4,377**	13,537	7,754
Net income attributable to non-controlling interest in subsidiaries	**12**	–	–
Net income attributable to bank shareholders	**4,365**	13,537	7,754
Dividends on preferred shares and distributions on other equity instruments	**(331)**	(231)	(244)
Net income available to common shareholders (A)	**4,034**	13,306	7,510
After-tax amortization of acquisition-related intangible assets	**264**	23	66
Net income available to common shareholders after adjusting for amortization of acquisition-related intangible assets (B)	**4,298**	13,329	7,576
After-tax impact of other adjusting items (1)	**4,034**	(4,521)	831
Adjusted net income available to common shareholders (C)	**8,332**	8,808	8,407
Average common shareholders' equity (D)	**67,486**	58,078	50,451
Goodwill	**(13,466)**	(5,051)	(5,836)
Acquisition-related intangible assets	**(2,197)**	(130)	(381)
Net of related deferred liabilities	**856**	251	271
Average tangible common equity (E)	**52,679**	53,148	44,505
Return on equity (%) (= A/D)	**6.0**	22.9	14.9
Adjusted return on equity (%) (= C/D)	**12.3**	15.2	16.7
Return on tangible common equity (%) (= B/E)	**8.2**	25.1	17.0
Adjusted return on tangible common equity (%) (= C/E)	**15.8**	16.6	18.9

(1) Refer to footnotes (1) to (8) in the Non-GAAP and Other Financial Measures table for further information on adjusting items.

Return on Equity by Operating Segment (1)

(Canadian $ in millions, except as noted)	2023 Canadian P&C	U.S. P&C	Total P&C	BMO Wealth Management	BMO Capital Markets	Corporate Services	Total Bank	U.S. Segment (2) (US$ in millions)
Reported								
Net income available to common shareholders	**3,677**	**2,672**	**6,349**	**1,118**	**1,648**	**(5,081)**	**4,034**	**56**
Total average common equity	**13,672**	**27,889**	**41,561**	**6,356**	**11,856**	**7,713**	**67,486**	**27,203**
Return on equity (%)	**26.9**	**9.6**	**15.3**	**17.6**	**13.9**	**na**	**6.0**	**0.2**
Adjusted (3)								
Net income available to common shareholders	**3,692**	**2,906**	**6,598**	**1,122**	**1,672**	**(1,060)**	**8,332**	**2,853**
Total average common equity	**13,672**	**27,889**	**41,561**	**6,356**	**11,856**	**7,713**	**67,486**	**27,203**
Return on equity (%)	**27.0**	**10.4**	**15.9**	**17.7**	**14.1**	**na**	**12.3**	**10.5**

(Canadian $ in millions, except as noted)	2022 Canadian P&C	U.S. P&C	Total P&C	BMO Wealth Management	BMO Capital Markets	Corporate Services	Total Bank	U.S. Segment (2) (US$ in millions)
Reported								
Net income available to common shareholders	3,783	2,461	6,244	1,243	1,732	4,087	13,306	6,052
Total average common equity	11,798	13,815	25,613	5,282	11,556	15,627	58,078	17,081
Return on equity (%)	32.1	17.8	24.4	23.5	15.0	na	22.9	35.4
Adjusted (3)								
Net income available to common shareholders	3,784	2,466	6,250	1,246	1,754	(442)	8,808	2,518
Total average common equity	11,798	13,815	25,613	5,282	11,556	15,627	58,078	17,081
Return on equity (%)	32.1	17.8	24.4	23.6	15.2	na	15.2	14.7

(1) Return on equity is based on allocated capital. In fiscal 2023, following the closing of the Bank of the West acquisition, capital was allocated from Corporate Services to U.S. P&C and BMO Wealth Management. For further information, refer to the How BMO Reports Operating Group Results section.
(2) U.S. segment reported and adjusted results comprise net income and allocated capital recorded in U.S. P&C and our U.S. operations in BMO Wealth Management, BMO Capital Markets and Corporate Services.
(3) Refer to footnotes (1) to (8) in the Non-GAAP and Other Financial Measures table for further information on adjusting items.

na – not applicable

Capital is allocated to the operating segments based on the amount of regulatory capital required to support business activities. Effective the first quarter of fiscal 2023, our capital allocation rate increased to 11.0% of risk-weighted assets, compared with 10.5% in 2022, to reflect increased regulatory capital requirements. Unallocated capital is reported in Corporate Services. Capital allocation methodologies are reviewed annually.

Recent Acquisitions

On February 1, 2023, we completed our acquisition of Bank of the West, including its subsidiaries, from BNP Paribas. Bank of the West provides a broad range of banking products and services, primarily in the Western and Midwestern regions of the United States. The acquisition strengthens our position in North America with increased scale and greater access to growth opportunities in strategic new markets. We completed the conversion of Bank of the West customer accounts and systems to our respective BMO operating platforms in September 2023. The acquisition has been reflected in our results as a business combination, primarily in the U.S. P&C and BMO Wealth Management reporting segments.

On closing, we recognized purchase accounting fair value marks on Bank of the West's loans and deposits of $3.0 billion and discounts on securities of $3.5 billion on our balance sheet, in accordance with International Financial Reporting Standards (IFRS). As previously disclosed, to manage the exposure of our regulatory capital to the risk of changes in the fair value of the assets and liabilities of Bank of the West due to changes in interest rates between the announcement and closing of the acquisition, we entered into interest rate swaps that resulted in cumulative mark-to-market gains of $5.7 billion on closing. Any exposure to interest rate risk in relation to these interest rate swaps was largely offset by our purchase of a portfolio of matched-duration U.S. treasuries and other balance sheet instruments. On closing, the swaps were neutralized and replaced with fair value accounting hedges, which in effect crystallized the unrealized loss position on our balance sheet. Accretion of the fair value marks and the discount on securities will increase net interest income, and the amortization of the fair value hedge will decrease net interest income over the remaining term of these instruments, both of which will be recorded in Corporate Services.

On June 1, 2023, we completed the acquisition of the AIR MILES Reward Program (AIR MILES) business of LoyaltyOne Co. The AIR MILES business operates as a wholly-owned subsidiary of BMO. The acquisition was accounted for as a business combination and the acquired business and corresponding goodwill are included in our Canadian P&C reporting segment.

For more information on the acquisition of Bank of the West and AIR MILES, refer to Note 10 of the audited annual consolidated financial statements.

Caution
This Recent Acquisitions section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

Economic Developments and Outlook

Economic Developments in 2023 and Outlook for 2024 (1)

After reaching 3.8% in 2022, growth in Canada's real gross domestic product (GDP) will likely slow to a modest estimated rate of 1.0% in 2023, due to the impact of higher interest rates and weaker global demand. The economy is expected to expand by only 0.5% in 2024, although activity should improve later in the year when interest rates are projected to begin to decline. A moderation in the pace of employment growth, coupled with rapid expansion of the population and labour force, has lifted the unemployment rate to 5.7% in October 2023 from a half-century low of 4.9% in July 2022, and we anticipate this rate will rise to approximately 6.5% in the summer of 2024. Looser labour market conditions are starting to relieve upward pressure on wages and prices. Year-over-year growth in the consumer price index has declined from a four-decade high of 8.1% in June 2022 to 3.1% in October 2023. Although inflation is projected to moderate further, it will likely remain above the Bank of Canada's 2% target until late 2024 due to elevated oil prices and lingering wage pressures. After raising the policy rate by 475 basis points from March 2022 to July 2023, the Bank of Canada has since held the policy rate steady at 5%. With the rate of economic growth and inflation projected to slow, the Bank of Canada will likely forgo further interest rate increases, before gradually reducing rates starting in mid-2024 to more neutral levels below 3.0% in early 2026. Interest rate concerns and a weaker economy have depressed equity markets. Housing market activity rebounded earlier this year due to steadier mortgage rates and strong population growth, but sales have weakened recently and will likely be held back by the ongoing lack of affordability. Housing prices are expected to decline moderately in response to lower demand. Industry-wide growth in residential mortgage balances has decelerated from more than 10% year-over-year in early 2022 to 3.2% in September 2023, and will likely moderate somewhat further. Year-over-year growth in consumer credit balances (excluding mortgages), which was 2.4% in September 2023, has been restrained by high interest rates, and is anticipated to moderate further as households curtail spending. After rising strongly in recent years, growth in non-financial corporate credit balances has decelerated sharply in 2023 in response to higher interest rates, a weakening economy and elevated cash balances, and will likely slow further in 2024.

The U.S. economy is estimated to grow at a moderate rate of 2.4% in 2023, up from 1.9% in 2022, before likely slowing to 1.3% in 2024. Resiliency in the first three quarters of 2023, amid expansionary fiscal policies and pent-up demand for entertainment, travel and automobiles, is expected to give way to much weaker activity at the turn of the year in response to higher interest rates, tighter lending conditions and the resumption of student loan repayments. Housing market activity remains depressed due to high mortgage rates and rising home prices, and sales are anticipated to remain soft as the economy weakens. The unemployment rate is projected to rise from 3.9% in October 2023 to 4.4% by the middle of 2024, which is still low by historical standards. Lower commodity prices and smoother-running supply chains have reduced year-over-year growth in the consumer price index from 9.1% in June 2022 to 3.2% in October 2023. However, inflation is expected to moderate more slowly in the year ahead, reflecting continued pressure from elevated energy prices and rising wages. The Federal Reserve held its policy rate steady in the fall of 2023 after cumulative increases of 525 basis points since March 2022. We anticipate that the policy rate will hold steady at around 5.4% until the fall of 2024, before returning to more neutral levels below 3.0% by early 2026. The yield on 10-year Treasury bonds has risen to 16-year highs due to the economy's resiliency, elevated inflation and restrictive monetary policies, but is forecast to decline gradually in 2024 ahead of an easing in monetary policy. Equity markets have been volatile as a result of rising long-term interest rates and fears of a recession. Earlier strong growth in industry-wide residential mortgage balances has slowed considerably as a result of weaker housing market activity, and will likely moderate somewhat further given the ongoing lack of affordability. Year-over-year growth in consumer credit balances has also decelerated and is projected to slow further amid elevated interest rates, higher unemployment and slower consumer spending. Non-financial corporate credit growth has decelerated from its previously strong pace and will remain impacted by high interest rates, a slowing economy, and a drawdown of deposit balances.

The economic outlook is subject to several risks that could potentially cause a contraction of the North American economy. The persistence of elevated inflation could lead to additional increases in interest rates and renewed stress in the U.S. regional banking sector. Any escalation of the conflicts in Ukraine and the Middle East could raise energy prices, unsettle financial markets and weaken global growth. Other risks stem from ongoing trade tensions with China, and a deterioration in diplomatic relations between Canada and India that could impede trade and tourism in Canada.

Caution

This Economic Developments and Outlook section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

(1) All time periods in this section refer to the calendar year rather than BMO's fiscal year.

2023 Financial Performance Review

This section provides a review of BMO's enterprise financial performance for 2023 that focuses on the Consolidated Statement of Income in BMO's audited annual consolidated financial statements. A review of the operating groups' strategies and performance follows the enterprise review.

We use a number of financial measures to assess our performance, as well as the performance of our operating segments, including amounts, measures and ratios that are presented on a non-GAAP basis. We believe that these non-GAAP amounts, measures and ratios, read together with our GAAP results, provide readers with a better understanding of how management assesses results.

Non-GAAP amounts, measures and ratios do not have standardized meanings under GAAP. They are unlikely to be comparable to similar measures presented by other companies and should not be viewed in isolation from, or as a substitute for, GAAP results.

Further discussion of non-GAAP amounts, measures and ratios is provided in the Non-GAAP and Other Financial Measures section.

For further information regarding the composition of non-GAAP and other financial measures, including supplementary financial measures, refer to the Glossary of Financial Terms.

Foreign Exchange

(Canadian $ in millions, except as noted)	2023 vs. 2022
Canadian/U.S. dollar exchange rate (average)	
2023	**1.3492**
2022	**1.2918**
Effects on U.S. segment reported results	
Increased (Decreased) net interest income	**273**
Increased (Decreased) non-interest revenue	**476**
Increased (Decreased) total revenue	**749**
Decreased (Increased) provision for credit losses	**1**
Decreased (Increased) non-interest expense	**(285)**
Decreased (Increased) provision for income taxes	**(117)**
Increased (Decreased) net income	**348**
Impact on earnings per share ($)	**0.52**
Effects on U.S. segment adjusted results	
Increased (Decreased) net interest income	**292**
Increased (Decreased) non-interest revenue	**142**
Increased (Decreased) total revenue	**434**
Decreased (Increased) provision for credit losses	**1**
Decreased (Increased) non-interest expense	**(246)**
Decreased (Increased) provision for income taxes	**(43)**
Increased (Decreased) net income	**146**
Impact on earnings per share ($)	**0.22**

Adjusted results are on a non-GAAP basis and are discussed in the Non-GAAP and Other Financial Measures section.

The table above indicates the relevant average Canadian/U.S. dollar exchange rates and the impact of changes in those rates on BMO's U.S. segment reported and adjusted results.

The Canadian dollar equivalents of BMO's U.S. segment results that are denominated in U.S. dollars increased in 2023 relative to 2022, due to changes in the Canadian/U.S. dollar exchange rate. References in this document to the impact of the U.S. dollar do not include U.S. dollar-denominated amounts recorded outside of BMO's U.S. segment.

Economically, our U.S. dollar income stream was not hedged against the risk of changes in foreign exchange rates during 2023 and 2022. Changes in exchange rates will affect future results measured in Canadian dollars, and the impact on those results is a function of the periods in which revenue, expenses and provisions for (or recoveries of) credit losses and income taxes arise.

Refer to the Enterprise-Wide Capital Management section for a discussion of the impact that changes in foreign exchange rates can have on BMO's capital position.

Net Income

Reported net income was $4,377 million, compared with $13,537 million in the prior year, and adjusted net income was $8,675 million, a decrease of $364 million or 4%. The inclusion of Bank of the West results in the current year decreased reported net income by $1,498 million, and increased adjusted net income by $592 million. The impact of the stronger U.S. dollar increased net income by 1% on a reported basis, and 2% on an adjusted basis.

Adjusted results in the current year and the prior year excluded the following items:

- Acquisition and integration costs of $1,533 million ($2,045 million pre-tax) in the current year and $245 million ($326 million pre-tax) in the prior year, recorded in non-interest expense. The current year included acquisition and integration costs of $1,520 million ($2,027 million pre-tax) related to Bank of the West.
- A loss of $1,461 million ($2,011 million pre-tax) in the current year related to the management of the impact of interest rate changes between the announcement and closing of the Bank of the West acquisition on its fair value and goodwill, comprising $1,628 million of mark-to-market losses on certain interest rate swaps recorded in non-interest trading revenue and $383 million of losses on a portfolio of primarily U.S. treasuries and other balance sheet instruments recorded in net interest income. The prior year included revenue of $5,667 million ($7,713 million pre-tax), comprising $7,665 million of non-interest trading revenue and $48 million of net interest income.
- Initial provision for credit losses of $517 million ($705 million pre-tax) in the current year on the purchased Bank of the West performing loan portfolio.
- Amortization of acquisition-related intangible assets of $264 million ($357 million pre-tax) in the current year and $23 million ($31 million pre-tax) in the prior year, recorded in non-interest expense. The current year included amortization of acquisition-related intangible assets of $231 million ($311 million pre-tax) related to Bank of the West.
- The impact of certain tax measures enacted by the Canadian government in the current year, including a one-time tax expense of $371 million, comprising a Canada Recovery Dividend (CRD) of $312 million and $59 million related to the pro-rated fiscal 2022 impact of a 1.5% tax rate increase, net of a deferred tax asset remeasurement, and a charge of $131 million ($160 million pre-tax) related to the amended GST/HST definition for financial services, comprising $138 million recorded in non-interest revenue and $22 million recorded in non-interest expense.
- The impact of a lawsuit associated with a predecessor bank, M&I Marshall and Ilsley Bank, of $21 million ($27 million pre-tax) in the current year, comprising interest expense of $30 million and a net non-interest expense recovery of $3 million. The prior year included $846 million ($1,142 million pre-tax), comprising interest expense of $515 million and non-interest expense of $627 million.
- The impact of divestitures of $55 million ($37 million pre-tax) in the prior year related to the sale of our EMEA business and the transfer of certain U.S. asset management clients, comprising a net loss of $21 million recorded in non-interest revenue and expenses of $16 million, including taxes of $22 million on closing of the sale.

Reported net income decreased from the prior year, primarily due to the items noted above, which in aggregate reduced net income by $4,298 million, compared with a gain of $4,498 million in the prior year. Adjusted net income decreased, as the inclusion of Bank of the West and higher underlying revenue were more than offset by higher expenses and a higher provision for credit losses. Reported and adjusted net income increased in U.S. P&C and decreased in BMO Wealth Management, Canadian P&C and BMO Capital Markets. On a reported basis, Corporate Services recorded a net loss, compared with net income in the prior year, primarily due to the items noted above. On an adjusted basis, Corporate Services recorded a higher net loss.

Further discussion is provided in the 2023 Operating Groups Performance Review section.

For further information on non-GAAP amounts, measures and ratios in this Net Income section, refer to the Non-GAAP and Other Financial Measures section.

Revenue

(Canadian $ in millions, on a pre-tax basis) For the year ended October 31	2023	2022
Net interest income	**18,681**	15,885
Non-interest revenue	**12,518**	17,825
Total revenue	**31,199**	33,710
Insurance claims, commissions and changes in policy benefit liabilities (CCPB) (1)	**1,939**	(683)
Revenue, net of CCPB (1)	**29,260**	34,393
Impact of divestitures (2)	**–**	21
Management of fair value changes on the purchase of Bank of the West (3)	**2,011**	(7,713)
Legal provision (including related interest expense and legal fees) (4)	**30**	515
Impact of Canadian tax measures (5)	**138**	–
Impact of adjusting items on revenue	**2,179**	(7,177)
Adjusted revenue (2) (3) (4)	**33,378**	26,533
Adjusted revenue, net of CCPB (1) (2) (3) (4)	**31,439**	27,216

(1) Insurance revenue can experience variability arising from fluctuations in the fair value of insurance assets caused by movements in interest rates and equity markets. The investments that support policy benefit liabilities are predominantly fixed income assets recorded at fair value, with changes in fair value recorded in insurance revenue in the Consolidated Statement of Income. These fair value changes are largely offset by changes in the fair value of policy benefit liabilities, the impact of which is reflected in CCPB. The presentation of revenue on a basis net of CCPB, reduces variability in results, which allows for a better assessment of operating results. For further information, refer to the Insurance Claims, Commissions and Changes in Policy Benefits section.

(2) Fiscal 2022 reported revenue included non-interest revenue related to the sale of our EMEA and U.S. Asset Management businesses, comprising a gain of $8 million related to the transfer of certain U.S. asset management clients and a $29 million loss related to foreign currency translation reclassified from accumulated other comprehensive income to non-interest revenue, recorded in Corporate Services.

(3) Reported revenue included revenue (losses) related to the acquisition of Bank of the West resulting from the management of the impact of interest rate changes between the announcement and closing of the acquisition on its fair value and goodwill. Fiscal 2023 included a loss of $2,011 million, comprising $1,628 million of mark-to-market losses on certain interest rate swaps recorded in trading revenue and $383 million of losses on a portfolio of primarily U.S. treasuries and other balance sheet instruments recorded in net interest income. Fiscal 2022 included revenue of $7,713 million, comprising $7,665 million of mark-to-market gains and $48 million of non-trading interest income. These amounts were recorded in Corporate Services. For further information on this acquisition, refer to the Recent Acquisitions section.

(4) Reported revenue included the impact of a lawsuit associated with a predecessor bank, M&I Marshall and Ilsley Bank. Interest expense of $30 million was recorded in fiscal 2023 and $515 million was recorded in fiscal 2022. These amounts were recorded in Corporate Services. For further information, refer to the Provisions and Contingent Liabilities section in Note 24 of the audited annual consolidated financial statements.

(5) Fiscal 2023 reported revenue included the impact of certain tax measures enacted by the Canadian government. These tax measures included a charge of $138 million related to the amended GST/HST definition for financial services, recorded in non-interest revenue in Corporate Services.

Revenue, net of CCPB, and adjusted results are on a non-GAAP basis and are discussed in the Non-GAAP and Other Financial Measures section.

Reported revenue was $31,199 million, a decrease of $2,511 million or 7% from the prior year. On a basis that nets insurance claims, commissions and changes in policy benefit liabilities (CCPB) against insurance revenue (net revenue), reported net revenue was $29,260 million, a decrease of $5,133 million or 15% from the prior year, and adjusted net revenue was $31,439 million, an increase of $4,223 million or 16%. The inclusion of Bank of the West contributed $3,143 million to both reported and adjusted revenue in the current year. The impact of the stronger U.S. dollar increased revenue by 2% on both a reported and an adjusted basis.

The decrease in reported net revenue primarily reflected the impact of fair value management actions and the impact of certain tax measures enacted by the Canadian government, partially offset by lower interest expense due to the legal provision related to the lawsuit associated with M&I Marshall and Ilsley Bank in the prior year. Net revenue increased across all operating groups and decreased in Corporate Services on both a reported and an adjusted basis.

BMO analyzes revenue at the consolidated level based on GAAP revenue as reported in the audited annual consolidated financial statements, on a basis net of insurance CCPB, and on an adjusted basis.

Further discussion is provided in the 2023 Operating Groups Performance Review section.

For further information on non-GAAP amounts, measures and ratios, and results presented on a net revenue basis in this Revenue section, refer to the Non-GAAP and Other Financial Measures section.

Net Interest Income comprises earnings on assets, such as loans and securities, including interest and certain dividend income, less interest expense paid on liabilities, such as deposits. Net interest income, excluding trading, is presented on a basis that excludes trading-related interest income and earning assets.

Net Interest Margin is the ratio of net interest income to average earning assets, expressed as a percentage or in basis points. Net interest margin, excluding trading, is computed in the same manner, excluding trading-related interest income and earning assets.

Net Non-Interest Revenue is non-interest revenue, net of insurance claims, commissions and changes in policy benefit liabilities (CCPB).

Average Earning Assets represents the daily average balance of deposits at central banks, deposits with other banks, securities borrowed or purchased under resale agreements, securities, and loans over a one-year period.

Trading-Related Revenue includes net interest income and non-interest revenue earned from on-balance sheet and off-balance sheet positions undertaken for trading purposes, and is dependent on, among other things, the volume of activities undertaken for clients who enter into transactions with BMO to mitigate their risks or to invest, as well as market conditions. We earn a spread or profit on the net sum of our client positions by profitably managing, within prescribed limits, the overall risk of our net positions. On a limited basis, we also earn revenue from our principal trading positions. The management of these positions typically includes marking them to market on a daily basis. Trading-related revenue also includes income (expense) and gains (losses) from both on-balance sheet instruments and interest rate, foreign exchange (including spot positions), equity, commodity and credit contracts.

Net Interest Income

Reported net interest income was $18,681 million, an increase of $2,796 million or 18% from the prior year, and adjusted net interest income was $19,094 million, an increase of $2,742 million or 17%.

The increase in reported net interest income primarily reflected lower interest expense related to the lawsuit associated with M&I Marshall and Ilsley Bank in the prior year, partially offset by the impact of fair value management actions in the current year.

Adjusted net interest income increased due to the inclusion of Bank of the West, higher balances and margins in Canadian P&C and higher margins in U.S. P&C, as well as the impact of the stronger U.S. dollar, partially offset by a decrease in trading-related interest income, lower net interest income in Corporate Services and the impact of risk transfer transactions. Trading-related net interest income was $900 million, a decrease of $772 million, and was largely offset in trading non-interest revenue.

BMO's overall reported net interest margin of 1.63% increased 1 basis point from the prior year. Adjusted net interest margin, excluding trading-related net interest income and trading-related earning assets, was 1.86%, an increase of 8 basis points, primarily due to higher margins in our P&C businesses, including the impact of Bank of the West, partially offset by higher low-yielding assets and lower net interest income in Corporate Services.

Change in Net Interest Income, Average Earning Assets and Net Interest Margin (1)

(Canadian $ in millions, except as noted) For the year ended October 31	Net interest income (2)		Average earning assets (3)		Net interest margin (in basis points)	
	2023	2022	**2023**	2022	**2023**	2022
Canadian P&C	**8,308**	7,449	**303,855**	278,022	**273**	268
U.S. P&C	**7,853**	5,037	**202,155**	138,094	**388**	364
Personal and Commercial Banking (P&C)	**16,161**	12,486	**506,010**	416,116	**319**	300
All other operating groups and Corporate Services (4)	**2,520**	3,399	**639,622**	563,225	**na**	na
Total reported	**18,681**	15,885	**1,145,632**	979,341	**163**	162
Total adjusted	**19,094**	16,352	**1,145,632**	979,341	**167**	167
Trading-related net interest income and earning assets	**900**	1,672	**168,686**	153,875	**na**	na
Total excluding trading net interest income and earning assets	**17,781**	14,213	**976,946**	825,466	**182**	172
Total adjusted excluding trading net interest income and earning assets	**18,194**	14,680	**976,946**	825,466	**186**	178
U.S. P&C (US$ in millions)	**5,818**	3,893	**149,767**	106,829	**388**	364

(1) Adjusted results and ratios are on a non-GAAP basis and are discussed in the Non-GAAP and Other Financial Measures section.
(2) Operating group revenue is presented on a taxable equivalent basis (teb) in net interest income. For further information, refer to the How BMO Reports Operating Group Results section.
(3) Average earning assets represents the daily average balance of deposits with central banks, deposits with other banks, securities borrowed or purchased under resale agreements, securities, and loans, over a one-year period.
(4) For further information on net interest income for these other operating groups and Corporate Services, refer to the 2023 Operating Groups Performance Review section.

na – not applicable

Non-Interest Revenue

(Canadian $ in millions) For the year ended October 31	**2023**	2022
Securities commissions and fees	**1,025**	1,082
Deposit and payment service charges	**1,517**	1,318
Trading revenue	**(216)**	8,250
Lending fees	**1,548**	1,440
Card fees	**700**	548
Investment management and custodial fees	**1,851**	1,770
Mutual fund revenue	**1,244**	1,312
Underwriting and advisory fees	**1,107**	1,193
Securities gains, other than trading	**181**	281
Foreign exchange, other than trading	**235**	181
Insurance revenue (loss)	**2,498**	(157)
Share of profit in associates and joint ventures	**185**	274
Other	**643**	333
Total reported	**12,518**	17,825
Insurance claims, commissions and changes in policy benefit liabilities (CCPB)	**1,939**	(683)
Reported non-interest revenue, net of CCPB	**10,579**	18,508
Management of fair value changes on the purchase of Bank of the West (1)	**1,628**	(7,665)
Impact of divestitures (2)	**–**	21
Impact of Canadian tax measures (3)	**138**	–
Adjusted non-interest revenue	**14,284**	10,181
Adjusted non-interest revenue, net of CCPB	**12,345**	10,864
Insurance revenue, net of CCPB	**559**	526

(1) Fiscal 2023 reported non-interest revenue included $1,628 million of mark-to-market losses on certain interest rate swaps related to the acquisition of Bank of the West resulting from the management of the impact of interest rate changes between the announcement and closing of the acquisition on its fair value and goodwill. Fiscal 2022 included $7,665 million of mark-to-market gains. These amounts were recorded in Corporate Services. For further information on this acquisition, refer to the Recent Acquisitions section.
(2) Fiscal 2022 reported non-interest revenue included the impact of divestitures related to the sale of our EMEA and U.S. Asset Management businesses of $21 million of non-interest losses, comprising a gain of $8 million related to the transfer of certain U.S. asset management clients and a $29 million loss related to foreign currency translation reclassified from accumulated other comprehensive income to non-interest revenue, recorded in Corporate Services.
(3) Fiscal 2023 reported non-interest revenue included the impact of certain tax measures enacted by the Canadian government. These tax measures included a charge of $138 million related to the amended GST/HST definition for financial services, recorded in non-interest revenue in Corporate Services.

Reported and adjusted revenue measures, net of CCPB, in this section are on a non-GAAP basis and are discussed in the Non-GAAP and Other Financial Measures section.

Reported non-interest revenue was $12,518 million, a decrease of $5,307 million from the prior year. Reported non-interest revenue, net of CCPB, was $10,579 million, a decrease of $7,929 million or 43% from the prior year, and adjusted non-interest revenue, net of CCPB, was $12,345 million, an increase of $1,481 million or 14%. The inclusion of Bank of the West contributed $461 million to non-interest revenue. The impact of the stronger U.S. dollar increased non-interest revenue by 1% on both a reported and an adjusted basis.

Reported non-interest revenue, net of CCPB, decreased primarily due to the loss related to fair value management actions in the current year, compared with a gain in the prior year. Adjusted non-interest revenue, net of CCPB, increased due to the inclusion of Bank of the West and AIR MILES, higher trading and card-related revenue and the impact of the stronger U.S. dollar, partially offset by lower underwriting and advisory revenue and securities gains, other than trading. Trading-related revenue is discussed in the section that follows.

Gross insurance revenue was $2,498 million, compared with a loss of $157 million in the prior year, primarily due to changes in the fair value of investments and higher annuity sales. Insurance revenue can experience variability arising from fluctuations in the fair value of insurance assets caused by movements in interest rates and equity markets. The investments that support policy benefit liabilities are predominantly fixed income and equity assets recorded at fair value, with changes in fair value recorded in insurance revenue in the Consolidated Statement of Income. The impact of these fair value changes was largely offset by changes in the fair value of policy benefit liabilities, which are reflected in the Insurance Claims, Commissions and Changes in Policy Benefits section.

We believe analyzing revenue, net of CCPB, is useful given the extent to which insurance revenue can vary, and given that this variability is largely offset in CCPB.

For further information on results presented on a net revenue basis in this Non-Interest Revenue section, refer to the Non-GAAP and Other Financial Measures section.

Trading-Related Revenue (1)

(Canadian $ in millions) (taxable equivalent basis) For the year ended October 31	**2023**	2022
Interest rates	**770**	893
Foreign exchange	**638**	571
Equities	**931**	950
Commodities	**192**	189
Other	**(1,526)**	7,556
Total (teb) (2)	**1,005**	10,159
Teb offset	**321**	237
Reported total	**684**	9,922
Management of fair value changes on the purchase of Bank of the West (3)	**1,628**	(7,665)
Adjusted total trading revenue	**2,312**	2,257
Reported as:		
Net interest income	**1,221**	1,909
Non-interest revenue – trading revenue	**(216)**	8,250
Total (teb)	**1,005**	10,159
Teb offset	**321**	237
Reported total, net of teb offset	**684**	9,922
Adjusted total trading revenue	**2,312**	2,257

(1) Reported and adjusted revenue measures are on a non-GAAP basis and are discussed in the Non-GAAP and Other Financial Measures section.
(2) Trading-related revenue presented on a taxable equivalent basis (teb) is a non-GAAP measure. Similar to other banks, BMO analyzes trading-related revenue on a taxable equivalent basis (teb), which reflects an increase in net interest income on tax-exempt securities to equivalent pre-tax amounts and is useful in facilitating comparisons of income from taxable and tax-exempt sources.
(3) Fiscal 2023 trading-related revenue included $1,628 million of mark-to-market losses on certain interest rate swaps related to the announced acquisition of Bank of the West resulting from the management of the impact of interest rate changes between the announcement and closing of the acquisition on its fair value and goodwill. Fiscal 2022 included $7,665 million of mark-to-market gains. These amounts were recorded in other trading revenue, in Corporate Services. For further information on this acquisition, refer to the Recent Acquisitions section.

Reported trading-related revenue on a teb basis was $1,005 million, a decrease of $9,154 million, primarily due to the impact of fair value management actions related to the acquisition of Bank of the West. Adjusted trading-related revenue on a teb basis was $2,633 million, an increase of $139 million or 6%. Foreign exchange trading-related revenue increased $67 million or 12%, due to higher levels of client activity. Equities and commodities trading-related revenue was relatively unchanged from the prior year. Interest rate trading-related revenue decreased $123 million or 14%, due to lower levels of client activity. Adjusted other trading-related revenue on a teb basis increased $211 million, primarily due to mark-downs on loan underwriting commitments recorded in the prior year.

Refer to the Enterprise-Wide Risk Management – Market Risk section for more information on trading-related revenue.

Insurance Claims, Commissions and Changes in Policy Benefit Liabilities

Insurance claims, commissions and changes in policy benefit liabilities (CCPB) were $1,939 million in 2023, compared with negative $683 million in the prior year. CCPB increased, primarily due to changes in the fair value of policy benefit liabilities and the impact of higher annuity sales. The changes were largely offset in revenue.

Total Provision for Credit Losses

(Canadian $ in millions)	Canadian P&C	U.S. P&C	Total P&C	BMO Wealth Management	BMO Capital Markets	Corporate Services	Total Bank
2023							
Provision for credit losses on impaired loans	**784**	**380**	**1,164**	**5**	**9**	**2**	**1,180**
Provision for credit losses on performing loans	**146**	**130**	**276**	**13**	**9**	**700**	**998**
Total provision for credit losses	**930**	**510**	**1,440**	**18**	**18**	**702**	**2,178**
Initial provision for credit losses on purchased performing loans (1)	**–**	**–**	**–**	**–**	**–**	**(705)**	**(705)**
Adjusted total provision for (recovery of) credit losses (2)	**930**	**510**	**1,440**	**18**	**18**	**(3)**	**1,473**
Total PCL-to-average net loans and acceptances (%) (3)	**0.30**	**0.26**	**0.28**	**0.04**	**0.02**	**nm**	**0.35**
PCL on impaired loans-to-average net loans and acceptances (%) (3)	**0.25**	**0.20**	**0.23**	**0.01**	**0.01**	**nm**	**0.19**
2022							
Provision for (recovery of) credit losses on impaired loans	432	107	539	2	(32)	(7)	502
Provision for (recovery of) credit losses on performing loans	(91)	(90)	(181)	(4)	(11)	7	(189)
Total provision for (recovery of) credit losses	341	17	358	(2)	(43)	–	313
Total PCL-to-average net loans and acceptances (%) (3)	0.12	0.01	0.09	(0.01)	(0.07)	nm	0.06
PCL on impaired loans-to-average net loans and acceptances (%) (3)	0.15	0.08	0.13	–	(0.05)	nm	0.10

(1) Fiscal 2023 comprised an initial provision for credit losses of $705 million on the purchased Bank of the West performing loan portfolio, recorded in Corporate Services.
(2) Adjusted results exclude certain items from reported results and are used to calculate our adjusted measures as presented in the above table. Management assesses performance on a reported basis and an adjusted basis, and considers both to be useful. For further information, refer to the Non-GAAP and Other Financial Measures section, and for details on the composition of non-GAAP amounts, measures and ratios, as well as supplementary financial measures, refer to the Glossary of Financial Terms.
(3) Ratios are presented on an annualized basis.

nm – not meaningful

The total provision for credit losses (PCL) was $2,178 million on a reported basis and $1,473 million on an adjusted basis, compared with $313 million on both a reported and adjusted basis in the prior year. Total PCL as a percentage of average net loans and acceptances was 35 basis points on a reported basis and 24 basis points on an adjusted basis, compared with 6 basis points on both a reported and adjusted basis in the prior year. PCL on impaired loans was $1,180 million, an increase of $678 million from the prior year, with higher provisions across all businesses. PCL on impaired loans as a percentage of average net loans and acceptances was 19 basis points, compared with 10 basis points in the prior year. The provision for credit losses on performing loans in the current year was $998 million on a reported basis and $293 million on an adjusted basis, compared with a reported and adjusted recovery of credit losses of $189 million in the prior year. Reported PCL on performing loans included an initial provision of $705 million on the purchased Bank of the West performing loan portfolio. On an adjusted basis, PCL on performing loans of $293 million in the current year primarily reflected portfolio credit migration, uncertainty in credit conditions and balance growth, partially offset by an improvement in the macroeconomic outlook and the continued benefit from risk transfer transactions.

Note 4 of the audited annual consolidated financial statements provides additional information on PCL, including on a geographic basis. Table 12 in the Supplemental Information provides further segmented PCL information.

Provision for Credit Losses (PCL) is a charge to income that represents an amount deemed adequate by management to fully provide for impairment in a portfolio of loans and acceptances and other credit instruments, given the composition of the portfolio, the probability of default, the economic outlook and the allowance for credit losses already established. PCL can comprise both a provision for credit losses on impaired loans and a provision for credit losses on performing loans. For further information, refer to the Credit and Counterparty Risk – Provision for Credit Losses section, the Critical Accounting Estimates and Judgments – Allowance for Credit Losses section and Note 4 of the audited annual consolidated financial statements.

Average Net Loans and Acceptances is the daily or monthly average balance of loans and customers' liability under acceptances, net of the allowance for credit losses, over a one-year period.

Non-Interest Expense (1)

(Canadian $ in millions, on a pre-tax basis) For the year ended October 31	**2023**	2022
Employee compensation		
Salaries	**6,602**	4,467
Performance-based compensation	**3,565**	3,193
Employee benefits	**1,348**	1,135
Total employee compensation	**11,515**	8,795
Total premises and equipment	**4,879**	3,635
Amortization of intangible assets	**1,015**	604
Other expenses		
Advertising and business development	**814**	517
Communications	**368**	278
Professional fees	**1,147**	788
Other	**1,481**	1,577
Total other expenses	**3,810**	3,160
Total non-interest expense	**21,219**	16,194
Acquisition and integration costs (2)	**(2,045)**	(326)
Amortization of acquisition-related intangible assets (3)	**(357)**	(31)
Impact of divestitures (4)	**–**	(16)
Legal provision (including related interest expense and legal fees) (5)	**3**	(627)
Impact of Canadian tax measures (6)	**(22)**	–
Impact of adjusting items on non-interest expense	**(2,421)**	(1,000)
Total adjusted non-interest expense	**18,798**	15,194
Efficiency ratio (%)	**68.0**	48.0
Efficiency ratio, net of CCPB (%) (1)	**72.5**	47.1
Adjusted efficiency ratio (%)	**56.3**	57.3
Adjusted efficiency ratio, net of CCPB (%) (1)	**59.8**	55.8

(1) Reported and adjusted results, measures and ratios, net of CCPB, are on a non-GAAP basis. For a quantitative reconciliation of revenue, net of CCPB, and adjusted results, refer to the Revenue section and the Non-GAAP and Other Financial Measures section.
(2) Reported non-interest expense included acquisition and integration costs of $2,027 million in fiscal 2023 and $316 million in fiscal 2022 related to the acquisition of Bank of the West, recorded in Corporate Services. In addition, reported non-interest expense included acquisition and integration costs of $5 million related to Radicle and Clearpool in fiscal 2023 and $10 million related to KGS-Alpha and Clearpool in fiscal 2022, recorded in BMO Capital Markets. Fiscal 2023 included acquisition and integration costs of $13 million related to the acquisition of AIR MILES, recorded in Canadian P&C.
(3) Reported non-interest expense included amortization of acquisition-related intangible assets of $357 million in fiscal 2023 and $31 million in fiscal 2022, recorded in the related operating group.
(4) Fiscal 2022 reported non-interest expense included the impact of divestitures of $32 million, including taxes of $22 million, related to the sale of our EMEA and U.S. Asset Management businesses, recorded in Corporate Services.
(5) Reported non-interest expense included the impact of a lawsuit associated with a predecessor bank, M&I Marshall and Ilsley Bank. Fiscal 2023 included a net non-interest expense recovery of $3 million and fiscal 2022 included a provision of $627 million. These amounts were recorded in Corporate Services. For further information, refer to the Provisions and Contingent Liabilities section in Note 24 of the audited annual consolidated financial statements.
(6) Fiscal 2023 reported non-interest expense included the impact of certain tax measures enacted by the Canadian government, comprising $22 million related to the amended GST/HST definition for financial services, recorded in Corporate Services.

na – not applicable

Reported non-interest expense was $21,219 million, an increase of $5,025 million or 31% from the prior year. Adjusted non-interest expense was $18,798 million, an increase of $3,604 million or 24% from the prior year. The inclusion of Bank of the West contributed $4,284 million to reported non-interest expense and $2,181 million on an adjusted basis. The impact of the stronger U.S. dollar increased non-interest expense by 2% on both a reported and an adjusted basis.

Reported results included higher acquisition and integration costs and amortization of acquisition-related intangible assets compared with the prior year, partially offset by the lower legal expense related to the lawsuit associated with M&I Marshall and Ilsley Bank in the prior year.

Reported and adjusted non-interest expense increased, primarily due to the inclusion of Bank of the West, as well as higher employee-related, technology, advertising and business development costs, legal provisions in the current year and the impact of the stronger U.S. dollar.

For further information on non-GAAP amounts, measures and ratios in this Non-Interest Expense section, refer to the Non-GAAP and Other Financial Measures section.

Provision for Income Taxes and Other Taxes

(Canadian $ in millions, except as noted) For the year ended October 31	**2023**	2022
Payroll levies	**517**	398
Property taxes	**40**	34
Provincial capital taxes	**50**	45
Business taxes	**24**	11
Harmonized sales tax, GST, VAT and other sales taxes	**563**	459
Sundry taxes	**1**	1
Total government levies other than income taxes (other taxes) (1)	**1,195**	948
Provision for income taxes	**1,486**	4,349
Provision for income taxes and other taxes	**2,681**	5,297
Provision for income taxes and other taxes as a % of income before provision for income taxes and other taxes	**38.0**	28.1
Effective income tax rate (%)	**25.3**	24.3
Adjusted effective income tax rate (%)	**22.3**	22.8

(1) Other taxes are included in various non-interest expense categories.

Provision for income taxes and other taxes and the adjusted effective tax rate are on a non-GAAP basis and are discussed in the Non-GAAP and Other Financial Measures section.

The provision for income taxes and other taxes was $2,681 million in the current year. Of this amount, $1,345 million was incurred in Canada, with $498 million included in the provision for income taxes, and the remaining $847 million was recorded in total government levies other than income taxes (other taxes). The decrease from $5,297 million in the prior year primarily reflected a lower provision for income taxes.

The provision for income taxes presented in the Consolidated Statement of Income is based on transactions recorded in income, regardless of when such transactions are subject to taxation by tax authorities, with the exception of the repatriation of retained earnings from subsidiaries, as outlined in Note 22 of the audited annual consolidated financial statements.

Management assesses BMO's consolidated results and the associated provision for income taxes on a GAAP basis. We assess the performance of our operating groups and associated income taxes on a taxable equivalent basis, and we report accordingly.

The provision for income taxes was $1,486 million, compared with $4,349 million in the prior year. The reported effective tax rate was 25.3%, compared with 24.3% in the prior year, primarily due to the impact of certain Canadian tax measures during the 2023 fiscal year. The adjusted provision for income taxes was $2,493 million, compared with $2,670 million in the prior year. The adjusted effective tax rate was 22.3%, compared with 22.8% in the prior year.

BMO partially hedges, for accounting purposes, the foreign exchange risk arising from investments in foreign operations by funding the investments in the corresponding foreign currency. A gain or loss on hedging activities and an unrealized gain or loss on translation of foreign operations are charged or credited to other comprehensive income. For income tax purposes, a gain or loss on hedging activities results in an income tax charge or credit in the current period that is charged or credited to other comprehensive income, while the associated unrealized gain or loss on investments in foreign operations does not incur income taxes until the investments are liquidated. The income tax charge/benefit arising from a hedging gain/loss is a function of the fluctuations in exchange rates from period to period. Hedging of investments in foreign operations has given rise to an income tax recovery in other comprehensive income of $90 million in the current year, compared with a recovery of $124 million in the prior year. Refer to Note 22 of the audited annual consolidated financial statements for further information.

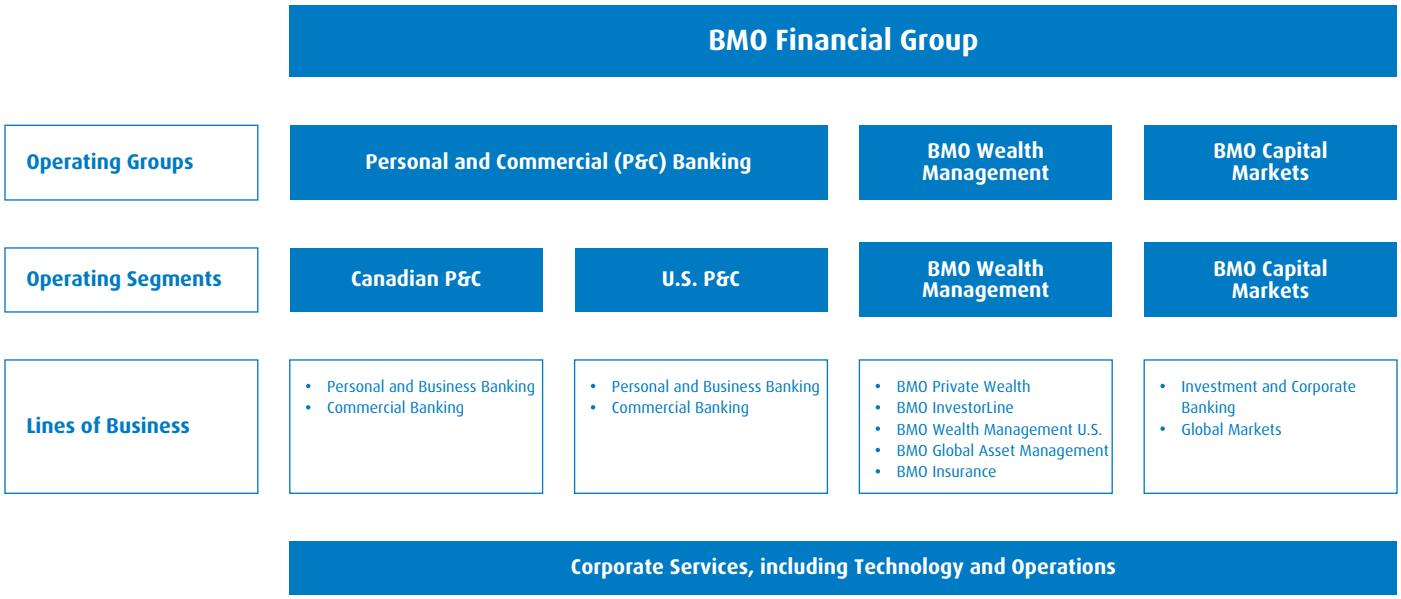
Legislative changes and changes in tax policy, including their interpretation by tax authorities and the courts, may impact our earnings. Refer to the discussion in the Critical Accounting Estimates and Judgments section for further information. In the table above we disclose provision for income taxes and other taxes as a percentage of income before the provision for income taxes and other taxes, which is a non-GAAP financial ratio and may not be comparable to similar financial measures disclosed by other issuers, to reflect the full impact of all government levies and taxes as a percentage of our income.

For further information on non-GAAP amounts, measures and ratios in this Provision for Income Taxes and Other Taxes section, refer to the Non-GAAP and Other Financial Measures section.

2023 Operating Groups Performance Review

Summary

This section includes an analysis of the financial results of BMO's operating groups and descriptions of their operating segments, businesses, strategies, challenges, achievements and outlooks.



How BMO Reports Operating Group Results

BMO reports financial results for its three operating groups, one of which comprises two operating segments, all of which are supported by Corporate Units and Technology and Operations (T&O) within Corporate Services. Operating segment results include allocations from Corporate Services for treasury-related revenue, corporate and T&O costs, and capital. The impact of the Bank of the West acquisition has been reflected in our results as a business combination, primarily in the U.S. P&C and BMO Wealth Management reporting segments.

BMO employs funds transfer pricing and liquidity transfer pricing between corporate treasury and the operating segments in order to assign the appropriate cost and credit to funds for the appropriate pricing of loans and deposits, and to help assess the profitability performance of each line of business. These practices also capture the cost of holding supplemental liquid assets to meet contingent liquidity requirements, as well as facilitating the management of interest rate risk and liquidity risk within our risk appetite framework and regulatory requirements. We review our transfer pricing methodologies at least annually, in order to align with our interest rate, liquidity and funding risk management practices, and update these as appropriate.

The costs of Corporate Units and T&O services are largely allocated to the four operating segments, with any remaining amounts retained in Corporate Services. Certain expenses, directly incurred to support a specific operating segment, are generally allocated to that operating segment. Other expenses are generally allocated across the operating segments in amounts that are reasonably reflective of the level of support provided to each operating segment. We review our expense allocation methodologies annually, and update these as appropriate.

Capital is allocated to the operating segments based on the amount of regulatory capital required to support business activities. Effective fiscal 2023, our capital allocation rate increased to 11.0% of risk-weighted assets, compared with 10.5% in fiscal 2022, in order to reflect an increase in capital requirements. Unallocated capital is reported in Corporate Services. We review our capital allocation methodologies annually, and update these as appropriate.

Periodically, certain lines of business and units within our organizational structure are realigned to support our strategic priorities, and comparative figures from prior periods have been reclassified to conform with the current period's presentation.

We analyze revenue at the consolidated level based on GAAP revenue as reported in the audited annual consolidated financial statements, rather than on a taxable equivalent basis, which is consistent with our Canadian banking peer group. Like many banks, BMO analyzes revenue on a taxable equivalent basis (teb) at the operating segment level. Revenue and the provision for income taxes in BMO Capital Markets and U.S. P&C are increased on tax-exempt securities to equivalent pre-tax amounts that facilitate comparisons of income from taxable and tax-exempt sources. The offset to the segment teb adjustments is reflected in Corporate Services revenue and provision for (recovery of) income taxes.

Personal and Commercial Banking (1)

(Canadian $ in millions, except as noted) As at or for the year ended October 31	Canadian P&C		U.S. P&C		Total P&C	
	2023	2022	**2023**	2022	**2023**	2022
Net interest income (teb) (2)	**8,308**	7,449	**7,853**	5,037	**16,161**	12,486
Non-interest revenue	**2,519**	2,419	**1,573**	1,265	**4,092**	3,684
Total revenue (teb) (2)	**10,827**	9,868	**9,426**	6,302	**20,253**	16,170
Provision for credit losses on impaired loans	**784**	432	**380**	107	**1,164**	539
Provision for (recovery of) credit losses on performing loans	**146**	(91)	**130**	(90)	**276**	(181)
Total provision for (recovery of) credit losses	**930**	341	**510**	17	**1,440**	358
Non-interest expense	**4,770**	4,349	**5,502**	3,043	**10,272**	7,392
Income before income taxes	**5,127**	5,178	**3,414**	3,242	**8,541**	8,420
Provision for income taxes (teb) (2)	**1,409**	1,352	**690**	745	**2,099**	2,097
Reported net income	**3,718**	3,826	**2,724**	2,497	**6,442**	6,323
Acquisition and integration costs (3)	**9**	–	**–**	–	**9**	–
Amortization of acquisition-related intangible assets (4)	**6**	1	**234**	5	**240**	6
Adjusted net income	**3,733**	3,827	**2,958**	2,502	**6,691**	6,329
Net income available to common shareholders	**3,677**	3,783	**2,672**	2,461	**6,349**	6,244
Adjusted net income available to common shareholders	**3,692**	3,784	**2,906**	2,466	**6,598**	6,250

(1) Adjusted results are on a non-GAAP basis and are discussed in the Non-GAAP and Other Financial Measures section.
(2) Taxable equivalent basis (teb) amounts of $33 million in fiscal 2023 and $25 million in fiscal 2022 were recorded in net interest income, revenue and provision for income taxes.
(3) Acquisition and integration costs of $13 million pre-tax related to the acquisition of AIR MILES in fiscal 2023 were recorded in non-interest expense.
(4) Amortization of acquisition-related intangible assets pre-tax amounts of $323 million in fiscal 2023 and $7 million in fiscal 2022 were recorded in non-interest expense.

The Personal and Commercial Banking (P&C) operating group represents the sum of our two retail and commercial operating segments, Canadian Personal and Commercial Banking (Canadian P&C) and U.S. Personal and Commercial Banking (U.S. P&C). The P&C banking business reported net income was $6,442 million in 2023, an increase of $119 million or 2% from the prior year. Adjusted net income, which excludes acquisition and integration costs and the amortization of acquisition-related intangible assets, was $6,691 million in 2023, an increase of $362 million or 6% from the prior year. These operating segments are reviewed separately in the sections that follow.

For further information on non-GAAP amounts, measures and ratios in this 2023 Operating Groups Performance Review section, refer to the Non-GAAP and Other Financial Measures section.

Canadian Personal and Commercial Banking

Canadian Personal and Commercial Banking provides financial products and services to nearly eight million customers. Personal and Business Banking helps customers make real financial progress through a network of almost 900 branches, contact centres and digital banking platforms, with more than 3,200 automated teller machines. Commercial Banking serves clients across Canada, offering valuable industry expertise, local presence and a comprehensive range of commercial products and services.

Lines of Business

Personal and Business Banking (P&BB) provides customers with a wide range of products and services, including deposits, home lending, consumer credit, small business lending, credit cards, cash management, everyday financial and investment advice and other banking services, with an overall focus on providing customers with an exceptional experience in every interaction and helping them make real financial progress.

Commercial Banking provides clients with a comprehensive range of commercial products and services, including a variety of financing options and treasury and payment solutions, as well as risk management products. Our commercial bankers partner with clients to anticipate their financial needs, and share their unique expertise and industry knowledge to help them manage and grow their businesses.

Strategy and Key Priorities

2023 Priorities and Achievements

Key Priority: Build on our strong franchise to drive growth and customer loyalty by continuing to invest in differentiating capabilities and delivering enhanced One Client experiences

2023 Achievements

- Maintained strong customer loyalty in both Personal and Business Banking and Commercial Banking, as measured by Net Promoter Score (1)
- Ranked first by J.D. Power (2) for Personal Banking Customer Satisfaction among the Big 5 Banks in its 2023 Canada Retail Banking Satisfaction Study, as well as for Customer Satisfaction with Online Banking in its 2023 Canada Online Banking Satisfaction Study, with the highest scores among Canada's largest banks, demonstrating our dedication to support our customers' financial goals and achievements, as well as our focus on convenience and digital innovation across all customer channels
- Named Best Commercial Bank in Canada for the ninth consecutive year and Best Retail Bank in Canada for the second consecutive year by *World Finance* magazine, in recognition of our Digital First strategy and industry-leading delivery of personal and digital experiences that are meeting and exceeding our customers' evolving expectations, as well as best-in-class digital money management services
- Continued to grow our customer-facing, advice-based roles, strengthening our ability to engage with customers on the financial issues that are important to them

2024 Areas of Focus

- Drive strong customer loyalty, leveraging our enhanced capabilities across customer channels
- Leverage our One Client strategy to provide a connected and integrated experience to our clients, with a holistic approach to address their needs across our businesses

Key Priority: In Personal and Business Banking, continue to drive customer acquisition, increase share of wallet, enhance digital engagement and in-person guidance conversations, and help customers make real financial progress

2023 Achievements

- Continued to expand our digital sales and service capabilities, with more than a third of our core banking products purchased and delivered digitally, while more than 90% of service transactions were completed through self-serve channels, allowing our front-line employees to focus on delivering leading advisory services
- Improved market share in key categories, including deposits, mortgages and credit cards, supported by strong year-over-year customer acquisition
- Completed our acquisition of the AIR MILES Reward Program, one of Canada's most recognized loyalty programs, with more than 10 million active collector accounts. Added new partnerships and introduced robust new features, including an updated travel booking platform, an AIR MILES mobile app and new ways to earn Miles
- Helped customers grow their savings through our BMO Savings Goals feature and the BMO Savings Amplifier Account, as well as offering access to BMO's SmartProgress online financial literacy program
- Enhanced our offerings to support new Canadians, including the expansion of our industry-leading BMO NewStart® Pre-Arrival Account Opening program, and continued to develop and build strategic relationships with Immigration.ca and Immigrant Services Calgary to provide specialized guidance and resources aimed at helping newcomers transition to their new lives in Canada
- Launched the Greener Future Financing program for small and medium-sized agriculture businesses, committing $30 million to a climate-related financing product that supports investments in sustainable business practices and climate resilience measures
- Introduced *BMO for Indigenous Entrepreneurs*, providing Indigenous business owners with greater access to working capital, educational resources and professional partnerships

(1) Net Promoter Score (NPS): The percentage of customers surveyed who would recommend BMO to a friend or colleague.
(2) For more information, refer to www.jdpower.com/business.

2024 Areas of Focus

- Drive customer acquisition through our differentiated value proposition, enabled by analytics and digital marketing capabilities
- Deliver differentiated products and services that meet customers' needs and help them make real financial progress
- Accelerate growth of our AIR MILES Reward Program by strengthening the program's offering for collectors and program partners

Key Priority: In Commercial Banking, maintain focus on key sectors and geographies, and enhance the client experience through innovative capabilities and products, including climate transition and Digital First solutions

2023 Achievements

- Maintained a leadership position in lending in the Atlantic and British Columbia regions and reinforced our second-place ranking in national lending market share, as well as peer-leading deposit growth
- Introduced a new retrofits product, the first of its kind in Canada, which is anchored by our strategic relationships with energy services companies and the Canada Infrastructure Bank and bundled with conventional construction financing
- Launched BMO Marketplace, a one-stop shop for third-party partnerships, where our clients across North America can connect their accounts to create a more efficient and customized banking experience
- Launched mobile wallet functionality for physical and virtual cards, as well as contactless payments through Mastercard Extend, enabling our Corporate Card clients in Canada and the United States to manage their businesses more conveniently

2024 Areas of Focus

- Maintain focus on key sectors and geographies
- Deepen relationships through simplification and digital innovation to drive deposit growth
- Continue to develop climate and carbon transition solutions for our clients

Key Priority: Drive efficiencies by simplifying and streamlining operations, and investing in digital capabilities

2023 Achievements

- Introduced new digital solutions to address our customers' needs, including digital mortgage pre-qualification and recurring lump-sum mortgage payment features, as well as the PaySmart™ credit card instalment plan, which simplifies card transactions and helps customers build a credit history
- Continued to modernize our digital payments functionality and improve our customers' experiences and our operational efficiency, including platform upgrades, enhanced fraud detection capabilities and increased transaction limits, and optimized the BMO.com interface with the introduction of an advanced decision management tool that adapts quickly to changing market demands and regulations
- Received two 2023 Celent Model Bank Awards, the Retail Digital Banking Transformation Award and the Customer Financial Resilience Award, for our leadership in digital transformation and our commitment to enhancing the customer experience
- Recognized for innovation at the 2023 Cannes Lion festival, winning Gold for BMO NXT LVL, a first of its kind gaming platform on Twitch that educates and informs gamers about personal finance
- Ranked first in the Account Management, Digital Money Management and Alerts categories in the 2023 Insider Intelligence Canadian Mobile Banking Emerging Features Benchmark
- Named Overall Leader in the 2023 Javelin Canadian Mobile Banking Scorecard in the Financial Fitness, Money Movement and Account Opening categories
- Recognized for artificial intelligence (AI) and advanced analytics by Datos Insights, with the 2023 Impact Innovation Award in Cash Management and Payments
- Continued to deliver automated open-banking solutions for business clients through partnerships with Xero and FISPAN, enabling owners to spend more time growing their business

2024 Areas of Focus

- Continue to simplify and digitize processes to enhance efficiency
- Continue to strengthen digital capabilities, leveraging existing and new partnerships and delivering leading digital experiences to our customers

Key Priority: Foster a winning culture, focused on alignment, empowerment and recognition, with a commitment to a diverse and inclusive workplace

2023 Achievements

- Improved on strong employee engagement index scores – on par with the global benchmark for leading companies – with ongoing improvements in all priority areas of our winning culture
- Opened BMO Place in Toronto, a new workspace designed to support accessibility, sustainability, inclusion and collaboration – in alignment with our Purpose and our Zero Barriers to Inclusion strategy
- Launched a Personal and Business Banking rotation program, demonstrating our commitment to attracting and developing diverse talent by providing access to meaningful career experiences and development opportunities
- Recognized by the Office québécois de la langue française with a Mérites du français award for promoting the use of the French language in the workplace and preserving French culture within BMO

2024 Areas of Focus

- Continue to attract and develop a diverse workforce while promoting an inclusive workplace
- Maintain a world-class, winning culture and continue to drive strong employee engagement

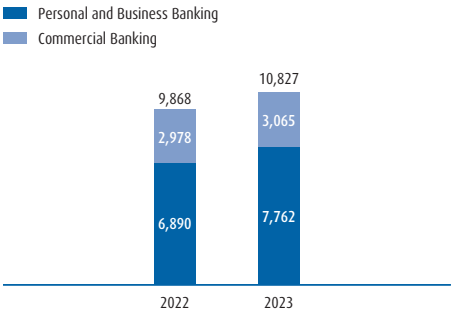
Canadian P&C (1)

(Canadian $ in millions, except as noted) As at or for the year ended October 31	2023	2022
Net interest income	**8,308**	7,449
Non-interest revenue	**2,519**	2,419
Total revenue	**10,827**	9,868
Provision for credit losses on impaired loans	**784**	432
Provision for (recovery of) credit losses on performing loans	**146**	(91)
Total provision for credit losses	**930**	341
Non-interest expense	**4,770**	4,349
Income before income taxes	**5,127**	5,178
Provision for income taxes	**1,409**	1,352
Reported net income	**3,718**	3,826
Acquisition and integration costs (2)	**9**	–
Amortization of acquisition-related intangible assets (3)	**6**	1
Adjusted net income	**3,733**	3,827
Adjusted non-interest expense	**4,749**	4,348
Net income available to common shareholders	**3,677**	3,783
Adjusted net income available to common shareholders	**3,692**	3,784
Key Performance Metrics		
Personal and Business Banking revenue	**7,762**	6,890
Commercial Banking revenue	**3,065**	2,978
Return on equity (%) (4)	**26.9**	32.1
Adjusted return on equity (%) (4)	**27.0**	32.1
Operating leverage (%)	**–**	2.7
Adjusted operating leverage (%)	**0.4**	2.7
Efficiency ratio (%)	**44.1**	44.1
PCL on impaired loans to average net loans and acceptances (%)	**0.25**	0.15
Net interest margin on average earning assets (%)	**2.73**	2.68
Average earning assets	**303,855**	278,022
Average gross loans and acceptances	**314,988**	290,324
Average net loans and acceptances	**313,486**	288,979
Average deposits	**272,575**	243,541
Full-time equivalent employees	**16,217**	15,471

(1) Adjusted results and ratios are on a non-GAAP basis and are discussed in the Non-GAAP and Other Financial Measures section.
(2) Pre-tax acquisition and integration costs related to AIR MILES of $13 million in fiscal 2023 were recorded in non-interest expense.
(3) Amortization of acquisition-related intangible assets pre-tax amounts of $8 million in fiscal 2023 and $1 million in fiscal 2022 were recorded in non-interest expense.
(4) Return on equity is based on allocated capital. Effective fiscal 2023, the capital allocation rate increased to 11.0% of risk-weighted assets, compared with 10.5% in fiscal 2022. For further information, refer to the Non-GAAP and Other Financial Measures section.

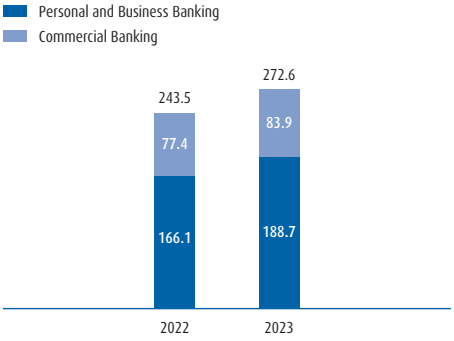
Revenue by Line of Business

($ millions)



Average Deposits*

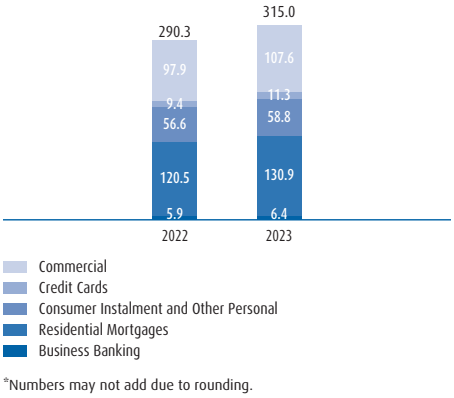
($ billions)



*Numbers may not add due to rounding.

Average Gross Loans and Acceptances*

($ billions)



*Numbers may not add due to rounding.

Financial Review

Canadian P&C reported net income was $3,718 million, a decrease of $108 million or 3% from the prior year, with strong revenue growth more than offset by higher provisions for credit losses and higher expenses.

Total revenue was $10,827 million, an increase of $959 million or 10% from the prior year. Net interest income increased $859 million or 12%, due to higher balances and net interest margins. Non-interest revenue increased $100 million or 4%, primarily due to the inclusion of AIR MILES and higher card-related revenue, partially offset by lower gains on investments in Commercial Banking and lower loan and mutual fund distribution fee revenue. Net interest margin of 2.73% increased 5 basis points from the prior year, with higher deposit margins and deposits growing faster than loans, partially offset by lower loan margins.

Personal and Business Banking revenue increased $872 million or 13%, due to higher net interest income and non-interest revenue. Commercial Banking revenue increased $87 million or 3%, due to higher net interest income, partially offset by lower non-interest revenue.

Total provision for credit losses was $930 million, an increase of $589 million from the prior year. The provision for credit losses on impaired loans was $784 million, an increase of $352 million from the prior year, reflecting higher Personal and Business Banking and Commercial Banking provisions. There was a $146 million provision for credit losses on performing loans in the current year, compared with a recovery of $91 million in the prior year.

Reported non-interest expense was $4,770 million, an increase of $421 million or 10% from the prior year, reflecting higher employee-related costs, including severance, the impact of AIR MILES and other business investment costs.

Average gross loans and acceptances increased $24.7 billion or 8% from the prior year to $315.0 billion, reflecting growth of 7% in Personal and Business Banking, 10% in Commercial Banking and 20% in credit card balances. Average deposits increased $29.0 billion or 12% to $272.6 billion, reflecting growth of 14% in Personal and Business Banking and 8% in Commercial Banking balances, primarily due to strong growth in term deposits.

For further information on non-GAAP amounts, measures and ratios in this 2023 Operating Groups Performance Review section, refer to the Non-GAAP and Other Financial Measures section.

Business Environment and Outlook

Canadian P&C's solid performance in fiscal 2023 demonstrated resilience and an ability to adapt quickly to economic uncertainty. While inflation has moderated from peak levels in fiscal 2022, it remains elevated and the Bank of Canada continued to raise interest rates by an additional 125 basis points in fiscal 2023 to 5.0%, which together with weaker global demand, has slowed GDP growth compared with the prior year. Higher interest rates helped drive strong growth in term deposits, partially offsetting a decline in chequing and savings deposits, reflecting both deposit migration and a drawdown of excess savings built during the pandemic. Mortgage growth remained healthy in the first half of 2023, supported by robust population growth and a rising demand for housing, but balance growth moderated in the second half of fiscal 2023, as housing sales slowed in response to rising mortgage rates. Growth in credit card balances was supported by successful customer acquisition, an increase in consumer spending compared with the prior year and revolving balances returning to more normalized levels. Business lending growth moderated in the second half of fiscal 2023, in response to the higher interest rate environment. Credit performance is normalizing from historically low levels, with insolvency and impairment rates trending higher. Expense growth has moderated from the first half of the year, reflecting the impact of prior-year investments in our sales force, technology and advertising, which have supported strong customer acquisition and expanded market share.

The Canadian economy is expected to slow further in fiscal 2024, which is projected to keep loan demand modest. The Bank of Canada is anticipated to hold interest rates steady before gradually reducing interest rates beginning in the second half of the year. Migration to term deposits is projected to taper, with mortgage growth forecast to decelerate further as housing sales are constrained by poor affordability, partially offset by the impact of continued immigration. Credit performance is expected to deteriorate modestly compared with fiscal 2023 but remain well-managed, as inflation and the higher cost of borrowing put more pressure on purchasing power and household and business budgets.

Our focus on helping customers make real financial progress by delivering exceptional customer solutions and advice, together with leading digital experiences, is key to successfully delivering on our strategy in any environment.

The Canadian economic environment in calendar 2023 and the outlook for calendar 2024 are discussed in more detail in the Economic Developments and Outlook section.

Caution

This Canadian Personal and Commercial Banking section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

U.S. Personal and Commercial Banking

U.S. Personal and Commercial Banking provides financial products and services to more than four million customers. Personal and Business Banking helps customers make real financial progress through an extensive network of more than 1,000 branches, with nationwide access to contact centres, digital banking platforms and more than 40,000 BMO and Allpoint® automated teller machines. Commercial Banking serves clients across the United States, offering valuable industry expertise, local presence and a comprehensive range of commercial products and services.

Lines of Business

Personal and Business Banking (P&BB) provides customers with a wide range of products and services, including deposits, home lending, consumer credit, small business lending, credit cards, cash management and other banking services, with an overall focus on providing customers with an exceptional experience in every interaction and helping them make real financial progress.

Commercial Banking provides clients with a comprehensive range of commercial products and services, including a variety of financing options and treasury and payment solutions, as well as risk management products. Our commercial bankers partner with clients to anticipate their financial needs, and share their unique expertise and industry knowledge to help them manage and grow their businesses.

Strategy and Key Priorities

2023 Priorities and Achievements

Key Priority: Build on our strong franchise to drive growth and customer loyalty by continuing to invest in differentiating capabilities and delivering enhanced One Client experiences

2023 Achievements

- Continued to strengthen customer loyalty in both Personal and Business Banking and Commercial Banking, as measured by Net Promoter Score (1)
- Expanded our market presence in the U.S. West and Southwest regions with the acquisition of Bank of the West, while reinforcing our third-place market share position for deposits across our Midwest footprint
- Named by *World Finance* magazine as Best Commercial Bank in the United States, in recognition of our efforts to provide a more comprehensive range of banking products and services
- Rated Outstanding by the Office of the Comptroller of the Currency on *Community Reinvestment Act* performance, in recognition of our commitment to help support communities with moderate or low income levels

2024 Areas of Focus

- Drive strong customer loyalty, leveraging our enhanced capabilities across customer channels
- Leverage our One Client strategy to provide a connected and integrated experience to our clients, with a holistic approach to address their needs across our businesses

Key Priority: Effectively integrate Bank of the West upon closing of the acquisition, with an emphasis on customer and employee experience

2023 Achievements

- Successfully transitioned nearly two million customers to BMO, along with their accounts, financial products and online banking relationships
- Integrated our Bank of the West colleagues into BMO's internal processes and systems, adapting our organizational structure to support our growth objectives
- Rebranded and integrated branches, automated teller machines and digital banking platforms across the United States to BMO
- Introduced a long-term commercial agreement with BNP Paribas (BNPP), to enhance coverage and global access for commercial banking clients of both institutions

Key Priority: In Personal and Business Banking, continue to drive customer acquisition, increase share of wallet, enhance digital engagement and in-person guidance conversations, and help customers make real financial progress

2023 Achievements

- Continued to build our digital sales and service capabilities, with our digital adoption rate increasing nearly 200 basis points year-over-year, approximately one third of our core banking products purchased and delivered digitally, and more than 80% of service transactions completed through self-serve channels, allowing our front-line employees to focus on delivering leading advisory services (2)
- Enhanced our credit card product suite, introducing a new BMO Boost Secured Credit Card and rebranding the BMO Flex Rewards loyalty program, which led to higher levels of customer engagement
- Engaged in personalized conversations through more than 400,000 Real Financial Progress™ checks, to help our customers identify their goals and make real financial progress
- Launched BMO Alto™, an online, high-yielding deposit account offering, successfully growing deposits nationally

(1) Net Promoter Score (NPS): The percentage of customers surveyed who would recommend BMO to a friend or colleague.
(2) Metrics exclude Bank of the West.

- Maintained our commitment to underserved customer groups by reducing fees and improving access to products and services, including our enhanced Credit Builder™ Loan Program, supporting home ownership by offering down-payment relief through the Welcome Home Grant™ Program and opening more than 50,000 Bank On™ certified Smart Money accounts since the launch of the product
- Launched multiple programs to support members of many different communities, including Asian, veteran and 2SLGBTQI+ special purpose credit programs that are intended to improve access to capital for historically underserved segments, and hosted educational webinars to support Black, Latinx, Native American and women-owned businesses
- Launched CreditView®, enabling our customers to view and improve their credit score, and BMO Digital Banking Security Hub, helping our customers protect their accounts with added security features

2024 Areas of Focus

- Drive customer acquisition through our differentiated value proposition, enabled by digital and marketing capabilities, leveraging our expanded footprint and realizing synergies
- Deliver differentiated products and services that meet customers' needs and help them make real financial progress

Key Priority: In Commercial Banking, maintain focus on key sectors and geographies, and enhance the client experience through innovative capabilities and products, including climate transition and Digital First solutions

2023 Achievements

- Achieved Top 10 Commercial Bank market share for total wholesale loans, maintained our leading position in key markets (Illinois and Wisconsin) and continued to grow through the Bank of the West acquisition, establishing a market presence in 21 of the top 50 U.S. metropolitan areas
- Completed a renewable natural gas/manure biodigester transaction, which has enabled an agriculture client to build a unique operating model that captures methane gas, reducing greenhouse gas emissions and generating renewable energy
- Expanded V-PAYO, an integrated payables solution that offers existing and new clients automation, process efficiency and digitization – with one easy payment file
- Partnered with *Latino Leaders Magazine* to create and launch the inaugural Index 200, an index that helps to celebrate the growing base of large Latinx-owned companies in the United States

2024 Areas of Focus

- Maintain focus on key sectors and geographies while leveraging our wider footprint to unlock synergies and cross-sell opportunities
- Deepen relationships through simplification and digital innovation to drive deposit growth
- Continue to develop solutions and capabilities to support our clients through their climate and carbon transition journey

Key Priority: Drive efficiencies by simplifying and streamlining operations, and investing in digital capabilities

2023 Achievements

- Recognized by *The Digital Banker* for an Outstanding Machine Learning Initiative – our cutting-edge artificial intelligence (AI) solution uses natural language processing to rapidly analyze and categorize linguistic patterns, enhancing the customer experience and improving front-line efficiency
- Invested in key digital capabilities to improve the customer experience, including digital card activation and automated increases in card limits, an enhanced account opening experience with e-sign capability in Business Banking, and a self-serve option for client onboarding in Commercial Banking
- Introduced greater convenience for customers completing the end-to-end mortgage and home equity application process digitally, with online scheduling of closings that simplifies the experience for both customers and employees
- Introduced digital chat capabilities in BMO Virtual Connect and addressed our customers' sales and service needs by scaling the chat functionality of BMO Assist, powered by AI
- Partnered with DailyPay to provide Commercial Banking client employees with real-time access to their pay by depositing funds into direct-deposit accounts for immediate access by employees

2024 Areas of Focus

- Continue to simplify and digitize processes to enhance efficiency
- Continue to strengthen digital capabilities, leveraging existing and new partnerships and delivering leading digital experiences to our customers

Key Priority: Foster an inclusive, winning culture, focused on alignment, empowerment and recognition, with a commitment to a diverse and inclusive workplace

2023 Achievements

- Improved on strong employee engagement index scores – on par with the global benchmark for leading companies – with ongoing improvements in all priority areas of our winning culture
- Named one of the Best Workplaces for Innovators by Fast Company, an annual list honouring organizations and teams that demonstrate a commitment to encourage and develop innovation, the only financial institution to be recognized among the top 30 companies
- Recognized by *Forbes* magazine as one of the Best Employers for Diversity for the fifth consecutive year in an independent survey of 60,000 U.S. employees, as well as one of the 2023 Best Employers for New Grads
- Expanded BMORE™, our inclusive hiring and employment program focused on improving access to careers, skills and advancement in the financial industry for under-represented groups

2024 Areas of Focus

- Continue to attract and develop a diverse workforce while promoting an inclusive workplace
- Maintain a world-class, winning culture and continue to drive strong employee engagement

U.S. P&C (1)

(Canadian $ in millions, except as noted) As at or for the year ended October 31	2023	2022
Net interest income (teb) (2)	**7,853**	5,037
Non-interest revenue	**1,573**	1,265
Total revenue (teb) (2)	**9,426**	6,302
Provision for credit losses on impaired loans	**380**	107
Provision for (recovery of) credit losses on performing loans	**130**	(90)
Total provision for credit losses	**510**	17
Non-interest expense	**5,502**	3,043
Income before income taxes	**3,414**	3,242
Provision for income taxes (teb) (2)	**690**	745
Reported net income	**2,724**	2,497
Amortization of acquisition-related intangible assets (3)	**234**	5
Adjusted net income	**2,958**	2,502
Adjusted non-interest expense	**5,187**	3,037
Net income available to common shareholders	**2,672**	2,461
Adjusted net income available to common shareholders	**2,906**	2,466
Average earning assets	**202,155**	138,094
Average gross loans and acceptances	**196,459**	132,240
Average net loans and acceptances	**194,746**	131,394
Average deposits	**198,717**	145,633
(US$ equivalent in millions)		
Net interest income (teb) (2)	**5,818**	3,893
Non-interest revenue	**1,165**	981
Total revenue (teb) (2)	**6,983**	4,874
Provision for credit losses on impaired loans	**282**	82
Provision for (recovery of) credit losses on performing loans	**97**	(71)
Total provision for credit losses	**379**	11
Non-interest expense	**4,076**	2,353
Income before income taxes	**2,528**	2,510
Provision for income taxes (teb) (2)	**510**	577
Reported net income	**2,018**	1,933
Amortization of acquisition-related intangible assets (3)	**173**	4
Adjusted net income	**2,191**	1,937
Adjusted non-interest expense	**3,843**	2,348
Net income available to common shareholders	**1,979**	1,905
Adjusted net income available to common shareholders	**2,157**	1,909
Key Performance Metrics (US$ basis)		
Personal and Business Banking revenue	**2,620**	1,420
Commercial Banking revenue	**4,363**	3,454
Return on equity (%) (4)	**9.6**	17.8
Adjusted return on equity (%) (4)	**10.4**	17.8
Operating leverage (teb) (%)	**(29.9)**	6.0
Adjusted operating leverage (teb) (%)	**(20.3)**	5.0
Efficiency ratio (teb) (%)	**58.4**	48.3
Adjusted efficiency ratio (teb) (%)	**55.0**	48.2
Net interest margin on average earning assets (teb) (%)	**3.88**	3.64
PCL on impaired loans to average net loans and acceptances (%)	**0.20**	0.08
Average earning assets	**149,767**	106,829
Average gross loans and acceptances	**145,543**	102,290
Average net loans and acceptances	**144,274**	101,636
Average deposits	**147,220**	112,780
Full-time equivalent employees	**12,235**	6,822

(1) Adjusted results and ratios are on a non-GAAP basis and are discussed in the Non-GAAP and Other Financial Measures section.

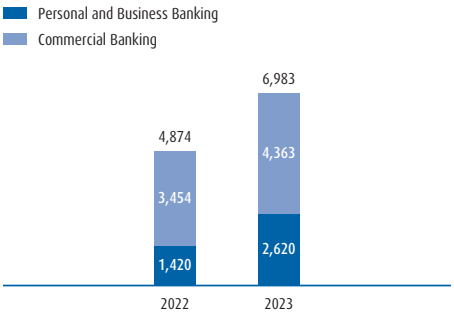
(2) Taxable equivalent basis (teb) amounts of $33 million in fiscal 2023 and $25 million in fiscal 2022 were recorded in net interest income, revenue and provision for income taxes, and were reflected in the ratios. On a source currency basis, teb amounts were US$25 million in fiscal 2023 and US$20 million in fiscal 2022.

(3) Amortization of acquisition-related intangible assets pre-tax amounts of $315 million in fiscal 2023 and $6 million in fiscal 2022 were recorded in non-interest expense. On a source currency basis, pre-tax amounts were US$233 million in fiscal 2023 and US$5 million in fiscal 2022.

(4) Return on equity is based on allocated capital. Effective fiscal 2023, the capital allocation rate increased to 11.0% of risk-weighted assets, compared with 10.5% in fiscal 2022. For further information, refer to the Non-GAAP and Other Financial Measures section.

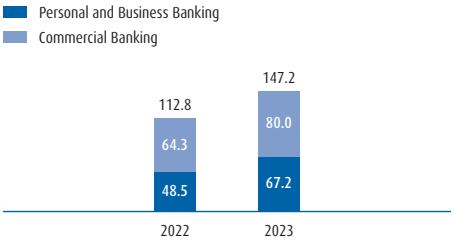
Revenue by Line of Business (teb) (2)

(US$ millions)



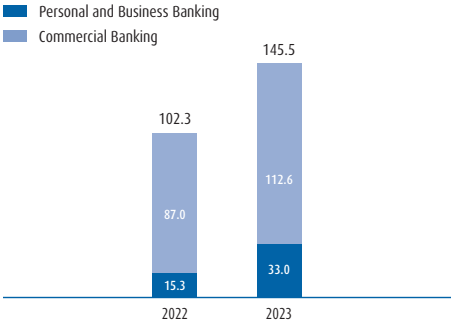
Average Deposits

(US$ billions)



Average Gross Loans and Acceptances

(US$ billions)



Financial Review

U.S. P&C reported net income was $2,724 million, an increase of $227 million or 9% from the prior year. The impact of the stronger U.S. dollar increased growth in net income by 5%, revenue by 6% and expenses by 8%. All amounts in the remainder of this section are presented on a U.S. dollar basis.

Reported net income was $2,018 million, an increase of $85 million or 4% from the prior year, primarily driven by the Bank of the West acquisition and underlying revenue growth due to higher net interest income, partially offset by higher provisions for credit losses and higher expenses, compared with the prior year.

Total revenue was $6,983 million, an increase of $2,109 million or 43% from the prior year. Net interest income increased $1,925 million or 49%, due to the inclusion of Bank of the West, and higher net interest margins and loan balances, partially offset by lower deposit balances. Non-interest revenue increased $184 million or 19%, due to the inclusion of Bank of the West, partially offset by lower operating lease revenue and deposit and lending fee revenue. Net interest margin of 3.88% increased 24 basis points from the prior year, primarily due to higher deposit margins reflecting the impact of the higher interest rate environment and the inclusion of Bank of the West, partially offset by lower loan margins.

Personal and Business Banking revenue increased $1,200 million or 85% and Commercial Banking revenue increased $909 million or 26%, both due to the inclusion of Bank of the West and higher underlying net interest income, partially offset by lower underlying non-interest revenue.

Total provision for credit losses was $379 million, compared with a provision of $11 million in the prior year. The provision for credit losses on impaired loans was $282 million, an increase of $200 million from the prior year, reflecting higher Personal and Business Banking and Commercial Banking provisions. There was a $97 million provision for credit losses on performing loans in the current year, compared with a recovery of $71 million in the prior year.

Reported non-interest expense was $4,076 million, an increase of $1,723 million or 73%, primarily reflecting the impact of Bank of the West, as well as higher employee-related and advertising costs.

Average gross loans and acceptances increased $43.3 billion or 42% from the prior year to $145.5 billion, reflecting the impact of Bank of the West and underlying growth in Commercial Banking balances, partially offset by a decrease in Personal and Business Banking balances. Average deposits increased $34.4 billion or 31% to $147.2 billion, reflecting the impact of Bank of the West, partially offset by a decrease in underlying Commercial Banking and Personal and Business Banking deposits.

For further information on non-GAAP amounts, measures and ratios in this 2023 Operating Groups Performance Review section, refer to the Non-GAAP and Other Financial Measures section.

Business Environment and Outlook

U.S. P&C recorded strong results in fiscal 2023, driven by the successful integration of the Bank of the West acquisition. While the U.S. economy grew at a modest rate, inflation remained high and in response, the Federal Reserve raised the federal funds target rate in the current fiscal year to reach 5.33%. In addition, quantitative tightening and the failure of several U.S. regional banks intensified competition for deposits across the financial services sector, including from money market funds, putting pressure on net interest margins. Demand for business lending moderated and residential mortgage balance growth softened in response to higher interest rates, slower economic growth and weaker housing activity. Deposit balances have been declining as customers deployed excess savings and sought higher yields. Credit performance is normalizing from historical lows with credit migration trending higher. Commercial Banking continued to drive growth by adding new clients across its expanded footprint, despite intense competition and shrinking market liquidity. Personal and Business Banking continued to attract new clients through a Digital First strategy aimed at optimizing sales and delivering an enhanced client experience across all channels, enabled by leading digital, data analytics and marketing capabilities.

The U.S. economy is expected to slow in fiscal 2024, reflecting weaker consumer demand in response to higher interest rates, tighter lending conditions and the resumption of student loan repayments. The Federal Reserve is expected to hold policy rates steady before beginning a return to a more neutral position late in fiscal 2024, supporting a modest pickup in growth. Residential mortgage activity is expected to moderate further due to the weaker housing market, and consumer and business credit growth is expected to decelerate amid elevated interest rates, higher unemployment and weaker consumer spending growth. Credit performance is expected to deteriorate modestly in the upcoming year.

The financial services landscape in the United States remains highly competitive and is facing more stringent capital and liquidity constraints. U.S. P&C has demonstrated its ability to perform well through economic cycles, supported by its diversified growth strategy and expanded scale as a leading North American bank, with a presence in 32 states and in 21 of the top 50 U.S. metropolitan areas. We are committed to helping our customers, employees and local communities make real financial progress by harnessing all of BMO's capabilities to drive efficient growth – and by tailoring our products and offerings to client needs.

The U.S. economic environment in calendar 2023 and the outlook for calendar 2024 are discussed in more detail in the Economic Developments and Outlook section.

Caution

This U.S. Personal and Commercial Banking section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

BMO Wealth Management

BMO Wealth Management serves a full range of clients, from individuals and families to business owners and institutions, offering a wide spectrum of wealth, asset management and insurance products and services aimed at helping clients make real financial progress through planning, growing, protecting and transitioning their wealth. Our asset management business is focused on making a positive impact and delivering innovative financial solutions and strategies for our clients.

Lines of Business

BMO Private Wealth provides full-service investing, banking and wealth advisory services to high net worth and ultra-high net worth clients, leveraging individualized financial planning and advice-based solutions such as investment management, business succession planning, trust and estate services and philanthropy.

BMO InvestorLine leads Wealth Management's digital investing services, offering three ways for Canadian clients to invest: a self-directed online trading platform for investors who want to be in control of their investments; adviceDirect® for investors who want to make their own investment decisions with personalized advice and support; and SmartFolio® for investors who want low-fee, professionally managed portfolios aligned with their investment objectives.

BMO Wealth Management U.S. offers financial solutions to mass affluent, high net worth and ultra-high net worth individuals, families and businesses.

BMO Global Asset Management provides investment management services to institutional, retail and high net worth investors, offering a wide range of innovative, client-focused solutions and strategies to help clients meet their investment objectives.

BMO Insurance is a diversified insurance and wealth solutions provider and a leader in pension de-risking solutions. It manufactures individual life, critical illness and annuity products, as well as segregated funds. In addition, group creditor and travel insurance is available to customers in Canada through BMO.

Strategy and Key Priorities

2023 Priorities and Achievements

Key Priority: Scale our leadership position in private wealth advisory services across North America to plan, grow, protect and transition our clients' wealth with confidence

2023 Achievements

- Achieved top-tier loyalty scores across several BMO Wealth Management businesses, with Private Wealth Canada and BMO InvestorLine achieving record results, as measured by Net Promoter Score (1)
- Recognized by *World Finance* magazine as Best Private Bank in Canada for the 13th consecutive year and for the first time, as Best Private Bank in the United States

2024 Areas of Focus

- Accelerate growth across our client base by strengthening product and service offerings, deepening client relationships and growing distribution in core markets, while maintaining top-tier client loyalty scores in North America

Key Priority: Extend our advantage as a solutions provider, expanding asset management and insurance offerings in key growth areas, including environmental, social and governance and climate-focused offerings

2023 Achievements

- Launched new capabilities in exchange-traded funds (ETFs), providing investors with more choice in portfolio construction, as well as solutions for investors seeking exposure to key sectors
- Maintained our leadership position in Canadian ETFs, ranking first in net sales for 12 consecutive years (2)
- Recognized at the 2022 Canada Refinitiv Lipper Fund Awards (3), which honour funds and fund management firms that have excelled in delivering consistently strong risk-adjusted performance relative to their peers. Seven BMO ETFs claimed top honours across seven categories
- Received 18 FundGrade A+ Awards from Fundata Canada Inc., one of the most widely recognized analytics firms in the financial services industry for its objectivity in selecting funds with a record of consistent risk-adjusted performance
- Announced a new strategic partnership with Sagard, a global multi-strategy alternative asset management firm, in line with our commitment to building a market-leading alternatives platform with access to demonstrated investment experience through partnerships with top-tier managers
- Launched ESG Insights, a comprehensive research tool for self-directed clients that can help them build a more sustainable portfolio by evaluating environmental, social and governance risks and opportunities related to their investments

2024 Areas of Focus

- Continue to provide innovative and competitive product solutions across our distribution channels to meet the evolving needs of our clients

(1) Net Promoter Score (NPS): The percentage of customers surveyed who would recommend BMO to a friend or colleague.
(2) National Bank ETF Report as at December 31, 2022.
(3) Announced in fiscal 2023: 2022 Canada Refinitiv Lipper Fund Awards.

Key Priority: Deliver a top-tier digital wealth management offering, building on our differentiated digital advisory capabilities to provide an enhanced client experience, including streamlined processes that deliver efficiencies and value

2023 Achievements

- Maintained a top-two market share for self-managed assets with digital advisory services – a category that represents more than one third of total market assets
- BMO InvestorLine ranked in the top three in the *Globe and Mail* 2023 Digital Broker Ranking for consistently driving digital innovation that focuses on client needs and delivering an exceptional client experience
- Successfully rolled out BMO Smart Portfolio®, a new digital investment solution for BMO U.S. retail customers, providing them with the convenience of online investing and personalized portfolio management
- Launched BMO Active Trader, a web-based platform that enables our clients to execute trading strategies with ease and precision, supported by market insights, advanced technical charts and a customizable workspace

2024 Areas of Focus

- Continue to invest in technology platforms to simplify, streamline and integrate client digital experiences, along with leading advisor-facing tools and practice support

Key Priority: Provide a One Client experience, with improved delivery of services and products to our clients across BMO

2023 Achievements

- Leveraged digital channels and data analytics to deliver investment solutions to Personal Banking customers through BMO InvestorLine
- Significantly expanded product and service offerings through greater collaboration and more efficient integration with Personal and Commercial Banking

2024 Areas of Focus

- Deepen client relationships by working in partnership with colleagues across BMO, supported by data and analytics and a client-centric operating model

Key Priority: Foster a winning culture, focused on alignment, empowerment and recognition, with a commitment to a diverse and inclusive workplace

2023 Achievements

- Maintained strong employee engagement index scores, with improvement across many key metrics
- Well-represented in the inaugural *Globe and Mail* Report on Business list of 100 Top Women Wealth Advisors, which included 19 Nesbitt Burns advisors who manage exceptional businesses and are raising the bar for the industry

2024 Areas of Focus

- Maintain an engaged and diverse workforce to promote innovation and enable strategic outperformance

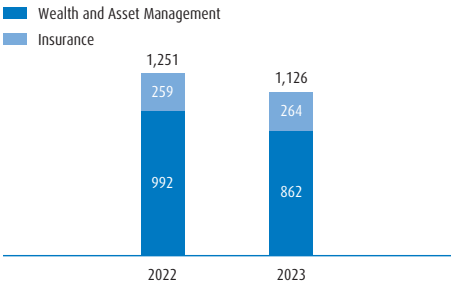
BMO Wealth Management (1)

(Canadian $ in millions, except as noted) As at or for the year ended October 31	2023	2022
Net interest income	**1,416**	1,188
Non-interest revenue	**5,978**	3,336
Total revenue	**7,394**	4,524
Insurance claims, commissions and changes in policy benefit liabilities (CCPB)	**1,939**	(683)
Revenue, net of CCPB	**5,455**	5,207
Provision for credit losses on impaired loans	**5**	2
Provision for (recovery of) credit losses on performing loans	**13**	(4)
Total provision for (recovery of) credit losses	**18**	(2)
Non-interest expense	**3,962**	3,564
Income before income taxes	**1,475**	1,645
Provision for income taxes	**349**	394
Reported net income	**1,126**	1,251
Amortization of acquisition-related intangible assets (2)	**4**	3
Adjusted net income	**1,130**	1,254
Adjusted non-interest expense	**3,955**	3,559
Net income available to common shareholders	**1,118**	1,243
Adjusted net income available to common shareholders	**1,122**	1,246
Key Performance Metrics		
Wealth and Asset Management reported net income	**862**	992
Wealth and Asset Management adjusted net income	**866**	995
Insurance net income	**264**	259
Return on equity (%) (3)	**17.6**	23.5
Adjusted return on equity (%) (3)	**17.7**	23.6
Operating leverage, net of CCPB (%)	**(6.4)**	(0.7)
Adjusted operating leverage, net of CCPB (%)	**(6.3)**	(1.3)
Efficiency ratio (%)	**53.6**	78.8
Adjusted efficiency ratio, net of CCPB (%)	**72.5**	68.4
Average assets	**58,661**	50,488
Average gross loans and acceptances	**40,851**	34,007
Average net loans and acceptances	**40,805**	33,974
Average deposits	**61,739**	55,919
Assets under administration (AUA) (4)	**416,352**	424,191
Assets under management (AUM)	**332,947**	305,462
Full-time equivalent employees	**6,417**	6,124
U.S. Business Select Financial Data (US$ in millions)		
Total revenue	**774**	576
Non-interest expense	**599**	458
Reported net income	**132**	91
Adjusted non-interest expense	**594**	454
Adjusted net income	**136**	94
Average gross loans and acceptances	**9,776**	5,937
Average deposits	**11,975**	7,528

(1) Revenue measures, net of CCPB, and adjusted results and ratios are on a non-GAAP basis and are discussed in the Non-GAAP and Other Financial Measures section.
(2) Amortization of acquisition-related intangible assets pre-tax amounts of $7 million in fiscal 2023 and $5 million in fiscal 2022 were recorded in non-interest expense.
(3) Return on equity is based on allocated capital. Effective fiscal 2023, the capital allocation rate increased to 11.0% of risk-weighted assets, compared with 10.5% in fiscal 2022. For further information, refer to the Non-GAAP and Other Financial Measures section.
(4) Certain assets under management that are also administered by BMO are included in assets under administration.

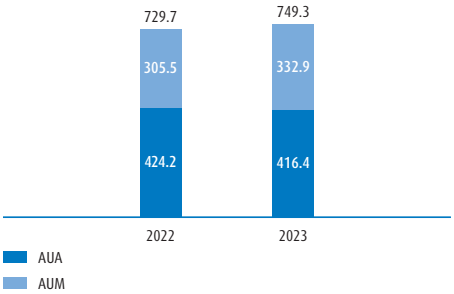
Reported Net Income

($ millions)



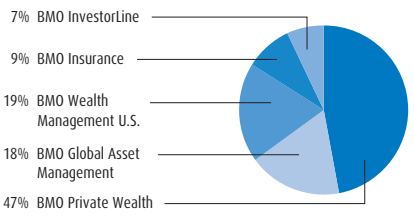
AUA and AUM

($ billions)



2023 Net Revenue by Line of Business

(%)



Financial Review

BMO Wealth Management reported net income was $1,126 million, compared with $1,251 million in the prior year. Wealth and Asset Management reported net income was $862 million, a decrease of $130 million or 13%, and Insurance net income was $264 million, an increase of $5 million or 2%.

We present revenue on a basis that is net of insurance claims, commissions and changes in policy benefit liabilities (CCPB), and we calculate our efficiency ratio and operating leverage on a similar basis.

Total revenue was $7,394 million, an increase of $2,870 million. Revenue, net of CCPB, was $5,455 million, an increase of $248 million or 5%. Wealth and Asset Management revenue was $4,971 million, an increase of $219 million or 5%, as the inclusion of Bank of the West, higher net new client assets and the impact of the stronger U.S. dollar were partially offset by the impact of weaker global markets, lower net interest income, primarily from lower deposit balances and the impact of lower revenue from online brokerage transactions. Insurance revenue, net of CCPB, was $484 million, an increase of $29 million or 6% from the prior year, primarily due to underlying business growth, partially offset by the impact of actuarial assumption changes in the current year.

Non-interest expense was $3,962 million, an increase of $398 million or 11% from the prior year, primarily reflecting the impact of Bank of the West, higher employee-related and technology costs, and the impact of the stronger U.S. dollar.

Assets under management increased $27.5 billion or 9% from the prior year to $332.9 billion, driven by higher net client assets, the impact of Bank of the West, stronger global markets and favourable foreign exchange movements. Assets under administration decreased $7.8 billion or 2% to $416.4 billion. Average gross loans increased 18% and average deposits increased 9%, primarily due to the inclusion of Bank of the West.

For further information on non-GAAP amounts, measures and ratios in this 2023 Operating Groups Performance Review section, refer to the Non-GAAP and Other Financial Measures section.

Business Environment and Outlook

In fiscal 2023, BMO Wealth Management results were impacted by challenging market conditions. We continued to support our clients with expert advice to help them navigate the impacts of market volatility, rising interest rates and macroeconomic uncertainty. As a result of higher interest rates, client preferences shifted toward fixed income products, and weaker global markets resulted in lower levels of assets under administration and assets under management, as well as a reduction in digital trading volumes. We continue to provide our clients with enhanced digital advisory capabilities and innovative solutions to meet their financial needs, leveraging BMO's comprehensive investment and banking products and services, leading to growth in net new assets, and positioning them to re-enter the market when markets stabilize. In addition, we completed the integration of Bank of the West, which is expected to provide new growth opportunities in our expanded markets.

The outlook for equity markets and the economy is shifting rapidly and continues to be impacted by elevated (though moderating) inflation, high interest rates and growing geopolitical tensions. Continued market volatility and near-term recessionary risks may impact our overall business performance, as we continue to focus on prudently managing expenses while strategically investing for growth.

The wealth management industry remains attractive, with good growth potential over the long term. Our expanded North American sales force, strong client loyalty and integrated business model position us well to meet our clients' evolving needs.

We continue to invest in technology to enhance the client experience and improve the productivity of our sales force. BMO InvestorLine continues to attract new clients through digital platform enhancements, while BMO Global Asset Management is building new capabilities to accelerate growth and diversify our product offerings for both retail and institutional clients.

The Canadian and U.S. economic environment in calendar 2023 and the outlook for calendar 2024 are discussed in more detail in the Economic Developments and Outlook section.

Caution

This BMO Wealth Management section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

BMO Capital Markets

BMO Capital Markets offers a comprehensive range of products and services to corporate, institutional and government clients. BMO Capital Markets has approximately 2,700 professionals in 33 locations around the world, supporting the growth aspirations of our clients across the enterprise.

Lines of Business

Investment and Corporate Banking offers debt and equity capital-raising services to clients, as well as loan origination and syndication, balance sheet management solutions and treasury management services. The division also provides clients with strategic advice on mergers and acquisitions, restructurings and recapitalizations, trade finance and risk mitigation services to support international business activities, along with a wide range of banking and other operating services tailored to North American and international financial institutions.

Global Markets offers research and access to financial markets for institutional, corporate and retail clients through an integrated suite of sales and trading solutions related to debt, foreign exchange, interest rates, credit, equities, securitization and commodities. New product development and origination services are also offered, as well as risk management and advisory services for hedging strategies, including in interest rates, foreign exchange rates and commodities prices. In addition, Global Markets provides funding and liquidity management services to clients.

Strategy and Key Priorities

2023 Priorities and Achievements

Key Priority: Drive client-focused growth and activate and scale a One Client approach, with improved connectivity and integrated offerings

2023 Achievements

- Maintained a leading position in global and North American mergers and acquisitions (M&A), advising on landmark transactions, including the largest investment to date by an automaker to produce battery raw materials, the largest industrial real estate investment trust (REIT) transaction in Canadian history and the third-largest public net lease REIT
- Partnered with Commercial Banking to deliver holistic, integrated coverage that resulted in successful convertible note offerings and middle-market M&A deals. This unified approach also delivered success with transitioning Bank of the West clients to the BMO platform, such as Wayfair and Granite Construction
- Maintained global leadership in metals and mining, and recognized as the world's best Metals & Mining Investment Bank by *Global Finance* magazine for the 14th consecutive year
- Delivered top-tier product performance across Global Markets – awarded Best Issuer Sales in Canadian retail structured notes, ranked first in Canadian equity block volumes and recognized as a top-five dealer in sovereign, supranational and agency (SSA) USD global issuances, U.S. treasuries, U.S. agency collateralized mortgage obligations (CMOs) and U.S. commercial mortgage-backed securities (CMBS) issuances

2024 Areas of Focus

- Accelerate a One Client approach, with improved connectivity and integrated offerings
- Build deep client relationships, deliver value-added solutions to meet their needs, and win through expertise, knowledge and insight

Key Priority: Be an industry leader in sustainable finance and our clients' lead partner in the transition to a net zero world

2023 Achievements

- Played a leadership role in sustainable finance and energy transition solutions – we ranked first in the sustainability-linked loan market, launched one of the first sustainability-linked deposit offerings in North America and acted as co-lead manager on the government of Canada's Ukraine sovereignty bond, which was recognized as Social Bond of the Year by *Environmental Finance*
- Advanced our Climate Ambition, adding carbon market expertise and capabilities with the integration of BMO Radicle
- Signed a memorandum of understanding with Banco do Brasil to provide sustainability-linked trade loans to Brazilian exporters, a first of its kind program that will accelerate lending to companies focused on sustainable and regenerative agriculture
- Sponsored and contributed thought leadership to industry-leading climate events such as the Bloomberg Sustainable Business Summit and New Energy Finance Forum, as well as our new Transition Think Summit

2024 Areas of Focus

- Maintain our leading position in sustainable finance and build on our strong foundation in climate leadership by adding capabilities to serve rapidly evolving markets

Key Priority: Deploy Digital First capabilities and solutions for speed, scale and simplification

2023 Achievements

- Scaled our digital capabilities to deliver new service models and enhance our offerings, including end-to-end digital platform capabilities to onboard new clients, provide advanced analytics and execute electronic trading
- Launched an agile testing and innovation environment for emerging technologies, including artificial intelligence and machine learning
- Implemented technology and workflow enhancements, as well as process automation to improve employee productivity
- Recognized with Breaking the Status Quo and Leading the Pack awards from Fintech Open Source Foundation for our progress on open source readiness

2024 Areas of Focus

- Leverage Digital First capabilities and data to improve operational efficiency and deliver innovative solutions
- Deliver client-centric, digitally-enabled service models with leading digital client portals and platforms

Key Priority: Foster a winning culture, focused on alignment, empowerment and recognition, with a commitment to a diverse and inclusive workplace

2023 Achievements

- Maintained strong employee engagement index scores, with ongoing improvement in all priority areas of our winning culture, including enablement and empowerment
- Continued to make progress on our Zero Barriers to Inclusion strategy, supporting communities through our hallmark programs, including *Equity Through Education* and *Trees from Trades*
- Advanced our diversity, equity and inclusion strategy and improved the representation of diversity in our talented and engaged workforce

2024 Areas of Focus

- Foster a winning culture focused on alignment, empowerment and recognition, while advancing progress on our Zero Barriers to Inclusion strategy

BMO Capital Markets (1)

(Canadian $ in millions, except as noted) As at or for the year ended October 31	2023	2022
Net interest income (teb) (2)	**2,553**	3,197
Non-interest revenue	**3,897**	2,975
Total revenue (teb) (2)	**6,450**	6,172
Provision for (recovery of) credit losses on impaired loans	**9**	(32)
Provision for (recovery of) credit losses on performing loans	**9**	(11)
Total provision for (recovery of) credit losses	**18**	(43)
Non-interest expense	**4,279**	3,855
Income before income taxes	**2,153**	2,360
Provision for income taxes (teb) (2)	**471**	588
Reported net income	**1,682**	1,772
Acquisition and integration costs (3)	**4**	8
Amortization of acquisition-related intangible assets (4)	**20**	14
Adjusted net income	**1,706**	1,794
Adjusted non-interest expense	**4,247**	3,826
Net income available to common shareholders	**1,648**	1,732
Adjusted net income available to common shareholders	**1,672**	1,754
Key Performance Metrics		
Global Markets revenue	**3,856**	3,763
Investment and Corporate Banking revenue	**2,594**	2,409
Return on equity (%) (5)	**13.9**	15.0
Adjusted return on equity (%) (5)	**14.1**	15.2
Operating leverage (teb) (%)	**(6.5)**	(10.6)
Adjusted operating leverage (teb) (%)	**(6.5)**	(10.8)
Efficiency ratio (teb) (%)	**66.3**	62.5
Adjusted efficiency ratio (teb) (%)	**65.8**	62.0
PCL on impaired loans to average net loans and acceptances (%)	**0.01**	(0.05)
Average assets	**416,261**	390,306
Average gross loans and acceptances	**77,058**	63,254
Average net loans and acceptances	**76,751**	62,986
Full-time equivalent employees	**2,717**	2,815
U.S. Business Select Financial Data (US$ in millions)		
Total revenue (teb) (2)	**2,052**	2,010
Non-interest expense	**1,617**	1,471
Reported net income	**311**	415
Adjusted non-interest expense	**1,604**	1,450
Adjusted net income	**320**	431
Average assets	**138,475**	135,030
Average gross loans and acceptances	**29,003**	25,118

(1) Adjusted results and ratios are on a non-GAAP basis and are discussed in the Non-GAAP and Other Financial Measures section.

(2) Taxable equivalent basis (teb) amounts of $321 million in fiscal 2023 and $245 million in fiscal 2022 were recorded in net interest income, revenue and provision for income taxes, and were reflected in the ratios. For our U.S. businesses, teb amounts were US$nil in fiscal 2023 and US$11 million in fiscal 2022.

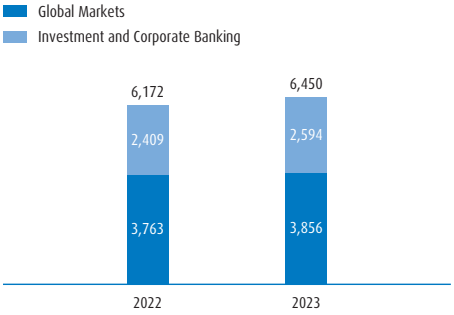
(3) Pre-tax acquisition and integration costs related to Clearpool and Radicle of $5 million in fiscal 2023 were recorded in non-interest expense. Pre-tax acquisition and integration costs related to KGS-Alpha and Clearpool of $10 million in fiscal 2022 were recorded in non-interest expense.

(4) Amortization of acquisition-related intangible assets pre-tax amounts of $27 million in fiscal 2023 and $19 million in fiscal 2022 were recorded in non-interest expense.

(5) Return on equity is based on allocated capital. Effective fiscal 2023, the capital allocation rate increased to 11.0% of risk-weighted assets, compared with 10.5% in fiscal 2022. For further information, refer to the Non-GAAP and Other Financial Measures section.

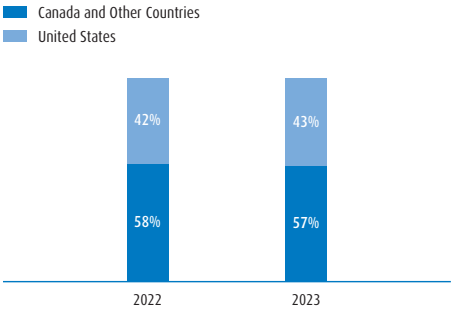
Revenue by Line of Business (teb) (2)

($ millions)



Revenue by Geography

(%)



Financial Review

BMO Capital Markets reported net income was $1,682 million, a decrease of $90 million or 5% from the prior year. Results were driven by higher revenue, more than offset by higher expenses and a higher provision for credit losses, compared with a recovery in the prior year.

Revenue was $6,450 million, an increase of $278 million or 5% from the prior year. Global Markets revenue increased $93 million or 2%, as lower trading revenue and equity and debt issuances were more than offset by higher revenue related to securitization activity and the impact of the stronger U.S. dollar. Investment and Corporate Banking revenue increased $185 million or 8%, primarily due to higher corporate banking-related revenue, the prior-year mark-down on loan underwriting commitments and the impact of the stronger U.S. dollar, partially offset by a decrease in underwriting and advisory revenue reflecting lower levels of client activity.

Total provision for credit losses was $18 million, compared with a recovery of $43 million in the prior year. The provision for credit losses on impaired loans was $9 million, compared with a recovery of $32 million in the prior year. There was a $9 million provision for credit losses on performing loans in the current year, compared with a recovery of $11 million in the prior year.

Non-interest expense was $4,279 million, an increase of $424 million or 11% from the prior year. The increase was driven by higher legal provisions and higher technology, employee-related and travel and business development costs, and the impact of the stronger U.S. dollar.

Average gross loans and acceptances increased $13.8 billion or 22% from the prior year to $77.1 billion, reflecting higher levels of lending activity across loan portfolios and the impact of the stronger U.S. dollar.

For further information on non-GAAP amounts, measures and ratios in this 2023 Operating Groups Performance Review section, refer to the Non-GAAP and Other Financial Measures section.

Business Environment and Outlook

BMO Capital Markets' performance in the current year reflected the strength of our diversified business in a volatile environment. Market conditions in fiscal 2023 reflected economic uncertainty, geopolitical tensions and a heightened risk of a recession, which lowered business confidence. While client trading activity has remained stable, client appetite for new M&A and issuance activity has been below historical levels. A number of disruptive forces, including rising interest rates, tightened money supply, a more assertive regulatory environment and a focus on climate change, are reshaping the banking and capital markets industry. BMO Capital Markets has responded by optimizing resources against the current environment to accelerate growth opportunities across its businesses and leveraging its digital-first capabilities and data to improve efficiency.

Looking forward, we expect a more constructive environment in the capital markets in fiscal 2024, reflecting more moderate inflation and an end to the current cycle of rising rates, although geopolitical risks may lead to further market disruption. Our robust and diversified platform positions us well to benefit from the normalization of market conditions and client activity across industry sectors.

Our strategy remains unchanged, with a client-centric approach to be a valued financial partner through the deployment of capital and our integrated offerings of digital-first solutions to help clients achieve their goals. We leverage our strong talent, sector expertise and thought leadership to support our clients in changing market environments. Our commitment to sustainability is integral to our strategy, with sustainable finance product offerings and advice to support clients in their transition to a net zero world. In addition, our disciplined and integrated approach to risk management, along with continued investments in technology infrastructure, should position the business well to adapt to evolving regulatory and compliance requirements. With a prominent presence in Canada and strong momentum in the United States, we are building a solid foundation for profitable growth and sustainable returns.

The Canadian and U.S. economic environment in calendar 2023 and the outlook for calendar 2024 are discussed in more detail in the Economic Developments and Outlook section.

Caution

This BMO Capital Markets section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

Corporate Services, including Technology and Operations

Corporate Services consists of Corporate Units and Technology and Operations (T&O). Corporate Units provide enterprise-wide expertise, governance and support in a variety of areas, including strategic planning, risk management, treasury, finance, legal and regulatory compliance, sustainability, human resources, communications, marketing, real estate and procurement. T&O develops, monitors, manages and maintains governance of information technology, including data and analytics, and provides cyber security and operations services.

Corporate Services focuses on enterprise-wide priorities related to maintaining a sound internal control and risk management environment and regulatory compliance, including the management, assessment and monitoring of BMO's investment portfolios and funding, liquidity and capital activities, as well as any exposures to credit, foreign exchange and interest rate risks. In support of the operating segments, Corporate Services develops and implements enterprise-wide processes, systems and controls to maintain operating efficiency and enable our businesses to adapt and meet their customer experience objectives.

The costs of Corporate Units and T&O services are largely allocated to the four operating segments (Canadian P&C, U.S. P&C, BMO Wealth Management and BMO Capital Markets), with any remaining amounts retained in Corporate Services results. As such, Corporate Services results largely reflect the impact of residual unallocated expenses, residual treasury-related activities and the elimination of taxable equivalent adjustments. We review revenue and expense allocation methodologies on an annual basis.

Corporate Services, including Technology and Operations (1)

(Canadian $ in millions, except as noted) As at or for the year ended October 31	2023	2022
Net interest income before group teb offset	**(1,095)**	(716)
Group teb offset	**(354)**	(270)
Net interest income (teb)	**(1,449)**	(986)
Non-interest revenue	**(1,449)**	7,830
Total revenue (teb)	**(2,898)**	6,844
Provision for (recovery of) credit losses on impaired loans	**2**	(7)
Provision for (recovery of) credit losses on performing loans	**700**	7
Total provision for (recovery of) credit losses	**702**	–
Non-interest expense	**2,706**	1,383
Income (loss) before income taxes	**(6,306)**	5,461
Provision for (recovery of) income taxes (teb)	**(1,433)**	1,270
Reported net income (loss)	**(4,873)**	4,191
Initial provision for credit losses on purchased performing loans (2)	**517**	–
Acquisition and integration costs (3)	**1,520**	237
Impact of divestitures (4)	**–**	55
Management of fair value changes on the purchase of Bank of the West (5)	**1,461**	(5,667)
Legal provision (including related interest expense and legal fees) (6)	**21**	846
Impact of Canadian tax measures (7)	**502**	–
Adjusted net loss	**(852)**	(338)
Adjusted total revenue (teb)	**(719)**	(333)
Adjusted total recovery of credit losses	**(3)**	–
Adjusted non-interest expense	**660**	424
Net income (loss) available to common shareholders	**(5,081)**	4,087
Adjusted net loss available to common shareholders	**(1,060)**	(442)
Full-time equivalent employees	**18,181**	15,490
U.S. Business Select Financial Data (US$ in millions)		
Total revenue (teb) (8)	**(956)**	5,604
Total provision for (recovery of) credit losses	**518**	(4)
Non-interest expense	**1,688**	686
Provision for (recovery of) income taxes (teb) (8)	**(791)**	1,282
Reported net income (loss)	**(2,371)**	3,640
Adjusted total revenue	**571**	106
Adjusted total provision for (recovery of) credit losses	**1**	(4)
Adjusted non-interest expense	**190**	44
Adjusted net income (loss)	**240**	83

(1) Adjusted results are on a non-GAAP basis and are discussed in the Non-GAAP and Other Financial Measures section.
(2) Fiscal 2023 reported net income included a provision for credit losses of $517 million ($705 million pre-tax) on the purchased Bank of the West performing loan portfolio.
(3) Fiscal 2023 reported net income included acquisition and integration costs related to Bank of the West of $1,520 million ($2,027 million pre-tax), and fiscal 2022 included $237 million ($316 million pre-tax). These amounts were recorded in non-interest expense.
(4) Fiscal 2022 reported net income included the impact of divestitures related to the sale of our EMEA and U.S. Asset Management businesses, comprising a gain of $8 million related to the transfer of certain U.S. asset management clients and a $29 million loss related to foreign currency translation reclassified from accumulated other comprehensive income, both recorded in non-interest revenue, and expenses of $16 million, including taxes of $22 million on the closing of the sale, recorded in non-interest expense.
(5) Fiscal 2023 reported net income included a loss of $1,461 million ($2,011 million pre-tax) related to the acquisition of Bank of the West resulting from the management of the impact of interest rate changes between the announcement and closing of the acquisition on its fair value and goodwill, comprising $1,628 million of mark-to-market losses on certain interest rate swaps recorded in trading revenue and $383 million of losses on a portfolio of primarily U.S. treasuries and other balance sheet instruments recorded in net interest income. Fiscal 2022 included revenue of $5,667 million ($7,713 million pre-tax), comprising $7,665 million of mark-to-market gains and $48 million of non-trading interest income. For further information on this acquisition, refer to the Recent Acquisitions section.
(6) Fiscal 2023 reported net income included the impact of a lawsuit associated with a predecessor bank, M&I Marshall and Ilsley Bank, of $21 million ($27 million pre-tax), comprising interest expense of $30 million and a net non-interest expense recovery of $3 million. Fiscal 2022 included a provision of $846 million ($1,142 million pre-tax), comprising interest expense of $515 million and non-interest expense of $627 million. For further information, refer to the Provisions and Contingent Liabilities section in Note 24 of the audited annual consolidated financial statements.
(7) Fiscal 2023 reported net income included the impact of certain tax measures enacted by the Canadian government. These tax measures included a one-time tax expense of $371 million, comprising a Canada Recovery Dividend (CRD) of $312 million and $59 million related to the pro-rated fiscal 2022 impact of the 1.5% tax rate increase, net of a deferred tax asset remeasurement, and a charge of $131 million ($160 million pre-tax) related to the amended GST/HST definition for financial services, comprising $138 million recorded in non-interest revenue and $22 million recorded in non-interest expense.
(8) Fiscal 2023 reported net income included group teb offset amounts for our U.S. businesses of US$25 million and fiscal 2022 included US$31 million, recorded in revenue and provision for (recovery of) income taxes.

Financial Review

Corporate Services reported net loss was $4,873 million, compared with reported net income of $4,191 million in the prior year.

The reported net loss in the current year reflected a loss related to fair value management actions and the impact of certain Canadian tax measures, including the Canada Recovery Dividend and a charge related to the amended GST/HST definition for financial services, as well as higher acquisition and integration costs related to Bank of the West and an initial provision for credit losses on the purchased Bank of the West performing loan portfolio. Reported net income in the prior year reflected gains related to fair value management actions, partially offset by the impact of the lawsuit associated with M&I Marshall and Ilsley Bank.

Adjusted net loss was $852 million, compared with an adjusted net loss of $338 million in the prior year. Adjusted results were driven by higher expenses, primarily due to the inclusion of Bank of the West and lower revenue. Lower revenue was driven by treasury-related activities, partially offset by the impact of Bank of the West, which included the accretion of purchase accounting fair value marks on loans and deposits and the discount on securities, net of the amortization of the fair value hedge.

For further information on non-GAAP amounts, measures and ratios in this 2023 Operating Groups Performance Review section, refer to the Non-GAAP and Other Financial Measures section.

Summary Quarterly Earnings Trends

Summarized Statement of Income and Quarterly Financial Measures (1)

(Canadian $ in millions, except as noted)	Q4-2023	Q3-2023	Q2-2023	Q1-2023	Q4-2022	Q3-2022	Q2-2022	Q1-2022
Net interest income	**4,941**	**4,905**	**4,814**	**4,021**	3,767	4,197	3,902	4,019
Non-interest revenue	**3,419**	**3,024**	**3,626**	**2,449**	6,803	1,902	5,416	3,704
Revenue (1)	**8,360**	**7,929**	**8,440**	**6,470**	10,570	6,099	9,318	7,723
Insurance claims, commissions and changes in policy benefit liabilities (CCPB)	**151**	**4**	**591**	**1,193**	(369)	413	(808)	81
Revenue, net of CCPB (1)	**8,209**	**7,925**	**7,849**	**5,277**	10,939	5,686	10,126	7,642
Provision for credit losses on impaired loans	**408**	**333**	**243**	**196**	192	104	120	86
Provision for (recovery of) credit losses on performing loans	**38**	**159**	**780**	**21**	34	32	(70)	(185)
Total provision for (recovery of) credit losses	**446**	**492**	**1,023**	**217**	226	136	50	(99)
Non-interest expense	**5,700**	**5,594**	**5,522**	**4,403**	4,776	3,859	3,713	3,846
Income before income taxes	**2,063**	**1,839**	**1,304**	**657**	5,937	1,691	6,363	3,895
Provision for income taxes	**446**	**385**	**245**	**410**	1,454	326	1,607	962
Reported net income (see below)	**1,617**	**1,454**	**1,059**	**247**	4,483	1,365	4,756	2,933
Initial provision for credit losses on purchased performing loans (2)	**–**	**–**	**517**	**–**	–	–	–	–
Acquisition and integration costs (3)	**433**	**370**	**549**	**181**	145	62	28	10
Amortization of acquisition-related intangible assets (4)	**88**	**85**	**85**	**6**	6	5	6	6
Impact of divestitures (5)	**–**	**–**	**–**	**–**	(8)	6	9	48
Management of fair value changes on the purchase of Bank of the West (6)	**–**	**–**	**–**	**1,461**	(3,336)	694	(2,612)	(413)
Legal provision (including related interest expense and legal fees) (7)	**12**	**(3)**	**6**	**6**	846	–	–	–
Impact of Canadian tax measures (8)	**–**	**131**	**–**	**371**	–	–	–	–
Adjusted net income	**2,150**	**2,037**	**2,216**	**2,272**	2,136	2,132	2,187	2,584
Operating Group Reported and Adjusted Net Income								
Canadian P&C reported net income	**962**	**915**	**861**	**980**	917	965	940	1,004
Acquisition and integration costs (3)	**1**	**6**	**2**	**–**	–	–	–	–
Amortization of acquisition-related intangible assets (4)	**3**	**2**	**1**	**–**	–	–	1	–
Canadian P&C adjusted net income	**966**	**923**	**864**	**980**	917	965	941	1,004
U.S. P&C reported net income	**661**	**576**	**789**	**698**	660	568	588	681
Amortization of acquisition-related intangible assets (4)	**79**	**77**	**77**	**1**	2	1	1	1
U.S. P&C adjusted net income	**740**	**653**	**866**	**699**	662	569	589	682
BMO Wealth Management reported net income	**262**	**303**	**284**	**277**	298	324	314	315
Amortization of acquisition-related intangible assets (4)	**1**	**1**	**1**	**1**	–	1	1	1
BMO Wealth Management adjusted net income	**263**	**304**	**285**	**278**	298	325	315	316
BMO Capital Markets reported net income	**489**	**310**	**380**	**503**	357	262	448	705
Acquisition and integration costs (3)	**(2)**	**1**	**2**	**3**	2	1	2	3
Amortization of acquisition-related intangible assets (4)	**5**	**5**	**6**	**4**	4	3	3	4
BMO Capital Markets adjusted net income	**492**	**316**	**388**	**510**	363	266	453	712
Corporate Services reported net income (loss)	**(757)**	**(650)**	**(1,255)**	**(2,211)**	2,251	(754)	2,466	228
Initial provision for credit losses on purchased performing loans (2)	**–**	**–**	**517**	**–**	–	–	–	–
Acquisition and integration costs (3)	**434**	**363**	**545**	**178**	143	61	26	7
Impact of divestitures (5)	**–**	**–**	**–**	**–**	(8)	6	9	48
Management of fair value changes on the purchase of Bank of the West (6)	**–**	**–**	**–**	**1,461**	(3,336)	694	(2,612)	(413)
Legal provision (including related interest expense and legal fees) (7)	**12**	**(3)**	**6**	**6**	846	–	–	–
Impact of Canadian tax measures (8)	**–**	**131**	**–**	**371**	–	–	–	–
Corporate Services adjusted net income (loss)	**(311)**	**(159)**	**(187)**	**(195)**	(104)	7	(111)	(130)
Key Performance Metrics								
Basic earnings per share ($) (9)	**2.07**	**1.97**	**1.31**	**0.30**	6.52	1.96	7.15	4.44
Diluted earnings per share ($) (9)	**2.06**	**1.97**	**1.30**	**0.30**	6.51	1.95	7.13	4.43
Adjusted diluted earnings per share ($)	**2.81**	**2.78**	**2.93**	**3.22**	3.04	3.09	3.23	3.89
Net interest margin on average earning assets (%)	**1.66**	**1.68**	**1.69**	**1.48**	1.46	1.71	1.69	1.64
PCL-to-average net loans and acceptances (annualized) (%)	**0.27**	**0.30**	**0.65**	**0.15**	0.16	0.10	0.04	(0.08)
PCL on impaired loans-to-average net loans and acceptances (annualized) (%)	**0.25**	**0.21**	**0.16**	**0.14**	0.14	0.08	0.10	0.07
Effective tax rate (%)	**21.6**	**20.9**	**18.8**	**62.5**	24.5	19.3	25.2	24.7
Adjusted effective tax rate (%)	**22.7**	**21.8**	**22.5**	**22.3**	21.8	22.0	23.6	23.5
Canadian/U.S. dollar average exchange rate ($)	**1.3648**	**1.3331**	**1.3564**	**1.3426**	1.3516	1.2774	1.2665	1.2710

(1) Adjusted results exclude certain items from reported results and are used to calculate our adjusted measures as presented in the above table. Management assesses performance on a reported basis and an adjusted basis, and considers both to be useful. Revenue, net of CCPB, as well as reported ratios calculated net of CCPB, and adjusted results, measures and ratios in this table are non-GAAP amounts. For further information, refer to the Non-GAAP and Other Financial Measures section; and for details on the composition of non-GAAP amounts, measures and ratios, as well as supplementary financial measures, refer to the Glossary of Financial Terms.

(2) Reported net income included a provision for credit losses of $517 million ($705 million pre-tax) on the acquired Bank of the West performing loan portfolio in Q2-2023, recorded in Corporate Services.

(3) Reported net income included acquisition and integration costs recorded in non-interest expense. Costs related to the acquisition of Bank of the West were recorded in Corporate Services: Q4-2023 included $434 million ($583 million pre-tax), Q3-2023 included $363 million ($487 million pre-tax), Q2-2023 included $545 million ($722 million pre-tax), Q1-2023 included $178 million ($235 million pre-tax), Q4-2022 included $143 million ($191 million pre-tax), Q3-2022 included $61 million ($82 million pre-tax), Q2-2022 included $26 million ($35 million pre-tax) and Q1-2022 included $7 million ($8 million pre-tax). Costs related to Radicle and Clearpool were recorded in BMO Capital Markets: Q3-2023 included $1 million ($2 million pre-tax), Q2-2023 included $2 million ($2 million pre-tax), Q1-2023 included $3 million ($4 million pre-tax), Q4-2022 included $2 million ($2 million pre-tax), Q3-2022 included $1 million ($2 million pre-tax), Q2-2022 included $2 million ($2 million pre-tax) and Q1-2022 included $3 million ($4 million pre-tax). Q4-2023 included a recovery of $2 million ($3 million pre-tax). Costs related to the acquisition of AIR MILES were recorded in Canadian P&C: Q4-2023 included $1 million ($2 million pre-tax), Q3-2023 included $6 million ($8 million pre-tax) and Q2-2023 included $2 million ($3 million pre-tax).

(4) Reported net income included amortization of acquisition-related intangible assets recorded in non-interest expense in the related operating group: Q4-2023 included $88 million ($119 million pre-tax), Q3-2023 and Q2-2023 both included $85 million ($115 million pre-tax), Q1-2023 and Q4-2022 both included $6 million ($8 million pre-tax), Q3-2022 included $5 million ($7 million pre-tax), and Q2-2022 and Q1-2022 both included $6 million ($8 million pre-tax).

(5) Reported net income in fiscal 2022 included the impact of divestitures related to the sale of our EMEA and U.S. Asset Management businesses: Q4-2022 included an $8 million ($6 million pre-tax) recovery of non-interest expense; Q3-2022 included non-interest expense of $6 million ($7 million pre-tax); Q2-2022 included a loss of $9 million ($10 million pre-tax), comprising a gain of $8 million related to the transfer of certain U.S. asset management clients recorded in non-interest revenue and non-interest expense of $18 million; and Q1-2022 included a loss of $48 million ($26 million pre-tax), comprising a $29 million loss related to foreign currency translation reclassified from accumulated other comprehensive income to non-interest revenue, and a $3 million net recovery of non-interest expense, including taxes of $22 million on closing of the sale of our EMEA Asset Management businesses. These amounts were recorded in Corporate Services.

(6) Reported net income included revenue (losses) related to the acquisition of Bank of the West resulting from the management of the impact of interest rate changes between the announcement and closing of the acquisition on its fair value and goodwill: Q1-2023 included a loss of $1,461 million ($2,011 million pre-tax), comprising $1,628 million of mark-to-market losses on certain interest rate swaps recorded in non-interest trading revenue and $383 million of losses on a portfolio of primarily U.S. treasuries and other balance sheet instruments recorded in net interest income; Q4-2022 included revenue of $3,336 million ($4,541 million pre-tax), comprising $4,698 million of mark-to-market gains and $157 million of net interest losses; Q3-2022 included a loss of $694 million ($945 million pre-tax), comprising $983 million of mark-to-market losses and $38 million of net interest income; Q2-2022 included revenue of $2,612 million ($3,555 million pre-tax), comprising $3,433 million of mark-to-market gains and $122 million of net interest income; and Q1-2022 included revenue of $413 million ($562 million pre-tax), comprising $517 million of mark-to-market gains and $45 million of net interest income. These amounts were recorded in Corporate Services. For further information on this acquisition, refer to the Recent Acquisitions section.

(7) Reported net income included the impact of a lawsuit associated with a predecessor bank, M&I Marshall and Ilsley Bank: Q4-2023 included $12 million ($16 million pre-tax), comprising interest expense of $14 million and non-interest expense of $2 million; Q3-2023 included a net recovery of $3 million ($4 million pre-tax), comprising interest expense of $3 million and a non-interest expense recovery of $7 million; Q2-2023 included interest expense of $6 million ($7 million pre-tax); Q1-2023 included $6 million ($8 million pre-tax), comprising interest expense of $6 million and non-interest expense of $2 million; and Q4-2022 included a legal provision of $846 million ($1,142 million pre-tax), comprising interest expense of $515 million and non-interest expense of $627 million. These amounts were recorded in Corporate Services. For further information, refer to the Provisions and Contingent Liabilities section in Note 24 of the audited annual consolidated financial statements.

(8) Reported net income included the impact of certain tax measures enacted by the Canadian government: Q3-2023 included a charge of $131 million ($160 million pre-tax) related to the amended GST/HST definition for financial services, comprising $138 million recorded in non-interest revenue and $22 million recorded in non-interest expense; and Q1-2023 included a one-time tax expense of $371 million, comprising a Canada Recovery Dividend (CRD) of $312 million and $59 million related to the pro-rated fiscal 2022 impact of the 1.5% tax rate increase, net of a deferred tax asset remeasurement. These amounts were recorded in Corporate Services.

(9) Net income and earnings from our business operations are attributable to shareholders by way of EPS and diluted EPS. Adjusted EPS and adjusted diluted EPS are non-GAAP measures. For further information, refer to the Non-GAAP and Other Financial Measures section.

Earnings in certain quarters are impacted by modest seasonal factors, such as higher employee expenses related to higher employee benefits and stock-based compensation for employees eligible to retire that are recorded in the first quarter of each year, as well as the impact of fewer days in the second quarter relative to other quarters. Quarterly earnings are also impacted by foreign currency translation. The table above outlines summary results for the first quarter of 2022 through the fourth quarter of 2023.

On February 1, 2023, we completed the acquisition of Bank of the West, which contributed to the increase in revenue, expenses and provision for credit losses beginning in the second quarter of 2023, with operating results primarily allocated to our U.S. P&C and BMO Wealth Management businesses. In addition, we completed the acquisition of AIR MILES Reward Program (AIR MILES) on June 1, 2023, which contributed to the increase in revenue and expenses in our Canadian P&C business beginning in the third quarter of 2023.

Financial performance has demonstrated good operating momentum and benefitted from the strength and diversification of our businesses. Results were impacted by a higher interest rate environment resulting in an increase in net interest income, while uncertain economic conditions resulted in lower levels of client activity in our market-sensitive businesses, as well as higher provisions for credit losses from historically low levels.

A number of items impacted reported results in certain quarters. The third quarter and first quarter of 2023 included the impact of certain tax measures enacted by the Canadian government, reducing revenue and increasing expenses and provision for income taxes. The second quarter of 2023 included an initial provision for credit losses on the purchased Bank of the West performing loan portfolio. The first quarter of 2023 and fiscal 2022 included revenue (losses) resulting from fair value management actions related to the impact of interest rate changes between the announcement and closing of the Bank of the West acquisition on its fair value and goodwill. The fourth quarter of 2022 included a legal provision related to a lawsuit associated with a predecessor bank, M&I Marshall and Ilsley Bank. Results in 2022 included the impact of divestitures related to the sale of our EMEA and U.S. Asset Management businesses. All periods included acquisition and integration costs, as well as the amortization of acquisition-related intangible assets, which increased in recent quarters due to the acquisition of Bank of the West.

Revenue in our P&C businesses benefitted from customer acquisition, higher loan and deposit volumes and margin expansion, reflective of higher rate environments in both Canada and the United States, as well as the inclusion of Bank of the West revenue. Revenue in BMO Wealth Management benefitted from steady growth in client assets and higher net interest income, while the impact of weaker global markets in fiscal 2023 negatively impacted non-interest revenue, relative to fiscal 2022. Insurance revenue, net of CCPB, is subject to variability, resulting from changes in interest rates and equity markets. BMO Capital Markets' performance in recent quarters reflects modest improvements in market conditions, particularly in M&A and underwriting activities.

Early in 2022, as the economy recovered from the economic downturn brought on by the pandemic, we recovered provisions on performing loans, reflecting favourable credit conditions and positive credit migration. Later in 2022, we saw signs of normalization in credit conditions with gradually increasing provisions on impaired loans and modest provisions on performing loans reflecting balance growth and deterioration in the economic outlook. In 2023, the macroeconomic outlook improved, but this was more than offset by downward credit migration, resulting in higher provisions for performing loans and an increase in losses on impaired loans during the year.

Non-interest expense growth has reflected investments to drive revenue growth and efficiency improvement, as well as the impact of inflation, resulting in higher employee-related costs, including sales force expansion, higher salaries and performance-based compensation, as well as higher technology and advertising costs. The third quarter of fiscal 2023 included severance costs to accelerate efficiency initiatives across the enterprise, as well as the impact of legal provisions recorded in BMO Capital Markets.

The effective tax rate has varied with legislative changes; changes in tax policy, including their interpretation by tax authorities and the courts; earnings mix, including the relative proportion of earnings attributable to the different jurisdictions in which we operate, the level of pre-tax income, and the level of investments or securities which generate tax credits, or tax-exempt income from securities. The reported effective tax rate was impacted by certain tax measures enacted by the Canadian government as noted above, fair value management actions relating to the acquisition of Bank of the West in the first quarter of 2023 and in fiscal 2022, and the sale of our EMEA and U.S. Asset Management businesses in 2022.

For further information on non-GAAP amounts, measures and ratios in this Summary Quarterly Earnings Trends section, refer to the Non-GAAP and Other Financial Measures section.

Review of Fourth Quarter 2023 Performance

Q4 2023 vs. Q4 2022

Net Income

Reported net income was $1,617 million, a decrease of $2,866 million or 64% from the prior year, and adjusted net income was $2,150 million, an increase of $14 million or 1% from the prior year. Adjusted results in both the current quarter and the prior year excluded acquisition and integration costs, amortization of acquisition-related intangible assets and the impact of a lawsuit associated with a predecessor bank, M&I Marshall and Ilsley Bank. Adjusted results in the prior year also excluded the impact of fair value management actions related to the acquisition of Bank of the West. Reported EPS was $2.06, a decrease of $4.45 from the prior year, and adjusted EPS was $2.81, a decrease of $0.23, including the impact of common share issuances in the first quarter of 2023.

The decrease in reported results reflected the impact of fair value management actions in the prior year and higher acquisition-related costs in the current quarter, partially offset by lower legal provisions related to the lawsuit noted above. Adjusted net income increased due to the inclusion of Bank of the West, as well as higher underlying revenue, largely offset by higher expenses and a higher provision for credit losses.

Revenue

Reported revenue was $8,360 million, a decrease of $2,210 million or 21% from the prior year. Revenue, net of insurance claims, commissions and changes in policy benefit liabilities (CCPB), was $8,209 million, a decrease of $2,730 million or 25% from the prior year, and adjusted revenue, net of CCPB, was $8,223 million, an increase of $1,310 million or 19%. The decrease in reported results primarily reflected the impact of fair value management actions in the prior year, partially offset by lower interest expense related to the lawsuit associated with M&I Marshall and Ilsley Bank. On an adjusted basis, revenue, net of CCPB, increased across all operating groups, including the addition of Bank of the West and AIR MILES, reflecting higher net interest income and non-interest revenue. Revenue in Corporate Services decreased on a reported and an adjusted basis.

Insurance Claims, Commissions and Changes in Policy Benefit Liabilities

Insurance claims, commissions and changes in policy benefit liabilities (CCPB) were $151 million, an increase of $520 million from the prior year, largely driven by higher annuity premiums. These changes were largely offset in insurance revenue.

Provision for Credit Losses

Total provision for credit losses was $446 million, compared with $226 million in the prior year. The total provision for credit losses as a percentage of average net loans and acceptances ratio was 27 basis points, compared with 16 basis points in the prior year. The provision for credit losses on impaired loans was $408 million, an increase of $216 million from the prior year. The provision for credit losses on impaired loans as a percentage of average net loans and acceptances ratio was 25 basis points, compared with 14 basis points in the prior year. The provision for credit losses on performing loans was $38 million, compared with a $34 million provision in the prior year.

Non-Interest Expense

Reported non-interest expense was $5,700 million, an increase of $924 million or 19% from the prior year, and adjusted non-interest expense was $4,997 million, an increase of $1,043 million or 26%. Reported results reflected higher acquisition and integration costs and amortization of acquisition-related intangible assets compared with the prior year, partially offset by lower expenses related to the lawsuit associated with M&I Marshall and Ilsley Bank. Reported and adjusted non-interest expense increased due to the impact of Bank of the West and AIR MILES, as well as higher employee-related costs, higher premises costs, including a charge related to the consolidation of BMO real estate in the current quarter, and higher advertising costs.

Provision for Income Taxes

The reported provision for income taxes was $446 million, a decrease of $1,008 million from the fourth quarter of 2022, and the adjusted provision for income taxes was $630 million, an increase of $33 million. The effective tax rate for the current quarter was 21.6%, compared with 24.5% in the fourth quarter of 2022, and the adjusted effective tax rate was 22.7% in the current quarter, compared with 21.8%. The change in the reported effective tax rate in the current quarter relative to the fourth quarter of 2022 was primarily due to the impact of higher pre-tax earnings in the prior year, and the change in the adjusted effective tax rate was primarily due to earnings mix.

Q4 2023 vs. Q3 2023

Reported net income increased $163 million or 11% from the prior quarter, and adjusted net income increased $113 million or 6%. The increase in reported net income was primarily due to the impact of certain tax measures in the prior quarter, partially offset by higher acquisition-related costs in the current quarter. The increase in adjusted net income primarily reflected higher revenue. Reported net income increased in BMO Capital Markets, Canadian P&C and U.S. P&C, and decreased in BMO Wealth Management. Corporate Services recorded a higher net loss on both a reported and an adjusted basis, compared with the prior quarter.

Reported revenue increased $431 million or 5% from the prior quarter. Reported revenue, net of CCPB, increased $284 million or 4%, including the impact of certain tax measures in the prior quarter, and adjusted revenue, net of CCPB, increased $157 million or 2% from the prior quarter, reflecting higher net interest income and higher non-interest revenue. CCPB increased $147 million from the prior quarter, reflecting higher annuity premiums and lower claims associated with a change in our longevity portfolios in the prior quarter, partially offset by changes in the fair value of investments. These changes were largely offset in insurance revenue. Reported non-interest expense increased $106 million or 2% from the prior quarter, and adjusted non-interest expense increased $30 million or 1%, primarily due to the impact of the stronger U.S. dollar. Total provision for credit losses decreased $46 million from the prior quarter, with a higher provision on impaired loans more than offset by a lower provision on performing loans.

For further information on non-GAAP amounts, measures and ratios in this Review of Fourth Quarter 2023 Performance section, refer to the Non-GAAP and Other Financial Measures section.

2022 Financial Performance Review

The preceding discussions in the MD&A focused on BMO's performance in fiscal 2023. This section summarizes BMO's performance in fiscal 2022 relative to fiscal 2021. Periodically, certain lines of business and units within our organizational structure are realigned to support our strategic priorities, and comparative figures in prior periods have been reclassified to conform with the current period's presentation. Further information on these reclassifications is provided in the How BMO Reports Operating Group Results section.

(Canadian $ in millions)	Canadian P&C	U.S. P&C	Total P&C	BMO Wealth Management	BMO Capital Markets	Corporate Services	Total Bank
2022							
Net interest income (loss) (1)	7,449	5,037	12,486	1,188	3,197	(986)	15,885
Non-interest revenue	2,419	1,265	3,684	3,336	2,975	7,830	17,825
Revenue (1)	9,868	6,302	16,170	4,524	6,172	6,844	33,710
Insurance claims, commissions and changes in policy benefit liabilities (CCPB)	–	–	–	(683)	–	–	(683)
Revenue, net of CCPB	9,868	6,302	16,170	5,207	6,172	6,844	34,393
Provision for (recovery of) credit losses	341	17	358	(2)	(43)	–	313
Non-interest expense	4,349	3,043	7,392	3,564	3,855	1,383	16,194
Income before income taxes	5,178	3,242	8,420	1,645	2,360	5,461	17,886
Provision for income taxes (1)	1,352	745	2,097	394	588	1,270	4,349
Net income (loss)	3,826	2,497	6,323	1,251	1,772	4,191	13,537
Acquisition and integration costs	–	–	–	–	8	237	245
Amortization of acquisition-related intangible assets	1	5	6	3	14	–	23
Impact of divestitures	–	–	–	–	–	55	55
Restructuring costs (reversals)	–	–	–	–	–	–	–
Legal provision (including related interest expense and legal fees)	–	–	–	–	–	846	846
Management of fair value changes on the purchase of Bank of the West	–	–	–	–	–	(5,667)	(5,667)
Adjusted net income (loss)	3,827	2,502	6,329	1,254	1,794	(338)	9,039
2021							
Net interest income (loss) (1)	6,561	4,268	10,829	982	3,115	(616)	14,310
Non-interest revenue	2,225	1,243	3,468	6,071	3,011	326	12,876
Revenue (1)	8,786	5,511	14,297	7,053	6,126	(290)	27,186
Insurance claims, commissions and changes in policy benefit liabilities (CCPB)	–	–	–	1,399	–	–	1,399
Revenue, net of CCPB	8,786	5,511	14,297	5,654	6,126	(290)	25,787
Provision for (recovery of) credit losses	377	(144)	233	(12)	(194)	(7)	20
Non-interest expense	3,968	2,813	6,781	3,843	3,462	1,423	15,509
Income (loss) before income taxes	4,441	2,842	7,283	1,823	2,858	(1,706)	10,258
Provision for (recovery of) income taxes (1)	1,153	666	1,819	441	738	(494)	2,504
Net income (loss)	3,288	2,176	5,464	1,382	2,120	(1,212)	7,754
Acquisition and integration costs	–	–	–	–	7	–	7
Amortization of acquisition-related intangible assets	1	24	25	24	17	–	66
Impact of divestitures	–	–	–	–	–	842	842
Restructuring costs (reversals)	–	–	–	–	–	(18)	(18)
Adjusted net income (loss)	3,289	2,200	5,489	1,406	2,144	(388)	8,651

(1) Operating group revenue, net interest income and provision for income taxes are presented on a taxable equivalent basis (teb). The offset to the groups' teb adjustments is reflected in Corporate Services. For further information, refer to the How BMO Reports Operating Group Results section.

Revenue measures, net of CCPB, and adjusted results and ratios are on a non-GAAP basis and are discussed in the Non-GAAP and Other Financial Measures section.

Refer to footnotes (1) to (8) in the Non-GAAP and Other Financial Measures table for further information on adjusting items.

Net Income

Reported net income in 2022 was $13,537 million, an increase of $5,783 million or 75% from 2021, and adjusted net income was $9,039 million, an increase of $388 million or 4%. Reported results in 2022 included revenue of $5,667 million ($7,713 million pre-tax) related to management of the impact of interest rate changes between the announcement and closing of the Bank of the West acquisition on its fair value and goodwill, and related acquisition and integration costs of $237 million ($316 million pre-tax). In addition, 2022 included the impact of a lawsuit associated with a predecessor bank, M&I Marshall and Ilsley Bank, of $846 million ($1,142 million pre-tax), and the impact of divestitures related to the sale of our EMEA Asset Management businesses and the transfer of certain U.S. asset management clients of $55 million. Reported results in 2021 included a $779 million (pre-tax and after-tax) write-down of goodwill related to the sale of our EMEA Asset Management businesses, a $22 million ($29 million pre-tax) net gain on the sale of our Private Banking business in Hong Kong and Singapore, and $85 million ($107 million pre-tax) of divestiture-related costs for both transactions, partially offset by the partial reversal of $18 million ($24 million pre-tax) of restructuring charges recorded in 2019 related to severance. In addition, reported net income in both years included the amortization of acquisition-related intangible assets and acquisition and integration costs. The increase in reported net income was driven by the impact of fair value management actions in 2022. Adjusted results increased, primarily due to higher net revenue, partially offset by higher expenses and a higher provision for credit losses. Net income increased in our P&C businesses, and decreased in BMO Capital Markets and BMO Wealth Management. On a reported basis, Corporate Services recorded net income of $4,191 million, compared with a net loss of $1,212 million in the prior year, and on an adjusted basis recorded a lower net loss compared with the prior year.

Return on Equity

Reported return on equity (ROE) was 22.9% in 2022 and adjusted ROE was 15.2%, compared with 14.9% and 16.7%, respectively, in 2021. Reported ROE increased due to higher net income, including the impact of fair value management actions related to the acquisition of Bank of the West. Adjusted ROE decreased, as higher net income was offset by an increase in common equity. Average common shareholders' equity increased $7.6 billion or 15% from 2021, primarily due to growth in retained earnings and the issuance of common shares related to the acquisition of Bank of the West, partially offset by a decrease in accumulated other comprehensive income. The reported return on tangible common equity (ROTCE) was 25.1% in 2022, compared with 17.0% in 2021, and adjusted ROTCE was 16.6%, compared with 18.9%. Book value per share increased 19% from 2021 to $95.60 in 2022, reflecting the increase in shareholders' equity.

Revenue

Reported revenue in 2022 was $33,710 million, an increase of $6,524 million from 2021, and adjusted revenue was $26,533 million, a decrease of $624 million or 2%. On a basis that nets insurance claims, commissions and changes in policy benefit liabilities (CCPB) against insurance revenue (net revenue), reported net revenue in 2022 was $34,393 million, an increase of $8,606 million or 33% from 2021, and adjusted net revenue was $27,216 million, an increase of $1,458 million or 6%. Reported revenue in 2022 included $7,713 million related to fair value management actions, comprising $7,665 million of pre-tax mark-to-market gains on certain interest rate swaps recorded in non-interest trading revenue and $48 million of non-trading interest income on a portfolio of primarily U.S. treasury securities. In addition, reported revenue included interest expense of $515 million related to the lawsuit noted above. Both years included the impact of divestitures.

Canadian P&C

Total revenue in 2022 increased $1,082 million or 12% from 2021. Net interest income increased $888 million or 14%, due to higher loan and deposit balances and higher net interest margins. Non-interest revenue increased $194 million or 9%, with higher revenue across most categories, including card-related revenue and deposit fee revenue, partially offset by lower gains on investments in our commercial business. Personal and Business Banking revenue increased $736 million or 12%, and Commercial Banking revenue increased $346 million or 13%.

U.S. P&C

Total revenue in 2022 increased $791 million or 14% from 2021 on a Canadian dollar basis. On a U.S. dollar basis, revenue increased $484 million or 11%, primarily due to an increase in net interest income of $493 million or 14%, reflecting higher loan and deposit balances and higher net interest margins, partially offset by lower Paycheck Protection Program (PPP) [1] revenue. Non-interest revenue was relatively unchanged. Commercial Banking revenue increased $377 million or 12%, and Personal and Business Banking revenue increased $107 million or 8%.

BMO Wealth Management

Total revenue in 2022 was $4,524 million, compared with $7,053 million in 2021. Revenue, net of CCPB, in 2022 decreased $447 million or 8%. Revenue in Wealth and Asset Management decreased $426 million or 8%, due to divestitures, partially offset by underlying revenue growth of 5%, reflecting higher net interest income due to strong deposit and loan growth and higher net interest margins, as well as the benefit from growth in net new client assets, partially offset by lower online brokerage transaction revenue and the impact of weaker global markets. Insurance revenue, net of CCPB, decreased $21 million or 5% from 2021, primarily due to the impact of less favourable market movements in 2022 relative to 2021.

BMO Capital Markets

Revenue in 2022 increased $46 million or 1% from 2021. Global Markets revenue increased $158 million or 4%, primarily due to higher foreign exchange, equities and commodities trading revenue and the impact of the stronger U.S. dollar, partially offset by lower interest rate trading revenue and lower levels of new equity and debt issuances. Investment and Corporate Banking revenue decreased $112 million or 4%, primarily due to lower net securities gains, lower underwriting and advisory revenue reflecting lower levels of client activity given market conditions, and mark-downs on loan underwriting commitments, partially offset by higher corporate banking-related revenue and the impact of the stronger U.S. dollar.

(1) The U.S. Small Business Administration Paycheck Protection Program (PPP) is a government relief program implemented in fiscal 2020 to support businesses that faced financial hardship caused by the COVID-19 pandemic.

Corporate Services

Reported revenue in 2022 increased $7,134 million from 2021, and adjusted revenue decreased $14 million. Reported revenue in 2022 included the impact of fair value management actions related to the acquisition of Bank of the West and a legal provision related to a lawsuit noted above. In addition, both years included the impact of divestitures.

Insurance Claims, Commissions and Changes in Policy Benefit Liabilities

Insurance claims, commissions and changes in policy benefit liabilities (CCPB) were negative $683 million in 2022, compared with $1,399 million in 2021. CCPB decreased, primarily due to changes in the fair value of policy benefit liabilities and the impact of lower annuity sales. The changes were largely offset in revenue.

Provision for Credit Losses

The total provision for credit losses (PCL) in 2022 was $313 million, compared with $20 million in 2021. PCL on impaired loans was $502 million in 2022, a decrease of $23 million from 2021, largely due to lower provisions in Canadian P&C and BMO Capital Markets, partially offset by higher provisions in U.S. P&C. There was a $189 million recovery of the provision for credit losses on performing loans in 2022, compared with a $505 million recovery in 2021. The year-over-year change largely reflected the impact of a deteriorating economic outlook, a lower benefit from improvement in credit quality and stronger balance growth, partially offset by reduced uncertainty as a result of the improving pandemic environment and a smaller impact from changes in scenario weight.

Non-Interest Expense

Reported non-interest expense in 2022 was $16,194 million, an increase of $685 million or 4% from 2021, and adjusted non-interest expense was $15,194 million, an increase of $664 million or 4% from 2021. Reported non-interest expense in 2022 included $627 million related to the lawsuit noted above and in 2021, included a $24 million partial reversal of a restructuring charge. Reported non-interest expense in both years included the impact of divestiture costs, acquisition and integration costs, and the amortization of acquisition-related intangible assets. Reported and adjusted non-interest expense increased, due to higher employee-related costs, computer and equipment costs, advertising and business development costs and professional fees, partially offset by lower premises costs and divestitures.

Provision for Income Taxes

The provision for income taxes in 2022 was $4,349 million, compared with $2,504 million in 2021. The reported effective tax rate was 24.3%, compared with 24.4% in 2021. The adjusted provision for income taxes was $2,670 million, compared with $2,537 million in 2021. The adjusted effective tax rate was 22.8%, compared with 22.7% in 2021.

For further information on non-GAAP amounts, measures and ratios in this 2022 Financial Performance Review section, refer to the Non-GAAP and Other Financial Measures section.

Financial Condition Review

Summary Balance Sheet

(Canadian $ in millions) As at October 31	2023	2022
Assets		
Cash and cash equivalents and interest bearing deposits with banks	**82,059**	93,200
Securities	**322,379**	273,262
Securities borrowed or purchased under resale agreements	**115,662**	113,194
Net loans	**656,478**	551,339
Derivative instruments	**39,976**	48,160
Other assets	**76,722**	60,044
Total assets	**1,293,276**	1,139,199
Liabilities and Equity		
Deposits	**909,676**	769,478
Derivative instruments	**50,193**	59,956
Securities lent or sold under repurchase agreements	**106,108**	103,963
Other liabilities	**142,034**	126,614
Subordinated debt	**8,228**	8,150
Equity	**77,009**	71,038
Non-controlling interest in subsidiaries	**28**	–
Total liabilities and equity	**1,293,276**	1,139,199

Overview

Total assets of $1,293.3 billion increased $154.1 billion from October 31, 2022. The stronger U.S. dollar increased assets by $9.2 billion, excluding the impact on derivative assets. Total liabilities of $1,216.2 billion increased $148.1 billion from the prior year. The stronger U.S. dollar increased liabilities by $8.8 billion, excluding the impact of derivative liabilities. Total equity of $77.0 billion increased $6.0 billion from October 31, 2022, including share issuances during the first quarter of 2023.

Cash and Interest Bearing Deposits with Banks

Cash and interest bearing deposits with banks decreased $11.1 billion, primarily reflecting the use of cash accumulated in the prior year for the completion of the Bank of the West acquisition on February 1, 2023.

Securities

(Canadian $ in millions) As at October 31	2023	2022
Trading	**124,556**	108,177
Fair value through profit or loss (FVTPL) (1)	**16,720**	13,641
Fair value through other comprehensive income – Debt and equity (2)	**62,828**	43,561
Amortized cost (3)	**116,814**	106,590
Investments in associates and joint ventures	**1,461**	1,293
Total securities	**322,379**	273,262

(1) Included securities mandatorily measured at FVTPL of $6,729 million ($4,410 million as at October 31, 2022) and securities designated at fair value of $9,991 million ($9,231 million as at October 31, 2022).
(2) Included allowances for credit losses on debt securities recorded at fair value through other comprehensive income of $3 million as at October 31, 2023 ($3 million as at October 31, 2022).
(3) Net of allowances for credit losses of $3 million ($3 million as at October 31, 2022).

Securities increased $49.1 billion, primarily due to the inclusion of Bank of the West, higher levels of client activity in BMO Capital Markets and the impact of the stronger U.S. dollar.

Securities Borrowed or Purchased Under Resale Agreements

Securities borrowed or purchased under resale agreements increased $2.5 billion, due to higher levels of client activity in BMO Capital Markets and the impact of the stronger U.S. dollar.

Net Loans

(Canadian $ in millions) As at October 31	2023	2022
Residential mortgages	**177,250**	148,880
Consumer instalment and other personal	**104,040**	86,103
Credit cards	**12,294**	9,663
Businesses and governments	**366,701**	309,310
Gross loans	**660,285**	553,956
Allowance for credit losses	**(3,807)**	(2,617)
Total net loans	**656,478**	551,339

Net loans increased $105.1 billion from October 31, 2022, due to the inclusion of Bank of the West, growth in residential mortgages and credit card balances in Canadian P&C, growth in business and government loans in Canadian P&C and BMO Capital Markets and the impact of the stronger U.S. dollar, partially offset by lower source currency balances in U.S. P&C.

Table 4 in the Supplemental Information provides a comparative summary of loans by geographic location and product. Table 6 in the Supplemental Information provides a comparative summary of net loans in Canada by province and industry. Loan quality is discussed in the Credit Quality Information section, and further details on loans are provided in Notes 4, 6 and 24 of the audited annual consolidated financial statements.

Derivative Financial Assets

Derivative financial assets decreased $8.2 billion, primarily reflecting a decrease in the fair value of client-driven trading derivatives in BMO Capital Markets, with decreases in the fair value of commodities, foreign exchange and equity contracts, partially offset by an increase in the fair value of interest rate contracts. Further details on derivative financial assets are provided in Note 8 of the audited annual consolidated financial statements.

Other Assets

Other assets primarily include goodwill and intangible assets, customers' liability under acceptances, cash collateral, insurance-related assets, premises and equipment, precious metals, current and deferred tax assets, accounts receivable and prepaid expenses. Other assets increased $16.7 billion, primarily due to goodwill and intangible assets related to Bank of the West, higher deferred tax assets and higher precious metals balances, partially offset by lower customers' liability under acceptances due to lower levels of acceptances issued into the market. Further details on other assets are provided in Notes 9, 11, 12 and 22 of the audited annual consolidated financial statements.

Deposits

(Canadian $ in millions) As at October 31	**2023**	2022
Banks	**29,587**	30,901
Businesses and governments	**574,670**	495,831
Individuals	**305,419**	242,746
Total deposits	**909,676**	769,478

Deposits increased $140.2 billion. Business and government deposits increased $78.8 billion, reflecting the inclusion of Bank of the West, higher wholesale funding balances primarily to fund Global Markets client activity, growth in customer deposits in Canadian P&C and the impact of the stronger U.S. dollar, partially offset by lower source currency customer deposits in U.S. P&C. Deposits by individuals increased $62.7 billion, primarily reflecting the inclusion of Bank of the West and growth in customer deposits in the P&C businesses, partially offset by lower customer deposits in BMO Wealth Management.

Deposits by banks were relatively unchanged from the prior year. Further details on the composition of deposits are provided in Note 13 of the audited annual consolidated financial statements and in the Liquidity and Funding Risk section.

Derivative Financial Liabilities

Derivative financial liabilities decreased $9.8 billion, primarily due to a decrease in the fair value of client-driven trading derivatives in BMO Capital Markets, with decreases in the fair value of foreign exchange, equity and commodities contracts, partially offset by an increase in the fair value of interest rate contracts.

Securities Lent or Sold Under Repurchase Agreements

Securities lent or sold under repurchase agreements increased $2.1 billion, primarily due to the impact of the stronger U.S. dollar and Treasury activities.

Other Liabilities

Other liabilities primarily include securities sold but not yet purchased, securitization and structured entities liabilities, acceptances, insurance-related liabilities and accounts payable. Other liabilities increased $15.4 billion, driven by higher Federal Home Loan Bank borrowings, higher accrued interest payable, an increase in securities sold but not yet purchased due to higher levels of client activity in BMO Capital Markets and higher insurance-related liabilities, partially offset by lower acceptances as a result of lower levels of acceptances issued into the market.

Further details on the composition of other liabilities are provided in Note 14 of the audited annual consolidated financial statements.

Subordinated Debt

Subordinated debt was relatively unchanged from the prior year, reflecting a new issuance, net of a redemption. Further details on the composition of subordinated debt are provided in Note 15 of the audited annual consolidated financial statements.

Equity

(Canadian $ in millions) As at October 31	**2023**	2022
Share capital		
Preferred shares and other equity instruments	**6,958**	6,308
Common shares	**22,941**	17,744
Contributed surplus	**328**	317
Retained earnings	**44,920**	45,117
Accumulated other comprehensive income	**1,862**	1,552
Total equity	**77,009**	71,038

Total equity increased $6.0 billion from October 31, 2022, primarily due to common and preferred share issuances. Common shares increased $5.2 billion, reflecting share issuances during the first quarter of 2023, as well as shares issued under the dividend reinvestment and share purchase plan. Preferred shares and other equity instruments increased $0.7 billion, as a result of an issuance in the first quarter of 2023. Accumulated other comprehensive income increased $0.3 billion, primarily due to the impact of the stronger U.S. dollar on the translation of net foreign operations, partially offset by losses on remeasurement of own credit risk on financial liabilities designated at fair value and the impact of higher interest rates on cash flow hedges. Retained earnings decreased $0.2 billion, as a result of dividends and distributions on other equity instruments, partially offset by net income earned in the current year.

The Consolidated Statement of Changes in Equity in the audited annual consolidated financial statements provides a summary of items that increase or reduce total equity, while Note 16 of the audited annual consolidated financial statements provides details on the components of, and changes in, share capital. Details on our enterprise-wide capital management practices and strategies can be found below.

Enterprise-Wide Capital Management

Capital Management

Objective

BMO is committed to a disciplined approach to capital management that balances the interests and requirements of our shareholders, regulators, depositors, fixed income investors and rating agencies. We recognize the emerging global trend of rising regulatory capital requirements, and manage our capital position accordingly. Our objective is to maintain a strong capital position in a cost-effective structure that:

- Is appropriate given BMO's target regulatory capital ratios and internal assessment of economic capital requirements
- Underpins BMO's operating groups' business strategies and considers the market environment
- Supports depositor, investor and regulator confidence, while building long-term shareholder value
- Is consistent with BMO's target credit ratings.

Framework



The principles and key elements of our capital management framework are outlined in our Capital Management Corporate Policy and in the annual capital plan, which includes the results of the comprehensive Internal Capital Adequacy Assessment Process (ICAAP).

ICAAP is an integrated process that involves the application of stress testing and other tools to assess capital adequacy on both a regulatory and an economic capital basis. The results of this process inform and support the establishment of capital targets and the implementation of capital strategies that take into consideration the strategic direction and risk appetite of the enterprise. The annual capital plan is developed considering the results of ICAAP and in conjunction with the annual business plan, promoting alignment between business and risk strategies, regulatory and economic capital requirements and the availability of capital. Enterprise-wide stress testing and scenario analysis are conducted in order to assess the impact of various stress conditions on our risk profile and capital requirements. Our capital management framework seeks to ensure that the bank is adequately capitalized given the risks we assume in the normal course of business, as well as under stress, and supports the determination of limits, targets and performance measures that are applied in managing balance sheet positions, risk levels and capital requirements at both the consolidated entity and operating group levels. We seek to optimize our capital through efficient use of our balance sheet and the related risks we undertake, and may employ levers such as risk transfer transactions and the sale of assets. We evaluate assessments of actual and forecast capital adequacy against our capital plan throughout the year, including consideration of changes in our business activities and risk profile, as well as the operating environment or regulatory requirements or expectations.

We allocate capital to operating groups in order to evaluate business performance, and we view capital implications in our strategic, tactical and transactional decision-making. By allocating capital to operating groups, setting and monitoring capital limits and metrics, and measuring the groups' performance against these limits and metrics, we seek to optimize risk-adjusted return to our shareholders, while maintaining a well-capitalized position. This approach is intended to protect our stakeholders from the risks inherent in our various businesses, while still providing the flexibility to deploy resources in support of strategic growth activities.

Refer to the Enterprise-Wide Risk Management section for further discussion of the risks underlying our business.

Governance

The Board of Directors, either directly or in conjunction with its Risk Review Committee, provides ultimate oversight and approval of capital management, including the bank's Capital Management Corporate Policy, capital plan and capital adequacy assessments. The Board of Directors regularly reviews the bank's capital position and key capital management activities. In addition, the capital adequacy assessment results determined by ICAAP are reviewed by the Board of Directors and the Risk Review Committee. The Enterprise Capital Management Committee provides senior management oversight, including the review of significant capital management policies, issues and activities, and along with the Risk Management Committee, the capital required to support the execution of our enterprise-wide strategy. Finance and Risk Management are responsible for the design and implementation of our corporate policies and frameworks related to capital and risk management, as well as ICAAP. The Corporate Audit Division, as the third line of defence, verifies adherence to controls and identifies opportunities to strengthen our processes. Refer to the Enterprise-Wide Risk Management Framework section for further discussion.

Regulatory Capital Requirements

Regulatory capital requirements for BMO are determined in accordance with guidelines issued by the Office of the Superintendent of Financial Institutions (OSFI), which are based on the Basel III framework developed by the Basel Committee on Banking Supervision (BCBS). The current minimum risk-based capital ratios set out in OSFI's Capital Adequacy Requirements (CAR) Guideline are a Common Equity Tier 1 (CET1) Ratio of 4.5%, a Tier 1 Capital Ratio of 6.0% and a Total Capital Ratio of 8.0%. In addition to these minimum capital requirements, OSFI also requires domestic systemically important banks (D-SIBs), including BMO, to hold Pillar 1 and Pillar 2 buffers, which are meant to be used as a normal first response in periods of stress. Pillar 1 buffers include a capital conservation buffer of 2.5%, a D-SIB Common Equity Tier 1 surcharge of 1.0%, and a countercyclical buffer (which can range from 0% to 2.5%, depending on a bank's exposure to jurisdictions that have activated the buffer). Pillar 2 buffers include the domestic stability buffer (DSB), which can range from 0% to 4.0% of risk-weighted assets (RWA) and was set at 3.0% as at October 31, 2023. The buffer level is set twice a year by OSFI, in June and December, but OSFI can make a change any time when needed. Effective November 1, 2023, the DSB increased to 3.5%.

The current minimum Total Loss Absorbing Capacity (TLAC) requirements set by OSFI are a TLAC Ratio of 21.5% of RWA and a TLAC Leverage Ratio of 6.75% as at October 31, 2023.

The current minimum Leverage Ratio set out in OSFI's Leverage Requirements (LR) Guideline is 3.0%. Effective February 1, 2023, D-SIBs were required to meet a 0.5% buffer requirement for the Leverage and TLAC Leverage Ratios, in addition to the minimum requirements.

OSFI's requirements as at October 31, 2023, are summarized in the following table.

(% of risk-weighted assets or leverage exposures)	Minimum capital, leverage and TLAC requirements	Total Pillar 1 Capital buffers (1)	Tier 1 Capital buffer	Domestic stability buffer (2)	Minimum capital, leverage and TLAC requirements including capital buffers	BMO capital, leverage and TLAC ratios as at October 31, 2023
Common Equity Tier 1 Ratio	4.5%	3.5%	na	3.0%	11.0%	12.5%
Tier 1 Capital Ratio	6.0%	3.5%	na	3.0%	12.5%	14.1%
Total Capital Ratio	8.0%	3.5%	na	3.0%	14.5%	16.2%
TLAC Ratio	21.5%	na	na	3.0%	24.5%	27.0%
Leverage Ratio	3.0%	na	0.5%	na	3.5%	4.2%
TLAC Leverage Ratio	6.75%	na	0.5%	na	7.25%	8.1%

(1) The minimum CET1 Ratio requirement of 4.5% is augmented by a total of 3.5% in Pillar 1 Capital buffers, which can absorb losses during periods of stress. Pillar 1 Capital buffers include a capital conservation buffer of 2.5%, a Common Equity Tier 1 surcharge for D-SIBs of 1.0% and a countercyclical buffer, as prescribed by OSFI (immaterial for the fourth quarter of 2023). If a bank's capital ratios fall within the range of this combined buffer, restrictions on discretionary distributions of earnings (such as dividends, share repurchases and discretionary compensation) would ensue, with the degree of such restrictions varying according to the position of the bank's ratios within the buffer range.

(2) Breaches of the DSB will not result in a bank being subject to automatic constraints on capital distributions. In the event of a breach, OSFI would require a remediation plan, and would expect for the plan to be executed in a timely manner. Banks may be required to hold additional regulatory capital buffers that are applicable to Capital, Leverage and TLAC Ratios.

na – not applicable

Regulatory Capital and Total Loss Absorbing Capacity Ratios

The **Common Equity Tier 1 (CET1) Ratio** is calculated as CET1 Capital, which comprises common shareholders' equity, net of deductions for goodwill, intangible assets, pension assets, certain deferred tax assets and other items, which may include a portion of expected credit loss provisions, divided by risk-weighted assets. The CET1 Ratio is calculated in accordance with OSFI's Capital Adequacy Requirements (CAR) Guideline.

The **Tier 1 Capital Ratio** reflects **Tier 1 Capital** divided by risk-weighted assets.

The **Total Capital Ratio** reflects **Total Capital** divided by risk-weighted assets.

The **Leverage Ratio** reflects **Tier 1 Capital** divided by Leverage Exposures (LE), which consist of on-balance sheet items and specified off-balance sheet items, net of specified adjustments.

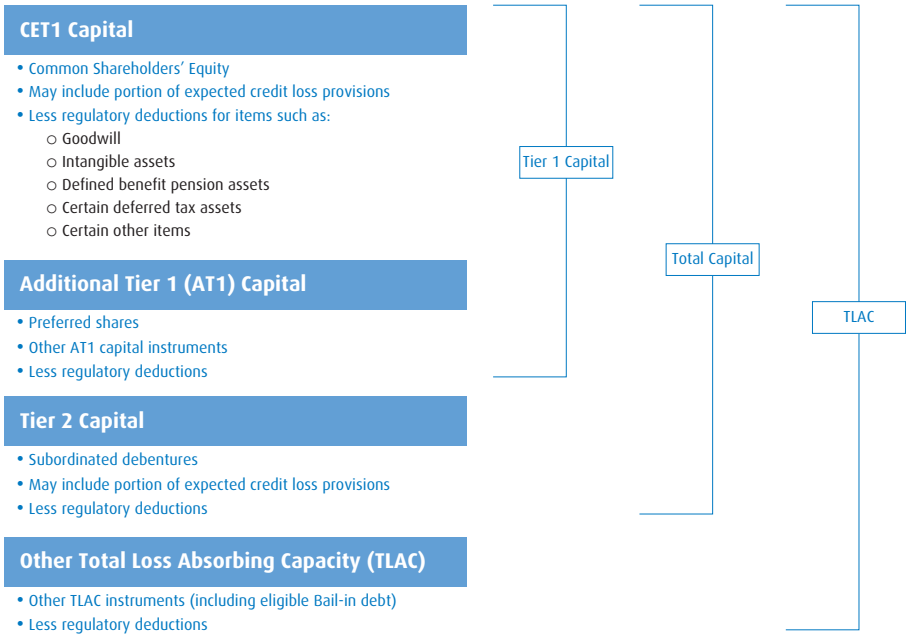
The **Total Loss Absorbing Capacity (TLAC) Ratio** reflects TLAC divided by risk-weighted assets.

The **TLAC Leverage Ratio** reflects TLAC divided by leverage exposures.

Refer to the Glossary of Financial Terms for definitions of ratios and their components.

Regulatory Capital and Total Loss Absorbing Capacity Elements

BMO maintains a capital structure that is diversified across instruments and tiers in order to provide an appropriate mix of loss absorbency. The major components of regulatory capital and total loss absorbing capacity are summarized as follows:



OSFI's CAR Guideline includes non-viability contingent capital (NVCC) provisions, which require the conversion of Additional Tier 1 and Tier 2 capital instruments into common shares if OSFI announces that a bank is, or is about to become, non-viable, or if the federal or a provincial government in Canada publicly announces that the bank has accepted, or has agreed to accept, a capital injection or equivalent support to avoid non-viability. Pursuant to the principles set out in the CAR Guideline, a conversion to common shares would respect the hierarchy of claims in liquidation, ensuring that holders of Additional Tier 1 and Tier 2 instruments are entitled to a more favourable economic outcome than existing common shareholders.

Under Canada's Bank Recapitalization (Bail-In) Regime, eligible senior debt issued on or after September 23, 2018 is subject to statutory conversion requirements. Canada Deposit Insurance Corporation has the power to trigger the conversion of bail-in debt into common shares. This statutory conversion supplements NVCC securities, which must be converted in full prior to the conversion of bail-in debt.

Risk-Weighted Assets

Risk-weighted assets (RWA) measure a bank's exposures, weighted for their relative risk and calculated in accordance with the regulatory capital rules prescribed by OSFI, which include standardized and internal ratings or internal model approaches for credit risk and market risk.

We primarily use the Internal Ratings Based (IRB) Approach to determine credit RWA in our portfolio. Effective with the implementation of the Basel III Reforms as at February 1, 2023, the IRB approaches include the Foundation (FIRB) Approach for exposures to financial institutions and large corporate portfolios, and the Advanced (AIRB) Approach for all other exposures. The AIRB Approach applies sophisticated techniques to measure RWA at the exposure level based on sound risk management principles, including estimates of the probability of default (PD), loss given default (LGD) and exposure at default (EAD) risk parameters, as well as term to maturity and asset class type, as prescribed by the OSFI rules. These risk parameters are determined using internal models that leverage historical portfolio data supplemented by benchmarking, as appropriate, and are updated periodically. Validation procedures related to these models are in place in order to quantify and differentiate risks appropriately. The FIRB Approach employs the same internal PD estimates as the AIRB Approach, but LGD and EAD parameters are prescribed by OSFI. Credit risk RWA related to certain Canadian and U.S. portfolios, including the acquired Bank of the West portfolio, are determined under the Standardized Approach using prescribed risk weights based on external ratings, counterparty type or product type. These portfolios reflect current waivers and exemptions to the IRB Approach approved by OSFI. For further discussion of the respective approaches noted above, refer to the Credit and Counterparty Risk – Credit and Counterparty Risk Measurement section.

In fiscal 2023, our market risk RWA was primarily determined using the Internal Models Approach, and the Standardized Approach was used for some exposures. With the implementation of the Basel III Reforms for market risk, effective November 1, 2023, we transitioned to a fully Standardized Approach.

We use the new Standardized Measurement Approach for determining operational risk regulatory capital requirements, which was effective February 1, 2023, as part of the Basel III Reforms implementation.

BMO is subject to a capital floor as prescribed in OSFI's CAR Guideline. In calculating regulatory capital ratios, total RWA must be increased when the capital floor amount calculated under the standardized approaches, multiplied by a capital floor adjustment factor, is higher than a similar calculation using the more risk-sensitive internal modelled approaches, where applicable. Other than during the first quarter of 2023, the capital floor was not operative for BMO in fiscal 2023, following the acquisition of Bank of the West.

Regulatory Capital Developments

Effective November 1, 2023, the DSB has been raised from 3.0% to 3.5% of total RWA. On December 8, 2022, OSFI raised the DSB range of 0% to 2.5% to 0% to 4.0%.

On October 20, 2023, OSFI published the revised CAR Guideline, which will be effective in the first quarter of fiscal 2024. The key revisions reflect heightened regulatory capital requirements for mortgages with growing balances where payments are insufficient to cover the interest component, as well as other changes that provide further clarification on the application of the guideline.

On September 12, 2023, OSFI published the final Parental Stand-Alone (Solo) TLAC Framework for D-SIBs, which will be effective in the first quarter of fiscal 2024. The purpose of the Solo framework is to ensure a non-viable D-SIB has sufficient loss absorbing capacity on a stand-alone legal entity basis to support its resolution, which would, in turn, facilitate an orderly resolution of the D-SIB while minimizing adverse impacts on the stability of the financial sector, ensuring the continuity of critical functions and minimizing taxpayers' exposure to loss. We are well-positioned to meet the new Solo TLAC requirement.

The domestic implementation of Basel III Reforms related to capital, leverage, liquidity and disclosure requirements was effective as of the second quarter of fiscal 2023. Regulatory capital changes in the year under these reforms included revised rules for credit risk and operational risk. The capital floor adjustment factor was set at 65% effective February 1, 2023, rising 2.5% on November 1 of each year to 72.5% in fiscal 2026. Effective February 1, 2023, D-SIBs were required to hold a 0.5% buffer for the Leverage and TLAC Leverage Ratios, in addition to the minimum requirements. Basel III Reforms for market risk and credit valuation adjustment (CVA) risk come into effect in the first quarter of fiscal 2024. With this transition, the determination of market risk capital will shift from a primarily Internal Models Approach to a fully Standardized Approach and capital for CVA risk will also reflect OSFI's standardized rules.

International Financial Reporting Standard 17, *Insurance Contracts* (IFRS 17) becomes effective for our fiscal year beginning November 1, 2023, and we will apply the full retrospective approach where we restate prior periods as if we had always applied IFRS 17. On transition to IFRS 17, we will also change our accounting policy for the measurement of investment properties, recorded in insurance-related assets, under IAS 40, *Investment Property*. For more information, refer to the Future Changes in Accounting Policies section.

These regulatory and accounting changes are expected to have a modest impact on our regulatory capital ratios upon adoption.

Regulatory Capital and Total Loss Absorbing Capacity Review

BMO is well-capitalized, with capital ratios that exceed OSFI's published requirements for large Canadian banks, including a DSB of 3.0%. Our CET1 Ratio was 12.5% as at October 31, 2023, compared with 16.7% as at October 31, 2022. Our CET1 Ratio was elevated at the end of fiscal 2022, primarily driven by fair value management actions related to the acquisition of Bank of the West. The CET1 Ratio decreased from the prior year, primarily as a result of the acquisition and integration of Bank of the West.

Our Tier 1 Capital and Total Capital Ratios were 14.1% and 16.2%, respectively, as at October 31, 2023, compared with 18.4% and 20.7%, respectively, as at October 31, 2022. The Tier 1 Capital and Total Capital Ratios were lower due to the factors impacting the CET1 Ratio, partially offset by a $650 million issuance of institutional preferred shares.

The impact of foreign exchange rate movements on BMO's capital ratios was largely offset. Our investments in foreign operations are primarily denominated in U.S. dollars, and the foreign exchange impact of U.S.-dollar-denominated RWA and capital deductions may result in variability in the bank's capital ratios. We may manage the impact of foreign exchange rate movements on BMO's capital ratios, and did so during fiscal 2023. Any such activities could also impact BMO's book value and return on equity.

Our Leverage Ratio was 4.2% as at October 31, 2023, a decrease from 5.6% as at October 31, 2022, primarily as a result of our acquisition of Bank of the West.

As at October 31, 2023, our TLAC Ratio was 27.0% and our TLAC Leverage Ratio was 8.1%, compared with 33.1% and 10.1%, respectively, as at October 31, 2022.

While the ratios discussed above reflect our consolidated capital base, we conduct business through a variety of corporate structures, including subsidiaries. A framework is in place such that capital and funding are managed appropriately at the subsidiary level.

Following our acquisition of Bank of the West, our subsidiary, BMO Financial Corp. (BFC), as a U.S. bank intermediate holding company, has transitioned from a Category IV to a Category III institution under the Enhanced Prudential Standards issued by the Federal Reserve Board (FRB). This change will require BFC to meet certain heightened regulatory standards related to capital, liquidity and risk management, including complying with single counterparty credit limits. These heightened regulatory standards include a requirement that BFC will now be subject to the Comprehensive Capital Analysis and Review (CCAR) and *Dodd-Frank Act* Stress Test (DFAST) requirements of the FRB on an annual (from biennial) basis, along with other requirements, including biennial company-run stress testing, countercyclical capital buffer and supplementary leverage ratio requirements. We are well-positioned to meet these incremental requirements and do not expect them to have a material impact on our business, financial condition, results of operations or capital position.

BFC was also required to participate in the FRB's 2023 CCAR exercise as a result of our acquisition of Bank of the West. On June 28, 2023, the FRB released its 2023 CCAR and DFAST results, and on July 27, 2023, announced individual large bank capital requirements, which were effective October 1, 2023. For BFC, the FRB determined a CET1 Ratio requirement of 7.8%, including the 4.5% minimum CET1 Ratio and a 3.3% stress capital buffer (SCB). BFC is well-capitalized, with a strong CET1 Ratio of 10.3% as at September 30, 2023.

Regulatory Capital and TLAC [1]

(Canadian $ in millions, except as noted) As at October 31	2023	2022
Common Equity Tier 1 Capital: Instruments and Reserves		
Directly issued qualifying common share capital plus related stock surplus	**23,269**	18,061
Retained earnings	**44,920**	45,117
Accumulated other comprehensive income (and other reserves)	**1,862**	1,552
Goodwill and other intangibles (net of related tax liability)	**(20,899)**	(6,901)
Other common equity Tier 1 capital deductions	**3,762**	3,062
Common Equity Tier 1 Capital (CET1)	**52,914**	60,891
Additional Tier 1 Capital: Instruments		
Directly issued qualifying Additional Tier 1 instruments plus related stock surplus	**6,958**	6,308
Total regulatory adjustments applied to Additional Tier 1 Capital	**(87)**	(78)
Additional Tier 1 Capital (AT1)	**6,871**	6,230
Tier 1 Capital (T1 = CET1 + AT1)	**59,785**	67,121
Tier 2 Capital: Instruments and Provisions		
Directly issued qualifying Tier 2 instruments plus related stock surplus	**8,082**	8,003
General allowance	**902**	235
Total regulatory adjustments to Tier 2 Capital	**(51)**	(50)
Tier 2 Capital (T2)	**8,933**	8,188
Total Capital (TC = T1 + T2)	**68,718**	75,309
Non-Regulatory Capital Elements of TLAC		
Directly issued qualifying Other TLAC instruments	**45,773**	45,554
Total regulatory adjustments applied to Other TLAC	**(89)**	(200)
Other TLAC	**45,684**	45,354
TLAC (TLAC = TC + Other TLAC)	**114,402**	120,663
Risk-Weighted Assets and Leverage Ratio Exposures		
Risk-Weighted Assets	**424,197**	363,997
Leverage Ratio Exposures	**1,413,036**	1,189,990
Capital Ratios (%)		
Common Equity Tier 1 Ratio	**12.5**	16.7
Tier 1 Capital Ratio	**14.1**	18.4
Total Capital Ratio	**16.2**	20.7
TLAC Ratio	**27.0**	33.1
Leverage Ratio	**4.2**	5.6
TLAC Leverage Ratio	**8.1**	10.1

(1) Calculated in accordance with OSFI's CAR Guideline and LR Guideline, as applicable. Non-qualifying Additional Tier 1 and Tier 2 Capital instruments were phased out at a rate of 10% per year from January 1, 2013 to January 1, 2022.

Our CET1 Capital was $52.9 billion as at October 31, 2023, compared with $60.9 billion as at October 31, 2022. CET1 Capital decreased, as internal capital generation, common shares issuances through a public offering and private placements, and under the Shareholder Dividend Reinvestment and Share Purchase Plan (DRIP) were more than offset by an increase in the capital deductions for goodwill and intangible assets, and acquisition and integration costs related to Bank of the West.

Tier 1 Capital and Total Capital were $59.8 billion and $68.7 billion, respectively, as at October 31, 2023, compared with $67.1 billion and $75.3 billion, respectively, as at October 31, 2022. The decrease in Tier 1 Capital was primarily due to the factors impacting CET1 Capital, partially offset by an issuance of institutional preferred shares. Total Capital was lower, primarily due to the factors impacting Tier 1 Capital.

Risk-Weighted Assets

RWA were $424.2 billion as at October 31, 2023, an increase from $364.0 billion as at October 31, 2022. Credit Risk RWA were $349.9 billion as at October 31, 2023, an increase from $295.5 billion as at October 31, 2022, primarily due to the inclusion of the assets of Bank of the West, partially offset by the impact of the implementation of the Basel III Reforms and risk transfer transactions. As noted above, the impact of foreign exchange rate movements is largely offset in the CET1 Ratio. Market Risk RWA were $17.0 billion as at October 31, 2023, an increase from $13.5 billion as at October 31, 2022, primarily attributable to portfolio changes, including business growth, and market volatility during the year. Operational Risk RWA were $57.4 billion as at October 31, 2023, an increase from $42.4 billion as at October 31, 2022, primarily due to the acquisition of Bank of the West and the impact of legal provisions. The capital floor was not operative at October 31, 2023, compared with a floor adjustment of $12.6 billion reflected in our RWA as at October 31, 2022.

(Canadian $ in millions) As at October 31	2023 Total Exposure (1) (2)	Average risk weight	RWA (1) Standardized	RWA (1) IRB FIRB	RWA (1) IRB AIRB	RWA (1) Total	2022 Total RWA (5)
Credit Risk							
Wholesale							
Corporate, including specialized lending	**406,703**	**44.4%**	**36,787**	**71,214**	**72,522**	**180,523**	137,272
Corporate small and medium-sized enterprises	**33,830**	**61.7%**	**4,830**	**52**	**15,987**	**20,869**	31,671
Sovereign	**261,799**	**1.6%**	**180**	**–**	**3,901**	**4,081**	4,818
Bank	**23,111**	**20.9%**	**214**	**4,623**	**–**	**4,837**	4,113
Retail							
Residential mortgages, excluding home equity line of credit	**175,473**	**10.8%**	**4,559**	**–**	**14,308**	**18,867**	11,076
Home equity line of credit	**74,487**	**10.6%**	**982**	**–**	**6,895**	**7,877**	5,915
Qualifying revolving retail	**49,006**	**21.9%**	**690**	**–**	**10,048**	**10,738**	7,408
Other retail, excluding small and medium-sized enterprises	**46,276**	**57.6%**	**17,765**	**–**	**8,892**	**26,657**	16,099
Retail small and medium-sized enterprises	**19,459**	**62.4%**	**3,407**	**–**	**8,733**	**12,140**	11,860
Equity	**11,101**	**131.3%**	**14,574**	**–**	**–**	**14,574**	11,956
Trading book	**50,763**	**24.5%**	**5,055**	**6,478**	**888**	**12,421**	11,036
Securitization	**81,947**	**15.4%**	**1,467**	**–**	**11,160**	**12,627**	9,530
Other credit risk assets – non-counterparty managed assets	**21,091**	**112.1%**	**23,641**	**–**	**–**	**23,641**	18,580
Scaling factor for credit risk assets under AIRB Approach (3)	**na**	**na**	**na**	**na**	**na**	**na**	14,189
Total Credit Risk	**1,255,046**	**–**	**114,151**	**82,367**	**153,334**	**349,852**	295,524
Market Risk	**–**	**–**	**2,131**	**–**	**14,850**	**16,981**	13,522
Operational Risk	**–**	**–**	**57,364**	**–**	**–**	**57,364**	42,353
Risk-Weighted Assets before floor	**1,255,046**	**–**	**173,646**	**82,367**	**168,184**	**424,197**	351,399
Floor adjustment (4)	**–**	**–**	**–**	**–**	**–**	**–**	12,598
Total Risk-Weighted Assets	**1,255,046**	**–**	**173,646**	**82,367**	**168,184**	**424,197**	363,997

(1) Exposure and RWA are grouped by the obligor's asset class.
(2) Exposure represents exposure at default (EAD) after the application of credit risk mitigation and the credit conversion factor for undrawn exposures.
(3) In fiscal 2022, RWA amounts for credit risk under the Advanced Internal Ratings Based (AIRB) Approach were subject to a 6% scaling factor. This scaling factor is no longer effective as of the second quarter of fiscal 2023, following the implementation of Basel III Reforms.
(4) The bank is subject to capital floor requirements as prescribed in OSFI's CAR Guideline. Total RWA is increased by a floor adjustment amount, which is calculated based on the standardized methodology. The capital floor was not operative at October 31, 2023.
(5) Prior periods have been reclassified to conform with the current period's presentation.

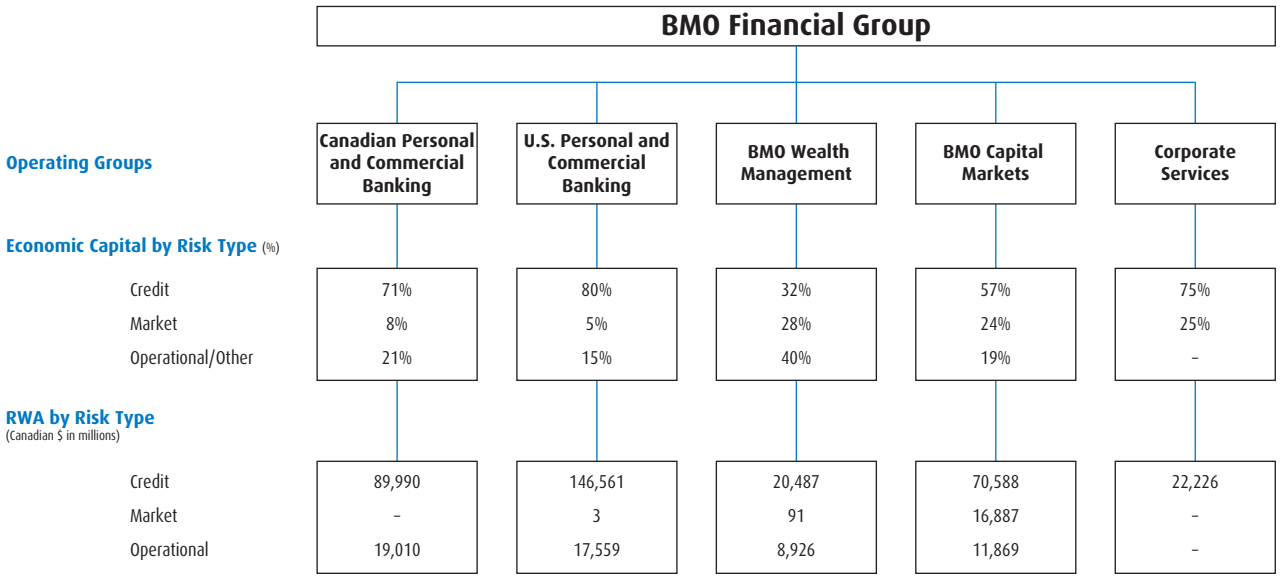
na – not applicable

Economic Capital

Economic capital is an expression of the enterprise's capital demand requirement relative to its view of the economic risks in its underlying business activities. It represents management's estimation of the likely magnitude of economic losses that could occur should severely adverse situations arise. Economic loss is the loss in economic or market value incurred over a specified time horizon at a defined confidence level, relative to the expected loss over the same time horizon. Economic capital is calculated for various types of risk, including credit, market (trading and non-trading), operational, business and insurance, based on a one-year time horizon using a defined confidence level.

Economic Capital and RWA by Operating Group and Risk Type

(As at October 31, 2023)



Capital Management Activities

During fiscal 2023, we issued approximately 28.3 million common shares through a public offering and private placements to align our capital position with increased regulatory requirements and for general corporate purposes. We also issued approximately 14.2 million common shares through the Shareholder Dividend Reinvestment and Share Purchase Plan (DRIP) and the exercise of stock options. In addition, we issued 1.2 million common shares for the acquisition of Radicle Group Inc.

During fiscal 2023, we completed the issuances and redemptions of Tier 1 and Tier 2 Capital instruments, outlined in the table below.

Capital Instrument Issuances and Redemptions

As at October 31, 2023	Issuance or redemption date	Number of shares (in millions)	Balance (Canadian $ in millions, except as noted)
Common shares issued		43.8	$ 5,197
Tier 1 Capital			
Issuance of Non-Cumulative 5-Year Fixed Rate Reset Class B Preferred Shares, Series 52	January 31, 2023	0.65	$ 650
Tier 2 Capital			
Issuance of Medium-Term Notes, Series M, First Tranche	September 7, 2023		$ 1,150
Redemption of U.S. 4.338% Subordinated Notes	October 5, 2023		USD 850

Outstanding Shares and NVCC Instruments

As at October 31	Number of shares or dollar amount (in millions)	Dividends declared per share 2023	Dividends declared per share 2022
Common shares	721	**$ 5.80**	$ 5.44
Class B Preferred shares			
Series 27*	$ 500	**$ 0.96**	$ 0.96
Series 29*	$ 400	**$ 0.91**	$ 0.91
Series 31*	$ 300	**$ 0.96**	$ 0.96
Series 33*	$ 200	**$ 0.76**	$ 0.76
Series 44*	$ 400	**$ 1.21**	$ 1.21
Series 46*	$ 350	**$ 1.28**	$ 1.28
Series 50*	$ 500	**$73.73**	$24.64
Series 52*	$ 650	**$57.52**	–
Additional Tier 1 Capital Notes*			
4.800% Additional Tier 1 Capital Notes	US$ 500	**na**	na
4.300% Limited Recourse Capital Notes, Series 1 (1)	$1,250	**na**	na
5.625% Limited Recourse Capital Notes, Series 2 (1)	$ 750	**na**	na
7.325% Limited Recourse Capital Notes, Series 3 (1)	$1,000	**na**	na
Medium-Term Notes* (2)			
3.803% Subordinated Notes	US$1,250	**na**	na
Series J – First Tranche	$1,000	**na**	na
Series J – Second Tranche	$1,250	**na**	na
Series K – First Tranche	$1,000	**na**	na
3.088% Subordinated Notes	US$1,250	**na**	na
Series L – First Tranche	$ 750	**na**	na
Series M – First Tranche	$1,150	**na**	na
Stock options			
Vested	2.8		
Non-vested	3.6		

* Convertible into common shares.

(1) Convertible into common shares by virtue of recourse to the Preferred Shares Series 48, Preferred Shares Series 49 and Preferred Shares Series 51, respectively. Refer to Note 16 of the audited annual consolidated financial statements for conversion details.

(2) Note 15 of the audited annual consolidated financial statements includes details on the NVCC Medium-Term Notes.

na – not applicable

Note 16 of the audited annual consolidated financial statements includes details on share capital and other equity instruments.

If an NVCC trigger event were to occur, NVCC instruments would be converted into BMO common shares pursuant to automatic conversion formulas, with the conversion price based on the greater of: (i) a floor price of $5.00; and (ii) the current market price of BMO common shares at the time of the trigger event (calculated using a 10-day weighted average). Based on a floor price of $5.00, these NVCC instruments would be converted into approximately 4.0 billion BMO common shares, assuming no accrued interest and no declared and unpaid dividends.

Further details on subordinated debt and share capital are provided in Notes 15 and 16 of the audited annual consolidated financial statements.

Dividends

Dividends per common share declared in fiscal 2023 totalled $5.80, an increase of 7% from the prior year. Annual dividends declared represented 103% of reported net income available to common shareholders on a last twelve-month basis, primarily reflecting the impact of Bank of the West. On an adjusted basis, annual dividends declared represented 49% of adjusted net income available to common shareholders.

Our target dividend payout range (common share dividends as a percentage of net income available to shareholders, less preferred share dividends and distributions on other equity instruments, based on earnings over the last twelve months) is 40% to 50%, providing shareholders with a competitive dividend yield. Our target dividend payout range seeks to provide shareholders with stable income, while retaining sufficient earnings to support anticipated business growth, fund strategic investments and support capital adequacy.

At year-end, our common shares provided an annualized dividend yield of 6% based on the year-end closing share price. On December 1, 2023, we announced that the Board of Directors had declared a quarterly dividend on common shares of $1.51 per share, an increase of $0.04 per share or 6% from the prior year. The dividend is payable on February 27, 2024 to shareholders of record on January 30, 2024.

Shareholder Dividend Reinvestment and Share Purchase Plan

Common shareholders may elect to have their cash dividends reinvested in common shares of BMO, in accordance with the DRIP.

During fiscal 2023, common shares to supply the DRIP were issued from treasury at a 2% discount from the then-current market price. Such shares will continue to be issued from treasury at a 2% discount until further notice. During fiscal 2022, common shares to supply the DRIP were issued from treasury at a 2% discount from the then-current market price except in the first quarter, when common shares to supply the DRIP were purchased on the open market.

Eligible Dividends Designation

For the purposes of the *Income Tax Act (Canada)* or any similar provincial and territorial legislation, BMO designates all dividends paid or deemed to be paid on both its common and preferred shares as "eligible dividends", unless indicated otherwise.

Caution

This Enterprise-Wide Capital Management section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

Off-Balance Sheet Arrangements

We enter into a number of off-balance sheet arrangements in the normal course of operations, and these include structured entities (SEs), credit instruments and guarantees.

Structured Entities and Securitization

We carry out certain business activities through arrangements involving SEs, using them to obtain sources of liquidity by securitizing certain of our financial assets, to secure customer transactions, or to pass our credit risk exposure to holders of the vehicles' securities. For example, we enter into transactions with SEs in which we transfer assets, including mortgage loans, mortgage-backed securities, credit card loans, real estate lines of credit, auto loans and equipment loans, in order to obtain alternate sources of funding or as part of our trading activities. Note 6 of the audited annual consolidated financial statements describes the loan securitization activities carried out through third-party programs such as the Canada Mortgage Bond Program. Note 7 of the audited annual consolidated financial statements provides further details of our interests in both consolidated and unconsolidated SEs. Under IFRS, we consolidate a SE if we control the entity. We consolidate our own securitization vehicles, certain capital and funding vehicles, and other structured entities created to meet our customers' needs, as well as our own. We do not consolidate our customer securitization vehicles, certain capital vehicles, various BMO-managed funds or various other SEs where investments are held. The acquisition of Bank of the West had a nominal impact on our SEs and securitization profile. Further details on our customer securitization vehicles are provided below.

BMO-Sponsored Securitization Vehicles

We sponsor various vehicles that fund assets originated either by us (which are then securitized through a bank securitization vehicle) or by our customers (which are then securitized through three Canadian customer securitization vehicles and one U.S. customer securitization vehicle). We earn fees for providing services related to these customer securitization vehicles, including liquidity, distribution and financial arrangement fees for supporting the ongoing operations of the vehicles. These fees totalled approximately $149 million in fiscal 2023 ($140 million in fiscal 2022).

Customer Securitization Vehicles

Our customer securitization vehicles provide customers with access to financing either from us or from the asset-backed commercial paper (ABCP) markets. Customers sell either their assets or an interest in their assets into these vehicles, which then issue ABCP either to investors or to us, in order to fund the purchases. The sellers remain responsible for servicing the transferred assets and are first to absorb any losses realized on those assets. We are not responsible for servicing or absorbing the first loss and none of the sellers are affiliated with BMO.

Our exposure to potential losses arises from the purchase of ABCP issued by the vehicles, any related derivative contracts entered into with the vehicles, and the liquidity support provided to the market-funded vehicles. We use the credit adjudication process in deciding whether to enter into these arrangements, just as we do when extending credit in the form of a loan.

Three of these customer securitization vehicles are market-funded, while the fourth is funded directly by the bank. We do not control these entities and therefore they are not consolidated. Further information on the consolidation of customer securitization vehicles is provided in Note 7 of the audited annual consolidated financial statements.

The market-funded vehicles had a total of $12.2 billion of ABCP outstanding as at October 31, 2023 ($11.0 billion in 2022). The ABCP issued by the Canadian market-funded vehicles is rated R-1 (high) by DBRS and P1 by Moody's, and the ABCP issued by the U.S. market-funded vehicle is rated A1 by S&P and P1 by Moody's. Our holdings of ABCP, as distributing agent of ABCP issued by the market-funded vehicles, totalled $518 million as at October 31, 2023 ($573 million in 2022).

We provide liquidity facilities to the market-funded vehicles, which may require that we provide additional financing to the vehicles should certain events occur. The total committed and undrawn amount under these liquidity facilities and undrawn amounts of the BMO funded vehicles as at October 31, 2023 totalled $19.8 billion ($18.4 billion as at October 31, 2022). This amount comprises part of the commitments outlined in Note 24 of the audited annual consolidated financial statements.

The assets of each of these market-funded vehicles consist primarily of exposures to diversified pools of automobile-related receivables and conventional residential mortgages in Canada, and automobile-related receivables and equipment loans in the United States. These two asset classes represent 63% (66% in 2022) in Canada, and 86% (88% in 2022) in the United States, of the aggregate assets of their respective vehicles as at October 31, 2023.

Credit Instruments

To meet the financial needs of our clients, we use a variety of off-balance sheet credit instruments. These include guarantees and standby letters of credit, which represent our obligation to make payments to third parties on behalf of a customer if the customer is unable to make the required payments or meet other contractual requirements. We also write documentary and commercial letters of credit, which represent agreements to honour drafts presented by a third party upon completion of specified activities. Credit commitments are off-balance sheet arrangements that represent our commitment to customers to grant them credit in the form of loans or other financings for specific amounts and maturities, subject to certain conditions.

There are a large number of credit instruments outstanding at any time. Our customers are broadly diversified, and we do not anticipate events or conditions that would cause a significant number of customers to fail to perform in accordance with the terms of their contracts. We use the credit adjudication process in deciding whether to enter into these arrangements, just as we do when extending credit in the form of a loan. We monitor off-balance sheet credit instruments in order to avoid undue concentrations in any geographic region or industry.

The maximum amount payable by BMO in relation to these credit instruments was $250 billion as at October 31, 2023 ($228 billion as at October 31, 2022). However, this amount is not representative of our likely credit exposure or the liquidity requirements for these instruments, as it does not take into account customer behaviour, which suggests that only a portion of our customers would utilize the facilities related to these instruments, nor does it take into account any amounts that could be recovered under recourse and collateral provisions.

For the credit commitments outlined in the preceding paragraphs, in the absence of an event that triggers a default, early termination by BMO may result in a breach of contract.

Further information on these instruments can be found in Note 24 of the audited annual consolidated financial statements.

Guarantees

Guarantees include contracts under which we may be required to make payments to a counterparty based on changes in the value of an asset, liability or equity security that the counterparty holds. Contracts under which we may be required to make payments if a third party does not perform according to the terms of a contract, and contracts under which we provide indirect guarantees of indebtedness, are also considered guarantees. In the normal course of business, we enter into a variety of guarantees, including standby letters of credit, backstop and other liquidity facilities, and derivatives contracts or instruments (including, but not limited to, credit default swaps), as well as indemnification agreements.

The maximum amount payable by BMO in relation to these guarantees was $58 billion as at October 31, 2023 ($54 billion as at October 31, 2022). However, this amount is not representative of our likely exposure, as it does not take into account customer behaviour, which suggests that only a portion of the guarantees would require us to make any payments, nor does it take into account any amounts that could be recovered under recourse and collateral provisions.

For a more detailed discussion of these arrangements, refer to Note 24 of the audited annual consolidated financial statements.

Caution

This Off-Balance Sheet Arrangements section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

Enterprise-Wide Risk Management

As a diversified financial services company providing banking, wealth management, capital markets and insurance services, BMO is exposed to a variety of risks that are inherent in each of these business activities. A disciplined and integrated approach to managing risk is fundamental to the success of our operations. Our risk management framework provides independent risk oversight across the enterprise and is integral to building competitive advantage.

Enterprise-Wide Risk Management outlines BMO's approach to managing the key financial risks and other related risks that are inherent in these business activities, as discussed in the following sections:

78 Risks That May Affect Future Results
82 Enterprise-Wide Risk Management Framework
87 Credit and Counterparty Risk
95 Market Risk
100 Insurance Risk
100 Liquidity and Funding Risk
109 Operational Non-Financial Risk
113 Legal and Regulatory Risk
115 Strategic Risk
116 Environmental and Social Risk
118 Reputation Risk

Text and tables presented in a blue-tinted font in the Enterprise-Wide Risk Management section of the MD&A form an integral part of the 2023 audited annual consolidated financial statements. They present required disclosures as set out by the International Accounting Standards Board in IFRS 7, *Financial Instruments – Disclosures,* which permits cross-referencing between the notes to the consolidated financial statements and the MD&A. Refer to Notes 1 and 5 of the audited annual consolidated financial statements.

Risks That May Affect Future Results

Top and Emerging Risks That May Affect Future Results

Evolving internal and external events may have an impact on BMO's overall risk profile. These events have the potential to affect our business, the results of our operations and our financial condition. Our risk management process involves proactively identifying, assessing, managing, monitoring and reporting on risks arising from these events. Risks that are identified are brought forth to several forums for discussion with the Board of Directors, senior management and business leaders, incorporating both bottom-up and top-down approaches. Risks are examined and assessed by scenario analysis. Action plans that address our exposure to certain events are developed based on these risk assessments.

The following risks are considered to have the potential to materially impact BMO's financial results, operational efficiency, strategic direction or reputation.

General Economic Conditions

The general economic conditions prevailing in Canada, the United States and other jurisdictions in which we conduct business affect our earnings. The Canadian and U.S. economies slowed in the past year in response to higher interest rates, but have shown some resilience as a result of high levels of household savings, pent-up demand, expansionary fiscal policies and, in Canada, robust population growth. The labour market remains healthy, with some recent signs of softening. Inflation has moderated, although underlying price pressures persist. The economy faces headwinds from high interest rates and high levels of household indebtedness in Canada, as well as the conflicts in Ukraine and the Middle East, trade disputes with China, diplomatic tensions between Canada and India, and other global geopolitical risks. The possibility that policy rates could rise further and remain high for an extended period has driven longer-term borrowing costs to multi-decade highs, which could lead to higher loan provisions, lower levels of loan demand and stronger deposit pricing competition, with potential impacts on net interest income. These factors represent potential risks for market stability and economic growth. Refer to the Geopolitical Risk and Escalating Trade Disputes section and the Inflation section for further discussion of these risks.

Management regularly monitors the economic environment in which we operate, in order to identify significant changes in key economic indicators, so that we can assess BMO's portfolio and business strategies, and develop contingency plans to address any adverse developments.

Cyber and Cloud Security Risk

Our exposure to cyber security risk arises from the ever-increasing reliance of our business operations on internet and cloud technologies, coupled with a hybrid work environment and extensive dependence on advanced digital technologies to process data. Heightened geopolitical tensions are also contributing to increasing global exposures to cyber security risks. These risks include the threat of data loss, which could lead to exposure of customer or employee information, as well as identity theft and fraud. Ransomware or denial of service attacks could result in system failure and disruption of services. Threat campaigns are becoming better organized and more sophisticated, including an increase in reported data breaches, often occurring through third-party suppliers, that can negatively impact a company's brand and reputation, as well as customer retention and acquisition. At BMO, our response includes investing in our Financial Crimes Unit and technological infrastructure, equipping our team to detect and address cyber security threats across North America, Europe and Asia in order to help keep our customers' and employees' data secure.

Technology Resiliency Risk

Heightened exposure to technology resiliency risk is leading to new and more expansive regulatory requirements related to operational resilience, challenging banks to extend their programs beyond disaster recovery and business continuity activities. New regulatory expectations include the need to be predictive and respond proactively to internal and external threats of disruption.

Technology resiliency is critical to providing our customers with a smooth online experience across our digital channels. Given the extent to which our customers, employees and suppliers are increasingly reliant on technology platforms and the Internet of Things to manage and support their personal, business and investment banking activities, it is important that we maintain platforms that can function at high levels of operational reliability and resilience, particularly with respect to business-critical systems.

Third-Party Risk

Our use of third-party arrangements continues to expand, helping us to deliver innovative solutions across the bank and for our clients. Failure to effectively manage these third-party arrangements exposes BMO to the risk that data may be compromised or the delivery of critical products and services may be disrupted. In addition, third-party service providers may use sub-contractors, introducing an additional layer of complexity for oversight. Any concentration of third parties will also heighten exposures to existing risks of disruption arising from other events, such as natural disasters or geopolitical events.

Effective risk management and oversight are important for third-party arrangements. This includes determining the inherent risk and criticality of third-party arrangements, conducting appropriate due diligence, as well as ongoing monitoring and oversight of the third-party service provider. At BMO, we continue to enhance our third-party risk management practices, aligning them with regulatory expectations and strengthening operational resilience across the supply chain.

Geopolitical Risk and Escalating Trade Disputes

The Russia-Ukraine conflict has had a significant global impact, including high energy prices and the erosion of business confidence. The financial, energy and technology sanctions imposed on Russia by Ukraine's allies have also aggravated shortages, particularly the supply of energy, across the global economy. This could result in a long-term political, economic and military standoff between Western countries and Russia.

Canadian and U.S. relations with China remain fragile. Taiwan continues to be a volatile issue between the United States and China, as China is committed to unification. A U.S. commitment to expanding trade ties with Taiwan may further increase the tension. In addition, the strategic competition between the two countries is driving greater global fragmentation, as both seek to reinforce their autonomy, limit any vulnerabilities and insulate their technology sectors. This could adversely affect business investment, and could prove especially problematic for commodity-producing countries such as Canada that rely on a large export market. Recent Canada-China disputes over political interference are further evidence of this antagonism. More recently, diplomatic relations between Canada and India have frayed, threatening to disrupt trade flows and tourism between the two countries and limit the number of international students applying to study in Canada. The Middle East crisis has raised tensions significantly in the region, and the risk of potential for escalation could drive up energy prices, unsettle financial markets and slow global growth even further, which would have a direct impact on our customers.

We actively monitor global and North American trends and continually assess our businesses in the context of these trends. Our lending portfolio has limited direct exposure outside North America; however, our customers rely on global trade and sustained economic growth. To mitigate exposure to geopolitical risk, we maintain a diversified portfolio that we monitor continually, in addition to contingency plans that are intended to prepare BMO for any possible adverse developments. Our portfolios, business plans and capital adequacy are stress tested against severely adverse scenarios arising from trade-related shocks, and we build contingency plans and mitigation strategies to address and offset the consequences of possible adverse political and economic developments.

BMO's credit exposure by geographic region is set out in Tables 4, 5 and 8 to 10 in the Supplemental Information and in Note 4 of the audited annual consolidated financial statements.

Climate Change

BMO is exposed to risks related to environmental conditions and extreme weather events that could potentially disrupt our operations, impact our customers and counterparties, and result in lower earnings and higher losses. Factors contributing to heightened environmental risks include the impacts of climate change and the continued intensification of development in areas of greater environmental sensitivity. Business continuity management plans provide us with the roadmap and tools that support the restoration, maintenance and management of critical operations and processes in the event of a business disruption.

BMO is also exposed to risks related to borrowers that may experience financial losses or rising operating costs as a result of climate-related litigation or policies, such as carbon emissions pricing, or that may experience a decline in revenue as new and emerging technologies disrupt or displace demand for certain commodities, products and services. As a global bank, our strategic priority is to be our clients' lead partner in the transition to a net zero world, delivering on our commitments to sustainable financing and responsible investing, supported by the BMO Climate Institute and our dedicated Energy Transition Group.

Legal and regulatory, business or reputation risks could arise from actual or perceived actions, or inaction, in our operations and those of our customers in relation to climate change and other environmental and social risk issues, or our disclosures related to these matters. Risks related to these issues could also affect our customers, suppliers or other stakeholders, which could give rise to new business or reputation risks. Globally, climate-related litigation or enforcement measures could arise from new and more stringent obligations to manage and report climate-related risks.

Refer to the Environmental and Social Risk section for further discussion of these risks.

Canadian Housing Market and Consumer Leverage

The level of household debt in Canada is high, making the economy vulnerable to economic shocks. The housing market rebounded after the Bank of Canada paused interest rate hikes in early 2023, which together with elevated inflation and a pickup in economic activity, prompted the Canadian central bank to raise rates twice over the summer. While the Bank of Canada may refrain from raising rates further, the housing market recovery will likely be held back by the persistent lack of affordability, notably in Ontario and British Columbia. However, high rates of immigration should provide underlying support to housing market activity and prices.

Housing affordability remains challenging, especially in the Greater Toronto Area (GTA) and Greater Vancouver Area (GVA) and their surrounding regions, and represents an ongoing barrier to entry for potential first-time homebuyers. Inflation and higher interest rates are putting a strain on household budgets despite historically low unemployment rates, which is reducing overall household purchasing power. Further increases in interest rates could add more stress to the financial situation of some households as their fixed payment variable-rate mortgage or fixed-rate mortgage is renewed. To address this risk, BMO has proactively reached out to customers, directly and through our website, to inform them of the potential impact of higher interest rates and provide options for increasing their scheduled payments before renewal.

A decline in home sales activity, particularly in the GTA and GVA, would impact mortgage origination volumes, while lower property values could result in higher provisions for credit losses. BMO's prudent lending practices, which include the application of additional underwriting scrutiny and regulatory stress testing at origination on higher-value and higher loan-to-value transactions, and the setting and close monitoring of regional, property type and customer segment concentration limits, support the soundness of BMO's Canadian real estate lending portfolio. Further, stress test analysis suggests that even significant price declines and extremely challenging economic conditions would result in manageable losses, primarily due to insurance coverage and the significant level of equity held by owners with seasoned loans. Credit losses may be mitigated by relatively low unemployment and rising wages, which are expected to support consumer spending capacity in the face of high inflation.

Inflation

The inflation rate has begun to moderate after reaching four-decade highs in 2022, amid lower commodity prices and improved global supply chains. However, it is not expected to return to the 2% target of central banks until 2025. Elevated inflation is having an impact on the operations of our clients, and could have a negative effect on our earnings through higher provisions for credit losses and higher operating costs. We monitor inflationary pressures in North America closely and assess potential effects on our portfolios, interest margins and operating costs. Refer to the Canadian Housing Market and Consumer Leverage section and the General Economic Conditions section for further discussion of these risks.

Technological Innovation and Competition

Emerging technologies continue to evolve rapidly, creating opportunities to drive revenue growth and operating efficiencies in the financial sector. We are committed to the prudent and responsible adoption of emerging new technologies in order to have a competitive advantage and meet our customers' expectations, as we deliver personalized on-demand banking and new digital products and services. In alignment with BMO's Digital First strategy, we are continuing to invest in risk management technology that can also enhance the customer experience, streamline processes and reduce complexity. We continue to monitor the evolving external environment to identify emerging technologies, practices and regulations in the financial services industry. Our emerging technologies risk management framework is now a component of Technology Risk Management, supporting prudent and responsible innovation and adoption. We are also developing and deploying new talent strategies to attract and retain employees with the skills essential to maintaining BMO's global competitive position.

Other Factors That May Affect Future Results

Fiscal and Monetary Policies and Other Economic Conditions in the Countries in which BMO Conducts Business

Fiscal and monetary policies and other economic conditions prevailing in Canada, the United States and other jurisdictions in which we do business may impact profitability and heighten economic uncertainty in specific businesses and markets, which may in turn affect our customers and counterparties, reduce profitability and contribute to a greater risk of default. Higher levels of business debt following the pandemic may give rise to future vulnerabilities that could impact our markets and our operating results. Interest rate fluctuations could have an impact on our earnings, the value of our investments, the credit quality of our loans to customers and counterparty exposure, as well as the capital markets that we access.

Fluctuations in the value of the Canadian dollar relative to other currencies have affected, and could continue to affect, the business operations and results of clients with significant earnings or input costs denominated in foreign currencies. Our investments in operations outside of Canada are primarily denominated in U.S. dollars, and the foreign exchange impact on our U.S.-dollar-denominated risk-weighted assets and capital deductions may result in variability in our capital ratios. Refer to the Enterprise-Wide Capital Management section for further discussion of these risks. The value of the Canadian dollar relative to the U.S. dollar will also affect the contribution of U.S. operations to Canadian-dollar profitability.

Hedging positions may be taken to manage interest rate exposures and foreign exchange impacts, and to partially offset the effects of Canadian dollar/U.S. dollar exchange rate fluctuations on the bank's financial results. Refer to the Foreign Exchange section and the Market Risk section for a more complete discussion of our exposure to foreign exchange and interest rate risk.

Regulatory Requirements

The financial services industry is highly regulated, and BMO has experienced increasing complexity in regulatory requirements and expectations, as governments and regulators around the world continue to pursue major reforms intended to strengthen the stability of the financial system and protect key markets and participants. These may lead to further increases in regulatory capital or liquidity requirements and additional compliance costs, which could lower returns and affect growth. These reforms could also affect the cost and availability of funding and the level of the bank's market-making activities. Regulatory reforms may also impact fees and other revenues for certain operating groups. In addition, differences in the laws and regulations enacted by a range of national regulatory authorities may offer advantages to our international competitors, which could affect our ability to compete. We monitor such developments, and other potential changes, so that we are well-positioned to respond and implement any necessary changes.

Following our acquisition of Bank of the West, our subsidiary, BMO Financial Corp. (BFC), as a U.S. bank intermediate holding company, has transitioned from a Category IV to a Category III institution under the Enhanced Prudential Standards issued by the Federal Reserve Board. This change will require BFC to meet certain heightened regulatory standards. Additional information regarding regulatory requirements that now apply to BFC is set out in the Enterprise-Wide Capital Management section.

Failure to comply with applicable legal and regulatory requirements and expectations could result in legal proceedings, financial losses, regulatory sanctions and fines, enforcement actions, criminal convictions and penalties, restrictions on or an inability to execute certain business strategies, a decline in investor and customer confidence, and damage to our reputation. Refer to the Legal and Regulatory Risk section for a more complete discussion of BMO's management of legal and regulatory risk.

Tax Legislation and Interpretations

Legislative changes and changes in tax policy, including their interpretation by tax authorities and the courts, may impact earnings. Tax laws, as well as interpretations of tax laws and policy by tax authorities, may change as a result of efforts by the Canadian and U.S. federal governments, other G20 governments and the Organisation for Economic Co-operation and Development (OECD) to increase taxes, broaden the tax base globally and improve tax-related reporting. For example, the Canadian government has released proposed legislation to adopt the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting two-pillar plan (Pillar 2) for international tax reform, which will levy a 15% minimum tax on operations globally. For further discussion, refer to the Regulatory Developments – New Canadian Tax Measures section.

Changes to Business Portfolio

On occasion, BMO may acquire companies, businesses and assets as part of its overall business strategy. We conduct thorough due diligence before completing these acquisitions. However, some acquisitions, including Bank of the West, may not perform in accordance with our financial or strategic objectives or expectations. We may be subject to regulatory and shareholder approvals to successfully complete an acquisition, and it may not be possible to establish when, if or on what terms the necessary approvals will be granted. Changes in the competitive and economic environment, as well as other factors, may result in reductions in revenue or profitability, while higher than anticipated integration costs and failure to realize anticipated cost savings after an acquisition could also adversely affect earnings. Integration costs may increase because of regulatory costs related to an acquisition, operational loss events, other unanticipated expenses that were not identified in the due diligence process, or demands on management time that are more significant than anticipated, as well as unexpected delays in implementing certain plans that may in turn lead to delays in attaining full integration. Successful post-acquisition performance depends on retaining the clients and key employees of acquired companies and businesses and on integrating key systems and processes without disruption.

BMO also evaluates potential dispositions of assets and businesses that may no longer meet strategic objectives. When we sell assets or withdraw from a business, we may experience difficulty in finding buyers or devising alternative exit strategies on acceptable terms or in a timely manner, which could delay the achievement of strategic objectives. We may also dispose of assets or a business on terms that are less favourable than anticipated or lead to adverse operational or financial impacts, or greater disruption than expected, and the impact of the divestiture on revenue growth may be greater than projected. Dispositions may be subject to the satisfaction of conditions and the granting of governmental or regulatory approvals on acceptable terms that, if not satisfied or obtained, may prevent the completion of a disposition as intended, or at all.

Critical Accounting Estimates, Judgments and Accounting Standards

BMO prepares its consolidated financial statements in accordance with International Financial Reporting Standards (IFRS). Changes that the International Accounting Standards Board makes from time to time may materially affect the way we record and report financial results. Future changes in accounting policies are discussed in the Future Changes in Accounting Policies section, as well as in Note 1 of the audited annual consolidated financial statements.

The application of IFRS requires management to make significant judgments and estimates that affect the carrying amounts of certain assets and liabilities, certain amounts reported in net income and other related disclosures. In making these judgments and estimates, we rely on the best information available at the time. However, it is possible that circumstances may change, new information may become available or models may prove to be imprecise.

BMO's financial results could be affected for the period during which any such new information or change in circumstances becomes apparent, and the extent of the impact could be significant. More information is included in the Critical Accounting Estimates and Judgments section.

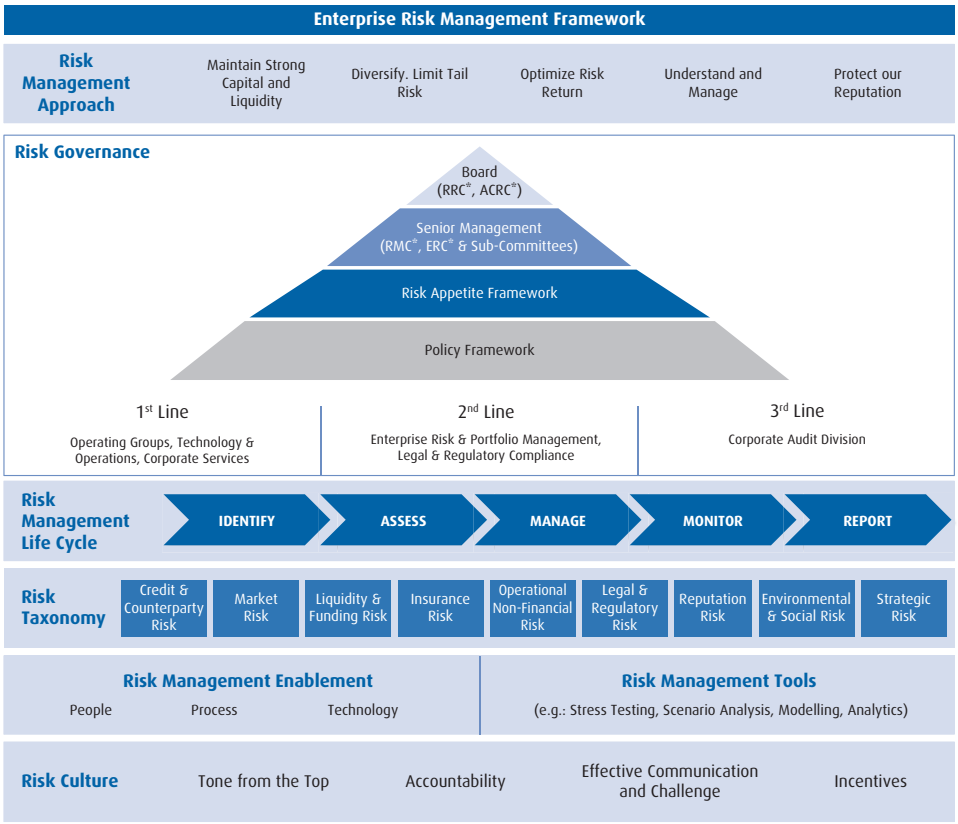
Caution

The Risks That May Affect Future Results section and the remainder of this Enterprise-Wide Risk Management section contain forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements. Other factors beyond BMO's control that may affect its future results are noted in the Caution Regarding Forward-Looking Statements. BMO cautions that the preceding discussion of risks that may affect future results is not exhaustive.

Enterprise-Wide Risk Management Framework

BMO's integrated and disciplined approach to risk management is fundamental to the success of our business. Our Enterprise Risk and Portfolio Management (ERPM) group oversees the implementation and operation of the Enterprise-Wide Risk Management Framework (ERMF), and provides independent review and oversight across the enterprise on risk-related issues, in order to enable prudent and measured risk-taking that is integrated with business strategy. All elements of the ERMF function together to support informed and effective risk management, while striking an appropriate balance between risk and return.

The ERMF guides our risk-taking activities in order to align them with customer needs, shareholder expectations and regulatory requirements. The ERMF also sets out our approach to risk management: maintain strong capital and liquidity positions, diversify and limit tail risk, optimize risk return, understand and manage the risks we face, and protect our reputation. Our approach to risk governance is outlined in the ERMF, which incorporates our Risk Management Life Cycle, and informs our efforts to identify, assess, manage (which includes mitigation), monitor and report on our exposure to material risks. The ERMF is driven by our people, processes and technology, along with a range of risk management tools, including modelling and analytics, stress testing and scenario analysis, and our Risk Taxonomy. All elements of the ERMF are supported by our risk culture and provide for the direct management of each individual risk type, as well as the management of risk on an integrated basis.



*RRC: Risk Review Committee, ACRC: Audit and Conduct Review Committee, RMC: Risk Management Committee, ERC: Enterprise Regulatory Committee

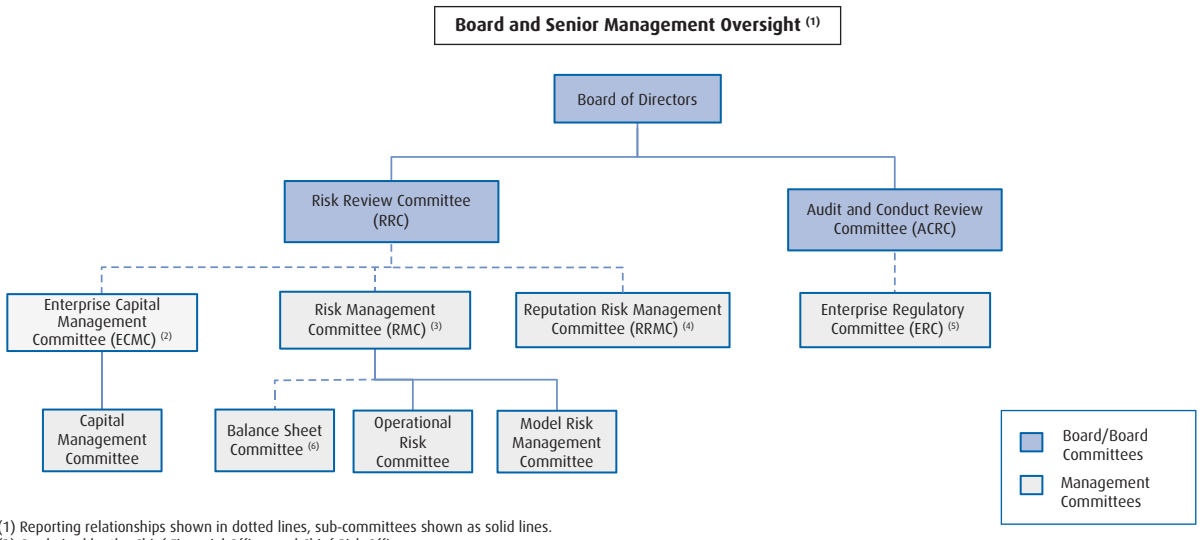
Risk Governance

The ERMF outlines a governance approach that includes robust Board of Directors and senior management oversight, a Risk Appetite Framework, the Enterprise Policy Framework and the corresponding roles in the three-lines-of-defence operating model.

Board of Directors and Senior Management Oversight

Specific policies approved by our Board of Directors govern our approach to the management of material risks, and oversight is exercised at every level of the enterprise through a hierarchy of committees and individual responsibilities, as outlined in the following diagram. The Board of Directors seeks to ensure that corporate objectives are supported by a sound risk strategy and an effective ERMF that is appropriate to the nature, scale, complexity and risk profile of our lines of business and other operations. The Board also has overall responsibility for oversight of the bank's governance framework and corporate culture. Senior management reviews and discusses significant risk issues and action plans as they arise in the implementation of the enterprise-wide strategy, exercising oversight and governance of the risks taken across the enterprise and the processes through which exposures to such risks are identified, assessed, managed, monitored and reported on, in accordance with policies, and held within approved limits and risk tolerances.

The ERMF is reviewed on a regular basis by the Risk Review Committee (RRC) of the Board of Directors, in order to exercise oversight and guide risk-taking activities.



(1) Reporting relationships shown in dotted lines, sub-committees shown as solid lines.
(2) Co-chaired by the Chief Financial Officer and Chief Risk Officer.
(3) Chaired by the Chief Risk Officer.
(4) Chaired by the General Counsel.
(5) Co-chaired by the General Counsel and Chief Risk Officer.
(6) The Balance Sheet Committee (BSC) is a sub-committee of the Asset and Liability Management Committee (ALCO) and reports to RMC on matters related to Structural Market Risk and Liquidity and Funding Risk.

In addition to the oversight exercised by the Board of Directors and senior management, effective governance of the bank's risks is overseen by management committees and supported by the three-lines-of-defence operating model, which addresses risks across the operating groups and Corporate Services.

Board of Directors is responsible for supervising the management of the business and affairs of BMO. The Board, either directly or through its committees, is responsible for oversight of the following areas: strategic planning; defining risk appetite; identifying and managing risk; managing capital; fostering a culture of integrity; internal controls; succession planning and evaluation of senior management; communication; public disclosure; and corporate governance.

Risk Review Committee (RRC) of the Board of Directors assists the Board in fulfilling its risk management oversight responsibilities. This includes overseeing a strong risk culture; overseeing the identification and management of BMO's risks; monitoring adherence to risk management corporate policies and compliance with risk-related regulatory requirements; and evaluating the effectiveness of the Chief Risk Officer (CRO), in conjunction with the Human Resources Committee, including input into succession planning for the CRO. The ERMF is reviewed on a regular basis by the RRC and guides risk-taking activities and sets out the bank's approach to risk management.

Audit and Conduct Review Committee (ACRC) of the Board of Directors assists the Board in fulfilling its oversight responsibilities for the integrity of BMO's financial reporting and sustainability reporting on environmental, social and governance (ESG) matters; the effectiveness of BMO's internal controls; the internal audit function; the qualifications, independence and performance of the independent auditors; BMO's compliance with laws and regulations; transactions involving related parties; conflicts of interest and confidential information; standards of business conduct and ethics; cyber security; and consumer protection measures and complaints.

Chief Executive Officer (CEO) is directly accountable to the Board for all of BMO's risk-taking activities. The CEO is supported by the CRO and the ERPM group.

Chief Risk Officer (CRO) reports directly to the CEO and is head of ERPM and chair of RMC. The CRO is responsible for providing independent review and oversight of enterprise-wide risks and leadership on risk issues, developing and maintaining the ERMF and fostering a strong risk culture across the enterprise.

Risk Management Committee (RMC) brings together senior executive members of BMO management to oversee risk management across the enterprise. RMC reviews and discusses significant risk issues and action plans as they arise in the implementation of the enterprise-wide strategy. RMC exercises risk oversight and governance at the highest levels of management. This committee is chaired by the CRO, and its members include the heads of the operating groups, the CEO, the Chief Financial Officer (CFO) and the General Counsel.

RMC Sub-Committees have oversight responsibility for the risk exposures and balance sheet impacts that may arise from management strategies, governance practices, risk measurement, model risk management and contingency planning. RMC and its sub-committees exercise oversight of the risks taken across the enterprise and the processes through which such risks are identified, assessed, managed, monitored and reported on, in accordance with policies, and held within limits and risk tolerances.

Enterprise Risk and Portfolio Management (ERPM), as the second line of defence, provides risk management oversight, effective challenge and independent assessment of risk and risk-taking activities. ERPM supports a disciplined approach to risk-taking by exercising its responsibility for independent transactional approval and portfolio management, policy formulation, risk reporting, stress testing, modelling and risk education. This approach promotes consistency in risk management practices and standards across the enterprise, and verifies that any risks accepted are consistent with BMO's risk appetite.

Operating Groups and Corporate Services, including Technology and Operations, are responsible for effectively managing risks by identifying, assessing, managing, monitoring, mitigating and reporting on exposures to risk within their respective operations and lines of business in accordance with their established risk appetite. They exercise business judgment and maintain effective policies, processes and internal controls, so that significant risk issues are escalated and reviewed by ERPM. Individual governance committees and ERPM establish and monitor risk limits that are consistent with, and subordinate to, the Board-approved limits.

Risk Appetite Framework

BMO's Risk Appetite Framework consists of a Risk Appetite Statement and the responsibilities of senior management and the Board of Directors, and is supported by corporate policies, standards and guidelines, including the related risk limits, concentration levels and controls defined therein. Risk appetite defines the level and type of risk that the bank is willing to assume given its guiding principles, thereby supporting the pursuit of sound business initiatives, appropriate returns and targeted growth. Risk appetite is integrated with strategic and capital planning and performance management. The Risk Appetite Statement consists of both qualitative and quantitative specifications of our appetite for the assumption of material risks. Key risk metrics are outlined for material risks, with specific thresholds that allow senior management and the Board of Directors to monitor actual performance relative to risk appetite. On an annual basis, the RMC submits the Risk Appetite Statement and key risk metrics to the RRC, which in turn reviews and recommends them to the Board of Directors for approval. The Risk Appetite Statement is articulated and applied consistently across the enterprise, with operating groups, Corporate Services, key businesses and entities developing their own respective risk appetite statements within this framework.

We believe that risk management is every employee's responsibility. This is guided by five key principles that define our approach to managing risk across the enterprise and comprise our Risk Appetite Statement.

- **Understand and Manage** by only taking risks that are transparent and understood.
- **Protect BMO's Reputation** by adhering to principles of honesty, integrity, respect and high ethical standards, in line with our Code of Conduct.
- **Diversify. Limit Tail Risk** by targeting a business mix that minimizes earnings volatility and exposure to low-probability, high-impact events.
- **Maintain Strong Capital and Liquidity** positions that meet, or exceed, regulatory requirements and market expectations.
- **Optimize Risk Return** by managing risk-adjusted exposures and making decisions that create value for shareholders.

Risk Limits

Risk limits are set so that risk-taking activities remain within BMO's risk appetite, balancing risk diversification, exposure to loss and risk-adjusted returns. These limits inform business strategies and decisions, and are reviewed and approved by the Board of Directors or management committees, as appropriate, based on the level and granularity of the limits. They include:

- **Credit and Counterparty Risk** – limits on group and single-name exposures and material country, industry and portfolio/product segments.
- **Market Risk** – limits on economic value and earnings exposures to stress scenarios and significant market movements, as well as limits on value at risk and stress related to trading and underwriting activities.
- **Insurance Risk** – limits on policy exposures and reinsurance arrangements.
- **Liquidity and Funding Risk** – minimum limits governing the internal liquidity stress testing scenario, minimum regulatory liquidity ratio requirements, and maximum levels of asset pledging and wholesale funding, as well as limits related to liability diversification and exposure to credit and liquidity facilities.
- **Operational Non-Financial Risk** – key metrics for measuring operational and other non-financial risks that may have financial consequences.

The Board of Directors, after considering recommendations from the RRC and RMC, annually reviews and approves key risk limits and then delegates overall authority for these limits to the CEO. The CEO in turn delegates more specific authorities to the senior executives of the operating groups (first line of defence), who are responsible for the management of risk in their respective operations, and to the CRO. These delegated authorities allow risk officers to set risk tolerances, approve geographic and industry sector exposure limits within defined parameters, and establish underwriting and inventory limits for trading and investment banking activities. The criteria under which more specific authorities may be delegated across the organization, as well as the requirements relating to documentation, communication and monitoring of those specific delegated authorities, are set out in corporate policies and standards.

Enterprise Policy Framework

The Enterprise Policy Framework includes a comprehensive set of risk-related corporate policies, each of which is approved by the RRC, as well as corporate standards issued pursuant to those corporate policies that have been reviewed by the RMC and approved by senior management. Corporate policies and standards collectively outline the principles, expectations, and roles and responsibilities of senior management for ensuring that exposures to key risks are identified, assessed, managed, monitored and reported. Corporate policies and standards are reviewed and updated at a minimum every two years.

The Enterprise Policy Framework also includes supporting directives and procedures that apply across the first and second lines of defence to operationalize the requirements, roles and responsibilities, and frameworks outlined in those corporate policies and standards.

Three-Lines-of-Defence Operating Model

Our ERMF is operationalized through the three-lines-of-defence approach to managing risk, as described below:

- Operating groups and Corporate Services, which includes Technology and Operations, serve as our first line of defence. They are accountable for the risks arising from their businesses, operations and exposures. They are expected to pursue business opportunities within their established risk appetite and to identify, assess, manage (which includes mitigation), monitor and report on all risks in, or arising from, their businesses, operations and exposures. The first line fulfils its responsibilities by applying risk management and reporting methodologies, by establishing appropriate internal controls in accordance with the ERMF, and by monitoring the effectiveness of such controls. These processes and controls serve as the framework for our lines of business to act within their delegated risk-taking authority and risk limits, as set out in corporate policies and the Risk Appetite Framework. Corporate Services, while part of our first line of defence, may also serve in a governance capacity when specific roles and responsibilities are assigned to individuals or groups under the Enterprise Policy Framework.
- The second line of defence comprises ERPM and Legal & Regulatory Compliance. The second line exercises independent oversight, performs effective challenge and provides independent assessment of risks and risk management practices, including transaction, product and portfolio risk

management decisions, processes and controls applied in the first line of defence. The second line establishes enterprise-wide risk management policies, infrastructure, processes, methodologies and practices that the first and second lines use to identify, assess, manage (which includes mitigation), monitor and report on risks across the enterprise.
- Corporate Audit Division is the third line of defence. It provides an independent assessment of the effectiveness of internal controls across the enterprise, including controls that support the risk management and governance processes.

Risk Taxonomy

Our Risk Taxonomy categorizes the key risks to which BMO is exposed and provides an analytical framework for the risk management life cycle in relation to each of the key risks. Our Risk Taxonomy incorporates exposures to financial risks (Credit and Counterparty Risk, Market Risk, Insurance Risk and Liquidity and Funding Risk), non-financial risks (Operational Non-Financial Risk and Legal and Regulatory Risk) and transverse risks, which intersect with both financial and non-financial risks (Strategic Risk, Environmental and Social Risk and Reputation Risk). We maintain sub-categories under each Tier 1 risk to support effective risk management practices as part of the overall ERMF. Failure in managing these risks, or in controlling our exposures to them, could have material financial consequences for BMO.

Risk Management Life Cycle

Risk Identification, Assessment and Management

Risk identification is an integral step in recognizing the key inherent risks that BMO faces, assessing the potential for loss and then acting to mitigate this potential. Our Risk Taxonomy documents the key risks, supporting the implementation of our Risk Appetite Framework and assisting in identifying the primary risk categories for which stress capital consumption is estimated. Risk review and approval processes are established based on the nature, size and complexity of the risks involved. Generally, these involve a formal review and approval by either an individual or a committee that is independent of the originator. Delegated authorities and approvals by category are outlined below.

- **Portfolio transactions** – transactions are approved through risk assessment processes for all types of transactions at all levels of the enterprise, which include operating group recommendations and ERPM approval of credit risk, and transactional and position limits for market risk.
- **Structured transactions** – new structured products and transactions with significant legal and regulatory, accounting or tax implications are reviewed by the Global Markets Risk Committee, as appropriate, and are also assessed under the operational risk management process if they involve structural or operational complexity that may give rise to significant operational risk. Transactions that may give rise to significant or heightened reputation risk are reviewed by the Reputation Risk Management Committee.
- **Investment initiatives** – documentation of risk assessments is formalized through the investment assessment and approval process, and is reviewed and approved by Corporate Services based on the size of an initiative's investment spending and its inherent risk.
- **New products and services** – policies and procedures for the approval of new or modified products and services offered to customers are the responsibility of the first line of defence, including appropriate senior business leaders, and are reviewed and approved by subject matter experts and senior management in Corporate Services, as well as by other senior management committees.

Risk Monitoring and Reporting

Risk-Based Capital Assessment

Two measures of risk-based capital are used by BMO: economic capital and regulatory capital. Both are aggregate measures of the risk that the bank assumes in pursuit of its financial objectives, and enable the evaluation of returns on a risk-adjusted basis. Our operating model provides for the direct management of each type of risk, as well as the management of material risks on an integrated basis. Measuring the economic profitability of transactions or portfolios involves a combination of both expected and unexpected losses to assess the extent and correlation of risk before authorizing new exposures. Both expected and unexpected loss measures for a current transaction or portfolio reflect current and future market conditions, the inherent risk in the position and, as appropriate, its credit quality. Risk-based capital methods and material models are reviewed at least annually and updated as appropriate. The risk-based capital models provide a forward-looking estimate of the difference between the maximum potential loss in economic (or market) value and expected loss, measured over a specified time interval and using a defined confidence level.

Stress Testing

Stress testing is a key element of our risk management and capital management frameworks. It is integrated into our enterprise and group risk appetite statements and embedded in our management processes. To evaluate risks, we regularly test a range of scenarios, which vary in frequency, severity and complexity, in portfolios and businesses across the enterprise. In addition, we participate in regulatory stress tests in multiple jurisdictions. Governance of the stress testing framework resides with senior management, including the Enterprise Stress Testing Committee. This committee comprises business, risk and finance executives, and is accountable for reviewing and challenging enterprise-wide scenarios and stress test results. Stress testing and enterprise-wide scenarios associated with the Internal Capital Adequacy Assessment Process (ICAAP), including recommendations for actions that the enterprise could take in order to manage the impact of a stress event, are established by senior management and presented to the Board of Directors. Oversight and governance of the stress testing associated with the Horizontal Capital Review (HCR), which is a U.S. regulatory requirement for BMO Financial Corp. (BFC), are exercised at the BFC level by its Board of Directors.

Quantitative models and tools, along with qualitative evaluations, are utilized to assess the impact of changes in the macroeconomic environment on the income statement and balance sheet and the resilience of the bank's capital position over a forecast horizon. Models utilized for stress testing are approved and governed under the Model Risk Management Framework, and are used to establish a better understanding of our risks and to test our capital adequacy.

BMO's stress testing framework integrates stress testing at the line of business, portfolio, industry, geographic and product level, and embeds the test results in strategy, business planning and decision-making. Targeted portfolio, industry and geographic analysis is conducted by ERPM and the lines of business to test risk appetite, limits, concentration and strategy. Ad hoc stress testing is conducted in response to changing economic or market conditions and in order to assess business strategies.

Refer to the Environmental and Social Risk section for a discussion of our climate scenario analysis program.

Enterprise Stress Testing

Enterprise stress testing supports BMO's ICAAP and target-setting through analysis of the potential effects of low-frequency, high-severity events on our earnings, our balance sheet, and our liquidity and capital positions. Scenario selection is a multi-step process that considers material and idiosyncratic risks and the potential impact of new or emerging trends on risk profiles, as well as the macroeconomic environment. Scenarios may be defined by senior management or regulators. The economic impacts are determined by the Economics group, which distills the scenarios into macroeconomic and market variables that include, but are not limited to, GDP growth, yield curve estimates, unemployment rates, real estate prices, stock index growth and changes in corporate profits. These macroeconomic variables drive stress loss models, tools and qualitative assessments that are applied to determine estimated stress impacts. The scenarios are used by operating, risk and finance groups to assess a broad range of financial impacts that BMO could experience as a result of a specific stress, as well as the ordinary course of business and extraordinary actions anticipated in response to that stress.

Stress test results, including mitigating actions, are benchmarked and challenged by the relevant business units and senior management, including the Enterprise Stress Testing Committee.

Risk Culture

The Enterprise Culture and Conduct Framework sets out BMO's approach to managing and mitigating potential misconduct. Misconduct is behaviour that falls short of legal, professional, internal conduct and ethical standards. Similar to BMO's approach to managing other non-financial risks, this framework is supported by the ERMF and our focus on maintaining a strong risk culture. BMO reports on various metrics related to culture and conduct, and engages with other control frameworks across the enterprise and in all of the jurisdictions in which it operates.

Risk culture at BMO is the set of shared norms, attitudes and behaviours related to risk awareness, risk-taking and risk management. Sound risk culture consistently supports appropriate behaviours and judgments about risk-taking, and promotes effective risk management and the alignment of risk-taking activities with BMO's Risk Appetite. Our risk culture informs and supports our overall organizational culture. We are committed to high ethical standards, grounded in our values of integrity, empathy, diversity and responsibility. Our Purpose – to Boldly Grow the Good *in business and life* – defines BMO as an organization and is the foundation of our operations. ERPM is responsible for the development and promotion of a healthy, strong risk culture across the enterprise. In pursuing this mandate, ERPM works closely with Legal & Regulatory Compliance and its Ethics & Conduct Office, as well as People & Culture. BMO's risk culture is founded on four guiding principles that together reinforce its effectiveness across the bank: Tone from the Top, Accountability, Effective Communication and Challenge, and Incentives.

- **Tone from the Top:** Our risk culture is grounded in an approach to risk management that encourages openness, constructive challenge and personal accountability. Each member of senior management plays a critical role in fostering this strong risk culture among all employees by effectively communicating this responsibility and by the example of their actions. The Board of Directors oversees BMO's corporate objectives, and affirms that they are supported by a sound risk strategy and an effective ERMF that is appropriate to the nature, scale, complexity and risk profile of our operations.
- **Accountability:** BMO's ERMF is anchored in the three-lines-of-defence approach to managing risk. Our risk culture also encourages the escalation of concerns associated with potential or emerging risks to senior management, so that those concerns can be appropriately evaluated and addressed. BMO encourages and supports an environment in which concerns can be raised without retaliation.
- **Effective Communication and Challenge:** Timely and transparent sharing of information is integral to engaging stakeholders in key decisions and strategy discussions, which brings added rigour and discipline to BMO's decision-making. This not only leads to the timely identification, escalation and resolution of issues, but also encourages open communication, independent challenge and an understanding of the key risks faced by the organization, so that employees are equipped and empowered to make decisions and take action in a coordinated and consistent manner, supported by a strong and effective monitoring and control framework.
- **Incentives:** Compensation and other incentives are aligned with prudent risk-taking. These are designed to reward the appropriate use of capital and respect for the rules and principles of the ERMF, and to discourage excessive risk-taking. Risk managers have input into the design of incentive programs that may have an effect on risk-taking. We also maintain training programs that are designed to foster a deep understanding of BMO's capital management and risk management frameworks across the enterprise, providing employees and management with the tools and insights they need to fulfill their responsibilities for independent oversight, regardless of their role in the organization.

Credit and Counterparty Risk

Credit and Counterparty Risk is the potential for financial loss due to the failure of an obligor (i.e., a borrower, endorser, guarantor or counterparty) to repay a loan or honour another predetermined financial obligation.

Credit and counterparty risk underlies every lending activity that we enter into, and also arises in the holding of investment securities, transactions related to trading and other capital markets products, and activities related to securitization. Credit risk and counterparty risk represent the most significant measurable risks we face. Effective management of credit and counterparty risk is integral to our success, since failure to do so could have an immediate and significant impact on our earnings, financial condition and reputation.

Credit and Counterparty Risk Governance

The Credit Risk Management Framework seeks to ensure that all material credit risks to which the enterprise is exposed are identified, assessed, managed, monitored and reported on regularly. The Risk Review Committee (RRC) has oversight of the management of all material risks that BMO faces, including the Credit Risk Management Framework. The framework incorporates governing principles that are defined in a series of corporate policies and standards and are given effect through specific operating procedures. These policies and standards are reviewed on a regular basis and modified as necessary, so that they are current and consistent with our risk appetite. The structure, limits (both notional and capital-based), collateral requirements, monitoring, reporting and ongoing management of credit and counterparty exposures are all governed by these credit risk management principles.

Lending officers in the operating groups are responsible for recommending credit decisions based on the completion of appropriate due diligence, and they assume accountability for the related risks. In some instances, relatively small transactions may be assessed by an automated decision-making process, or they may be approved by first-line underwriters with appropriate training, independence and oversight. Credit officers in Enterprise Risk and Portfolio Management (ERPM) approve larger transactions or transactions involving greater risk and are accountable for providing an objective independent assessment of the relevant lending recommendations and risks assumed by the lending officers. All of these individuals in the first and second lines of defence are subject to a lending qualification process and operate in a disciplined environment with clear delegation of decision-making authority, including individually delegated lending limits where appropriate, which are reviewed annually or more frequently, as needed. The Board of Directors annually delegates to the CEO discretionary lending limits for further specific delegation to senior officers.
Credit decision-making is conducted at the management level appropriate to the size and risk of each transaction, in accordance with a range of corporate policies, standards and procedures governing the conduct of activities in which credit risk arises. Corporate Audit Division reviews and tests management processes and controls and samples credit transactions in order to assess adherence to acceptable lending standards as set out in BMO's Risk Appetite Statement, as well as compliance with all applicable corporate policies, standards and procedures.

For corporate and commercial borrowers presenting a higher than normal risk of default, we have formal policies in place that outline the framework for managing such accounts, as well as specialized groups that manage them. We strive to identify borrowers facing financial difficulty early, and every effort is made to return such accounts to an acceptable level of risk through the application of good business judgment and the implementation of sound and constructive workout solutions.

All credit risk exposures are subject to regular monitoring. Performing corporate and commercial accounts are reviewed on a regular basis, generally no less frequently than annually, with most subject to internal monitoring of triggers that, if breached, result in an interim review.
The frequency of review rises in accordance with the likelihood and size of potential credit losses, and deteriorating higher-risk situations are referred to specialized account management groups for closer attention, as appropriate. In addition, regular portfolio and sector reviews are conducted, including stress testing and scenario analysis based on current, emerging or prospective risks. Reporting is provided at least quarterly, and more frequently where appropriate, to the Board of Directors and senior management committees in order to keep them informed of credit risk developments in our portfolios, including changes in credit risk concentrations, watchlist accounts, impaired loans, provisions for credit losses, negative credit migration and significant emerging credit risk issues. This supports the RRC and senior management committees in any related decisions they may make.

Counterparty credit risk (CCR) involves a bilateral risk of loss because the market value of a transaction can be positive or negative for either counterparty. CCR exposures are subject to the credit oversight, limits, risk management framework and approval process outlined above. However, given the nature of the risk, CCR exposures are also monitored under the market risk framework. In order to reduce our exposure to CCR, transactions are often collateralized and trades may be cleared through a regulated central counterparty (CCP), which reduces overall systemic risk by standing between counterparties, maximizing netting across trades and insulating counterparties from each other's defaults. CCPs mitigate the risk of default by any member through margin requirements (both initial and variation) and a default management process, including a default fund and other provisions. Our exposures to CCPs are subject to the same credit risk governance, monitoring and rating framework we apply to all other corporate accounts.

Material presented in a blue-tinted font above is an integral part of Note 5 of the 2023 audited annual consolidated financial statements.

Credit and Counterparty Risk Management

Collateral Management

Collateral is used for credit risk mitigation purposes in order to minimize losses that would otherwise be incurred in the event of a default. Depending on the type of borrower or counterparty, the assets available and the structure and term of the credit obligations, collateral can take various forms. For corporate and commercial borrowers, collateral can take the form of pledges of the assets of a business, such as accounts receivable, inventory, machinery or real estate, or personal assets pledged in support of guarantees. For trading counterparties, BMO may enter into legally enforceable netting agreements for on-balance sheet credit exposures, when possible. In the securities financing business (including repurchase agreements and securities lending), we obtain eligible financial collateral that we control and can readily liquidate.

Collateral for BMO's derivatives trading counterparty exposures primarily comprises cash and eligible liquid securities that are monitored and revalued on a daily basis. Collateral is obtained under the contractual terms of standardized industry documentation.

With limited exceptions, we utilize the Master Agreement provided by International Swaps and Derivatives Association Inc., frequently with a Credit Support Annex, to document our collateralized trading relationships with counterparties for over-the-counter (OTC) derivatives that are not centrally cleared.

A Credit Support Annex entitles a party to demand a transfer of collateral (or other credit support) when its exposure to OTC derivatives of the other party exceeds an agreed threshold. Collateral to be transferred can include variation margin or initial and variation margin. Credit Support Annexes contain, among other measures, certain thresholds and provisions setting out acceptable types of collateral, a method for their valuation (discounts are often applied to market values), the availability of the collateral for re-pledging by the recipient and the manner in which interest is to be calculated.

To document our contractual securities financing relationships with counterparties, we utilize master repurchase agreements for repurchase transactions, and master securities lending agreements for securities lending transactions.

On a periodic basis, collateral is subject to revaluation based on the specific asset type. For loans, the value of collateral is initially established at the time of origination, and the frequency of revaluation is dependent on the type of collateral. For commercial real estate collateral, a full external appraisal of the property is typically obtained at the time of loan origination, unless the exposure is below a specified threshold amount, in which case an internal evaluation and a site inspection are conducted. Internal evaluations may consider property tax assessments, purchase prices, real estate listings or realtor opinions. The case for an updated appraisal is reviewed annually, with consideration given to the borrower risk rating, existing tenants and lease contracts, as well as current market conditions.

In the event a loan is classified as impaired, and depending on its size, a current external appraisal, valuation or restricted use appraisal is obtained and updated every 12 months, as long as the loan remains classified as impaired. In Canada, for residential real estate that has an original loan-to-value (LTV) ratio of less than 80%, an independent property valuation is routinely obtained at the time of loan origination. For U.S. residential loans secured by real estate, an independent property valuation is obtained for all loans that will be retained in BMO's loan portfolio. For certain real estate loans originated for sale to government-sponsored agencies, the requirement may be waived based on an existing valuation already on file with that agency.

We may use an external service provided by Canada Mortgage and Housing Corporation or an automated valuation model from a third-party appraisal management provider to assist in determining either the current value of a property or the need for a full property appraisal.

For insured residential mortgages in Canada with an original LTV ratio greater than 80%, the default insurer is responsible for confirming the current value of the property.

Portfolio Management and Concentrations of Credit and Counterparty Risk

Our credit risk governance policies require an acceptable level of diversification to help ensure we avoid undue concentrations of credit risk. Concentrations of credit risk may exist when a relatively large number of clients are engaged in similar activities, are located in the same geographic region or have similar economic characteristics such that their ability to meet contractual obligations could be similarly affected by changes in economic, political or other conditions. Limits may be specified for several portfolio dimensions, including industry, specialty segments, country, product and single-name concentrations. We use a range of tools to reduce the credit risk exposures in our loan portfolio. These include asset sales, traditional securitizations, or the purchase of credit protection in the form of credit default swaps or credit insurance and risk transfer transactions. Credit risk is mitigated by obtaining protection from better-rated counterparties or high-quality collateral. Credit risk mitigation activities support our management of capital, and individual and portfolio credit concentration.

Our credit assets consist of a well-diversified portfolio representing millions of clients, the majority of them individual consumers and small to medium-sized businesses. On a drawn loans and commitments basis, our most significant credit exposure at default as at October 31, 2023 was to individual consumers, comprising $344,912 million ($290,896 million as at October 31, 2022).

Wrong-Way Risk

Wrong-way risk occurs when our exposure to a counterparty or the magnitude of our potential loss is highly correlated with the counterparty's probability of default. Specific wrong-way risk arises when the credit quality of the counterparty and the market risk factors affecting collateral or other risk mitigants display a high correlation, and general wrong-way risk arises when the credit quality of the counterparty, for non-specific reasons, is highly correlated with macroeconomic or other factors that affect the value of the risk mitigant. Our procedures require that specific wrong-way risk be identified in transactions and accounted for in the assessment of risk, including any heightened level of exposure.

Material presented in a blue-tinted font above is an integral part of Note 5 of the 2023 audited annual consolidated financial statements.

Credit and Counterparty Risk Measurement

BMO quantifies credit risk at both the individual borrower or counterparty level and the portfolio level. In order to limit earnings volatility, manage expected credit losses and minimize unexpected losses, credit risk is assessed and measured using the following risk-based parameters:

- **Exposure at Default (EAD)** represents an estimate of the outstanding amount of a credit exposure at the time a default may occur.
- **Loss Given Default (LGD)** is a measure of BMO's economic loss, such as the amount that may not be recovered in the event of a default, presented as a proportion of the exposure at default.
- **Probability of Default (PD)** represents the likelihood that a borrower or counterparty will go into default over a one-year time horizon.
- **Expected Loss (EL)** is a measure of the loss that BMO is expected to incur in the normal course of business in a given period of time. EL is calculated as a function of EAD, LGD and PD.

Under Basel III, the Office of the Superintendent of Financial Institutions (OSFI) permits three approaches for the measurement of credit risk: Standardized, Foundation Internal Ratings Based (FIRB) and Advanced Internal Ratings Based (AIRB). BMO primarily uses the Internal Ratings Based (IRB) Approach, which includes both AIRB and FIRB, to determine credit risk-weighted assets (RWA) in its portfolios, including portfolios of the bank's subsidiary BMO Financial Corp. Under the Basel III Reform requirement, it is mandatory to apply FIRB to a subset of IRB exposures where LGD and EAD are based on regulatory prescribed values. Refer to the Supplementary Regulatory Capital Information disclosure for details regarding the total exposure (measured as EAD) of Retail and Wholesale portfolios under the IRB Approach to determining regulatory capital. The remaining exposures reflect waivers and exemptions to the IRB Approach and are measured under the Standardized Approach, subject to OSFI's approval. We continue to transition all material exposures in this category to the AIRB Approach. For securitization exposures, we apply the Basel hierarchy of approaches, including the Securitization Internal Ratings Based Approach and the External Ratings Based Approach, as well as the Standardized Approach.

BMO's regulatory capital and economic capital frameworks both use EAD to assess credit and counterparty risk. Capital is calculated based on exposures that, where applicable, have been redistributed to a more favourable PD band or LGD measure, or a different Basel asset class, as a result of the application of credit risk mitigation and a consideration of credit risk mitigants, including collateral and netting.

Total credit exposures at default by type and industry sector, as at October 31, 2023 and 2022, based on the Basel III classifications, are as follows:

(Canadian $ in millions)	Drawn (3) (7)		Commitments (undrawn) (3) (8)		Other off-balance sheet items (3) (9)		OTC derivatives (4) (10)		Repo-style transactions (4) (5) (11)		Total (1)	
	2023	2022	**2023**	2022	**2023**	2022	**2023**	2022	**2023**	2022	**2023**	2022
Individual	**281,087**	233,450	**63,812**	57,446	**13**	–	**–**	–	**–**	–	**344,912**	290,896
Financial institutions	**95,433**	112,185	**18,690**	34,216	**7,201**	8,036	**19,307**	16,467	**16,177**	18,197	**156,808**	189,101
Governments	**219,809**	186,542	**2,551**	1,869	**1,575**	434	**8,193**	8,063	**5,870**	9,287	**237,998**	206,195
Manufacturing	**33,141**	32,515	**16,059**	17,522	**1,915**	2,050	**807**	1,643	**–**	–	**51,922**	53,730
Real estate	**61,766**	49,639	**11,843**	12,911	**971**	1,238	**224**	459	**–**	–	**74,804**	64,247
Retail trade	**27,858**	23,890	**4,621**	4,890	**441**	549	**129**	248	**–**	–	**33,049**	29,577
Service industries	**56,649**	52,437	**13,552**	17,113	**3,172**	3,169	**696**	695	**–**	–	**74,069**	73,414
Wholesale trade	**20,117**	18,037	**7,618**	7,206	**611**	775	**167**	336	**–**	–	**28,513**	26,354
Oil and gas	**3,364**	3,823	**2,889**	4,440	**788**	1,341	**1,444**	6,066	**–**	–	**8,485**	15,670
Utilities	**11,224**	8,781	**8,767**	12,885	**4,547**	4,323	**1,850**	2,087	**–**	–	**26,388**	28,076
Others (2)	**62,636**	50,936	**18,132**	18,111	**4,009**	5,287	**1,634**	1,649	**–**	–	**86,411**	75,983
Total exposure at default (6)	**873,084**	772,235	**168,534**	188,609	**25,243**	27,202	**34,451**	37,713	**22,047**	27,484	**1,123,359**	1,053,243

(1) Credit exposure excluding equity, securitization and other assets, such as non-significant investments, goodwill, deferred tax assets and intangibles.
(2) Includes remaining industries that individually comprise less than 2% of total exposures.
(3) Represents gross credit exposures without accounting for collateral.
(4) Credit exposure at default is inclusive of collateral.
(5) Repo-style transactions include repos, reverse repos and securities lending transactions, which represent both asset and liability exposures. The impact of collateral on the credit exposure for repo-style transactions is $228,691 million ($215,806 million in 2022).
(6) Excludes exposures arising from derivative and repo-style transactions that are cleared through a clearing house or a central counterparty totalling $9,025 million ($13,698 million in 2022).
(7) Drawn exposures include loans, acceptances, deposits with regulated financial institutions and certain securities.
(8) Undrawn commitments cover all unutilized authorizations associated with the drawn exposures noted above, including any authorizations that are unconditionally cancellable. EAD for undrawn commitments is model-generated, based on internal empirical data.
(9) Other off-balance sheet exposures include items such as guarantees, standby letters of credit and documentary credits.
(10) Over-the-counter (OTC) derivatives are those in proprietary accounts that result in exposure to credit risk in addition to market risk. EAD for OTC derivatives is calculated inclusive of collateral.
(11) EAD for repo-style transactions is the calculated exposure, net of collateral.

Certain comparative figures have been reclassified to conform with the current year's presentation.

Risk Rating Systems

BMO's risk rating systems are designed to assess and measure the risk of exposure.

Credit risk-based parameters are monitored, reviewed and validated regularly. Monitoring is on a quarterly basis for both the wholesale and retail models. Refer to the Model Risk section for a discussion of model risk mitigation processes.

Retail (Consumer and Small Business)

The retail portfolios comprise a diversified group of individual customer accounts and include residential mortgages, personal loans, credit cards, auto loans and small business loans. These loans are managed in pools of homogeneous risk exposures for risk rating purposes. Decision support processes are developed using established statistical techniques and expert systems for underwriting and monitoring purposes. Adjudication models, behavioural scorecards, decision trees and expert knowledge are combined to generate optimal credit decisions in a centralized and automated environment.

Material presented in a blue-tinted font above is an integral part of Note 5 of the 2023 audited annual consolidated financial statements.

The retail risk rating system assesses risk based on individual loan characteristics. We have a range of internally developed PD, LGD and EAD models for each of the major retail portfolios. The major product lines within each of the retail portfolios are modelled separately, so that the risk-based parameters capture the distinct nature of each product. The models, in general, are based on internal historical data recorded over a multi-year period that includes at least one full economic cycle, in compliance with regulatory requirements. Adjustments are incorporated into the parameters, as appropriate, to account for uncertainties. The retail parameters are tested and calibrated on an annual basis, if required, to incorporate additional data points and recent experience in the parameter estimation process. Risk drivers used in the retail credit models may include customer attributes such as delinquency status and credit scores, and account attributes such as loan amounts and utilization.

A PD estimate is assigned to each homogeneous pool to reflect the long-run average of one-year default rates over the economic cycle.

An LGD estimate is calculated by discounting future recovery payments to the time of default, including collection costs.

An EAD estimate is calculated as the balance at default divided by the credit limit at the beginning of the year. For non-revolving products, such as mortgages, EAD is equal to 100% of the current outstanding balance and has no undrawn component.

For capital purposes, the LGD and EAD estimates are calibrated to reflect downturn conditions. The PD, LGD and EAD estimates are updated annually and recalibrated as required by comparing the estimates to observed historical experience.

Retail Credit Probability of Default Bands by Risk Rating

Risk profile	Probability of default band
Exceptionally low	≤ 0.05%
Very low	> 0.05% to 0.20%
Low	> 0.20% to 0.75%
Medium	> 0.75% to 7.00%
High	> 7.00% to 99.99%
Default	100%

Wholesale (Sovereign, Bank, Corporate and Commercial)

Within our wholesale portfolios, an enterprise-wide risk rating framework is applied to all sovereign, bank, corporate and commercial counterparties. One key element of this framework is the assignment of appropriate borrower or counterparty risk ratings (BRRs). We have a range of internally developed general and sector-specific BRR models, as well as portfolio-level LGD and EAD models for each of the sovereign, bank, corporate and commercial portfolios.

The BRR models capture the key financial and non-financial characteristics of the borrowers and generate a borrower-level rating that reflects the relative rank order of the default risk. The models are primarily based on internal data, supplemented by judgment as necessary, for low-default portfolios.

BRRs are assessed and assigned at the time of loan origination, and reassessed when borrowers request changes to credit facilities or when events trigger a review, such as an external rating change or a covenant breach. BRRs are reviewed no less frequently than annually, and more frequent reviews are conducted for borrowers with less acceptable risk ratings. The assigned ratings are mapped to a PD reflecting the likelihood of default over a one-year time horizon. As a borrower migrates between risk ratings, the PD associated with the borrower also changes.

We employ a master scale with 14 BRRs above default, and PDs are assigned to each rating within an asset class to reflect the long-run average of one-year default rates over an economic cycle, supplemented by external benchmarking, as necessary.

An LGD estimate captures the priority of claim, collateral, product and sector characteristics of the credit facility extended to a borrower. LGD estimates are at the facility level.

An EAD estimate captures the facility type, sector and utilization rate characteristics of the credit facility extended to a borrower. EAD estimates are at the facility level. An EAD credit conversion factor is calculated for eligible facilities by comparing amounts drawn at the time of default and one year prior to default. The authorization and the amount drawn, one year prior to default, are used to split each facility into its respective drawn and undrawn portion, where applicable.

LGD and EAD models have been developed for each asset class using internal data recorded over a multi-year period that includes at least one full economic cycle, in compliance with regulatory requirements. Results are benchmarked using external data when necessary and adjustments are incorporated into the parameters, as appropriate, to account for uncertainties. For capital purposes, the LGD and EAD parameters are calibrated to reflect downturn conditions. The PD, LGD and EAD estimates are updated annually and recalibrated as required by comparing the estimates to observed historical experience.

As demonstrated in the table below, our internal risk rating system can be aligned with those of external rating agencies.

Wholesale Borrower Risk Rating Scale

BMO rating	Moody's Investors Service implied equivalent	Standard & Poor's implied equivalent
Acceptable		
I-1 to I-7	Aaa to Baa3	AAA to BBB-
S-1 to S-4	Ba1 to B1	BB+ to B+
Watchlist		
P-1 to P-3	B2 to Ca	B to CC
Default/Impaired		
D-1 to D-4	C	C to D

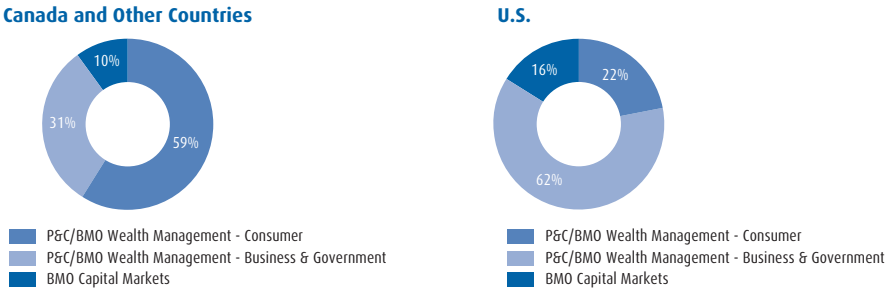
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Credit Quality Information

Portfolio Review

Total enterprise-wide outstanding credit risk exposures were $1,123.4 billion as at October 31, 2023, with $537.4 billion recorded in Canada, $539.2 billion in the United States and $46.8 billion in other jurisdictions. This represented an increase of $70.2 billion or 7% from the prior year.

BMO's loan book continues to be well-diversified by industry and geographic region. Gross loans and acceptances increased $101.2 billion or 18% from the prior year to $668.4 billion as at October 31, 2023. The geographic mix of BMO's Canadian and U.S. portfolios represented 55.9% and 42.4% of total loans, respectively, compared with 62.6% and 35.4% in the prior year. The loan portfolio is well-diversified, with the consumer loan portfolio representing 43.9% of the total portfolio, a slight increase from 43.1% in the prior year, and business and government loans representing 56.1% of the total portfolio, a slight decrease from 56.9% in the prior year.



Commercial Real Estate Lending

Commercial real estate (CRE) lending refers to loans made for the purpose of financing buildings or land intended to generate a profit, derived either from the sale of property or from rental income. CRE primarily refers to two distinct types of real estate businesses: income-producing real estate (office, industrial and retail space, and multi-family residential buildings with more than four dwelling units), including the construction of these assets; and development of land and construction of properties for sale (subdivisions, condominiums and other types of property). Our primary focus is on owners of income-producing commercial real estate portfolios with stable operating performance, diversified portfolios, modest leverage and continued access to capital, including those legally structured as real estate investment trusts (REITs), real estate investment funds and real estate operating companies (REOCs), as well as pension funds and other established owners of income-producing commercial real estate.

Our CRE portfolio was $69.8 billion as at October 31, 2023 ($54.5 billion as at October 31, 2022) and accounted for 10% of total gross loans and acceptances (10% as at October 31, 2022). The portfolio is well-managed, with consistent and conservative underwriting standards, strict lending criteria and structural resilience, resulting in strong credit quality. As at October 31, 2023, 57% of CRE loans are investment grade (69% as at October 31, 2022) and 41% are sub-investment grade (30% as at October 31, 2022), with impaired loans representing 1% of the portfolio (0% as at October 31, 2022).

Our CRE portfolio is well-diversified across businesses, property types and geographic regions. Given the post-pandemic prevalence of remote and hybrid work arrangements, office space is one of the higher-risk portfolio segments within commercial real estate and represents 1% of our total gross loans and acceptances. In addition to monitoring the limits we set for the CRE portfolio, we apply lower limits on each segment, including office space, which helps us mitigate any exposure to related risks.

Real Estate Secured Lending

Real estate secured lending comprises residential mortgages and home equity lines of credit (HELOC) we extend to individuals, secured by residential real estate, which is defined as residential structures with one to four dwelling units. The increases in prime interest rates during fiscal 2022 and 2023 impacted variable-rate mortgages, resulting in extended and negative amortization. These prime rate increases had no immediate impact on fixed-rate mortgages, which are fixed at one rate until renewal.

We regularly perform stress testing on our residential mortgage and HELOC portfolios to assess the potential effects of high-impact events. These stress tests incorporate scenarios ranging from moderately to severely adverse. The credit losses forecast in these tests vary with the severity of the scenario and are currently considered to be manageable.

The following tables provide a breakdown of residential mortgages and HELOCs by geographic region, as well as insured and uninsured balances. Residential mortgages and HELOCs are secured by residential properties.

Canadian Real Estate Secured Lending

(Canadian $ in millions)	Residential mortgages	Amortizing home equity lines of credit	Total amortizing real estate secured lending	Non-amortizing real estate secured lending	Total Canadian real estate secured lending
As at October 31, 2023	**150,575**	**35,741**	**186,316**	**12,982**	**199,298**
As at October 31, 2022	139,394	34,083	173,477	13,219	186,696

Material presented in a blue-tinted font above is an integral part of Note 5 of the 2023 audited annual consolidated financial statements.

Residential Mortgages (1)

(Canadian $ in millions, except as noted)	As at October 31, 2023					As at October 31, 2022				
	Outstanding balances				For the 12 months ended	Outstanding balances				For the 12 months ended
Region (2)	Insured (3)	Uninsured	Total	% of total	Average LTV uninsured (4)	Insured (3)	Uninsured	Total	% of total	Average LTV uninsured (4)
Atlantic	**3,347**	**3,452**	**6,799**	**3.8%**	**71%**	3,197	3,255	6,452	4.3%	72%
Quebec	**9,242**	**12,903**	**22,145**	**12.5%**	**71%**	8,892	12,156	21,048	14.2%	72%
Ontario	**14,643**	**56,798**	**71,441**	**40.3%**	**70%**	14,411	49,664	64,075	43%	70%
Alberta	**9,885**	**7,302**	**17,187**	**9.7%**	**73%**	9,552	6,854	16,406	11%	74%
British Columbia	**4,746**	**24,391**	**29,137**	**16.5%**	**67%**	4,680	22,919	27,599	18.5%	68%
All other Canada	**2,264**	**1,602**	**3,866**	**2.2%**	**73%**	2,179	1,635	3,814	2.6%	73%
Total Canada	**44,127**	**106,448**	**150,575**	**85.0%**	**70%**	42,911	96,483	139,394	93.6%	70%
United States	**68**	**26,607**	**26,675**	**15.0%**	**77%**	16	9,470	9,486	6.4%	72%
Total	**44,195**	**133,055**	**177,250**	**100%**	**71%**	42,927	105,953	148,880	100%	71%

Home Equity Lines of Credit (1)

(Canadian $ in millions, except as noted)	As at October 31, 2023					As at October 31, 2022				
	Portfolio				For the 12 months ended	Portfolio				For the 12 months ended
Region (2)	Outstanding balances	%	Authorizations	%	Average LTV (4)	Outstanding balances	%	Authorizations	%	Average LTV (4)
Atlantic	**996**	**1.8%**	**1,922**	**1.7%**	**60%**	967	1.9%	1,835	1.9%	64%
Quebec	**9,149**	**16.6%**	**18,071**	**15.9%**	**67%**	8,897	17.6%	17,085	17.4%	71%
Ontario	**24,601**	**44.6%**	**45,351**	**40.0%**	**59%**	23,647	46.8%	43,063	43.9%	63%
Alberta	**3,203**	**5.8%**	**6,970**	**6.2%**	**62%**	3,232	6.4%	6,835	6.9%	66%
British Columbia	**10,029**	**18.2%**	**18,899**	**16.7%**	**59%**	9,826	19.5%	17,953	18.3%	61%
All other Canada	**745**	**1.3%**	**1,474**	**1.3%**	**66%**	733	1.5%	1,443	1.5%	67%
Total Canada	**48,723**	**88.3%**	**92,687**	**81.8%**	**61%**	47,302	93.7%	88,214	89.9%	64%
United States	**6,471**	**11.7%**	**20,615**	**18.2%**	**60%**	3,196	6.3%	9,902	10.1%	64%
Total	**55,194**	**100%**	**113,302**	**100%**	**61%**	50,498	100%	98,116	100%	64%

(1) Reporting methodologies are in accordance with OSFI's Residential Mortgage Underwriting Practices and Procedures (B-20) Guideline.
(2) Region is based upon address of the property mortgaged.
(3) Portfolio insured mortgages are defined as mortgages that are insured individually or in bulk through an eligible insurer (i.e., CMHC, Sagen MI Canada™).
(4) Loan-to-value (LTV) is based on the value of the property at mortgage origination, as well as outstanding balances for mortgages and authorized amounts for HELOCs.

Residential Mortgages by Remaining Term of Amortization (1) (2)

	Amortization period							
As at October 31, 2023	**< 5 years**	**6-10 years**	**11-15 years**	**16-20 years**	**21-25 years**	**26-30 years**	**31-35 years**	**> 35 years**
Canada (3)	**0.7%**	**2.5%**	**6.1%**	**13.6%**	**32.1%**	**18.0%**	**2.1%**	**24.9%**
United States (4)	**0.5%**	**2.2%**	**5.3%**	**2.8%**	**10.4%**	**78.6%**	**0.1%**	**0.1%**
Total	**0.7%**	**2.5%**	**5.9%**	**12.0%**	**28.8%**	**27.1%**	**1.8%**	**21.2%**

	Amortization period							
As at October 31, 2022	< 5 years	6-10 years	11-15 years	16-20 years	21-25 years	26-30 years	31-35 years	**> 35 years**
Canada (3)	0.8%	2.6%	5.7%	13.5%	32.3%	13.8%	3.4%	27.9%
United States (4)	0.7%	4.9%	9.9%	4.9%	14.3%	65.0%	0.1%	0.2%
Total	0.8%	2.7%	6.0%	13.0%	31.1%	17.1%	3.2%	26.1%

(1) In Canada, the remaining amortization is based on the current balance, interest rate, customer payment amount and payment frequency. Contractual payment schedule is used in the United States.
(2) Reporting methodologies are in accordance with OSFI's B-20 guideline.
(3) As a result of increases in interest rates, the portfolio included $29.9 billion ($22.3 billion as at October 31, 2022) of variable-rate mortgages in negative amortization, with all of the contractual payments currently being applied to interest, and the portion of interest due that is not met by each payment is added to the principal.
(4) A large proportion of U.S.-based mortgages in the longer-amortization band are primarily associated with modification programs for troubled borrowers and regulator-initiated mortgage refinancing programs.

Leveraged Finance

We define leveraged finance loans as loans and mezzanine financing provided to private equity-owned businesses for which our assessment indicates a higher level of credit risk. We have some exposure to leveraged finance loans, which represented 2% of total assets, with $26.7 billion outstanding as at October 31, 2023 (2% and $25.1 billion, respectively, in 2022). Of this amount, 25% of leveraged finance loans, with $6.8 billion outstanding as at October 31, 2023 (25% and $6.3 billion, respectively, in 2022), were well-secured by high-quality assets. The remainder of the portfolio is well-diversified across sectors and includes loans to borrowers where we have relatively small hold sizes. This portfolio is closely managed, and in some cases has risk mitigation and structural elements that lower the level of credit risk. As at October 31, 2023, $497 million or 2% of all leveraged finance loans were classified as impaired ($348 million or 1% in 2022). In addition to this leveraged finance lending business, we also enter into underwriting activities involving leveraged borrowers, which are managed through the market risk framework.

Provision for Credit Losses

Total provision for credit losses was $2,178 million on a reported basis and $1,473 million on an adjusted basis, compared with $313 million on both a reported and adjusted basis in the prior year, due to downward credit migration despite an improvement in the macroeconomic outlook, as well as higher losses on impaired loans. Detailed discussions of PCL, including historical PCL trends, are provided in Table 12 in the Supplemental Information and in Note 4 of the audited annual consolidated financial statements.

Gross Impaired Loans

Total gross impaired loans and acceptances (GIL) were $3,960 million, an increase from $1,991 million in the prior year. The increase in impaired loans was predominantly in business and government lending, with the largest increases in the service, commercial real estate and retail trade industries. GIL as a percentage of gross loans and acceptances was 0.59% in 2023, which increased from an historically low level of 0.35% in the prior year.

Factors contributing to the change in GIL are outlined in the table below. Loans classified as impaired during the year increased to $4,047 million from $1,635 million in 2022, reflecting higher impaired loan formations in both the wholesale and the consumer portfolios, including the purchased credit impaired loans related to the acquisition of Bank of the West. On a geographic basis, Canada accounted for 42% of total formations in 2023, compared with 71% in 2022.

Detailed breakdowns of impaired loans by geographic region and industry can be found in Table 8 in the Supplemental Information and in Note 4 of the audited annual consolidated financial statements.

Changes in Gross Impaired Loans and Acceptances

(Canadian $ in millions, except as noted) For the year ended October 31	**2023**	2022
GIL, beginning of year	**1,991**	2,169
Classified as impaired during the year	**4,047**	1,635
Purchased credit impaired during the year	**415**	–
Transferred to not impaired during the year	**(545)**	(659)
Net repayments	**(1,214)**	(819)
Amounts written off	**(753)**	(363)
Recoveries of loans and advances previously written off	**–**	–
Disposals of loans	**(24)**	(54)
Foreign exchange and other movements	**43**	82
GIL, end of year	**3,960**	1,991
GIL as a % of gross loans and acceptances	**0.59**	0.35

Allowance for Credit Losses

We employ a disciplined approach to provisioning and loan loss evaluation across all loan portfolios, with the prompt identification of problem loans being a key risk management objective. We maintain both an allowance for credit losses on impaired loans and an allowance for credit losses on performing loans, in accordance with International Financial Reporting Standards (IFRS). An allowance on performing loans is maintained to cover impairment in the existing portfolio for loans that have not yet been individually identified as impaired. Our approach to establishing and maintaining the allowance on performing loans is based on the requirements of IFRS, considering the guideline issued by our regulator, OSFI. Under the IFRS 9 expected credit loss (ECL) methodology, an allowance is recorded for ECL on financial assets regardless of whether there has been an actual loss event. We recognize an allowance for loss at an amount generally based on 12 months of ECL, if the credit risk at the reporting date has not increased significantly since initial recognition (Stage 1). We record ECL over the remaining life of performing financial assets that are considered to have experienced a significant increase in credit risk (Stage 2).

ECL is calculated on a probability-weighted basis that involves three different economic scenarios and is a function of PD, EAD and LGD estimates calibrated to meet the requirements for calculating ECL for a specific financial asset. The timing of the loss is also considered, and ECL is estimated by incorporating forward-looking economic information and applying experienced credit judgment to reflect factors not captured in ECL models. An allowance on impaired loans is maintained to reduce the carrying value of individually identified impaired loans (Stage 3) to the expected recoverable amount. Allowances in the second quarter of 2023 included an initial provision of $705 million on the purchased Bank of the West performing loan portfolio.

We maintain an allowance for credit losses (ACL) at a level that we consider appropriate to absorb credit-related losses. As at October 31, 2023, the total ACL was $4,267 million, an increase of $1,269 million from the prior year, reflecting the initial provision of $705 million on the Bank of the West performing loans and higher allowances on both performing and impaired loans. The allowance on impaired loans was $695 million as at October 31, 2023, and the allowance on performing loans was $3,572 million. These amounts included an allowance on impaired loans of $11 million and an allowance on performing loans of $449 million, related to undrawn commitments and letters of credit that are considered other credit instruments and recorded in other liabilities. The allowance on impaired loans increased $138 million from $557 million in the prior year. The allowance on performing loans increased $1,131 million to $3,572 million from $2,441 million in the prior year, primarily driven by the initial provision on the Bank of the West performing loans, portfolio credit migration, uncertainty in credit conditions, growth in certain portfolios and movements in foreign exchange rates, partially offset by an improvement in the macroeconomic outlook.

Further details on the continuity in ACL by each product type can be found in Tables 9 and 10 in the Supplemental Information, and in Note 4 of the audited annual consolidated financial statements.

International Exposures

BMO's geographic exposures to regions outside of Canada and the United States are subject to a risk management framework that incorporates assessments of economic and political risks in each region or country. These exposures are also managed within limits based on product, entity and country of ultimate risk. Our total net exposure to these regions is set out in the table below.

The table outlines total net exposure for funded lending and undrawn commitments, securities (including cash products, traded credit and credit default swap activity), repo-style transactions and derivatives. Repo-style transactions and derivatives exposures are reported at mark-to-market value. Derivatives exposures incorporate transaction netting where master netting agreements with counterparties have been entered into, and collateral offsets for counterparties where a Credit Support Annex is in effect.

Exposure by Region

(Canadian $ in millions)	As at October 31, 2023													As at October 31, 2022
	Funded lending and commitments				Securities				Repo-style transactions and derivatives					
Region	Bank	Corporate	Sovereign	Total	Bank	Corporate	Sovereign	Total	Bank	Corporate	Sovereign	Total	Total net exposure	Total net exposure
Europe (excluding United Kingdom)	**641**	**2,978**	**–**	**3,619**	**495**	**214**	**6,423**	**7,132**	**377**	**124**	**29**	**530**	**11,281**	11,817
United Kingdom	**21**	**4,204**	**370**	**4,595**	**102**	**100**	**770**	**972**	**105**	**457**	**6**	**568**	**6,135**	7,095
Latin America	**2,978**	**6,922**	**–**	**9,900**	**1**	**118**	**–**	**119**	**13**	**238**	**–**	**251**	**10,270**	9,285
Asia-Pacific	**3,874**	**3,173**	**148**	**7,195**	**782**	**107**	**3,641**	**4,530**	**229**	**270**	**65**	**564**	**12,289**	13,706
Middle East and Africa	**782**	**437**	**105**	**1,324**	**–**	**4**	**28**	**32**	**12**	**28**	**1,075**	**1,115**	**2,471**	2,303
Other (1)	**–**	**5**	**51**	**56**	**6**	**–**	**3,681**	**3,687**	**–**	**–**	**1,832**	**1,832**	**5,575**	5,902
Total	**8,296**	**17,719**	**674**	**26,689**	**1,386**	**543**	**14,543**	**16,472**	**736**	**1,117**	**3,007**	**4,860**	**48,021**	50,108

(1) Primarily exposure to supranational entities.

Derivative Transactions

The following table presents the notional amounts of BMO's over-the-counter (OTC) derivative contracts, comprising contracts that are centrally cleared and settled through a designated clearing house or central counterparty (CCP) and contracts that are not centrally cleared.

CCPs are established under the supervision of central banks or other similar regulatory authorities and, as financial market infrastructure, must satisfy certain financial resilience requirements. Generally speaking, in order to centrally clear OTC derivative contracts, we acquire a membership in the CCP and, in addition to providing collateral to protect the CCP against risk of loss related to BMO, we are exposed to risk as a member for our contribution to a default fund. We may also be called on to make additional contributions or provide other support in the event of default by another member.

The notional amounts of our derivatives represent the amount to which a rate or price is applied in order to calculate the amount of cash that must be exchanged under each contract. Notional amounts do not represent assets or liabilities and therefore are not recorded in the Consolidated Balance Sheet. The fair values of OTC derivative contracts are recorded in the Consolidated Balance Sheet.

Over-the-Counter Derivative Contracts (Notional amounts)

(Canadian $ in millions)	Non-centrally cleared		Centrally cleared		Total	
As at October 31	**2023**	2022	**2023**	2022	**2023**	2022
Interest Rate Contracts						
Swaps	**413,856**	420,700	**9,197,174**	5,534,061	**9,611,030**	5,954,761
Forward rate agreements	**5,439**	3,929	**127,214**	18,468	**132,653**	22,397
Purchased options	**130,000**	98,113	**–**	–	**130,000**	98,113
Written options	**118,524**	87,941	**–**	–	**118,524**	87,941
Total interest rate contracts	**667,819**	610,683	**9,324,388**	5,552,529	**9,992,207**	6,163,212
Foreign Exchange Contracts						
Cross-currency swaps	**95,932**	119,976	**–**	–	**95,932**	119,976
Cross-currency interest rate swaps	**685,022**	582,092	**–**	–	**685,022**	582,092
Forward foreign exchange contracts	**555,031**	469,503	**9,335**	12,270	**564,366**	481,773
Purchased options	**51,143**	72,733	**–**	–	**51,143**	72,733
Written options	**55,370**	74,041	**–**	–	**55,370**	74,041
Total foreign exchange contracts	**1,442,498**	1,318,345	**9,335**	12,270	**1,451,833**	1,330,615
Commodity Contracts						
Swaps	**18,573**	24,487	**1**	38	**18,574**	24,525
Purchased options	**5,319**	5,686	**–**	–	**5,319**	5,686
Written options	**4,218**	5,011	**–**	–	**4,218**	5,011
Total commodity contracts	**28,110**	35,184	**1**	38	**28,111**	35,222
Equity Contracts	**116,011**	105,280	**129**	–	**116,140**	105,280
Credit Default Swaps						
Purchased	**1,705**	1,496	**15,222**	15,275	**16,927**	16,771
Written	**1,080**	962	**8,930**	10,137	**10,010**	11,099
Total credit default swaps	**2,785**	2,458	**24,152**	25,412	**26,937**	27,870
Total	**2,257,223**	2,071,950	**9,358,005**	5,590,249	**11,615,228**	7,662,199

Market Risk

Market Risk is the potential for adverse changes in the value of our assets and liabilities resulting from changes in market variables such as interest rates, foreign exchange rates, equity and commodity prices and their implied volatilities, and credit spreads, and includes the risk of credit migration and default in our trading book.

Market risk arises from our trading and underwriting activities, as well as our structural banking activities. The magnitude and importance of these activities to the enterprise, along with the potential volatility of market variables, call for diligent governance and a robust market risk management framework that can provide effective identification, measurement, reporting and control of market risk exposures.

Trading and Underwriting Market Risk Governance

Our market risk-taking activities are subject to an extensive governance framework. The Risk Review Committee (RRC) oversees the management of market risk on behalf of the Board of Directors and approves limits governing market risk exposures that are consistent with our risk appetite. The Risk Management Committee (RMC) regularly reviews and assesses significant market risk exposures and positions, and exercises ongoing senior management oversight of our risk-taking activities. Both of these committees are kept apprised of specific market risk exposures and any developments that could expose BMO to unusual, unexpected or unquantified risks associated with those market risk exposures, as well as other current and emerging market risks. In addition, all businesses and individuals authorized to conduct trading and underwriting activities on behalf of BMO are required to work within our governance framework and, as part of their first-line-of-defence responsibilities, they must adhere to all relevant corporate policies, standards and procedures, and maintain and manage market risk exposures within specified limits and risk tolerances. In support of our risk governance framework, our market risk management framework comprises processes, infrastructure and supporting documentation, which together support the identification, assessment, independent monitoring and control of our market risk exposures.

Trading and Underwriting Market Risk

Our trading and underwriting businesses give rise to market risk associated with buying and selling financial products in the course of meeting our customers' needs, including market-making and related financing activities, and assisting clients to raise funds by way of securities issuance.

Identification and Assessment of Trading and Underwriting Market Risk

As the first step in the management of market risk, rigorous assessment processes are in place to identify market risk exposures associated with both new products and the evolving risk profile of existing products, including on- and off-balance sheet positions, trading and non-trading positions, leveraged loan, bond and equity underwriting, and market risk exposures arising from the domestic and foreign operations of our operating groups.

Various metrics and techniques are then employed to measure identified market risk exposures. These include Value-at-Risk and stress tests, as well as sensitivity to market risk factors, position concentrations and trading revenues. Results are reported to the appropriate line of business, the RMC and RRC on a regular basis.

Value-at-Risk (VaR) measures the maximum loss likely to be experienced in the trading and underwriting portfolios, measured at a 99% confidence level over a one-day holding period. VaR is calculated for specific classes of risk in BMO's trading and underwriting activities related to interest rates, foreign exchange rates, credit spreads, equity and commodity prices and their implied volatilities.

Stress Tests are used to determine the potential impact of low-frequency, high-severity events on the trading and underwriting portfolios. The portfolios are measured daily against a variety of hypothetical and historical event scenarios. Scenarios are continuously refined to reflect the latest market conditions and portfolio risk exposures.

Risk models support the measurement of our exposure to the risk of adverse outcomes for income, retained earnings and capital. We use a variety of methods to verify the integrity of our risk models, including the application of back-testing against hypothetical losses and approval by an independent model validation team. The data and correlations that underpin our models are updated frequently, so that risk metrics reflect current conditions.

Stress tests capture a wide range of hypothetical and historical events, including the 2008 global financial crisis and the COVID-19 pandemic, along with portfolio-specific impacts and asset class scenarios. In addition, a range of assumptions, including the duration of the scenario and management actions, are incorporated in the stress tests to better reflect the anticipated impact on the trading and underwriting business.

Our VaR model is back-tested daily, assuming there are no changes to the previous day's closing position and isolating the effects of each day's price movements against those closing positions. The one-day 99% confidence level VaR at the local and consolidated BMO levels is compared with the estimated daily profit and loss (P&L) that would be recorded if the portfolio composition remained unchanged. If this P&L result is negative and its absolute value is greater than the previous day's VaR, a back-testing exception occurs. Each exception is investigated, explained and documented.

Although it is a useful indicator of risk, VaR has limitations, as with any model-driven metric. These include the assumption that all portfolio positions can be liquidated within the assumed one-day holding period, which may not be the case under illiquid market conditions. Market liquidity horizons are reviewed for suitability and updated where appropriate for relevant risk metrics, such as stress testing. Further limitations of the VaR metric include the assumption that historical data can be used as a proxy to forecast future market events. In addition, VaR calculations are based on portfolio positions at the close of business and do not reflect the impact of intra-day trading activity.

VaR and stress testing continue to have a significant role in managing portfolio risks, although the determination of trading market risk regulatory capital will reflect Basel III Reforms starting in 2024. However, these metrics should not be viewed as definitive predictors of the maximum amount of losses that could be experienced in the trading and underwriting portfolios in any one day, as their results are based on models and estimates and are subject to confidence levels, and the estimates could be exceeded under unforeseen market conditions.

Material presented in a blue-tinted font above is an integral part of Note 5 of the 2023 audited annual consolidated financial statements.

Monitoring and Control of Trading and Underwriting Market Risk

Limits are applied to VaR, stress testing and other risk metrics, and these limits are subject to regular monitoring and reporting, with breaches escalated to the appropriate level of management for review. Risk profiles of our trading and underwriting activities are maintained within our risk appetite and supporting limits, and are monitored and reported to traders, management, senior executives and committees of our Board of Directors. Other significant controls include the independent valuation of financial assets and liabilities, as well as compliance with our Model Risk Management Framework to mitigate model risk.

Trading Market Risk Measures

Trading VaR

Average Total Trading VaR increased year-over-year due to portfolio changes and higher market volatility, primarily in our fixed income portfolio. Average diversification levels increased and provided a significant offset to the rise in average interest rate VaR and debt-specific risk VaR.

Total Trading Value at Risk (VaR) Summary (1)

As at or for the year ended October 31 (Pre-tax Canadian $ equivalent in millions)	2023				2022			
	Year-end	**Average**	**High**	**Low**	Year-end	Average	High	Low
Commodity VaR	**4.0**	**2.4**	**6.1**	**1.2**	1.6	3.1	5.5	1.0
Equity VaR	**13.6**	**14.0**	**24.5**	**8.5**	14.1	13.1	18.4	8.5
Foreign exchange VaR	**1.7**	**2.9**	**5.6**	**1.3**	2.3	1.8	5.2	0.5
Interest rate VaR (2)	**27.3**	**27.4**	**41.5**	**16.0**	22.1	18.0	26.5	12.4
Debt-specific risk	**11.0**	**10.9**	**15.9**	**7.5**	10.2	5.7	10.5	1.8
Diversification	**(25.0)**	**(25.5)**	**nm**	**nm**	(15.0)	(15.1)	nm	nm
Total Trading VaR	**32.6**	**32.1**	**47.9**	**21.2**	35.3	26.6	38.2	18.1

(1) One-day measure using a 99% confidence interval. Gains are presented in brackets and losses are presented as positive numbers.
(2) Interest rate VaR includes general credit spread risk.

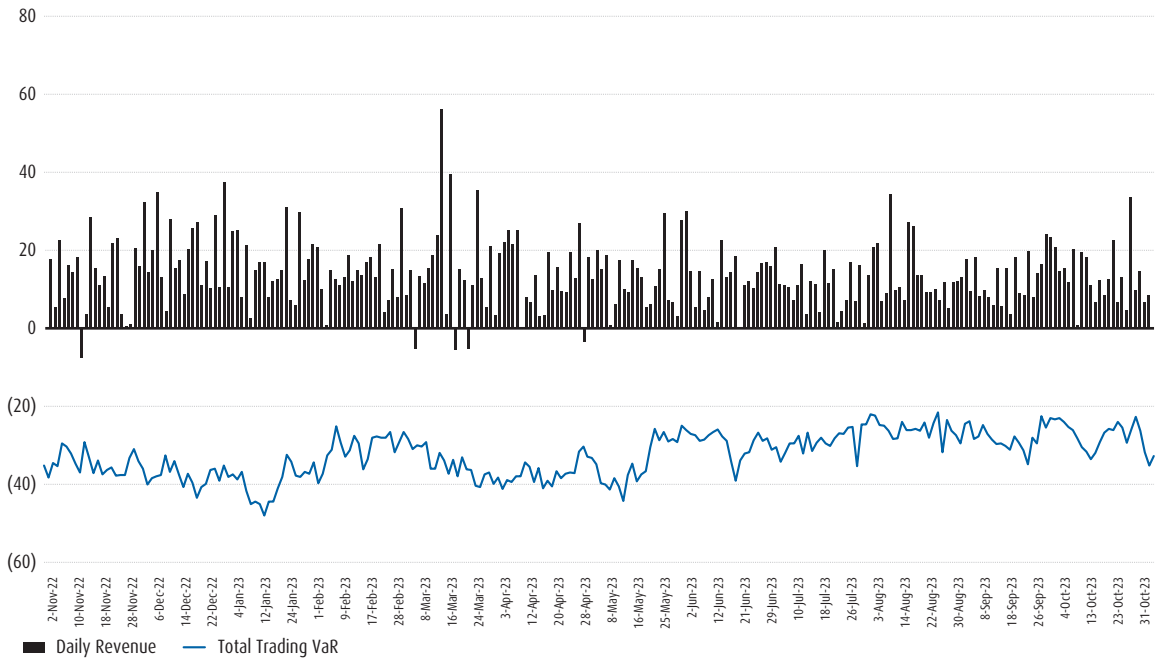
nm – not meaningful

Trading Net Revenue

The charts below present daily net revenues plotted against Total Trading VaR, along with a representation of daily net revenue distribution. In 2023, net trading losses occurred on five days, with none of these losses exceeding Total Trading VaR. The losses on these days were attributable to lower than usual client activity, combined with market volatility, which had a negative impact on some of our positions.

Trading Net Revenues versus Value at Risk

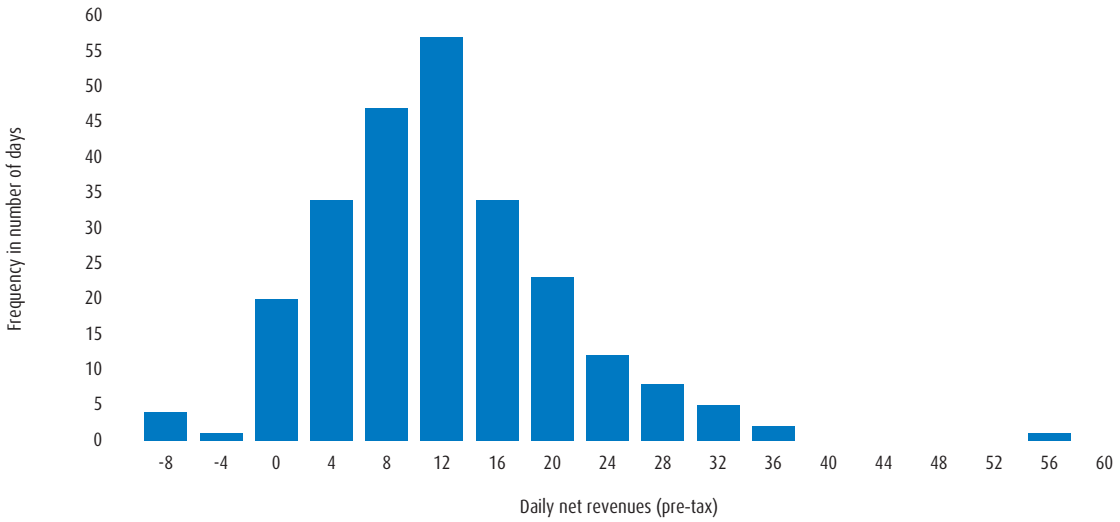
November 2, 2022 to October 31, 2023 (pre-tax basis, Canadian $ in millions)



Material presented in a blue-tinted font above is an integral part of Note 5 of the 2023 audited annual consolidated financial statements.

Frequency Distribution of Daily Net Revenues

Nov 1, 2022 to Oct 31, 2023 (Canadian $ in millions)



Structural (Non-Trading) Market Risk

Structural market risk comprises interest rate risk arising from our banking activities (such as those involving loans and deposits) and foreign exchange risk arising from our foreign currency operations and exposures.

Structural Market Risk Governance

BMO's Corporate Treasury group is responsible for the ongoing management of structural market risk across the enterprise, with independent oversight provided by the Market Risk group. In addition to the limits approved by our Board of Directors on earnings at risk and the sensitivity of economic value to changes in interest rates, more granular management limits are in place to guide the daily management of this risk.

The RRC oversees structural market risk management, regularly reviews structural market risk positions and annually approves the structural market risk plan and limits. The RMC and Asset Liability Committee provide ongoing senior management oversight of risk positions and related activities.

Structural Market Risk Measurement

Interest Rate Risk

Structural interest rate risk arises when changes in interest rates affect the market value, cash flows and earnings of assets and liabilities related to our banking activities. The objective of structural interest rate risk management is to maintain high-quality earnings and maximize sustainable product spreads, while managing risk to the economic value of our net assets arising from changes in interest rates.

Structural interest rate risk primarily comprises interest rate mismatch risk and product-embedded option risk.

Interest rate mismatch risk arises when there are differences in the scheduled maturities, repricing dates or reference rates of assets, liabilities and derivatives. The net interest rate mismatch, representing residual assets funded by common shareholders' equity, is managed to align with a target profile through interest rate swaps and securities.

Product-embedded option risk arises when product features allow customers to alter the timing of cash flows, such as scheduled maturity or repricing dates, usually in response to changes in market conditions. Product-embedded options include loan prepayments, deposit redemption privileges and committed rates on unadvanced mortgages. Product-embedded options and associated customer behaviours are captured in risk modelling, and hedging programs may be used to limit the level of exposure to this risk.

Structural interest rate risk is measured using simulations, analyses of the sensitivity of earnings and economic value, stress testing and gap analysis, in addition to other risk metrics.

Earnings Sensitivity is a measure of the impact of potential changes in interest rates on the projected 12-month pre-tax net income from a portfolio of assets, liabilities and off-balance sheet positions in response to prescribed parallel interest rate movements, with interest rates floored at zero.

Economic Value Sensitivity is a measure of the impact of potential changes in interest rates on the market value of a portfolio of assets, liabilities and off-balance sheet positions in response to prescribed parallel interest rate movements, with interest rates floored at zero.

The models that measure structural interest rate risk incorporate projected changes in interest rates and predict the likely reaction of our customers to these changes. For customer loans and deposits with scheduled maturity and repricing dates (such as mortgages and term deposits), the models measure the extent to which customers are likely to use embedded options to alter those scheduled dates and timing. For customer loans and deposits without scheduled maturity and repricing dates (such as credit card loans and chequing accounts), exposure is measured using models that adjust for elasticity in product pricing and reflect historical and forecasted trends in balances. The results generated by these structural market risk models are inherently uncertain, as they reflect potential future pricing and customer behaviours, which may differ from actual experience. These models have been developed using statistical analysis and are independently validated and periodically updated through regular model performance assessment, back-testing and ongoing dialogue with the lines of business. Models developed to predict customer behaviour are also used to support product pricing.

Material presented in a blue-tinted font above is an integral part of Note 5 of the 2023 audited annual consolidated financial statements.

All models are subject to BMO's Model Risk Management Framework, which is described in more detail in the Enterprise-Wide Risk Management Framework section.

The sensitivity of structural interest rate earnings and economic value to an immediate parallel increase or decrease of 100 basis points in the yield curve is disclosed in the table below.

On February 1, 2023, we closed the acquisition of Bank of the West. Prior to closing, we entered into interest rate swaps to manage the exposure of our regulatory capital to the risk of changes in the fair value of the assets and liabilities of Bank of the West due to changes in interest rates between the announcement and closing of the acquisition. These swaps resulted in a cumulative mark-to-market gain of $5.7 billion at closing. Any exposure to interest rate risk in relation to these interest rate swaps was largely offset by our purchase of a portfolio of matched-duration U.S. treasuries and other balance sheet instruments. On closing, the mark-to-market swaps were unwound and replaced with fair value accounting hedges, which in effect crystallized an unrealized loss on the U.S. treasuries and other balance sheet instruments that will be recognized as a reduction in interest income over their remaining life. Refer to the Enterprise-Wide Capital Management section and the Recent Acquisitions section for further discussion.

The sensitivity of structural economic value to rising interest rates primarily reflects a lower market value for fixed-rate loans. The sensitivity of structural economic value to falling interest rates primarily reflects the impact of a higher market value for fixed-rate loans and minimum modelled client deposit rates. The exposure of structural economic value to rising interest rates and the benefits of falling interest rates increased relative to October 31, 2022, primarily due to a modestly shorter net duration of BMO's position in the prior year, in advance of our acquisition of Bank of the West. Structural earnings sensitivity quantifies the potential impact of interest rate changes on structural balance sheet pre-tax net income over the next 12 months. The sensitivity of structural earnings to falling interest rates primarily reflects the risk of fixed-rate and floating-rate loans repricing at lower rates and the more limited ability to reduce deposit pricing as rates fall. The benefits of rising interest rates to structural earnings primarily reflect the positive impact of reinvesting our net equity and non-rate sensitive deposits into assets with higher-term rates. The benefits of rising interest rates to structural earnings and exposures to falling interest rates decreased in 2023 relative to 2022, largely due to a modestly shorter net duration of BMO's position in the prior year, in advance of our acquisition of Bank of the West.

During 2023, both economic value sensitivity and earnings sensitivity remained within the limits established by the Board of Directors.

Structural Interest Rate Sensitivity (1)

	Economic value sensitivity				Earnings sensitivity			
	October 31, 2023			October 31, 2022	October 31, 2023			October 31, 2022
(Pre-tax Canadian $ equivalent in millions)	Canada (2)	United States	Total	Total	Canada (2)	United States	Total	Total
100 basis point increase	**(872.6)**	**(976.0)**	**(1,848.6)**	(990.2)	**31.0**	**273.4**	**304.5**	498.9
100 basis point decrease	**750.4**	**741.1**	**1,491.6**	647.9	**(36.2)**	**(289.2)**	**(325.4)**	(595.2)

(1) Losses are presented in brackets and gains are presented as positive numbers.
(2) Includes Canadian dollar and other currencies.

The following table presents net loans and acceptances by interest rate sensitivity:

(Canadian $ in millions)	2023	2022
Fixed rate (1)		
Contractual amounts that will reprice/repay within 3 months	**213,667**	147,232
Contractual amounts that will reprice/repay after 3 months	**248,688**	181,694
Floating rate (2)	**186,327**	215,625
Non-rate sensitive (3)	**15,907**	20,023
Total	**664,589**	564,574

(1) Includes index-based loans.
(2) Floating rate only includes loans that reprice immediately upon a change in interest rates.
(3) Includes credit card balances that are paid when due, customers' liability under acceptances, impaired loans and allowance for credit losses.

Certain comparative figures have been reclassified to conform with the current year's presentation.

Insurance Market Risk

Insurance market risk includes interest rate and equity market risk arising from our insurance business activities. We may enter into hedging arrangements to offset the impact of changes in interest rates and equity market values on our earnings, and we did so during the 2023 fiscal year. The sensitivity reflects the impact of these hedging relationships. An increase of 100 basis points in interest rates would result in a decrease in earnings before tax of $13 million as at October 31, 2023 (increase of $12 million as at July 31, 2023 and $35 million as at October 31, 2022). A decrease of 100 basis points in interest rates would result in an increase in earnings before tax of $15 million as at October 31, 2023 (decrease of $8 million as at July 31, 2023 and $34 million as at October 31, 2022). An increase of 10% in equity market values would result in an increase in earnings before tax of $14 million as at October 31, 2023 ($15 million as at July 31, 2023 and $13 million as at October 31, 2022). A decrease of 10% in equity market values would result in a decrease in earnings before tax of $11 million as at October 31, 2023 ($12 million as at July 31, 2023 and $13 million as at October 31, 2022). The impact of insurance market risk on earnings is reflected in insurance claims, commissions and changes in policy benefit liabilities in our Consolidated Statement of Income, and the corresponding change in the fair value of BMO's policy benefit liabilities is reflected in other liabilities in our Consolidated Balance Sheet. The impact of insurance market risk is not reflected in the table above.

BMO Insurance will adopt International Financial Reporting Standard 17, *Insurance Contracts* (IFRS 17) effective November 1, 2023. IFRS 17 will change the fundamental principles used to recognize and measure insurance contracts, including life insurance contracts, reinsurance contracts held and investment contracts with discretionary participation features. This change will impact the timing of when investment-related income emerges and the associated market risk sensitivities, as the discount rates used in calculating the present value of insurance liabilities will no longer be based on the assets supporting those liabilities, but rather on the features of the insurance contracts themselves. On transition, we will apply the full retrospective approach to our creditor business and the fair value approach to all other products written prior to November 1, 2022. For further information, refer to the Critical Accounting Estimates and Judgments – Future Changes in Accounting Policies section.

Material presented in a blue-tinted font above is an integral part of Note 5 of the 2023 audited annual consolidated financial statements.

Non-Trading Foreign Exchange Risk

Structural foreign exchange risk arises primarily from translation risk related to our net investment in U.S. operations and from transaction risk associated with U.S.-dollar-denominated net income.

Translation risk arises from the potential impact that changes in foreign exchange rates could have on our reported shareholders' equity and capital ratios. We may enter into arrangements to offset the impact of changes in foreign exchange rates on our capital ratios, and we did so during the 2023 fiscal year. In addition, BMO entered into forward contracts during 2022 to mitigate the impact of changes in the Canadian dollar equivalent of the Bank of the West purchase price between the announcement and the closing of the acquisition, which qualified for hedge accounting. Changes in the fair value of these forward contracts of $374 million ($269 million after-tax) were accounted for as a reduction of the Canadian dollar equivalent of the purchase price. Refer to the Enterprise-Wide Capital Management section and the Recent Acquisitions section for further discussion.

Transaction risk arises from the potential impact that fluctuations in the Canadian dollar/U.S. dollar exchange rate could have on the Canadian dollar equivalent of BMO's U.S.-dollar-denominated financial results. Exchange rate fluctuations will affect future results measured in Canadian dollars, and the impact on those results is a function of the periods during which revenues, expenses and provisions for credit losses arise. Hedging positions may be taken to partially offset the pre-tax effects of Canadian dollar/U.S. dollar exchange rate fluctuations on financial results, although we did not enter into any hedging arrangements in the current or prior year. If future results are consistent with results in 2023, each one cent increase (decrease) in the Canadian dollar/U.S. dollar exchange rate would be expected to increase (decrease) the Canadian dollar equivalent of U.S. segment net income before income taxes for the year by $38 million, in the absence of hedging arrangements. Refer to the Foreign Exchange section for a more complete discussion of the effects of changes in foreign exchange rates on our results.

Linkages between Balance Sheet Items and Market Risk Disclosures

The table below presents items reported on the Consolidated Balance Sheet that are subject to market risk, comprising balances that are subject to either traded risk or non-traded risk measurement techniques.

	As at October 31, 2023				As at October 31, 2022				
		Subject to market risk				Subject to market risk			
(Canadian $ in millions)	**Consolidated Balance Sheet**	**Traded risk (1)**	**Non-traded risk (2)**	**Not subject to market risk**	Consolidated Balance Sheet	Traded risk (1)	Non-traded risk (2)	Not subject to market risk	Primary risk factors for non-traded risk balances
Assets Subject to Market Risk									
Cash and cash equivalents	**77,934**	**–**	**77,934**	**–**	87,466	–	87,466	–	Interest rate
Interest bearing deposits with banks	**4,125**	**237**	**3,888**	**–**	5,734	142	5,592	–	Interest rate
Securities	**322,379**	**124,620**	**197,759**	**–**	273,262	108,303	164,959	–	Interest rate, credit spread, equity
Securities borrowed or purchased under resale agreements	**115,662**	**–**	**115,662**	**–**	113,194	–	113,194	–	Interest rate
Loans and acceptances (net of allowance for credit losses)	**656,478**	**4,412**	**652,066**	**–**	551,339	3,501	547,838	–	Interest rate, foreign exchange
Derivative instruments	**39,976**	**34,004**	**5,972**	**–**	48,160	45,537	2,623	–	Interest rate, foreign exchange
Customers' liabilities under acceptances	**8,111**	**–**	**8,111**	**–**	13,235	–	13,235	–	Interest rate
Other assets	**68,611**	**4,734**	**27,385**	**36,492**	46,809	3,030	26,561	17,218	Interest rate
Total Assets	**1,293,276**	**168,007**	**1,088,777**	**36,492**	1,139,199	160,513	961,468	17,218	
Liabilities Subject to Market Risk									
Deposits	**909,676**	**35,300**	**874,376**	**–**	769,478	26,305	743,173	–	Interest rate, foreign exchange
Derivative instruments	**50,193**	**43,166**	**7,027**	**–**	59,956	46,803	13,153	–	Interest rate, foreign exchange
Acceptances	**8,111**	**–**	**8,111**	**–**	13,235	–	13,235	–	Interest rate
Securities sold but not yet purchased	**43,781**	**43,781**	**–**	**–**	40,979	40,979	–	–	Interest rate
Securities lent or sold under repurchase agreements	**106,108**	**–**	**106,108**	**–**	103,963	–	103,963	–	Interest rate
Other liabilities	**90,142**	**33**	**90,049**	**60**	72,400	60	71,815	525	Interest rate
Subordinated debt	**8,228**	**–**	**8,228**	**–**	8,150	–	8,150	–	Interest rate
Total Liabilities	**1,216,239**	**122,280**	**1,093,899**	**60**	1,068,161	114,147	953,489	525	

(1) Primarily comprises balance sheet items that are subject to the trading and underwriting risk management framework and recorded at fair value through profit or loss.
(2) Primarily comprises balance sheet items that are subject to the structural balance sheet insurance risk management framework and secured financing transactions.

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Insurance Risk

Insurance Risk is the potential for loss as a result of actual experience differing from that assumed when an insurance product was designed and priced, and comprises claims risk, policyholder behaviour risk and expense risk.

Insurance risk generally entails the inherent unpredictability that can arise from the assumption of long-term policy liabilities or uncertainty regarding future events. Insurance provides protection against the financial consequences of insured risks by transferring those risks to the insurer (under specific terms and conditions) in exchange for premiums. Insurance risk is inherent in all of our insurance products: life insurance, annuities (which include the pension risk transfer business), accident and sickness insurance, and creditor insurance, as well as the reinsurance business. Insurance risk consists of:

- Claims risk – the risk that the actual magnitude or frequency of claims will differ from those assumed in the pricing or underwriting process, including mortality risk, morbidity risk, longevity risk and catastrophic risk;
- Policyholder behaviour risk – the risk that the behaviour of policyholders in regard to premium payments, withdrawals or loans, as well as policy lapses and surrenders and other voluntary terminations, will differ from the behaviour assumed in the pricing process; and
- Expense risk – the risk that actual expenses arising from acquiring and administering policies and processing claims will exceed the expenses assumed in the pricing process.

Our risk governance practices provide effective independent oversight and control of risk within BMO Insurance. BMO Insurance's risk management framework addresses the identification, assessment, management, monitoring and reporting of risks. The framework includes: the Risk Appetite Statement and key risk metrics; insurance risk policies and processes, including limits; capital requirements; stress testing; risk reports; the Own Risk and Solvency Assessment; and ongoing monitoring of experience. Senior management within the various lines of business uses this framework, serving as the first line of defence and assuming the primary responsibility for managing insurance risk. Second-line-of-defence oversight is provided by the CRO, BMO Insurance, who reports to the CRO, BMO Wealth Management. Internal risk committees, the boards of directors of the BMO Insurance subsidiaries and senior management provide senior governance and review. In particular, the Risk Committee of BMO Insurance oversees and reports on risk management activities to the insurance companies' boards of directors on a quarterly basis. In addition, the Audit and Conduct Review Committee of the Board of Directors acts as the Audit and Conduct Review Committee for BMO Life Insurance Company.

A robust product approval process is a cornerstone of the BMO Insurance risk management framework, as it identifies, assesses and manages risks associated with new insurance products or changes to existing products. This process, along with guidelines and practices for underwriting and claims management, promotes the effective identification, assessment and management of insurance risk. Reinsurance transactions that transfer or cede insurance risk from BMO Insurance to independent reinsurance companies also mitigate our exposure to insurance risk by diversifying risk and limiting claims. BMO Insurance has exited the Property and Casualty Reinsurance market, with the last remaining treaty terminated in January 2021, significantly reducing our exposure to catastrophic claims and in turn, the risks arising from climate change. However, a certain portion of our exposure to catastrophic claims remains as the portfolio runs off and until all outstanding claims that were made prior to the treaty termination dates are settled and paid.

Caution
This Insurance Risk section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

Liquidity and Funding Risk

Liquidity and Funding Risk is the potential for loss if we are unable to meet our financial commitments in a timely manner at reasonable prices as they become due. Financial commitments include liabilities to depositors and suppliers, as well as lending, investment and pledging commitments.

Managing liquidity and funding risk is integral to maintaining enterprise soundness and safety, depositor confidence and earnings stability. It is BMO's policy to maintain a level of liquid assets and funding capacity sufficient to meet our financial commitments, even in times of stress.

Liquidity and Funding Risk Governance

The Corporate Treasury group and the operating groups, as the first line of defence, are responsible for the ongoing identification, assessment and management of liquidity and funding risk. The Corporate Treasury group is responsible for monitoring and reporting on exposures to liquidity and funding risk across the enterprise; develops and recommends for approval the Liquidity and Funding Risk Management Framework and the related risk appetite statement and limits; monitors compliance with relevant corporate policies; and assesses the impact of market events on liquidity and funding requirements on an ongoing basis.

Enterprise Risk and Portfolio Management, as the second line of defence, exercises oversight, independent risk assessment and effective challenge of liquidity and funding management frameworks, policies, limits, monitoring and reporting across the enterprise.

The Risk Management Committee (RMC) and Asset Liability Committee (ALCO) provide senior management oversight, and review and discuss significant liquidity and funding policies, issues and developments that arise in the pursuit of BMO's strategic priorities. The Risk Review Committee (RRC) provides oversight of the management of liquidity and funding risk, annually approves the applicable policies, limits and contingency plan, and regularly reviews liquidity and funding positions.

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Liquidity and Funding Risk Management

BMO's Liquidity and Funding Risk Management Framework is defined and authorized in alignment with corporate policies approved by our Board of Directors and standards approved by management. These policies and standards set out key management principles, liquidity and funding metrics and related limits, as well as roles and responsibilities in the management of liquidity and funding risk across the enterprise.

We have a robust limit structure in place in order to manage liquidity and funding risk. These limits define BMO's risk appetite for the key Stress Net Liquidity Position (Stress NLP) measure, regulatory liquidity ratios, secured and unsecured funding appetite (for both trading and structural activities), as well as enterprise collateral pledging. Limits also establish the tolerance for concentrations of maturities, as well as requirements for counterparty liability diversification, business pledging activity, and the size and type of uncommitted and committed credit and liquidity facilities that may be outstanding.

Operating within these limits helps to confirm that liquidity and funding risk is appropriately managed. An enterprise-wide contingency plan intended to facilitate effective risk management in the event of a disruption is also in place. Early warning indicators identified in the contingency plan are regularly monitored in order to detect any signs of rising levels of liquidity or funding risk in the market, or any exposure to other risks specific to BMO.

BMO legal entities include regulated and foreign subsidiaries and branches, and as a result, movements of funds between entities in the corporate group are subject to, among other things, the liquidity, funding and capital adequacy requirements of these entities. As such, liquidity and funding positions are managed on both a consolidated and key legal entity basis. Liquidity and funding risk management policies and limits, informed by the laws and regulations that apply to each entity, are in place for key legal entities, and positions are regularly reviewed at the key legal entity level to confirm compliance with applicable laws and regulations.

BMO continued to maintain a strong liquidity position during 2023. Customer loans and deposits continued to grow, while wholesale funding increased, reflecting net issuances. Our liquidity metrics, including the Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR), exceeded internal and regulatory requirements throughout 2023.

Liquidity and Funding Risk Measurement

A key component of liquidity risk management is the measurement of liquidity risk under stress. We use Stress NLP as a key measure of liquidity risk. Stress NLP represents the amount by which liquid assets exceed potential funding needs under severe systemic and enterprise-specific stress scenarios, and a combination thereof. Potential funding needs may arise from obligations to repay retail, commercial and wholesale deposits that are withdrawn or not renewed, or to fund drawdowns on available credit and liquidity lines, as well as from obligations to pledge collateral due to ratings downgrades or market volatility, along with the continuing need to fund new assets and strategic investments. Potential funding needs are quantified by applying factors to various business activities based on management's view of the relative level of liquidity risk related to each activity. These factors vary by deposit classification (e.g., retail, small business, non-financial corporate or wholesale counterparties) and deposit type (e.g., insured, uninsured, operational or non-operational deposits), as well as by commitment type (e.g., uncommitted or committed credit or liquidity facilities by counterparty type). Stress scenarios also consider the time horizon over which liquid assets can be monetized and management's assessment of the liquidity value of those assets under conditions of market stress. These potential funding needs are assessed under severe systemic and enterprise-specific stress scenarios, and a combination thereof.

Stress testing results are evaluated against our stated risk appetite and are considered in management's decisions on limit-setting and internal liquidity transfer pricing, and they also help to inform and shape the design of business plans and contingency plans. The Liquidity and Funding Risk Management Framework is integrated with enterprise-wide stress testing.

In addition to Stress NLP, we regularly monitor positions in relation to the limits and liquidity ratios noted in the Liquidity and Funding Risk Management section above. These include regulatory metrics such as LCR, Net Cumulative Cash Flow and NSFR.

Unencumbered Liquid Assets

Unencumbered liquid assets include high-quality assets that are marketable, can be pledged as security for borrowings, and can be converted to cash in a time frame that meets liquidity and funding requirements. Liquid assets are primarily held in our trading businesses, as well as in supplemental liquidity pools that are maintained for contingent liquidity risk management purposes. The liquidity values recognized for different asset classes under BMO's risk management framework reflect management's assessment of the liquidity values of those assets under a severe stress scenario. Liquid assets held in our trading businesses include cash on deposit with central banks, short-term deposits with other financial institutions, highly-rated debt securities, equity securities and short-term reverse repurchase agreements. Supplemental liquidity pool assets predominantly comprise cash on deposit with central banks, securities, and short-term reverse repurchase agreements for highly-rated Canadian federal and provincial government debt and U.S. federal government and agency debt. Substantially all supplemental liquidity pool assets meet the definition of high-quality liquid assets under Basel III. Approximately 60% of the supplemental liquidity pool is held at the parent bank level in assets denominated in Canadian or U.S. dollars, and most of the remaining supplemental liquidity pool is held at our U.S. bank entity, BMO Bank N.A., in U.S.-dollar-denominated assets. The size of the supplemental liquidity pool is integrated with our assessment of liquidity risk. In order to comply with local regulatory requirements, certain legal entities maintain their own minimum liquidity positions. There may be legal and regulatory restrictions on BMO's ability to use liquid assets held at one legal entity to support the liquidity requirements of another legal entity.

In the normal course of business, we may encumber a portion of cash and securities holdings as collateral in support of trading activities and participation in clearing and payment systems in Canada and abroad. In addition, we may receive liquid assets as collateral and may re-pledge these assets in exchange for cash or as collateral in support of trading activities. Net unencumbered liquid assets, defined as on-balance sheet assets, such as BMO-owned cash and securities and securities borrowed or purchased under resale agreements, plus other off-balance sheet eligible collateral received, less assets encumbered as collateral, totalled $360.2 billion as at October 31, 2023, compared with $335.3 billion as at October 31, 2022.

The increase in unencumbered liquid assets was primarily due to higher securities balances, partially offset by lower cash balances. Net unencumbered liquid assets are primarily held at the parent bank level, at BMO Bank N.A., and in our broker/dealer operations. In addition to liquid assets, we have access to the Bank of Canada's lending assistance programs, the Federal Reserve Bank discount window in the United States, the Bank of England's Sterling Monetary Framework, and European Central Bank standby liquidity facilities. We do not consider central bank facilities as a source of available liquidity when assessing the soundness of our liquidity position.

In addition to cash and securities holdings, we may also pledge other assets, including mortgages and loans, to raise long-term secured funding. As part of the Liquidity and Funding Risk Management Framework, a Pledging of Assets corporate policy sets out the framework and limits for pledging financial and non-financial assets.

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BMO's total encumbered assets and unencumbered liquid assets are summarized in the table below. Refer to Note 24 of the audited annual consolidated financial statements for further information on pledged assets.

Liquid Assets

(Canadian $ in millions)	As at October 31, 2023 Bank-owned assets	Other cash and securities received	Total gross assets (1)	Encumbered assets	Net unencumbered assets (2)	As at October 31, 2022 Net unencumbered assets (2)
Cash and cash equivalents	**77,934**	**–**	**77,934**	**125**	**77,809**	87,379
Deposits with other banks	**4,125**	**–**	**4,125**	**–**	**4,125**	5,734
Securities and securities borrowed or purchased under resale agreements						
Sovereigns / Central banks / Multilateral development banks	**155,249**	**107,854**	**263,103**	**141,176**	**121,927**	111,940
NHA mortgage-backed securities and U.S. agency mortgage-backed securities and collateralized mortgage obligations	**87,244**	**8,875**	**96,119**	**39,390**	**56,729**	39,978
Corporate and other debt	**24,783**	**20,368**	**45,151**	**8,683**	**36,468**	33,698
Corporate equity	**55,103**	**54,051**	**109,154**	**65,501**	**43,653**	39,966
Total securities and securities borrowed or purchased under resale agreements	**322,379**	**191,148**	**513,527**	**254,750**	**258,777**	225,582
NHA mortgage-backed securities (reported as loans at amortized cost) (3)	**23,983**	**–**	**23,983**	**4,481**	**19,502**	16,604
Total liquid assets	**428,421**	**191,148**	**619,569**	**259,356**	**360,213**	335,299

(1) Gross assets include bank-owned assets and cash and securities received from third parties.
(2) Net unencumbered liquid assets are defined as total gross assets less encumbered assets.
(3) Under IFRS, National Housing Act (NHA) mortgage-backed securities that include mortgages owned by BMO as the underlying collateral are classified as loans. Unencumbered NHA mortgage-backed securities have liquidity value and are included as liquid assets under BMO's Liquidity and Funding Risk Management Framework. This amount is shown as a separate line item, NHA mortgage-backed securities.

Asset Encumbrance

(Canadian $ in millions) As at October 31, 2023	Total gross assets (1)	Encumbered (2) Pledged as collateral	Encumbered (2) Other encumbered	Net unencumbered Other unencumbered (3)	Net unencumbered Available as collateral (4)
Cash and deposits with other banks	**82,059**	**–**	**125**	**–**	**81,934**
Securities (5)	**537,510**	**209,091**	**50,140**	**16,061**	**262,218**
Loans	**632,495**	**93,931**	**511**	**342,211**	**195,842**
Other assets					
Derivative instruments	**39,976**	**–**	**–**	**39,976**	**–**
Customers' liability under acceptances	**8,111**	**–**	**–**	**8,111**	**–**
Premises and equipment	**6,241**	**–**	**–**	**6,241**	**–**
Goodwill	**16,728**	**–**	**–**	**16,728**	**–**
Intangible assets	**5,216**	**–**	**–**	**5,216**	**–**
Current tax assets	**2,052**	**–**	**–**	**2,052**	**–**
Deferred tax assets	**3,081**	**–**	**–**	**3,081**	**–**
Other	**35,293**	**10,596**	**–**	**24,697**	**–**
Total other assets	**116,698**	**10,596**	**–**	**106,102**	**–**
Total assets	**1,368,762**	**313,618**	**50,776**	**464,374**	**539,994**

(Canadian $ in millions) As at October 31, 2022	Total gross assets (1)	Encumbered (2) Pledged as collateral	Encumbered (2) Other encumbered	Net unencumbered Other unencumbered (3)	Net unencumbered Available as collateral (4)
Cash and deposits with other banks	93,200	–	87	–	93,113
Securities (5)	472,443	183,275	46,982	12,620	229,566
Loans	529,458	71,139	656	299,358	158,305
Other assets					
Derivative instruments	48,160	–	–	48,160	–
Customers' liability under acceptances	13,235	–	–	13,235	–
Premises and equipment	4,841	–	–	4,841	–
Goodwill	5,285	–	–	5,285	–
Intangible assets	2,193	–	–	2,193	–
Current tax assets	1,421	–	–	1,421	–
Deferred tax assets	1,175	–	–	1,175	–
Other	31,894	13,991	–	17,903	–
Total other assets	108,204	13,991	–	94,213	–
Total assets	1,203,305	268,405	47,725	406,191	480,984

(1) Gross assets include on-balance sheet and off-balance sheet assets.
(2) Pledged as collateral refers to the portion of on-balance sheet assets and other cash and securities that is pledged through repurchase agreements, securities lending, derivative contracts, minimum required deposits at central banks, and requirements associated with participation in clearing houses and payment systems. Other encumbered assets include assets that are restricted for legal or other reasons, such as restricted cash and short sales.
(3) Other unencumbered assets include select liquid asset holdings that management believes are not readily available to support BMO's liquidity requirements. These include securities of $16.1 billion as at October 31, 2023, which include securities held at BMO's insurance subsidiary, significant equity investments and certain investments held at BMO's merchant banking business. Other unencumbered assets include mortgages and loans that may be securitized to access secured funding.
(4) Loans included in available as collateral represent loans currently lodged at central banks that may be used to access central bank funding. Loans available for pledging as collateral do not include other sources of additional liquidity that may be realized from BMO's loan portfolio, such as incremental securitization, covered bond issuances and U.S. Federal Home Loan Bank (FHLB) advances.
(5) Includes securities, securities borrowed or purchased under resale agreements and NHA mortgage-backed securities (reported as loans at amortized cost).

Funding Strategy

BMO's funding strategy requires that secured and unsecured wholesale funding used to support loans and less liquid assets must have a term (typically maturing in two to ten years) that will support the effective term to maturity of these assets. Secured and unsecured wholesale funding for liquid trading assets is largely shorter-term (maturing in one year or less), is aligned with the liquidity of the assets being funded and is subject to limits on aggregate maturities across different periods. Supplemental liquidity pools are funded largely with wholesale term funding.

We maintain a large and stable base of customer deposits that, in combination with our strong capital position, is a source of strength. This supports the maintenance of a sound liquidity position and reduces our reliance on wholesale funding. Customer deposits totalled $654.4 billion as at October 31, 2023, increasing from $544.4 billion in 2022, primarily due to the closing of the Bank of the West acquisition in February 2023, and underlying growth in both retail and commercial deposits.

Total secured and unsecured wholesale funding outstanding, which largely consists of negotiable marketable securities, was $269.6 billion as at October 31, 2023, with $78.2 billion sourced as secured funding and $191.4 billion sourced as unsecured funding. Total wholesale funding outstanding increased from $236.8 billion as at October 31, 2022, primarily due to the net issuance of wholesale funding during the year. The mix and maturities of BMO's wholesale term funding are outlined later in this section. Additional information on deposit maturities can also be found in the Contractual Maturities of Assets and Liabilities and Off-Balance Sheet Commitments section. We maintain a sizeable portfolio of unencumbered liquid assets, totalling $360.2 billion as at October 31, 2023 and $335.3 billion as at October 31, 2022, that can be monetized to meet potential funding requirements, as described in the Unencumbered Liquid Assets section above.

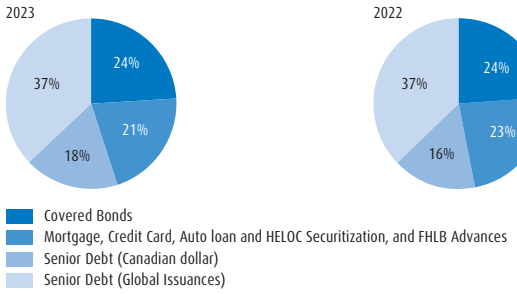
Wholesale Funding Maturities (1)

	As at October 31, 2023								As at October 31, 2022
(Canadian $ in millions)	Less than 1 month	1 to 3 months	3 to 6 months	6 to 12 months	Subtotal less than 1 year	1 to 2 years	Over 2 years	Total	Total
Deposits from banks	**4,374**	**1,660**	**753**	**927**	**7,714**	**–**	**–**	**7,714**	9,550
Certificates of deposit and commercial paper	**12,932**	**27,334**	**26,232**	**27,805**	**94,303**	**69**	**–**	**94,372**	80,696
Bearer deposit notes	**426**	**167**	**276**	**85**	**954**	**–**	**–**	**954**	1,661
Asset-backed commercial paper (ABCP)	**1,562**	**1,931**	**2,072**	**440**	**6,005**	**–**	**–**	**6,005**	–
Senior unsecured medium-term notes	**960**	**2,156**	**8,096**	**13,449**	**24,661**	**16,131**	**29,957**	**70,749**	65,234
Senior unsecured structured notes (2)	**135**	**215**	**–**	**31**	**381**	**156**	**8,878**	**9,415**	7,950
Secured funding									
Mortgage and HELOC securitizations	**–**	**585**	**1,165**	**1,717**	**3,467**	**3,405**	**11,044**	**17,916**	20,385
Covered bonds	**–**	**2,330**	**–**	**–**	**2,330**	**3,467**	**22,615**	**28,412**	29,047
Other asset-backed securitizations (3)	**–**	**–**	**–**	**148**	**148**	**176**	**7,337**	**7,661**	6,631
Federal Home Loan Bank advances	**693**	**–**	**–**	**–**	**693**	**13,265**	**4,190**	**18,148**	7,494
Subordinated debt	**–**	**–**	**–**	**–**	**–**	**–**	**8,227**	**8,227**	8,150
Total	**21,082**	**36,378**	**38,594**	**44,602**	**140,656**	**36,669**	**92,248**	**269,573**	236,798
Of which:									
Secured	**2,255**	**4,846**	**3,237**	**2,305**	**12,643**	**20,313**	**45,186**	**78,142**	63,557
Unsecured	**18,827**	**31,532**	**35,357**	**42,297**	**128,013**	**16,356**	**47,062**	**191,431**	173,241
Total (4)	**21,082**	**36,378**	**38,594**	**44,602**	**140,656**	**36,669**	**92,248**	**269,573**	236,798

(1) Wholesale unsecured funding primarily includes funding raised through the issuance of negotiable marketable securities. Wholesale funding excludes repo transactions and bankers' acceptances, which are disclosed in the Contractual Maturities of Assets and Liabilities and Off-Balance Sheet Commitments section, and also excludes ABCP issued by certain ABCP conduits that are not consolidated for financial reporting purposes.
(2) Primarily issued to institutional investors.
(3) Includes credit card, auto and transportation finance loan securitizations.
(4) Total wholesale funding comprised Canadian-dollar-denominated funding of $49.1 billion and U.S.-dollar-denominated and other foreign-currency-denominated funding of $220.5 billion as at October 31, 2023.

Diversification of our wholesale term funding sources is an important part of our overall liquidity management strategy. Our wholesale term funding is well-diversified by jurisdiction, currency, investor segment, instrument type and maturity profile. We maintain ready access to long-term wholesale funding through various borrowing programs, including a European Note Issuance Program, Canadian, Australian and U.S. Medium-Term Note programs, Canadian and U.S. mortgage securitizations, Canadian credit card loans, auto loans and home equity line of credit (HELOC) securitizations, U.S. transportation finance loans, covered bonds and Canadian and U.S. senior unsecured deposits.

Wholesale Capital Market Term Funding Composition (%)



Our wholesale term funding plan seeks to ensure sufficient funding capacity is available to execute business strategies. The funding plan considers expected maturities, as well as asset and liability growth projected for businesses in our forecasting and planning processes, and assesses funding needs in relation to the sources available. The plan is reviewed annually by the senior management committees with specific related responsibilities and approved by the RRC, and is regularly updated to reflect actual results and incorporate updated forecast information.

Regulatory Developments

The Office of the Superintendent of Financial Institutions (OSFI) announced changes to its Liquidity Adequacy Requirements (LAR) Guideline that became effective April 1, 2023. The changes primarily relate to the calculation of the Net Cumulative Cash Flow regulatory metric. There was no material impact on our liquidity and funding practices or requirements as a result of these changes.

Credit Ratings

The credit ratings assigned to BMO's short-term and senior long-term debt securities by external rating agencies are important in raising both capital and funding to support the bank's business operations. Maintaining strong credit ratings allows us to access the wholesale markets at competitive pricing levels. Should BMO's credit ratings experience a downgrade, our cost of funding may increase and our access to funding and capital through the wholesale markets could be constrained. A material downgrade of BMO's ratings could also have other consequences, including those set out in Note 8 of the audited annual consolidated financial statements.

The credit ratings assigned to BMO's senior debt by rating agencies are indicative of high-grade, high-quality issues. On June 20, 2023, Fitch affirmed its ratings for BMO and revised its outlook to stable from negative, reflecting solid and above-target capital adequacy levels after the successful closing of our acquisition of Bank of the West. During the third quarter of fiscal 2023, Moody's, Standard & Poor's (S&P) and DBRS also affirmed their ratings, while maintaining their stable outlook on BMO.

As at October 31, 2023

Rating agency	Short-term debt	Senior debt (1)	Long-term deposits / Legacy senior debt (2)	Subordinated debt (NVCC)	Outlook
Moody's	P-1	A2	Aa2	Baa1(hyb)	Stable
S&P	A-1	A-	A+	BBB+	Stable
Fitch	F1+	AA-	AA	A	Stable
DBRS	R-1 (high)	AA (low)	AA	A (low)	Stable

(1) Subject to conversion under the Bank Recapitalization (Bail-In) Regime.
(2) Long-term deposits / Legacy senior debt includes senior debt issued prior to September 23, 2018 and senior debt issued on or after September 23, 2018 that is excluded from the Bank Recapitalization (Bail-In) Regime.

We are required to deliver collateral to certain counterparties in the event of a downgrade of BMO's current credit rating. The incremental collateral required is based on mark-to-market exposure, collateral valuations and collateral threshold arrangements, as applicable. As at October 31, 2023, we would be required to provide additional collateral to counterparties totalling $128 million, $368 million and $844 million as a result of a one-notch, two-notch and three-notch downgrade, respectively.

Liquidity Coverage Ratio

The Liquidity Coverage Ratio (LCR) is calculated in accordance with the OSFI LAR Guideline and is summarized in the following table. The LCR is calculated on a daily basis as the ratio of high-quality liquid assets (HQLA) held to total net stressed cash outflows over the next 30 calendar days. BMO's HQLA primarily comprise cash, highly-rated debt issued or backed by governments, highly-rated covered bonds and non-financial corporate debt, and non-financial equities that are part of a major stock index. Net cash flows include outflows from deposits, secured and unsecured wholesale funding, commitments and potential collateral requirements, offset by permitted inflows from loans, securities lending activities and other non-HQLA debt maturing over a 30-day horizon. Weightings prescribed by OSFI are applied to cash flows and HQLA to arrive at the weighted values and the LCR. The LCR does not reflect liquidity in BMO Financial Corp. (BFC) in excess of 100%, because of limitations on the transfer of liquidity between BFC and the parent bank. Canadian domestic systemically important banks, including BMO, are required to maintain a minimum LCR of 100%. The average daily LCR for the quarter ended October 31, 2023 was 128%, equivalent to a surplus of $49.9 billion above the regulatory minimum. The LCR decreased 7% from 135% in 2022, primarily as a result of the incorporation of Bank of the West business activities into the measure. The closing of the Bank of the West acquisition increased both HQLA and net cash outflows, but excess liquidity at BFC was capped at 100% in the LCR measure. In the prior year, HQLA were temporarily elevated, in anticipation of the closing of the acquisition. While banks are required to maintain an LCR of greater than 100% in normal conditions, they are also expected to be able to utilize HQLA during a period of stress, which may result in an LCR of less than 100% during such a period. The LCR is only one measure of a bank's liquidity position and does not fully capture all of its liquid assets or the funding alternatives that may be available during a period of stress. BMO's total liquid assets are shown in the Liquid Assets table below.

	As at October 31, 2023	
(Canadian $ in billions, except as noted)	**Total unweighted value (average)** (1) (2)	**Total weighted value (average)** (2) (3)
High-Quality Liquid Assets		
Total high-quality liquid assets (HQLA)	*	**228.4**
Cash Outflows		
Retail deposits and deposits from small business customers, of which:	**290.4**	**21.4**
Stable deposits	**135.0**	**4.1**
Less stable deposits	**155.4**	**17.3**
Unsecured wholesale funding, of which:	**295.0**	**131.7**
Operational deposits (all counterparties) and deposits in networks of cooperative banks	**143.6**	**35.5**
Non-operational deposits (all counterparties)	**128.5**	**73.3**
Unsecured debt	**22.9**	**22.9**
Secured wholesale funding		**20.9**
Additional requirements, of which:	**239.4**	**47.1**
Outflows related to derivatives exposures and other collateral requirements	**26.3**	**7.5**
Outflows related to loss of funding on debt products	**4.0**	**4.0**
Credit and liquidity facilities	**209.1**	**35.6**
Other contractual funding obligations	**1.1**	**–**
Other contingent funding obligations	**517.4**	**9.8**
Total cash outflows	*	**230.9**
Cash Inflows		
Secured lending (e.g., reverse repos)	**152.8**	**31.6**
Inflows from fully performing exposures	**17.7**	**9.6**
Other cash inflows	**11.2**	**11.2**
Total cash inflows	**181.7**	**52.4**
		Total adjusted value (4)
Total HQLA		**228.4**
Total net cash outflows		**178.5**
Liquidity Coverage Ratio (%)		**128**
For the quarter ended October 31, 2022		Total adjusted value (4)
Total HQLA		204.3
Total net cash outflows		151.2
Liquidity Coverage Ratio (%)		135

* Disclosure is not required under the LCR disclosure standard.
(1) Unweighted values are calculated at market value (for HQLA) or as outstanding balances maturing or callable within 30 days (for inflows and outflows).
(2) Values are calculated based on the simple average of the daily LCR over 62 business days in the fourth quarter of 2023.
(3) Weighted values are calculated after the application of the weightings prescribed under the OSFI LAR Guideline for HQLA and cash inflows and outflows.
(4) Adjusted values are calculated based on total weighted values after applicable caps, as defined in the LAR Guideline.

Net Stable Funding Ratio

The Net Stable Funding Ratio (NSFR) is a regulatory metric that assesses the stability of a bank's funding profile in relation to the liquidity value of its assets and is calculated in accordance with the OSFI LAR Guideline. Unlike the LCR, which is a short-term metric, the NSFR assesses a bank's medium-term and long-term resilience. The NSFR is defined as the ratio of the amount of available stable funding (ASF) to the amount of required stable funding (RSF). ASF represents the proportion of own and third-party resources that are expected to be reliably available to a bank over a one-year time horizon (including customer deposits, long-term wholesale funding and capital). The stable funding requirements for each institution are set by OSFI based on the liquidity and maturity characteristics of its balance sheet assets and off-balance sheet exposures. Weightings prescribed by OSFI are applied to notional asset and liability balances to determine ASF, RSF and the NSFR. Canadian domestic systemically important banks, including BMO, are required to maintain a minimum NSFR of 100%. Both ASF and RSF increased in 2023, primarily due to the impact of the Bank of the West acquisition. BMO's NSFR was 115% as at October 31, 2023, equivalent to a surplus of $96.3 billion above the regulatory minimum. The NSFR increased from 114% as at October 31, 2022, as higher required stable funding was more than offset by higher available stable funding.

	For the quarter ended October 31, 2023				
	Unweighted value by residual maturity				
(Canadian $ in billions, except as noted)	No maturity (1)	Less than 6 months	6 to 12 months	Over 1 year	Weighted value (2)
Available Stable Funding (ASF) Item					
Capital:	–	–	–	90.7	90.7
Regulatory capital	–	–	–	90.7	90.7
Other capital instruments	–	–	–	–	–
Retail deposits and deposits from small business customers:	228.4	54.6	36.2	61.5	348.2
Stable deposits	116.7	20.3	15.2	13.8	158.4
Less stable deposits	111.7	34.3	21.0	47.7	189.8
Wholesale funding:	276.1	262.9	61.7	115.2	280.4
Operational deposits	129.6	–	–	–	64.8
Other wholesale funding	146.5	262.9	61.7	115.2	215.6
Liabilities with matching interdependent assets	–	0.9	1.5	12.2	–
Other liabilities:	4.0	*	*	33.2	4.8
NSFR derivative liabilities	*	*	*	11.1	*
All other liabilities and equity not included in the above categories	4.0	17.2	0.1	4.8	4.8
Total ASF	*	*	*	*	724.1
Required Stable Funding (RSF) Item					
Total NSFR high-quality liquid assets (HQLA)	*	*	*	*	11.8
Deposits held at other financial institutions for operational purposes	–	0.3	–	–	0.1
Performing loans and securities:	185.2	179.1	61.1	370.7	525.7
Performing loans to financial institutions secured by Level 1 HQLA	–	72.6	2.5	0.3	3.3
Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	33.4	55.4	6.7	16.9	59.9
Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and public sector entities, of which:	109.6	40.4	42.1	193.2	300.8
With a risk weight of less than or equal to 35% under the Basel II standardized approach for credit risk	–	–	–	–	–
Performing residential mortgages, of which:	13.0	8.5	9.4	144.9	122.5
With a risk weight of less than or equal to 35% under the Basel II standardized approach for credit risk	13.0	8.5	9.4	144.9	122.5
Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	29.2	2.2	0.4	15.4	39.2
Assets with matching interdependent liabilities	–	0.9	1.5	12.2	–
Other assets:	42.8	*	*	55.1	69.4
Physical traded commodities, including gold	4.9	*	*	*	4.1
Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	*	*	*	12.7	10.8
NSFR derivative assets	*	*	*	6.1	–
NSFR derivative liabilities before deduction of variation margin posted	*	*	*	20.7	1.0
All other assets not included in the above categories	37.9	7.2	0.2	8.2	53.5
Off-balance sheet items	–	–	–	589.6	20.8
Total RSF	*	*	*	*	627.8
Net Stable Funding Ratio (%)	*	*	*	*	115

For the quarter ended October 31, 2022	Weighted value (2)
Total ASF	610.2
Total RSF	534.1
Net Stable Funding Ratio (%)	114

* Disclosure is not required under the NSFR disclosure standard.

(1) Items in the no maturity column do not have a stated maturity. These may include, but are not limited to, items such as non-maturity deposits, short positions, open maturity positions, non-HQLA equities, physical traded commodities and demand loans.

(2) Weighted values are calculated after the application of the weights prescribed under the OSFI LAR Guideline for ASF and RSF.

Contractual Maturities of Assets and Liabilities and Off-Balance Sheet Commitments

The tables below show the remaining contractual maturities of on-balance sheet assets and liabilities and off-balance sheet commitments. The contractual maturity of financial assets and liabilities is an input to, but is not necessarily consistent with, the expected maturity of assets and liabilities that is used in the management of liquidity and funding risk. We forecast asset and liability cash flows, under both normal market conditions and a number of stress scenarios, to manage liquidity and funding risk. Stress scenarios incorporate assumptions for loan repayments, deposit withdrawals, and credit commitment and liquidity facility drawdowns by counterparty and product type. Stress scenarios also consider the time horizon over which liquid assets can be monetized and the related discounts ("haircuts") and potential collateral requirements that may result from both market volatility and credit rating downgrades, among other assumptions.

										2023
(Canadian $ in millions)	0 to 1 month	1 to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	1 to 2 years	2 to 5 years	Over 5 years	No maturity	Total
On-Balance Sheet Financial Instruments										
Assets										
Cash and cash equivalents	75,473	–	–	–	–	–	–	–	2,461	77,934
Interest bearing deposits with banks	2,791	680	383	153	118	–	–	–	–	4,125
Securities	4,037	8,408	7,472	5,614	6,816	29,374	63,601	141,953	55,104	322,379
Securities borrowed or purchased under resale agreements	93,707	12,311	6,903	2,491	–	250	–	–	–	115,662
Loans (1)										
Residential mortgages	1,121	2,188	3,403	4,246	4,761	27,229	107,347	26,689	266	177,250
Consumer instalment and other personal	283	621	1,028	1,343	1,542	8,094	35,467	29,992	25,670	104,040
Credit cards	–	–	–	–	–	–	–	–	12,294	12,294
Business and government	19,671	10,920	12,550	16,370	16,953	49,366	114,289	27,880	98,702	366,701
Allowance for credit losses	–	–	–	–	–	–	–	–	(3,807)	(3,807)
Total loans, net of allowance	21,075	13,729	16,981	21,959	23,256	84,689	257,103	84,561	133,125	656,478
Other Assets										
Derivative instruments	2,797	4,539	2,670	2,827	1,555	7,804	9,325	8,459	–	39,976
Customers' liabilities under acceptances	4,682	3,423	6	–	–	–	–	–	–	8,111
Other	4,023	814	336	42	4	10	19	7,629	55,734	68,611
Total other assets	11,502	8,776	3,012	2,869	1,559	7,814	9,344	16,088	55,734	116,698
Total Assets	208,585	43,904	34,751	33,086	31,749	122,127	330,048	242,602	246,424	1,293,276

										2023
(Canadian $ in millions)	0 to 1 month	1 to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	1 to 2 years	2 to 5 years	Over 5 years	No maturity	Total
Liabilities and Equity										
Deposits (2) (3)	48,986	63,728	64,939	60,911	52,040	47,624	80,829	18,624	471,995	909,676
Other liabilities										
Derivative instruments	3,103	8,450	3,033	2,278	2,014	7,694	11,748	11,873	–	50,193
Acceptances	4,682	3,423	6	–	–	–	–	–	–	8,111
Securities sold but not yet purchased (4)	43,781	–	–	–	–	–	–	–	–	43,781
Securities lent or sold under repurchase agreements (4)	99,006	4,751	476	539	–	1,336	–	–	–	106,108
Securitization and liabilities related to structured entities	97	717	1,199	2,195	592	4,896	9,870	7,528	–	27,094
Other	15,672	2,269	116	110	107	14,109	2,763	6,160	21,742	63,048
Total other liabilities	166,341	19,610	4,830	5,122	2,713	28,035	24,381	25,561	21,742	298,335
Subordinated debt	–	–	–	–	–	–	25	8,203	–	8,228
Total Equity	–	–	–	–	–	–	–	–	77,037	77,037
Total Liabilities and Equity	215,327	83,338	69,769	66,033	54,753	75,659	105,235	52,388	570,774	1,293,276

(1) Loans receivable on demand have been included under no maturity.
(2) Deposits payable on demand and payable after notice have been included under no maturity.
(3) Deposits totalling $30,852 million as at October 31, 2023 have a fixed maturity date; however, they can be redeemed early (either fully or partially) by customers without penalty. These are classified as payable on a fixed date due to their stated contractual maturity date.
(4) Presented based on their earliest maturity date.

										2023
(Canadian $ in millions)	0 to 1 month	1 to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	1 to 2 years	2 to 5 years	Over 5 years	No maturity	Total
Off-Balance Sheet Commitments										
Commitments to extend credit (1)	2,216	4,874	9,377	14,499	14,190	41,713	129,634	5,927	–	222,430
Letters of credit (2)	1,641	5,088	5,739	5,397	6,065	3,663	3,778	48	–	31,419
Backstop liquidity facilities	212	241	666	2,207	2,039	3,951	8,643	846	–	18,805
Other commitments (3)	46	91	106	101	155	354	626	141	–	1,620

(1) Commitments to extend credit exclude personal lines of credit and credit cards that are unconditionally cancellable at BMO's discretion. A large majority of these commitments expire without being drawn upon. As a result, the total contractual amounts may not be representative of the funding likely to be required for these commitments.
(2) Letters of credit can be drawn down at any time. These are classified based on their stated contractual maturity.
(3) Other commitments comprise purchase obligations and lease commitments for leases signed but not yet commenced.

Material presented in a blue-tinted font above is an integral part of Note 5 of the 2023 audited annual consolidated financial statements.

(Canadian $ in millions)	0 to 1 month	1 to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	1 to 2 years	2 to 5 years	Over 5 years	No maturity	2022 Total
On-Balance Sheet Financial Instruments										
Assets										
Cash and cash equivalents	86,003	–	–	–	–	–	–	–	1,463	87,466
Interest bearing deposits with banks	3,844	1,662	86	44	98	–	–	–	–	5,734
Securities	4,189	4,284	5,480	5,375	6,060	18,272	68,521	108,072	53,009	273,262
Securities borrowed or purchased under resale agreements	83,861	21,736	5,101	2,448	48	–	–	–	–	113,194
Loans (1)										
Residential mortgages	526	1,519	3,708	5,778	6,501	14,665	105,285	10,810	88	148,880
Consumer instalment and other personal	211	553	940	1,693	1,537	4,844	37,742	14,084	24,499	86,103
Credit cards	–	–	–	–	–	–	–	–	9,663	9,663
Business and government	13,003	9,595	11,724	9,300	11,394	37,250	105,009	17,776	94,259	309,310
Allowance for credit losses	–	–	–	–	–	–	–	–	(2,617)	(2,617)
Total loans, net of allowance	13,740	11,667	16,372	16,771	19,432	56,759	248,036	42,670	125,892	551,339
Other Assets										
Derivative instruments	5,362	7,147	3,359	2,552	2,225	7,787	11,636	8,092	–	48,160
Customers' liabilities under acceptances	9,752	3,461	19	3	–	–	–	–	–	13,235
Other	2,735	625	225	21	2	10	19	5,817	37,355	46,809
Total other assets	17,849	11,233	3,603	2,576	2,227	7,797	11,655	13,909	37,355	108,204
Total Assets	209,486	50,582	30,642	27,214	27,865	82,828	328,212	164,651	217,719	1,139,199

(Canadian $ in millions)	0 to 1 month	1 to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	1 to 2 years	2 to 5 years	Over 5 years	No maturity	2022 Total
Liabilities and Equity										
Deposits (2) (3)	38,064	44,637	49,626	47,908	48,444	39,992	62,978	16,265	421,564	769,478
Other liabilities										
Derivative instruments	3,370	11,764	4,399	3,814	2,895	7,619	14,092	12,003	–	59,956
Acceptances	9,752	3,461	19	3	–	–	–	–	–	13,235
Securities sold but not yet purchased (4)	40,979	–	–	–	–	–	–	–	–	40,979
Securities lent or sold under repurchase agreements (4)	94,215	6,476	1,046	2,226	–	–	–	–	–	103,963
Securitization and liabilities related to structured entities	14	2,803	1,300	794	1,673	5,136	9,342	6,006	–	27,068
Other	12,143	4,980	101	97	146	872	2,558	5,722	18,713	45,332
Total other liabilities	160,473	29,484	6,865	6,934	4,714	13,627	25,992	23,731	18,713	290,533
Subordinated debt	–	–	–	–	–	–	25	8,125	–	8,150
Total Equity	–	–	–	–	–	–	–	–	71,038	71,038
Total Liabilities and Equity	198,537	74,121	56,491	54,842	53,158	53,619	88,995	48,121	511,315	1,139,199

(1) Loans receivable on demand have been included under no maturity.
(2) Deposits payable on demand and payable after notice have been included under no maturity.
(3) Deposits totalling $29,966 million as at October 31, 2022 have a fixed maturity date; however, they can be redeemed early (either fully or partially) by customers without penalty. These are classified as payable on a fixed date due to their stated contractual maturity date.
(4) Presented based on their earliest maturity date.

(Canadian $ in millions)	0 to 1 month	1 to 3 months	3 to 6 months	6 to 9 months	9 to 12 months	1 to 2 years	2 to 5 years	Over 5 years	No maturity	2022 Total
Off-Balance Sheet Commitments										
Commitments to extend credit (1)	1,932	3,610	10,461	13,373	14,753	38,057	119,430	5,490	–	207,106
Letters of credit (2)	1,680	4,601	4,936	4,662	4,922	2,832	3,680	57	–	27,370
Backstop liquidity facilities	–	585	393	1,438	1,275	3,465	9,189	985	–	17,330
Other commitments (3)	27	98	55	55	58	220	353	278	–	1,144

(1) Commitments to extend credit exclude personal lines of credit and credit cards that are unconditionally cancellable at BMO's discretion. A large majority of these commitments expire without being drawn upon. As a result, the total contractual amounts may not be representative of the funding likely to be required for these commitments.
(2) Letters of credit can be drawn down at any time. These are classified based on their stated contractual maturity.
(3) Other commitments comprise purchase obligations and lease commitments for leases signed but not yet commenced.

Caution

This Liquidity and Funding Risk section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

Material presented in a blue-tinted font above is an integral part of Note 5 of the 2023 audited annual consolidated financial statements.

Operational Non-Financial Risk

Operational Non-Financial Risk encompasses a wide range of non-financial risks, including those related to business change, customer trust, reputation and data, all of which can result in financial loss. These losses can stem from inadequate or failed internal processes or systems, human error or misconduct, and external events that may directly or indirectly impact the fair value of assets we hold in our credit or investment portfolios. Examples of these risks include cyber and cloud security risk, technology risk, fraud risk and business continuity risk, but exclude legal and regulatory risk, credit risk, market risk, liquidity risk and other types of financial risk.

Operational non-financial risk (ONFR) is inherent in all of our business and banking activities and can lead to significant impacts on our operating and financial results, including financial loss, restatements of financial results and damage to BMO's reputation. Like other financial service organizations, we are exposed to a variety of operational risks arising from the potential for failures of our internal processes, technology systems and employees, as well as from external threats. Potential losses may be the result of process and control failures, unauthorized transactions by employees, business disruption, information security breaches, theft or fraud and cyber security threats, exposure to risks related to third-party relationships and damage to physical assets. For example, given the large volume of transactions that we process on a daily basis and the complexity and speed of our business operations, there is a possibility that certain operational or human errors may be repeated or compounded before they are discovered and rectified.

ONFR is not only inherent in our business and banking activities, it is also inherent in the processes and controls we use to manage risks. There is the possibility that errors could occur, as well as the possibility that a failure in our internal processes or systems could lead to a failure to manage or mitigate risk, financial loss and reputational harm. Shortcomings or failures of internal processes, systems or employees, or of services and products provided by third parties, including any of our financial, accounting or other data processing systems, could lead to financial loss, restatements of financial results and damage to BMO's reputation.

The nature of our business activities also exposes us to the risk of theft and fraud when we enter into transactions with customers or counterparties. BMO relies on the accuracy and completeness of any information provided by, and any other representations made by, customers and counterparties. While we conduct due diligence in relation to such customer information and, where practicable and economically feasible, engage valuation experts and other experts or sources of information to assist in assessing the value of collateral and other customer risks, our financial results may be adversely impacted if the information provided by customers or counterparties is materially misleading and this is not discovered during the due diligence process.

We have established various risk management frameworks to manage and mitigate these risks, including internal controls, limits and governance processes. However, despite the contingency plans we have in place to maintain our ability to serve our clients and minimize disruptions and adverse impacts and the contingency plans of our third-party service providers, our ability to conduct business may be adversely affected by a disruption to the infrastructure that supports our operations and the communities in which we do business, including, but not limited to, disruption caused by public health emergencies or terrorist acts.

We regularly review top and emerging risk exposures that could impact BMO's business and operations, and we assess our preparedness to proactively manage the risks we face or could face in the future. Consistent with the management of risk across the enterprise, we employ a three-lines-of-defence approach in managing our exposures to non-financial risk.

Refer to the Risks That May Affect Future Results – Top and Emerging Risks That May Affect Future Results section for further discussion of these risks.

Operational Non-Financial Risk Governance

The Enterprise Operational Risk Committee (EORC), a sub-committee of the Risk Management Committee (RMC), is the primary governance committee exercising oversight of all operational non-financial risk management matters, including: providing direction on, and monitoring against, strategic objectives and deliverables; improving operational resilience; and helping ensure that BMO maintains its reputation for preventing avoidable operating failures and mistakes. As part of its governance responsibilities, the EORC reviews and recommends corporate policies and standards to the Board of Directors and senior executives for review and approval as required, as well as the methodologies and tools that comprise the governing principles of the Operational Non-Financial Risk Management Framework (ONFRMF). The documentation that gives effect to these governing principles is reviewed on a regular basis in order to confirm that it incorporates sound governance practices and is consistent with BMO's risk appetite. Regular analysis and reporting of our enterprise operational risk profile to the various committees (EORC, RMC and Risk Review Committee (RRC)) are important elements of our risk governance framework. Enterprise operational risk reporting provides an integrated view of top and emerging risks, trends in loss data, capital consumption, key risk indicators and operating group profiles. We continue to invest in our reporting platforms, supporting timely and comprehensive reporting capabilities in order to enhance risk transparency and facilitate the proactive management of operational risk exposures.

Operational Non-Financial Risk Management

As the first line of defence, the operating groups and Corporate Services are accountable for the day-to-day management of non-financial risk, including the Chief Risk Officers of our businesses, who provide governance and oversight for their respective business units, along with Corporate Services, which provides additional governance and oversight in certain targeted areas. Operational Risk Officers independently assess the operational risk profiles of our operating groups, identify material exposures and potential weaknesses in our product, service and process-based risk and control environment, and recommend appropriate mitigation strategies and actions.

Independent risk management oversight is provided by ONFR, which is responsible for developing and implementing effective risk-related strategies, tools and policies, and for exercising second-line oversight, effective challenge and governance. ONFR establishes and maintains the ONFRMF, which defines the processes to be used by the first line of defence to identify, assess, manage, mitigate, monitor and report on key operational risk exposures, losses and near-miss operational risk events with significant potential impact. In addition, the ONFRMF sets out the processes by which ONFR, as the second line of defence, guides, supports, monitors, assesses and communicates with the first line in its management of operational non-financial risks.

Implementing the governing principles of the ONFRMF also involves continuing to strengthen our risk culture by promoting greater awareness and understanding of non-financial risk across all three lines of defence, learning from loss events and near-misses, and providing related training and communication, as well as day-to-day execution and oversight of the ONFRMF. We also continue to strengthen our second-line-of-defence support and oversight capabilities with an enhanced Operational Non-Financial Risk Operating Model, which takes a differentiated approach based on the nature of the underlying risk and existing organizational structures.

Through the implementation and oversight of the ONFRMF, we seek to maintain an operational risk profile that is not only consistent with our risk appetite and supported by adequate capital, but is also reinforced by enhanced operational resilience. Operational resilience is an organization's ability to protect and sustain core business services that are essential for its clients, both during the normal course of business and when experiencing operational stress or disruption. It involves our ability to deal with unpredictable events and adapt to changes and external circumstances. Operational resilience is a positive, forward-looking strategic posture that allows us to take measured risks with confidence and prepare BMO to withstand challenges in the market arising from both expected and unexpected events.

The following are the key programs, methodologies and processes set out in the ONFRMF that assist us in the ongoing review of our operational risk profile:

- **Risk and Control Self-Assessment** is an established process that is evolving into the Product/Service and Process Risk Assessment program in 2023-2024. This new program will be used by our operating groups and Corporate Services areas to assess the controls and residual exposures to risk in their business operations by focusing on the key controls they have in place to address specific material risks associated with their products, services, internal activities and processes. It provides a current and forward-looking view of the impact of both our internal controls and the external business environment on the risk profiles of our operating groups and Corporate Services areas, supporting the proactive prevention, mitigation and management of risk.
- BMO's **Initiative Assessment and Approval Process** is used to assess, document and approve qualifying initiatives when a new business, service or product is developed, or existing services and products are enhanced. This process supports continuous oversight of change in risk exposure by setting out specific requirements for due diligence, approval, monitoring and reporting that apply at all levels of the organization.
- Material trends, metrics and risk assessments comprising **Key Risk Indicators, Issues Management** and **Internal Loss Data Events** are integral components of an operational risk profile and are utilized to assess specific risk exposures in relation to BMO's overall risk appetite.
- **Historical Internal Loss Data Events** are key data elements utilized in the Standardized Approach for the calculation of operational risk regulatory capital. BMO adopted the new Basel III Standardized Approach for regulatory capital reporting as of February 1, 2023, as set out in the Capital Adequacy Requirements (CAR) Guideline published by OSFI.
- **Stress Testing** assesses the potential impact of severe negative events on key risk exposures and critical business processes in order to inform risk management. Stress testing helps management identify and understand the impact of large-scale events, including events that have a low frequency of occurrence but a high severity of impact, as well as environmental stresses, and develop mitigation measures or controls that aim to help manage tail risk.
- BMO's **Corporate Risk & Insurance (CR&I)** group provides a second layer of mitigation for certain operational risk exposures. CR&I is also accountable for establishing and maintaining the enterprise-wide insurance program. We purchase insurance when required by law, regulation or contractual agreement, and when it is economically attractive and practicable to mitigate our risks, in order to provide adequate protection against unexpected material loss. The policy structures and coverage provisions of our insurance positions are assessed annually to confirm alignment with BMO's overall risk tolerance.

The following are some of the operational non-financial risks that may adversely affect BMO's business and financial results.

Anti-Money Laundering

Money laundering, terrorist financing and sanctions risks are associated with laundering the proceeds of crime, financing terrorist activity, or violating economic sanctions by making use of our products or services. Compliance with all anti-money laundering, anti-terrorist financing (AML/ATF) and sanctions measures is critical to safeguarding BMO, our customers and the communities in which we operate. We are committed to managing AML/ATF and sanctions risks effectively, and to complying with all relevant laws and regulations. The consequences of non-compliance with these requirements can include enforcement action, criminal prosecution, legal action and damage to our reputation. Under the direction of the Chief Anti-Money Laundering Officer (CAMLO), BMO's AML/ATF and sanctions compliance program promotes effective governance and oversight across all of our businesses, and sets out policies, risk assessments, due diligence processes and controls, and training, including mandatory annual training for all employees. BMO's compliance program applies analytics, technology and professional expertise in order to deter, detect and report suspicious activity. The CAMLO reports regularly to the Audit and Conduct Review Committee (ACRC) of the Board of Directors and to senior management on the effectiveness of the compliance program. The effectiveness of our AML/ATF and sanctions compliance program is subject to regular review and independent assessment by the Corporate Audit Division. We remain committed to effective compliance and the ongoing effort to protect the financial system and the communities in which we operate.

Artificial Intelligence Risk

Artificial intelligence (AI) risk is the potential for loss or harm arising from incorrect use or misuse of AI systems, which can include one or many AI techniques, such as machine learning (ML) or generative AI.

These outcomes can include financial loss, poor customer experiences and damage to our reputation. AI continues to present new opportunities for innovative products and services, including system automation and revenue-generating capabilities, and is expected to become a key enabler of future operating efficiencies, but only if we safely and responsibly adopt and integrate new AI technologies. The application of AI in our business operations is governed and managed by our existing risk management policies. Significant initiatives are reviewed by a cross-enterprise group before implementation with the aim to ensure that ethical, privacy and fair and responsible banking requirements are met.

Our management and oversight of AI risk is focused on advancing our commitment to serving our customers in a way that fosters confidence and trust in our secure, ethical and responsible use of these technologies, utilizing our robust risk management practices and internal safeguards in a manner aligned with, and in compliance with, regulatory expectations.

Business Continuity Risk

Business continuity risk is related to the possibility that we may be unable to maintain, continue or restore essential business operations during and/or after an event that prevents BMO from conducting business in the normal course.

Business continuity management should enable BMO to recover, maintain and manage critical processes, as well as safeguard the interests and well-being of our customers, shareholders and employees. In the event of an operational disruption, effective business continuity plans minimize adverse impacts on our customers, employees and other stakeholders. These operational disruptions could result from severe weather, technology failures, cyber attacks or any other event that can lead to process failure. We have a framework in place that facilitates the rapid recovery and timely resumption of critical operations, including availability of our people, processes, facilities and technology, and maintenance of our third-party arrangements. Our comprehensive business continuity management strategy involves developing, testing and maintaining recovery strategies and plans, and is intended to ensure that critical processes and third-party arrangements remain viable.

Cyber and Cloud Security Risk

Cyber and cloud security risk arises from the possibility that BMO could experience security incidents, including the loss, theft or misuse of information, including all types of data (e.g., client data, employee data and the organization's proprietary data), as well as any potential failure to comply with rules concerning information or cyber security.

Cyber and cloud security is integral to BMO's business operations, brand and reputation. As technology evolves rapidly and the connective capabilities of digital devices continue to grow, cyber threats and risks also evolve. These threats include: breaches of, or disruptions to, our systems or operations, as well as unauthorized access to, or use or dissemination of, information pertaining to BMO, our customers or employees. At BMO, our response includes investing in our Financial Crimes Unit and technological infrastructure, equipping our team to detect and address cyber security threats across North America, Europe and Asia in order to help us keep our customers' and employees' data secure.

Data Risk

Data risk is the risk of loss resulting from inadequate or failed internal processes and systems, or from external events impacting data. Data quality, governance and architecture impact our understanding and management of BMO's data assets.

We continue to invest in new capabilities in support of BMO's digital transformation. Our ability to effectively manage and safeguard critical data has a direct impact on our successful deployment of digital processes and our ability to develop and introduce innovative new capabilities with tools and systems driven by AI. Our management of data risk is focused on the quality, resilience, retention and governance of BMO's data assets, which are foundational to our business operations, strategy and future growth, including BMO's Digital First strategy.

Fraud and Physical Security Risk

Fraud risk is related to the possibility that an intentional act, misstatement or omission designed to deceive others may result in the intended target experiencing a loss or the perpetrator achieving a gain. Fraud may be perpetrated by our employees, suppliers or other external parties, including BMO customers. Fraudsters are getting more sophisticated and may open accounts with financial institutions, including BMO, and then use those accounts to commit fraud. BMO maintains a Fraud Risk Management program intended to proactively manage fraud risks across the bank. A recessionary or tightening interest rate environment may lead to an increase in fraud attacks against BMO and our customers.

The management of physical security risk seeks to ensure that the bank, its customers, employees and third parties are protected against the risk of loss, interference, unauthorized physical access, damage or injury to which they may be exposed as a result of the bank's operations. Physical security risks may emerge through various threat vectors, including criminal activities, terrorist attacks, sociopolitical unrest, human error, natural events and/or geopolitical threats. Physical security measures may also support the management of a number of other risks, including risks related to information security, privacy and fraud.

Project and Change Management Risk

Project and change management risk is related to the possibility that BMO could experience a loss due to substandard delivery of an initiative that may lead to the business not achieving its intended outcome, as well as attracting additional regulatory scrutiny.

The bank has established a Project and Change Management Risk Framework to drive consistency in the delivery of an initiative within a prescribed control environment. This framework outlines the principles and processes for providing governance, monitoring and reporting, as well as the roles and responsibilities necessary to address project and change management risk across the enterprise and meet or exceed stakeholder expectations.

Technology Risk

Technology risk, including risks related to emerging technology and digital platforms, arises from the possibility that the inadequacy, misuse, disruption or failure of information technology systems, infrastructure or data could result in an inability to meet business needs. Failure to maintain and invest in technology can lead to operational disruption and impede the achievement of strategic organizational goals, at significant financial cost. Technology risk management measures are intended to protect BMO's systems, data and assets, and help ensure their confidentiality, integrity and availability. As the adoption of digital banking channels continues to grow, we continue to invest in new and innovative technological capabilities in order to meet our customers' expectations and keep their data secure. In alignment with our operational risk management framework, we follow a program that addresses exposures to technology risk, supported by a team of technology risk management experts.

Third-Party Risk

Third-party risk is the risk associated with the acquisition of goods, services and arrangements that permit BMO's products, processes and/or systems to be managed or supplied by external service providers, which could result in a negative impact on our business operations, regulatory compliance or reputation. Failure to effectively manage these third-party arrangements exposes BMO to the risk that data may be compromised, or the delivery of critical products and services may be disrupted. In addition, third-party service providers may use sub-contractors, introducing an additional layer of

complexity for oversight. Any concentration of third parties will also heighten exposures to existing risks of disruption arising from other events, such as natural disasters or geopolitical events. BMO's third-party risk management (TPRM) framework defines the identification, governance, measurement, mitigation, monitoring and reporting of third-party risk across the third-party life cycle. This framework is supported by enterprise-wide TPRM policies that are intended to ensure compliance with the framework.

We continue to enhance our capabilities in order to maintain robust risk management practices, support operational resilience objectives and comply with relevant regulatory requirements.

Model Risk

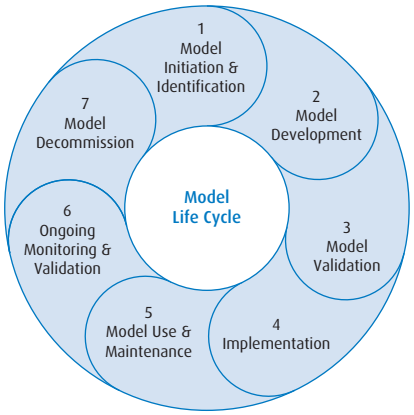
Model Risk is the potential for adverse outcomes resulting from decisions that are based on incorrect or misused model results. These adverse outcomes can include financial loss, poor business decision-making and damage to reputation.

Model risk arises from the use of quantitative analytical tools that apply statistical, mathematical, economic, algorithmic or other advanced techniques, such as AI and ML, to process input data and generate quantitative output or estimates. These analytical tools range from very simple quantitative methods that produce straightforward estimates to highly sophisticated models that can be used to value complex transactions or provide a broad range of forward-looking estimates. These analytical tools generate results that can inform business, risk and capital management decision-making, and assist in making daily lending, trading, underwriting, funding, investment and operational decisions.

These quantitative analytical tools provide important insights and are effective when used within a framework that identifies key assumptions and limitations, while controlling and mitigating model risk. In addition to applying judgment to evaluate the reliability of model results, we mitigate model risk by maintaining strong controls over the development, validation, implementation and use of all models across the enterprise. We also seek to ensure that any additional overlays and approaches to estimation in evaluating risks are intuitive, experience-based, well-documented and subject to effective challenge by those with sufficient expertise and knowledge, in order to deliver reasonable results.

Model Risk Management Framework

Risk is inherent in models because model results are estimates that rely on statistical, mathematical or other quantitative techniques to approximate reality and transform data into estimates or forecasts of future outcomes. Model risk also arises from the potential for misuse of models or model results. Model risk is governed at BMO by a risk-based enterprise-wide Model Risk Management Framework.



The Model Risk Management Framework sets out an end-to-end approach for model risk governance across the model life cycle and for the management of model risk within the limits of our risk appetite. The framework includes BMO's Model Risk Corporate Policy, Model Risk Guidelines and supporting operating procedures, which outline the governing principles for managing model risk, describe model risk management processes in detail and define the roles and responsibilities of all stakeholders across the model life cycle. Model owners, developers and users serve as the first line of defence, while the Model Risk group is the second line of defence, and the Corporate Audit Division is the third line of defence.

Our Model Risk group is responsible for developing and maintaining our Model Risk Management Framework in alignment with regulatory expectations, as well as exercising oversight of the effectiveness of model processes, model inventory and the overall aggregation, assessment and reporting of model risk. This framework incorporates guidance on the management of risks, the safe and responsible adoption of advances in automation used for decision-making, such as large language models and algorithmic trading, as well as other AI and ML applications. Our enterprise Model Risk Management Committee (MRMC), a sub-committee of the RMC, is a cross-functional group representing key stakeholders across the enterprise. The MRMC meets regularly to help direct BMO's use of models, oversee the development, implementation and maintenance of the Model Risk Management Framework, provide effective challenge and discuss governance of the enterprise's models.

Outcomes Analysis and Back-Testing

Once models are validated, approved and in use, they are subject to ongoing monitoring, including outcomes analysis, at varying frequencies. As a key component of outcomes analysis, back-testing compares model results against actual observed outcomes. Variances between model forecasts and actual observed outcomes are measured against defined risk materiality thresholds and tolerance ranges, which may result in further steps being taken, such as model review and parameter recalibration, as appropriate. This analysis serves to confirm the validity of a model's performance over time. Controls are in place to address identified issues and enhance our models' overall performance.

All models used within BMO, including models that incorporate AI and ML techniques, are subject to validation and ongoing monitoring to confirm that they are being used in alignment with our framework and in compliance with regulatory expectations, such as those related to ethics, privacy, fairness and explainability. This framework applies to a wide variety of models, ranging from market, credit and non-financial risk models to stress testing, pricing and valuation, and anti-money laundering models.

Caution

This Operational Non-Financial Risk section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

Legal and Regulatory Risk

Legal and Regulatory Risk is the potential for loss or harm resulting from failure to comply with laws or satisfy contractual obligations or regulatory requirements. This includes the risk arising from any failure to: comply with the law (in letter or in spirit) or maintain standards of care; implement legal or regulatory requirements; enforce or comply with contractual terms; assert non-contractual rights; effectively manage disputes; or act in a manner so as to maintain our reputation.

The success of BMO's business operations relies in part on our ability to manage our exposure to legal and regulatory risk. The financial services industry is highly regulated and subject to strict enforcement of legal and regulatory requirements. Banks globally continue to be subject to fines and other penalties for a number of regulatory and conduct issues, and we are exposed to risks in connection with regulatory and governmental inquiries, investigations and enforcement actions, as well as criminal prosecutions. As rulemaking and supervisory expectations continue to evolve, we monitor developments to enable BMO to respond by implementing changes as required.

Under the direction of BMO's General Counsel, our Legal & Regulatory Compliance group maintains enterprise-wide frameworks that set out the steps to be taken to identify, assess, manage, monitor and report on exposure to legal and regulatory risk. We identify applicable laws and regulations and potential risks, recommend mitigation measures and strategies, conduct internal investigations, and oversee legal proceedings and enforcement actions, including civil claims and litigation, criminal charges, and regulatory examinations and audits.

Heightened regulatory and supervisory scrutiny has a significant impact on the way we conduct business. Working with the operating groups and Corporate Services, Legal & Regulatory Compliance assesses and analyzes the implications of changes in regulatory and supervisory expectations. We devote substantial resources to the implementation of systems and processes required to comply with new regulations. Failure to comply with applicable legal and regulatory requirements may lead to legal proceedings, financial losses, regulatory sanctions or fines, enforcement actions, criminal convictions and penalties, restrictions on or an inability to execute certain business strategies, a decline in investor and customer confidence, and damage to our reputation. Certain businesses are also subject to fiduciary requirements, including policies and practices that address the responsibilities of a business to a customer, such as service requirements and expectations, customer suitability determinations, disclosure obligations and communications.

BMO is subject to legal proceedings, including investigations by regulators, arising in the ordinary course of business, and the unfavourable resolution of any such legal proceedings could have a material adverse effect on our business, financial condition, results of operations, cash flows, capital position or credit ratings; require material changes in our operations; result in loss of customers; and damage our reputation. The volume of legal proceedings and the amount of damages and penalties assessed in such legal proceedings could grow in the future. Information regarding material legal proceedings to which we are a party is included in the Legal Proceedings section in Note 24 of the audited annual consolidated financial statements. Our disclosure controls and procedures are intended to provide reasonable assurance that all relevant information is gathered and reported to senior management on a timely basis, so that appropriate decisions can be made regarding public disclosure. In assessing the materiality of legal proceedings, factors considered include a case-by-case assessment of specific facts and circumstances, our past experience, and the opinions of legal experts. However, some legal proceedings may be highly complex, and may include novel or untested legal claims or theories. The outcome of such proceedings may be difficult to anticipate until late in the proceedings, which may last several years.

BMO's Anti-Corruption Office, through its global program, has articulated key principles and procedures that support the effective oversight of compliance with anti-corruption legislation in the jurisdictions in which we operate. These include guidance on both identifying, avoiding and reporting on corrupt practices and rigorously investigating allegations of corrupt activity.

Governments and regulators around the world continue to focus on anti-money laundering and related concerns, raising their expectations for the quality and efficacy of anti-money laundering programs and penalizing institutions that fail to meet these expectations. Under the direction of the Chief Anti-Money Laundering Officer (CAMLO), BMO's Anti-Money Laundering Office is responsible for the assessment, governance and oversight of the principles and procedures we have in place to help ensure compliance with laws and regulations and internal risk parameters related to anti-money laundering, anti-terrorist financing and sanctions measures. For additional discussion, refer to the Operational Non-Financial Risk Management – Anti-Money Laundering section.

The success of our business operations has been built on BMO's reputation for good conduct. In recognition of this, we have adopted a wide range of practices, in addition to BMO's Code of Conduct, to support the ethical conduct of our employees. BMO's Ethical Culture and Conduct Framework sets out our approach to managing and mitigating the risk of potential misconduct. Misconduct is behaviour that falls short of legal, professional, internal conduct and ethical standards. Similar to our approach to other non-financial risks, this framework is supported by our Enterprise-Wide Risk Management Framework and our focus on maintaining a strong risk culture. For further discussion, refer to the Risk Culture section.

All of these frameworks reflect the three-lines-of-defence operating model described previously. The operating groups and Corporate Services manage day-to-day risks by implementing and observing corporate policies and standards, while Legal & Regulatory Compliance units specifically assigned to each of the operating groups provide advice and independent legal and regulatory risk management oversight.

We continue to respond to other global regulatory developments, including the impact of changes in capital and liquidity requirements. These developments include consumer protection measures and specific financial reforms, including proposals in respect of the assessment, management and disclosure of climate-related financial risk, which are discussed further below. For additional discussion of regulatory developments related to capital management and liquidity and funding risk, refer to the Enterprise-Wide Capital Management section and the Liquidity and Funding Risk section. For a discussion of the impact of certain other regulatory developments, refer to: Critical Accounting Estimates and Judgments – Income Taxes and Deferred Tax Assets; Fiscal and Monetary Policies and Other Economic Conditions in the Countries in which BMO Conducts Business; Tax Legislation and Interpretations; and Other Regulatory Developments.

Climate Change and Environmental, Social and Governance Matters

We continue to monitor the rulemaking activities of regulatory authorities, and we are participating in programs and consultations that focus on risk management and disclosures related to environmental, social and governance (ESG) matters, as well as trends in climate-related litigation. Globally, we are also tracking the emergence and finalization of formal supervisory regulatory frameworks governing the analysis and reporting of risks related to sustainability and climate change, including frameworks in Canada, the United States, the United Kingdom and the European Union. In addition, current and emerging regulatory requirements in certain U.S. states may apply restrictions or sanctions on financial institutions that impose any environmental standards that exceed the legal or regulatory requirements in the states in which they operate. Trends in litigation and regulatory investigation involving disclosure practices or financing activities related to climate or ESG matters, as well as allegations of "greenwashing", also continue to evolve. We are monitoring these trends and assessing their potential impact in the context of BMO's climate-related sustainable finance and responsible investment activities, environmental and social risk management, and disclosure practices related to climate or ESG matters. For further discussion, refer to the Environmental and Social Risk section.

Consumer and Investor Protection

Regulators around the world continue to focus on consumer protection measures, including those related to seniors and other vulnerable customers, interactions with consumers, and standards of conduct for individuals in the financial services industry. In Canada, the Financial Consumer Agency of Canada (FCAC) issued a Guideline on Existing Consumer Mortgage Loans in Exceptional Circumstances. The guideline requires banks to establish policies and procedures that can provide tailored support to consumers who are experiencing severe financial stress as a result of exceptional circumstances, including rising interest rates, and who are at risk of mortgage default. Recently enacted provincial legislation specifies various language requirements, including with respect to consumer contracts and the manner in which we conduct business. In addition, reforms to the Canadian securities regulatory regime related to the protection of investors are also proceeding. Canadian securities regulatory reforms included the consolidation of the Mutual Fund Dealers Association of Canada (MFDA) and the Investment Industry Regulatory Organization of Canada (IIROC) into a single self-regulatory organization known as the Canadian Investment Regulatory Organization (CIRO), as well as the merger of two investor protection funds under the continuing name of the Canadian Investor Protection Fund (CIPF). Further, the Canadian Securities Administrators (CSA) and the Canadian Council of Insurance Regulators adopted changes to harmonize and enhance reporting of the ongoing costs, including embedded fees, of owning investment funds and segregated funds. In addition, the Canadian government announced that it will implement new measures to reduce fees for non-sufficient funds and certain other fees charged by financial institutions. If these proposed measures are enacted, the expected impact would be a reduction in BMO fee revenue. In the United States, banking regulators have a heightened focus, with respect to all consumer products, on matters pertaining to racial equity, financial inclusion and consumer protection. Key consumer concerns, including fair lending and unfair, deceptive or abusive acts or practices, are now the subject of heightened regulatory scrutiny in bank examination programs.

Privacy

There is a growing focus on regulation related to privacy and the use and safeguarding of personal information, and we continue to advance our privacy program so that we are able to comply with evolving regulatory requirements. In Canada, significant reform to federal privacy laws is expected under Bill C-27, including new regulatory powers and penalties and additional legislation to address artificial intelligence. In Quebec, Law 25 (previously Bill 64) is coming into effect in phases, which began in 2021 and will end in 2024. Law 25 modernizes the province's private-sector privacy regime, introduces new regulations related to biometrics and automated decisions, and gives new powers to regulators to impose monetary administrative penalties. Outside of Canada, large fines and settlements have been imposed for breaches of privacy rights and failure to comply with regulatory privacy requirements – evidence of heightened regulatory vigilance and enforcement. The *California Consumer Privacy Act,* which is currently the most comprehensive privacy law at the state level in the United States, was enhanced and amended in 2023 by the *California Privacy Rights Act*, which includes new and expanded privacy rights for California residents. Other states have introduced privacy legislation, which is leading to a growing patchwork of privacy laws in the United States. In the European Union and the United Kingdom, there are continuing concerns regarding the transfer of personal data to countries lacking adequate privacy protection. For further discussion, refer to the Top and Emerging Risks That May Affect Future Results – Cyber and Cloud Security Risk section and the Operational Non-Financial Risk – Cyber and Cloud Security Risk section.

The General Counsel and the Chief Compliance Officer regularly report to the Audit and Conduct Review Committee (ACRC) of the Board of Directors and senior management on the effectiveness of our enterprise compliance program. The program uses a risk-based approach to identify, assess and manage any risks related to compliance with applicable laws and regulations, and directs operating groups and Corporate Services to maintain policies, procedures and controls that address these laws and regulations. Under the direction of the Chief Compliance Officer, we identify and report on gaps and deficiencies, and we track remedial action plans. The CAMLO also regularly reports to the ACRC.

All BMO employees must regularly complete legal and regulatory training on topics such as anti-corruption, anti-money laundering and privacy policies, standards and directives. This is carried out in conjunction with our Code of Conduct training, which tests employees' knowledge and understanding of the behaviour required of employees of BMO.

Securities Transaction Settlement Cycle

The U.S. Securities and Exchange Commission published final rules, effective in May 2024, shortening the settlement cycle for most securities transactions to T+1. Canadian securities regulators have also proposed rule amendments to support the adoption of a T+1 settlement cycle, and this is expected to occur in 2024, in step with the U.S. rules. Planning for implementation at BMO is underway.

Third-Party Risk Management

On April 24, 2023, OSFI released its final Guideline B-10 – *Third-Party Risk Management*, which sets out expectations for federally regulated financial institutions, including BMO, in managing risks involving third-party arrangements. Federally regulated financial institutions retain accountability for business activities and services outsourced to a third party. We continue to prepare for compliance with this guideline, which comes into effect on May 1, 2024. Refer to the Operational Non-Financial Risk – Third-Party Risk section for further discussion.

U.S. Regulatory Developments

On October 25, 2023, the U.S. Federal Reserve announced proposed revisions to the debit card interchange fee cap under Regulation II of the *Dodd-Frank Act*, which would: (i) reduce the base component of the interchange fee cap and the transaction value; and (ii) increase the fraud-prevention adjustment. If these revisions are enacted as proposed, the expected impact would be a reduction in BMO's U.S. interchange revenue.

U.S. Regulatory Reform

Following the closing of our acquisition of Bank of the West and with the increasing size and scope of our U.S. operations, BMO Financial Corp. (BFC), BMO's U.S. holding company, has met the threshold for designation as a Category III firm under the Enhanced Prudential Standards issued by the Federal Reserve Board. This change requires BFC to meet certain increased regulatory requirements related to capital, liquidity and risk management, including complying with single counterparty credit limits. Additional information regarding regulatory requirements that now apply to BFC is set out in the Enterprise-Wide Capital Management section.

On August 29, 2023, the U.S. banking agencies issued a new rule proposal that would require large banks with total assets of $100 billion or more to maintain a layer of long-term debt, which would improve financial stability by increasing the resolvability and resiliency of such institutions. The impact of these proposed rules on our results will depend on the final rules issued by the U.S. banking agencies, but we do not currently expect a material change to our enterprise-level funding activities.

On July 27, 2023, the U.S. banking agencies issued new rule proposals that would revise the regulatory capital framework for large bank holding companies and their depository institutions, including BFC and BMO Bank N.A. These proposals would implement the risk-based capital standards contained in the Basel III Reforms (referred to as Basel III Endgame) published by the Basel Committee on Banking Supervision. The impact of these proposed rules on our results will depend on the final rules issued by the U.S. banking agencies.

Caution

This Legal and Regulatory Risk section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

Strategic Risk

Strategic Risk is the potential for loss due to fluctuations in the external business environment and/or failure to properly respond to these fluctuations due to inaction, ineffective strategies or poor implementation of strategies.

Strategic risk arises from exposure to the external risks inherent in the business environment within which BMO operates, as well as from the potential financial loss or other negative impact that BMO could experience as a result of failing to address those external risks effectively. While external strategic risks – including possible changes in the macroeconomic, geopolitical or regulatory environment, and changes in legal, innovation, competitive, environmental and social factors – cannot be controlled, the likelihood and magnitude of their impact can be limited through an effective strategic risk management framework, and the potential impact of certain of these risks can be assessed through stress testing.

BMO's Corporate Strategy group oversees the strategic planning process and works with the lines of business and Corporate Services to identify, monitor and mitigate strategic risk across the enterprise. Our rigorous strategic risk management framework encourages a consistent approach in the development of strategic plans, carried out through an integrated, multi-year strategic and financial planning process that directs funding to support specific strategic choices across each line of business, in alignment with our enterprise risk appetite.

The framework promotes consistency and adherence to strategic management standards, including a consideration of the results of stress testing as an input into strategic decision-making. The potential impacts of changes in the business environment, including macroeconomic developments, broad industry trends, the actions of existing and new competitors and regulatory developments, are considered in this process and inform strategic decision-making within each line of business. Oversight of strategic risk is the responsibility of the Executive Committee and the Board of Directors. This is carried out through an annual review of enterprise and group strategies, which involves interactive sessions that challenge assumptions and strategies in the context of both the current and potential future business environment. Where required, these strategies are revised to address new or unexpected developments.

Strategic risk also includes business risk arising from specific enterprise activities and the effects these could have on earnings. Within BMO, each operating group is responsible for controlling its respective business risk by assessing, managing and mitigating risks. To manage exposure to transverse business risks (i.e., those spanning multiple lines of business, such as climate change), the Corporate Strategy group works in tandem with the relevant business stakeholders to shape effective mitigation approaches.

Our ability to implement the strategic plans developed by management influences our financial performance. Performance objectives are established through the strategic planning process and our progress toward those objectives is monitored regularly and reported on quarterly, using both leading and lagging indicators of absolute and relative performance, so that strategies can be reviewed and adjusted where necessary. Regular strategic and financial updates are also reviewed closely in order to identify any significant emerging risk issues.

Environmental and Social Risk

Environmental and Social Risk is the potential for loss or harm directly or indirectly resulting from environmental and social factors that impact BMO or its customers, and BMO's impact on the environment and society.

In recognition of its unique characteristics, environmental and social (E&S) risk is classified in BMO's Risk Taxonomy as a transverse risk that may manifest itself through other risk types, namely: credit and counterparty risk, market risk, insurance risk, liquidity and funding risk, operational non-financial risk, legal and regulatory risk, strategic risk and reputation risk. E&S risk may arise over a range of time frames, from short-term to long-term. Factors that may give rise to E&S risk include, but are not limited to: climate change; pollution and waste; the use of energy, water and other resources; biodiversity and land use; human rights; diversity, equity and inclusion; labour standards; community health, safety and security; land acquisition and involuntary resettlement; Indigenous peoples' rights; and cultural heritage. We are advancing our risk identification efforts by defining these factors and identifying any risk exposures that may be affected by the transverse impact of these factors.

We may have direct exposure to E&S risk associated with the ownership and operation of BMO's businesses. We may be indirectly exposed to the risk of financial loss or reputational harm if our customers or suppliers are affected by E&S factors or are associated with adverse environmental or social impacts to such an extent that they are unable to meet their financial or other obligations to us, or that they cause reputational risks for BMO. E&S factors may also give rise to the risk of reputational harm, if we are perceived to not respond effectively to those factors, or to cause, contribute or be linked to adverse impacts on the environment or society, as discussed in the Reputation Risk section.

Governance

The Board of Directors, through the Risk Review Committee (RRC), approves the E&S Risk Appetite Statement and the E&S Risk Corporate Policy, as discussed below. The RRC assists the Board of Directors in meeting its oversight responsibilities for the identification, assessment and management of our exposure to E&S risk, including risks arising from climate change, for the overall adherence to risk management corporate policies, and for complying with risk-related regulatory requirements. The Audit and Conduct Review Committee (ACRC) assesses the effectiveness of BMO's governance of sustainability matters and approves BMO's sustainability reporting and disclosures, including our Sustainability Report and Public Accountability Statement, and our Climate Report. The Human Resources Committee has responsibility for the alignment of executive compensation with performance, including performance in relation to BMO's environmental and social objectives. The Governance and Nominating Committee regularly reviews the charters of our Board of Directors and its committees to assess the coverage and alignment of their responsibilities for overseeing environmental, social and governance (ESG) issues with their respective mandates.

BMO's General Counsel is the bank's Executive Committee Sponsor for Sustainability and Climate and has accountability for legal and regulatory risk, reputation risk, business conduct and ethics, and sustainability, including climate change. Our ESG Executive Committee comprises senior leaders from the lines of business and Corporate Services across the enterprise, and provides oversight and leadership for our sustainability strategy, including our Climate Ambition. In addition to the ESG Executive Committee, BMO has a Sustainability Council, which is a leadership forum for advancing sustainability initiatives. Senior management oversees E&S risk through management committees and forums that provide oversight and receive updates on sustainability matters and E&S risk. These include, but are not limited to: Disclosure Committee, Risk Management Committee (RMC), Reputation Risk Management Committee (RRMC), Enterprise Regulatory Committee, Climate Commercialization Working Group and Impact Investment Fund Committee, as well as the Investment Committee of BMO Global Asset Management. Additional committees, forums and working groups may be established as needed. In addition, the Board of Directors and any management committees active in other jurisdictions receive updates and oversee E&S risk for the relevant jurisdiction. They also receive updates on sustainability matters and E&S risk across the enterprise.

The Chief Risk Officer (CRO), as Head of Enterprise Risk and Portfolio Management (ERPM) and supported by the Risk Executive Committee, acts as the second line of defence on the transverse impacts of E&S risk on credit and counterparty risk, market risk, liquidity and funding risk, insurance risk and operational non-financial risk; oversees risk appetite for E&S risk in the context of these risks; and reports to the Board of Directors, its RRC and the RMC on E&S risk.

Strategy

As a global bank, we are partnering with our clients to accelerate their transition to a low-carbon operating environment, identifying and advancing solutions that meet net zero emissions and climate objectives and support positive social change. This ambition is explicitly linked to our enterprise commercial strategy and we are working to realize this ambition through a four-pillar climate strategy: Commitment; Capabilities; Client partnership and commercialization; and Convening for climate action. Our strategy seeks to capture commercialization opportunities by working with our clients on their decarbonization journeys. The strategy is being implemented by our operating groups, overseen by the ESG Executive Committee and supported by the BMO Climate Institute, which serves as an enterprise resource that is accelerating BMO's climate-related transition efforts and as an internal and external convenor on climate action.

In order to remain informed about emerging E&S risks, we participate in global forums with other financial institutions and maintain an open dialogue with our external stakeholders.

E&S Risk Management

A successful future for BMO and our customers depends on the sustainability of the environment, communities and economies in which we operate. We seek to understand the impact that E&S risk factors could have on our business environment, as well as our clients, portfolios and operations. With this understanding, we are better positioned to make informed strategic decisions.

Our E&S Risk Corporate Policy, applicable to all BMO employees, sets out our approach to integrating E&S risk into the ERMF. The policy affirms the expectation of our Board of Directors that BMO will integrate considerations of E&S risk across the ERMF. It is supported by BMO's three-lines-of-defence operating model, and is underpinned by our risk culture. Its implementation involves building new capabilities, while also leveraging

our existing risk governance provisions and resources, to identify, assess, manage, monitor and report on potential impacts on our clients, portfolios and operations. On March 7, 2023, the Office of the Superintendent of Financial Institutions (OSFI) published its final version of Guideline B-15 – *Climate Risk Management* (Guideline B-15), setting out its expectations for the sound management of climate-related risks for Canadian financial institutions. The guideline is effective October 2024, and the E&S risk group is considering updates to the E&S Risk Corporate Policy and related documentation for alignment across the enterprise.

We have developed a qualitative Risk Appetite Statement that includes E&S risks, including risks related to climate change. In addition, we have developed a key metric with risk tolerance thresholds, which measures our lending in support of carbon-related assets as a percentage of our total net loans and acceptances, net of the allowance for credit losses on impaired loans.

E&S risk is also addressed in our Credit Risk Management Framework, including provisions for governance and accountabilities, enhanced due diligence and thresholds for escalations or exceptions. Sector-specific financing guidelines help us identify and manage exposure to E&S risk in higher-risk sectors and to integrate a consideration of these risks into our decision-making, which also considers factors such as climate change and Indigenous consultation. The Environmental and Social Risk General Financing Guideline is an enterprise-level second-line directive that applies to wholesale lending transactions; articulates our lending risk appetite for E&S risk; outlines the enhanced due diligence process, supported by E&S Risk Rating (ESRR) assessment tools developed to address sectors with heightened risk; and outlines lending prohibitions, escalations and elevations. Social and environmental requirements in financing arrangements and transactions are monitored by the lines of business as part of our overall monitoring process.

We recognize that climate change involves exposure to physical risks and transition risks. Physical risks are risks associated with a changing climate, which can have both acute and chronic physical effects. These risks may include an increase in the frequency and intensity of weather-related events, such as storms, floods, wildfires and heatwaves, or longer-term changes, such as temperature changes, rising sea levels and changes in soil productivity. To date, key climate change indicators, weather-related events and associated scientific research indicate that global exposure to climate change risks appears to be accelerating. Transition risks are associated with the shift to a net zero carbon economy. These risks may arise from climate-related policy changes, technological changes and behavioural changes involving carbon-pricing mechanisms, or a shift in consumer preferences toward lower-carbon products and services. We continue to closely monitor these changes, some of which may unfold more rapidly than others as consumers, clients, investors, governments and communities act to enhance their resilience to climate-related risks. We consider the physical and transition risks arising from climate change to be transverse risks. Our Environmental and Social Risk General Financing Guideline includes direction on developing an understanding of the specific impacts of climate change on borrowers and their operations, including regulatory and/or legislative changes. To limit our involvement in any one sector or geographic region that might be exposed to climate-related risks, we maintain a diversified lending portfolio. We continue to conduct sector-specific reviews across our lending portfolio to assess exposure to climate-sensitive industries. Transactions involving significant environmental or social concerns may be escalated to the RRMC for consideration.

We are developing a climate scenario analysis program to explore climate-specific vulnerabilities in order to enhance our resilience to climate-related risks, in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). The climate scenario analysis program leverages existing risk capabilities in combination with climate-specific expertise. This program includes the evaluation of transition risks and/or physical risks, where relevant and potentially significant, across a selection of climate-sensitive portfolios, and we will continue expanding the scope of these analyses across sectors and risk types in line with internal policies and any applicable regulatory requirements. Utilizing scenario analysis to gain a deeper understanding of climate-related risks is a relatively new approach that is evolving rapidly. As we enhance our knowledge of climate-related impacts and consider comprehensive climate-based scenarios, and as data modelling techniques and data availability improve, we expect our approach to analyzing these scenarios will evolve. These analyses will help identify potential exposures to material financial risks and may inform our business strategy in relation to climate change going forward.

We continue to assess the credibility, reliability, comparability and decision-making usefulness of various measurement, assessment and reporting approaches, as well as the ways in which we could incorporate them into our climate risk management program and associated disclosures.

Managing E&S Risk in the Supply Chain

Our Sustainability group partners with the Procurement and Corporate Real Estate groups on operational sustainability. Together, these groups are responsible for establishing and maintaining an operational environmental management approach, including the application of the framework set out in ISO 14001, and for setting objectives and targets that are intended to align our operations with our sustainability performance goals.

BMO's Code of Conduct has been approved by our Board of Directors, and reflects our commitment to manage our business responsibly. We report publicly under the United Kingdom *Modern Slavery Act 2015* and the Australian *Modern Slavery Act 2018*, and we have in place a Supplier Code of Conduct, which outlines our standards for integrity, fair dealing and sustainability. We require our suppliers to be aware of, understand and comply with the principles of our Supplier Code of Conduct.

In Canada, Bill S-211, *An Act to enact the Fighting Against Forced Labour and Child Labour in Supply Chains Act and to amend the Customs Tariff* (Bill S-211) received royal assent on May 11, 2023, and comes into effect January 1, 2024. Under the provisions of Bill S-211, corporate entities that meet certain criteria will be required to file public reports on measures they have taken to identify, address and prevent the use of forced labour, prison labour and child labour in their supply chains. BMO is developing a plan for compliance with this new legislation.

Climate-Related Financial Disclosures

BMO provides voluntary annual disclosures by way of the BMO Climate Report and BMO Sustainability Report. We are implementing plans to adapt and extend our sustainability and climate disclosure to align with requirements set forth by regulators and standard setters.

We have adopted the TCFD framework to guide climate-related financial disclosures, as set out in our Climate Report. The Canadian Securities Administrators (CSA) has proposed National Instrument 51-107, *Disclosure of Climate-Related Matters* (NI 51-107), but related policies have yet to be finalized and would require certain additional disclosures. On June 26, 2023, the International Sustainability Standards Board (ISSB) issued its inaugural standards: IFRS S1, *General Requirements for Disclosure of Sustainability-Related Financial Information*, and IFRS S2, *Climate-Related Disclosures* (the ISSB Standards), which are intended to provide a global baseline for disclosures related to sustainability and climate-related risks and opportunities. The ISSB Standards are effective for our fiscal year beginning November 1, 2024, on a voluntary basis, and any mandatory application will be determined by the rules and requirements issued by regulators in the jurisdictions in which we operate.

We are implementing plans to prepare BMO to meet the expectations of OSFI regarding the first set of climate-related financial disclosures it has mandated, which are effective for our fiscal year ending October 31, 2024. Other disclosures mandated by OSFI will be effective for the 2025 fiscal year.

Metrics and Targets

Our reporting of climate-related metrics and targets includes a discussion of BMO's Scope 1 and 2 greenhouse gas (GHG) emissions, calculated using the GHG Protocol, and a discussion of our Scope 3 emissions, calculated using the Partnership for Carbon Accounting Financials (PCAF). More detailed discussion, as well as a discussion of financed emissions targets for certain sectors, can be found in the Climate Report. Metrics related to sustainability are discussed in the Sustainability Report. Our sustainability reporting suite is prepared in accordance with the Global Reporting Initiative (GRI) Standards and the GRI Financial Services Sector Disclosure, and integrates the disclosure frameworks of the TCFD and the Sustainability Accounting Standards Board. These include the Public Accountability Statements for Bank of Montreal, Bank of Montreal Mortgage Corporation, BMO Life Assurance Company and BMO Life Insurance Company, outlining certain aspects of BMO's contributions, and the contributions of its affiliates with operations in Canada, to the Canadian economy and society. These statements meet the requirements of the Canadian federal government's Public Accountability Statement regulations. The shareholders' auditors provide a limited assurance report on selected environmental and social indicators in the Sustainability Report and the Climate Report. We are currently assessing the impact of our adoption of the ISSB Standards and monitoring domestic implementation processes in the United States and Canada.

Caution

This Environmental and Social Risk section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

Reputation Risk

Reputation Risk is the potential for loss or harm to the BMO brand. It can arise even if other risks are managed effectively.

Our reputation is built on our commitment to high standards of business conduct, and is one of our most valuable assets. By protecting and maintaining our reputation, we safeguard our brand, increase shareholder value, reduce our cost of capital, improve employee engagement and preserve our customers' loyalty and trust.

We manage risks to our reputation by considering the potential reputational impact of all business activities, including strategy development and implementation, transactions and initiatives, data and technology use (including artificial intelligence), product and service offerings, and events or incidents impacting BMO, as well as day-to-day decision-making and conduct. We consider our reputation in everything that we do.

BMO's Code of Conduct is the foundation of our ethical culture, and it provides employees with guidance on the behaviour that is expected of them, so that they can make the right choice in decisions that affect our customers and stakeholders. Ongoing reinforcement of the principles set out in the Code of Conduct minimizes risks to our reputation that may result from inappropriate behaviour or poor decision-making. Recognizing that non-financial risks can have a negative impact as significant as the effect of financial risks, we actively promote a culture in which employees are encouraged to raise concerns and are supported in doing so, with zero tolerance for retaliation.

In our corporate governance practices and Enterprise-Wide Risk Management Framework, we have specific controls in place to manage risks to our reputation. We seek to identify activities or events that could impact our reputation with customers, regulators or other stakeholders. Where we identify a potential risk to our reputation, we take steps to assess and manage that risk. Instances of significant or heightened exposure to reputation risk are escalated to BMO's Reputation Risk Management Committee (RRMC) for review. As misconduct can impact our reputation, the Chief Ethics Officer, who is responsible for enterprise-wide reporting on employee conduct, may escalate instances of misconduct involving significant reputation risk to BMO's RRMC for review, as appropriate.

Accounting Matters and Disclosure and Internal Control

Critical Accounting Estimates and Judgments

The most significant assets and liabilities for which we must make estimates and judgments include: allowance for credit losses; financial instruments measured at fair value; pension and other employee future benefits; impairment of securities; income taxes and deferred tax assets; goodwill and intangible assets; insurance-related liabilities; provisions, including legal proceedings and restructuring charges; transfers of financial assets; consolidation of structured entities; and valuation of the Bank of the West assets acquired and liabilities assumed. We make judgments in assessing the business model for financial assets, as well as whether substantially all risks and rewards have been transferred in respect of transfers of financial assets and whether we control structured entities (SEs). These judgments are discussed in Notes 6 and 7 of the audited annual consolidated financial statements. Note 17 of the audited annual consolidated financial statements provides further details on the estimates and judgments made in determining the fair value of financial instruments. If actual results were to differ from these estimates, the impact would be recorded in future periods.

By their nature, the judgments and estimates that we make for the purposes of preparing financial statements relate to matters that are inherently uncertain. However, we have detailed policies and control procedures that are intended to ensure the judgments made in estimating these amounts are well-controlled, independently reviewed and consistently applied from period to period. We believe that the estimates of the values of our assets and liabilities are appropriate.

For a more detailed discussion of the use of estimates, refer to Note 1 of the audited annual consolidated financial statements.

Allowance for Credit Losses

The allowance for credit losses consists of allowances for estimated losses related to impaired loans in the portfolio provided for but not yet written off, and allowances for performing loans, which represent our best estimate of impairment in the existing portfolio for loans that have not yet been individually identified as impaired. Our approach to establishing and maintaining the allowance on performing loans is based on the requirements of IFRS 9, *Financial Instruments*, and considering the guideline issued by the Office of the Superintendent of Financial Institutions (OSFI). Under the IFRS 9 expected credit loss (ECL) methodology, an allowance is recorded for expected credit losses on financial assets regardless of whether there has been actual impairment. ECL is calculated on a probability-weighted basis, based on three economic scenarios, and is calculated for each exposure in the portfolio as a function of the probability of default (PD), exposure at default (EAD) and loss given default (LGD), with the timing of the loss also considered. Where there has been a significant increase in credit risk, lifetime ECL is recorded; otherwise, 12 months of ECL is generally recorded. The determination of a significant increase in credit risk requires a consideration of many different factors that will vary by product and risk segment. The main factors considered in making this determination are the change in PD since origination and certain other criteria, such as 30-day past due and watchlist status. We may apply experienced credit judgment to reflect factors not captured in the results produced by the ECL models, as we deem necessary. We apply experienced credit judgment to reflect the impact of the uncertain environment on credit conditions and the economy. We have controls and processes in place to govern the ECL process, including judgments and assumptions used in determining the allowance on performing loans. These judgments and assumptions will change over time, and the impact of any such change will be recorded in future periods.

In establishing our allowance on performing loans, we attach probability weightings to three economic scenarios, which represent our view of economic and market conditions – a base scenario, which in our view represents the most probable outcome, as well as benign and adverse scenarios, all developed by our Economics group. The allowance on performing loans is sensitive to changes in economic forecasts and the probability weight assigned to each forecast scenario.

When changes in economic performance in the forecasts are measured, we use real GDP as the basis, which acts as the key driver for movements in many of the other economic and market variables used, including the equity volatility index (VIX), corporate BBB credit spreads, unemployment rates, housing price indices and consumer credit. We also consider industry-specific variables, where applicable. Many of the variables have a high degree of interdependency, and as such, there is no single factor to which the allowances as a whole are sensitive. Holding all else constant, as economic variables worsen, the allowance on performing loans would increase and conversely, as they improve, the allowance would decrease. In addition, assuming all variables are held constant, an increase in loan balances or a deterioration in the credit quality of the loan portfolio would both drive an increase in the allowance on performing loans.

Information on the provision for credit losses for the years ended October 31, 2023 and 2022 can be found in the Total Provision for Credit Losses section. Additional information on the process and methodology for determining the allowance for credit losses can be found in the discussion of Credit and Counterparty Risk, as well as in Note 4 of the audited annual consolidated financial statements.

Financial Instruments Measured at Fair Value

We record assets and liabilities classified as held for trading, assets and liabilities designated at fair value, derivatives, certain equity and debt securities and securities sold but not yet purchased at fair value. Fair value represents the amount that would be received on the sale of an asset or paid on the transfer of a liability in an orderly transaction between willing parties at the measurement date. We employ a fair value hierarchy based on inputs we use in valuation techniques to measure the fair value of our financial instruments. The extent of our use of quoted market prices (Level 1), internal models with observable market information (Level 2) and internal models without observable market information (Level 3) in the valuation of loans, securities, derivatives, certain other assets, and liabilities recorded at fair value as at October 31, 2023 and October 31, 2022 is disclosed in Note 17 of the audited annual consolidated financial statements. For instruments that are valued using models, we consider all reasonable available information and maximize the use of observable market data.

Valuation Product Control (VPC), a group independent of the trading lines of business, seeks to ensure that the recorded fair values of financial instruments are materially accurate by:

- Developing and maintaining valuation policies, procedures and methodologies in accordance with IFRS and regulatory requirements
- Establishing official rate sources for valuation data inputs, and
- Providing independent review of portfolios for which prices supplied by traders are used for valuation.

When VPC determines that adjustments to valuations are needed to better reflect fair value estimates based on data inputs from official rate sources, the adjustments are subject to review and approval by the Valuation Steering Committee (VSC).

The VSC is our senior management valuation committee. It meets at least monthly to address the more challenging valuation issues related to our portfolios, approves valuation methodology changes as needed to enhance the reliability of our fair value estimates, and is a key forum for the discussion of sources of valuation uncertainty and how these have been addressed by management. Certain financial instruments, including corporate equities, are valued by the respective business groups. Senior management oversees our valuation processes through various valuation and risk committees.

As at October 31, 2023, total valuation adjustments were a net decrease in value of $135 million for financial instruments carried at fair value on the Consolidated Balance Sheet (net decrease of $197 million as at October 31, 2022).

Pension and Other Employee Future Benefits

Our pension and other employee future benefits expense is calculated by independent actuaries using assumptions determined by management. Differences between actual experience and the assumptions used are recognized in other comprehensive income.

Pension and other employee future benefits expense, plan assets and defined benefit obligations are sensitive to changes in discount rates. We determine discount rates at each year-end for all plans, using high-quality corporate bonds with terms matching the plans' specific cash flows.

Additional information regarding accounting for pension and other employee future benefits, including a sensitivity analysis for key assumptions, is included in Note 21 of the audited annual consolidated financial statements.

Impairment of Securities

We have investments in associates and joint ventures, which we review at each quarter-end reporting period in order to identify and evaluate any investments that show indications of possible impairment. For these investments, a significant or prolonged decline in their fair value to an amount below their cost is objective evidence of impairment.

Debt securities measured at amortized cost or fair value through other comprehensive income (FVOCI) are assessed for impairment using the expected credit loss model. For securities determined to have low credit risk, the allowance for credit losses is measured at a 12-month expected credit loss.

Additional information regarding accounting for debt securities measured at amortized cost or FVOCI, other securities, the related allowance for credit losses and the determination of fair value is included in Notes 3 and 17 of the audited annual consolidated financial statements.

Income Taxes and Deferred Tax Assets

Our approach to tax matters is guided by our Statement on Tax Principles, elements of which are described below, and governed by our tax risk management framework, which is implemented through internal controls and processes. We operate with due regard to risks, including tax and reputation risks. We actively seek to identify, assess, manage, monitor and report any tax risks that may arise, in order to understand our financial exposure to those risks. Our intention is to comply fully with tax laws. We consider all applicable laws in connection with our commercial activities, and where tax laws change in our business or for our customers, we adapt and make adjustments accordingly. We monitor applicable tax-related developments, including legislative proposals, case law and guidance from tax authorities. When an interpretation or application of tax laws is not clear, we take well-reasoned positions based on available case law and administrative positions of tax authorities, and we engage external advisors when necessary. We do not engage in tax planning that does not have commercial substance, and we do not knowingly work with customers we believe use tax strategies to evade taxes. We are committed to maintaining productive relationships and cooperating with tax authorities on all tax matters. We seek to resolve disputes in a collaborative manner; however, when our interpretation of tax law differs from that of tax authorities, we are prepared to defend our position.

The provision for income taxes is calculated based on the expected tax treatment of transactions recorded in either the Consolidated Statement of Income or the Consolidated Statement of Changes in Equity. In determining the provision for income taxes, we interpret tax legislation, case law and administrative positions in numerous jurisdictions and, based on our judgment, we record the estimate of the amount required to settle tax obligations. We also make assumptions about the expected timing of the reversal of deferred tax assets and liabilities. If the interpretations and assumptions differ from those of tax authorities or if the timing of reversals is not as expected, the provision for income taxes could increase or decrease in future periods. The amount of any such increase or decrease cannot be reasonably estimated.

Deferred tax assets are recognized only when it is probable that sufficient taxable profit will be available in future periods against which deductible temporary differences or unused tax losses and tax credits may be utilized. We are required to assess whether it is probable that deferred income tax assets will be realized. Factors used to assess the probability of realization are past experience of income and capital gains, forecasts of future net income before taxes, and the remaining expiration period of tax loss carryforwards and tax credits. Changes in our assessment of these factors could increase or decrease the provision for income taxes in future periods.

Canadian tax authorities have reassessed us for additional income tax and interest in an amount of approximately $1,465 million, in respect of certain 2011-2018 Canadian corporate dividends. Those reassessments denied certain dividend deductions on the basis that the dividends were received as part of a "dividend rental arrangement". In general, the tax rules raised by Canadian tax authorities were prospectively addressed in the 2015 and 2018 Canadian federal budgets.

We filed Notices of Appeal with the Tax Court of Canada and the matter is in litigation. We remain of the view that our tax filing positions were appropriate and intend to challenge all reassessments. However, if such challenges are unsuccessful, the additional expense would negatively impact net income.

Additional information regarding accounting for income taxes is included in Note 22 of the audited annual consolidated financial statements.

Goodwill and Intangible Assets

Goodwill is assessed for impairment at least annually. This assessment includes a comparison of the carrying value and the recoverable amount of each of our cash-generating units (CGUs) in order to verify that the recoverable amount of each CGU is greater than its carrying value. If the carrying value of a CGU were to exceed its recoverable amount, an impairment calculation would be performed. The recoverable amount of a CGU is the higher of its fair value less costs to sell and its value in use.

Fair value less costs to sell has been used to perform the impairment test in all periods. In determining fair value less costs to sell, we employ the discounted cash flow model, consistent with that used when a business is acquired. This model is dependent on assumptions related to revenue growth, discount rates, synergies achieved on acquisition and the availability of comparable acquisition data. Changes in any of these assumptions would affect the determination of fair value for each of our CGUs in a different manner. Management must exercise judgment and make assumptions in determining fair value. Differences in judgments and assumptions could affect the determination of fair value and any resulting impairment write-down.

As at October 31, 2023 and October 31, 2022, no goodwill impairment was recorded, as the estimated fair value of the CGUs was greater than their carrying value.

Intangible assets with definite lives are amortized to income on either a straight-line or an accelerated basis over a period not exceeding 15 years, depending on the nature of the asset. We test intangible assets with definite lives for impairment when circumstances indicate that the carrying value may not be recoverable.

Intangible assets with indefinite lives are tested annually for impairment. If an intangible asset is determined to be impaired, it will be written down to its recoverable amount, the higher of value in use and fair value less costs to sell, when this is less than the carrying value.

Additional information regarding the composition of goodwill and intangible assets is included in Note 11 of the audited annual consolidated financial statements.

Insurance-Related Liabilities

Insurance claims and policy benefit liabilities represent current claims and estimates of future insurance policy benefit liabilities. Liabilities for life insurance contracts are determined using the Canadian Asset Liability Method, which incorporates best-estimate assumptions for mortality, morbidity, policy lapses, surrenders, future investment yields, policy dividends, administration costs and margins for adverse deviation. These assumptions are reviewed at least annually and updated to reflect actual experience and market conditions. There is a significant potential impact on the valuation of these liabilities should there be a change in assumptions for interest rates and equity market values.

Additional information on insurance-related liabilities is provided in Note 14 of the audited annual consolidated financial statements, and information on insurance risk is provided in the Insurance Risk section and the Insurance Market Risk section.

Provisions

A provision is recognized if, as a result of a past event, we have a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are recorded at the best estimate of the amount required to settle any obligation as at the balance sheet date, considering the risks and uncertainties surrounding the obligation. For example, BMO and its subsidiaries are involved in various legal actions in the normal course of business. Factors considered in estimating any obligation related to these legal actions include a case-by-case assessment of specific facts and circumstances, past experience and the opinions of legal experts. Management and internal and external experts are involved in estimating any amounts that may be required. Certain provisions also relate to restructuring initiatives that we have undertaken. These provisions are recorded at management's best estimate of the amounts that will ultimately be paid out.

The actual costs of settling some obligations may be substantially higher or lower than the amount of the provisions.

Additional information regarding provisions is included in the Legal and Regulatory Risk section and in Note 24 of the audited annual consolidated financial statements.

Transfer of Financial Assets

We sell Canadian residential mortgages to third-party Canadian securitization programs, including the Canada Mortgage Bond Program, and directly to third-party investors under the National Housing Act Mortgage-Backed Securities program.

We also purchase or originate certain commercial mortgage loans that are subsequently sold and derecognized, and we purchase U.S. government agency collateralized mortgage obligations (CMOs) issued by third-party sponsored vehicles, which we may further securitize by repackaging them into new CMOs prior to selling to third-party investors.

We assess whether substantially all of the risks and rewards of these financial instruments have been transferred in order to determine if they qualify for derecognition. Where we continue to be substantially exposed to prepayment, interest rate and/or credit risk of these financial instruments, they do not qualify for derecognition. We continue to recognize these financial instruments, and recognize the related cash proceeds as a secured financing on our Consolidated Balance Sheet.

Consolidation of Structured Entities

In the normal course of business, we enter into arrangements with SEs as described in the Off-Balance Sheet Arrangements section. We are required to consolidate a SE if we control the SE. We control a SE when we have power over the SE, exposure or rights to variable returns as a result of our involvement, and the ability to exercise power to affect the amount of those returns. For certain SEs, we exercise judgment in determining whether we control the entity.

Additional information concerning our interests in SEs is included in the Off-Balance Sheet Arrangements section, as well as in Note 7 of the audited annual consolidated financial statements.

Acquisition of Bank of the West – Valuation of Assets and Liabilities

Significant judgments and assumptions were used to determine fair value of the Bank of the West assets acquired and liabilities assumed, including the loan portfolio, core deposit and other relationship intangible assets and fixed-maturity deposits.

Additional information regarding the accounting for this acquisition is included in Notes 4 and 10 of the audited annual consolidated financial statements.

Caution

This Critical Accounting Estimates and Judgments section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

Future Changes in Accounting Policies

IFRS 17, *Insurance Contracts*

In May 2017, the IASB issued IFRS 17, *Insurance Contracts* (IFRS 17), which provides a comprehensive approach to accounting for all types of insurance contracts and will replace existing IFRS 4, *Insurance Contracts* (IFRS 4). The standard was subsequently amended in June 2020, with additional narrow-scope amendments in December 2021. IFRS 17 will be effective for our fiscal year beginning November 1, 2023. We established an enterprise-wide project in order to meet the requirements of IFRS 17.

IFRS 17 will change the fundamental principles used to recognize and measure insurance contracts, including life insurance contracts, reinsurance contracts held and investment contracts with discretionary participation features. Key differences from IFRS 4 are as follows:

- IFRS 17 requires us to measure groups of contracts based on our estimates of the present value of future cash flows that are expected to arise as we fulfill the contracts, an explicit risk adjustment for insurance-specific risk, and a contractual service margin (CSM) representing unearned profits.
- The CSM component of the insurance contract liability will be amortized into income as services/insurance coverage is provided. For groups of onerous contracts that are expected to experience losses, these losses are recorded in income immediately. Under IFRS 4, there is no similar grouping requirement and gains/losses on new business are recognized in income immediately.
- The discount rate we use under IFRS 4 is connected to the net yield of the assets held to support insurance contract liabilities. Under IFRS 17, the rate used to discount our insurance contract liabilities will reflect the characteristics of those insurance contract liabilities. We have elected the accounting policy choice under IFRS 17 to recognize changes in the discount rate and financial assumptions on insurance contract liabilities through the Consolidated Statement of Income.

On transition, we are required to apply a full retrospective approach, where we restate prior periods as if we had always applied IFRS 17, unless impracticable, in which case we will apply either the modified retrospective approach, where we apply specific modifications to the full retrospective approach, or the fair value approach, where we determine a fair value for the CSM by taking the difference between discounted fulfilment cash flows and risk adjustment using market participant assumptions versus using our own IFRS 17 assumptions. We have completed our assessment of IFRS 17 and will apply the full retrospective approach to our creditor business and the fair value approach to all other products written prior to November 1, 2022.

Further information on these amendments can be found in Note 1 of the audited annual consolidated financial statements.

IAS 40, *Investment Property*

On transition to IFRS 17, we plan to voluntarily change our accounting policy for the measurement of investment properties, recorded in insurance-related assets in other assets in our Consolidated Balance Sheet, from cost to fair value. International Accounting Standard 40, *Investment Property* (IAS 40), permits either measurement approach. We will apply the change retrospectively, as if we had always accounted for investment properties at fair value.

Further information on these amendments can be found in Note 1 of the audited annual consolidated financial statements.

IAS 12, *Income Taxes*

In May 2021, the IASB issued an amendment to IAS 12, *Income Taxes* (IAS 12), which will be effective for our fiscal year beginning November 1, 2023.

The amendment narrows the IAS 12 exemption to exclude transactions that give rise to equal and offsetting temporary differences (e.g. leases and asset retirement obligations). Upon adoption of the amendment, we will record separate deferred tax assets and liabilities related to the assets and liabilities that give rise to these temporary differences. This change will impact note disclosure only. There will be no impact on our Consolidated Balance Sheet, as the balances are eligible for offset when levied by the same tax authority.

In May 2023, the IASB issued an additional amendment to IAS 12. The amendment addresses concerns related to accounting for the global minimum top-up tax, as outlined in the two-pillar plan (Pillar 2) for international tax reform developed by members of the Organisation for Economic Co-operation and Development (OECD)/G20 Inclusive Framework on Base Erosion and Profit Shifting. The objective of the tax reform is to ensure that large multinational groups are subject to a minimum tax rate of 15% on income earned in each jurisdiction in which they operate. We will be impacted by the tax reform once the Canadian federal government, or a foreign government of a country in which we operate, passes into law the global minimum tax. The amendment to IAS 12 includes temporary mandatory relief from recognizing and disclosing deferred taxes for the top-up tax, that will be applicable once the measures are substantively enacted.

Further details are provided in Note 1 of the audited annual consolidated financial statements.

Caution

This Future Changes in Accounting Policies section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

Other Regulatory Developments

We continue to monitor and prepare for other regulatory developments, including those referenced elsewhere in this document.

For a comprehensive discussion of other regulatory developments, refer to the Enterprise-Wide Capital Management section, the Risks That May Affect Future Results section, the Liquidity and Funding Risk section, and the Legal and Regulatory Risk section.

New Canadian Tax Measures

On August 4, 2023, the Canadian government released proposed legislation on a number of measures, including a 2% tax on share buybacks that occur after December 31, 2023, and the two-pillar plan (Pillar 2) for international tax reform developed by members of the Organisation for Economic Co-operation and Development (OECD)/G20 Inclusive Framework on Base Erosion and Profit Shifting, which is expected to establish rules for a 15% minimum tax on operations globally, effective in the fiscal years of multinational enterprises that begin on or after December 31, 2023.

On June 22, 2023, the Canadian government enacted legislation amending the definition of a financial service in order to make payment card clearing services taxable for GST/HST purposes, retroactive to the enactment of the GST. The third quarter of 2023 included a one-time charge of $131 million ($160 million pre-tax), comprising $138 million pre-tax recorded in non-interest revenue and $22 million pre-tax recorded in non-interest expense, both in Corporate Services. In addition, the Canadian federal budget proposed a number of tax measures, including a rule that would, in certain circumstances, deny any deductions for dividends that are received after December 31, 2023. This was reaffirmed in the government's 2023 Fall Economic Statement.

On December 15, 2022, the Canadian government enacted legislation related to tax measures that are applicable to certain Canadian companies in a bank or life insurer group, including a one-time 15% tax (referred to as the Canada Recovery Dividend, or CRD), based on average taxable income for fiscal 2020 and fiscal 2021, less a $1 billion exemption, payable in equal instalments over five years. The legislation also included a permanent 1.5% increase in the tax rate, applicable to taxable income above $100 million (effective for taxation years that end after April 7, 2022, pro-rated for the first year). The first quarter of 2023 included a one-time tax expense of $371 million, comprising a CRD of $312 million and $59 million related to the pro-rated fiscal 2022 impact of the 1.5% tax rate increase, net of a deferred tax asset remeasurement. These amounts were recorded in Corporate Services.

Interbank Offered Rate Reform – Phase 2 amendments

Effective November 1, 2020, BMO early adopted Phase 2 amendments to IFRS 9, *Financial Instruments*, IAS 39, *Financial Instruments: Recognition and Measurement* (IAS 39), IFRS 7, *Financial Instruments: Disclosures*, and IFRS 4, *Insurance Contracts*, as well as IFRS 16, *Leases*. These amendments address issues that arise from the implementation of Interbank Offered Rate (IBOR) reform.

For financial instruments at amortized cost, the amendments introduce a practical expedient such that if a change in the contractual cash flows is as a result of IBOR reform and occurs on an economically equivalent basis, the change will be accounted for by updating the effective interest rate with no immediate gain or loss recognized. The amendments also provide temporary relief from the application of specific IAS 39 hedge accounting requirements to hedging relationships affected by IBOR reform. For example, there is an exemption available from the requirement to discontinue hedge accounting as a result of changes to hedge documentation required solely by IBOR reform. The amendments also require additional disclosure that allows users to understand the impact of IBOR reform on our financial instruments and risk management strategy.

Further details are provided in Note 1 of the audited annual consolidated financial statements.

On July 27, 2023, the Canadian Alternative Reference Rate (CARR) working group announced that lenders may not offer new Canadian Dollar Offered Rate (CDOR) and bankers' acceptance (BA) loans after November 1, 2023, which will result in the Canadian loan markets' shift away from CDOR and BAs by the CDOR cessation date in June 2024.

U.S. Federal Deposit Insurance Corporation Assessment

On November 16, 2023, the U.S. Federal Deposit Insurance Corporation (FDIC) approved the final rule to implement the special assessment on depository institutions to recover the losses incurred in the deposit insurance fund that were attributable to the protection of uninsured depositors of Silicon Valley Bank and Signature Bank. The special assessment is set at an annual rate of approximately 13.4 basis points on a U.S. depository institution's total estimated uninsured deposits for the December 31, 2022 reporting period, payable over eight quarterly assessment periods, beginning in the first assessment period in 2024. BMO expects to record a one-time charge related to the FDIC special assessment in the first quarter of fiscal 2024 of approximately US$300 million in non-interest expense.

Caution

This Other Regulatory Developments section contains forward-looking statements. Please refer to the Caution Regarding Forward-Looking Statements.

Transactions with Related Parties

In the normal course of business, we provide banking services to key management personnel on the same terms that we offer these services to preferred customers. Key management personnel are those persons having authority and responsibility for planning, directing and/or controlling the activities of an entity, being the directors and the most senior executives of the bank. Banking services are provided to joint ventures and equity-accounted investees on the same terms that we offer these services to our customers. We also offer employees a subsidy on annual credit card fees.

Details of our investments in joint ventures and associates and the compensation of key management personnel are disclosed in Note 27 of the audited annual consolidated financial statements.

Shareholders' Auditors' Services and Fees

Review of Shareholders' Auditors

The Audit and Conduct Review Committee (ACRC) of the Board of Directors is responsible for the appointment, compensation and oversight of the shareholders' auditors and conducts an annual assessment of the performance and effectiveness of the shareholders' auditors, considering factors such as: the quality of the services provided by the engagement team of the shareholders' auditors during the audit period; the qualifications, experience and geographical reach relevant to serving BMO Financial Group; the quality of communications received from the shareholders' auditors; and the independence, objectivity and professional skepticism of the shareholders' auditors.

The ACRC believes that it has a robust review process in place to monitor audit quality and oversee the work of the shareholders' auditors, including the lead audit partner, which includes:

- Annually reviewing the audit plan in two separate meetings, including a consideration of the impact of business risks on the audit plan and an assessment of the reasonableness of the audit fee
- Reviewing the qualifications of the senior engagement team members
- Monitoring the execution of the audit plan of the shareholders' auditors, with a focus on the more complex and challenging areas of the audit
- Reviewing and evaluating the audit findings, including during in-camera sessions
- Evaluating audit quality and performance, including recent Canadian Public Accountability Board (CPAB) and Public Company Accounting Oversight Board (PCAOB) inspection reports on the shareholders' auditors and their peer firms
- At a minimum, holding quarterly meetings with the chair of the ACRC and the lead audit partner to discuss audit-related issues independently of management
- Performing a comprehensive review of the shareholders' auditors every five years, and performing an annual review in the years between these comprehensive reviews, following the guidelines set out by the Chartered Professional Accountants of Canada (CPA Canada) and the CPAB.

In 2023, an annual review of the shareholders' auditors was completed. Input was sought from ACRC members and management in areas such as the effectiveness of the auditors' communications, their industry insights, audit performance, independence and professional skepticism. In addition, the most recent comprehensive review was completed in 2020, based on the latest recommendations of CPA Canada and the CPAB. These reviews focused on: (i) the independence, objectivity and professional skepticism of the shareholders' auditors; (ii) the quality of the engagement team; and (iii) the quality of communications and interactions with the shareholders' auditors. As a result of the reviews, the ACRC was satisfied with the performance of the shareholders' auditors.

Independence of the shareholders' auditors is overseen by the ACRC in accordance with BMO's Auditor Independence Standard. The ACRC considered the risks and benefits of audit firm rotation, including reports issued by the CPAB and CPA Canada. The ACRC concluded that existing requirements, including audit firm review and audit team member rotation, ensure auditor independence while maintaining and enhancing audit quality, which may be impaired by audit firm rotation. The ACRC also confirms that the lead audit partner rotates out of that role after five consecutive years and does not return to that role for a further five years.

Pre-Approval Policies and Procedures

As part of BMO Financial Group's corporate governance practices, the ACRC oversees the application of its policy limiting the services provided by the shareholders' auditors that are not related to their role as auditors. All services must comply with BMO's Auditor Independence Standard, as well as professional standards and securities regulations governing auditor independence. The ACRC pre-approves the types of services (permitted services) that can be provided by the shareholders' auditors, as well as the annual audit plan, which includes fees for specific types of services. For permitted services that are not included in the pre-approved annual audit plan, approval to proceed with the engagement is provided in accordance with BMO's Auditor Independence Standard.

Shareholders' Auditors' Fees

(Canadian $ in millions) Fees (1)	**2023**	2022
Audit fees	**34.4**	23.5
Audit-related fees (2)	**3.0**	4.8
Tax services fees (3)	**0.2**	0.3
All other fees (4)	**0.9**	0.7
Total	**38.5**	29.3

(1) The classification of fees is based on applicable Canadian securities laws and U.S. Securities and Exchange Commission definitions.
(2) Includes fees paid for specified procedures on BMO's Proxy Circular and other services, and French translation of financial statements, related continuous disclosures and other public documents containing financial information.
(3) Includes fees paid for tax compliance services provided to various BMO-managed investment company complexes.
(4) Includes other fees paid by BMO-managed investment company complexes.

Management's Annual Report on Disclosure Controls and Procedures and Internal Control over Financial Reporting

Disclosure Controls and Procedures

Disclosure controls and procedures are designed to provide reasonable assurance that all relevant information is gathered and reported to senior management, including the Chief Executive Officer (CEO) and the Chief Financial Officer (CFO), on a timely basis, so that appropriate decisions can be made regarding public disclosure.

As at October 31, 2023, under the supervision of the CEO and the CFO, the management of BMO Financial Group (BMO) evaluated the effectiveness of the design and operation of its disclosure controls and procedures, as defined in Canada by National Instrument 52-109, *Certification of Disclosure in Issuers' Annual and Interim Filings*, and in the United States by Rule 13a-15(e) of the *Securities Exchange Act of 1934* (the Exchange Act). Based on this evaluation, the CEO and the CFO have concluded that BMO's disclosure controls and procedures were effective as at October 31, 2023.

Internal Control over Financial Reporting

Internal control over financial reporting is a process designed under the supervision of the CEO and the CFO to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements in accordance with IFRS and the requirements of the Securities and Exchange Commission (SEC) in the United States, as applicable. Management is responsible for establishing and maintaining adequate internal control over financial reporting for BMO.

Internal control over financial reporting at BMO includes policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of BMO
- Are designed to provide reasonable assurance that transactions are recorded as necessary to permit preparation of the consolidated financial statements in accordance with IFRS and the requirements of the SEC in the United States, as applicable, and that receipts and expenditures of BMO are being made only in accordance with authorizations by management and directors of BMO, and
- Are designed to provide reasonable assurance that any unauthorized acquisition, use or disposition of BMO's assets that could have a material effect on the consolidated financial statements is prevented or detected in a timely manner.

Because of its inherent limitations, internal control over financial reporting can provide only reasonable assurance and may not prevent or detect misstatements. Furthermore, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the related policies and procedures may deteriorate.

BMO's management, under the supervision of the CEO and the CFO, has evaluated the effectiveness of internal control over financial reporting using the framework and criteria established in *Internal Control – Integrated Framework*, issued by the Committee of Sponsoring Organizations of the Treadway Commission in May 2013 (2013 COSO Framework). Based on this evaluation, management has concluded that internal control over financial reporting was effective as at October 31, 2023.

At the request of BMO's Audit and Conduct Review Committee, KPMG LLP (the shareholders' auditors), an independent registered public accounting firm, has conducted an audit of the effectiveness of our internal control over financial reporting. The audit report states in its conclusion that, in KPMG's opinion, BMO maintained, in all material respects, effective internal control over financial reporting as at October 31, 2023, in accordance with the criteria established in the 2013 COSO Framework.

Changes in Internal Control over Financial Reporting

During the year, the bank acquired Bank of the West, contributing $128 billion or 11% to total assets as at February 1, 2023. We evaluated the effectiveness of internal control over financial reporting as we completed the integration of Bank of the West with BMO, and made changes to our internal control framework, as necessary.

Other than as mentioned above, there were no changes in our internal control over financial reporting during the year ended October 31, 2023, which materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Supplemental Information

Table 1: Ten-Year Statistical Review

($ millions) As at or for the year ended October 31	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Condensed Consolidated Balance Sheet										
Assets										
Cash and cash equivalents	**77,934**	87,466	93,261	57,408	48,803	42,142	32,599	31,653	40,295	28,386
Interest bearing deposits with banks	**4,125**	5,734	8,303	9,035	7,987	8,305	6,490	4,449	7,382	6,110
Securities	**322,379**	273,262	232,849	234,260	189,438	180,935	163,198	149,985	130,918	143,319
Securities borrowed or purchased under resale agreements	**115,662**	113,194	107,382	111,878	104,004	85,051	75,047	66,646	68,066	53,555
Loans, net of allowances	**656,478**	551,339	458,262	447,420	426,984	384,172	358,507	357,518	321,531	291,400
Other	**116,698**	108,204	88,118	89,260	74,979	72,688	73,763	77,709	73,689	65,889
Total assets	**1,293,276**	1,139,199	988,175	949,261	852,195	773,293	709,604	687,960	641,881	588,659
Liabilities										
Deposits	**909,676**	769,478	685,631	659,034	568,143	520,928	479,792	470,281	438,169	393,088
Other	**298,335**	290,533	238,128	225,218	225,981	199,862	180,438	170,910	159,383	155,254
Subordinated debt	**8,228**	8,150	6,893	8,416	6,995	6,782	5,029	4,439	4,416	4,913
Total liabilities	**1,216,239**	1,068,161	930,652	892,668	801,119	727,572	665,259	645,630	601,968	553,255
Total equity	**77,037**	71,038	57,523	56,593	51,076	45,721	44,345	42,306	39,422	34,313
Total liabilities and equity	**1,293,276**	1,139,199	988,175	949,261	852,195	773,293	709,604	687,960	641,881	588,659
Condensed Consolidated Statement of Income										
Net interest income	**18,681**	15,885	14,310	13,971	12,888	11,438	11,275	10,945	9,796	8,292
Non-interest revenue	**12,518**	17,825	12,876	11,215	12,595	11,467	10,832	10,015	9,593	9,931
Total revenue	**31,199**	33,710	27,186	25,186	25,483	22,905	22,107	20,960	19,389	18,223
Insurance claims, commissions and changes in policy benefit liabilities (CCPB)	**1,939**	(683)	1,399	1,708	2,709	1,352	1,538	1,543	1,254	1,505
Provision for credit losses (PCL)	**2,178**	313	20	2,953	872	662	746	771	544	527
Non-interest expense	**21,219**	16,194	15,509	14,177	14,630	13,477	13,192	12,916	12,250	10,955
Income before income taxes	**5,863**	17,886	10,258	6,348	7,272	7,414	6,631	5,730	5,341	5,236
Provision for income taxes	**1,486**	4,349	2,504	1,251	1,514	1,961	1,292	1,100	936	903
Net income	**4,377**	13,537	7,754	5,097	5,758	5,453	5,339	4,630	4,405	4,333
Net income available to common shareholders	**4,034**	13,306	7,510	4,850	5,547	5,269	5,153	4,471	4,253	4,157
Condensed Consolidated Statement of Changes in Equity										
Preferred shares and other equity instruments	**6,958**	6,308	5,558	6,598	5,348	4,340	4,240	3,840	3,240	3,040
Common shares	**22,941**	17,744	13,599	13,430	12,971	12,929	13,032	12,539	12,313	12,357
Contributed surplus	**328**	317	313	302	303	300	307	294	299	304
Retained earnings	**44,920**	45,117	35,497	30,745	28,725	25,850	23,700	21,207	18,930	17,237
Accumulated other comprehensive income	**1,862**	1,552	2,556	5,518	3,729	2,302	3,066	4,426	4,640	1,375
Non-controlling interest in subsidiaries	**28**	–	–	–	–	–	–	–	–	–
Total equity	**77,037**	71,038	57,523	56,593	51,076	45,721	44,345	42,306	39,422	34,313

BMO adopted various new and amended IFRS standards in 2015, IFRS 9 *Financial Instruments* in 2018 and IFRS 16 *Leases* in 2020 prospectively, with no changes to prior periods. In 2019, BMO adopted IFRS 15 *Revenue from Contracts with Customers* and elected to reclassify 2017 and 2018 amounts.

($ millions, except as noted)
As at or for the year ended October 31

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Other Financial Measures										
Common Share Data ($)										
Basic earnings per share	**5.69**	20.04	11.60	7.56	8.68	8.19	7.93	6.94	6.59	6.44
Diluted earnings per share	**5.68**	19.99	11.58	7.55	8.66	8.17	7.90	6.92	6.57	6.41
Dividends declared per share	**5.80**	5.44	4.24	4.24	4.06	3.78	3.56	3.40	3.24	3.08
Book value per share	**97.17**	95.60	80.18	77.40	71.54	64.73	61.91	59.57	56.31	48.18
Closing share price	**104.79**	125.49	134.37	79.33	97.50	98.43	98.83	85.36	76.04	81.73
Number outstanding (in thousands)										
End of year	**720,909**	677,107	648,136	645,889	639,232	639,330	647,816	645,761	642,583	649,050
Market capitalization ($ billions)	**75.5**	85.0	87.1	51.2	62.3	62.9	64.0	55.1	48.9	53.0
Price-to-earnings multiple	**18.5**	6.3	11.6	10.5	11.3	12.0	12.5	12.3	11.6	12.8
Market-to-book value multiple	**1.08**	1.31	1.68	1.02	1.36	1.52	1.60	1.43	1.35	1.70
Dividend yield (%)	**5.5**	4.3	3.2	5.3	4.2	3.8	3.6	4.0	4.3	3.8
Dividend payout ratio (%)	**102.0**	27.1	36.5	56.1	46.8	46.1	44.9	49.0	49.2	47.8
Financial Measures and Ratios (%)										
Return on equity	**6.0**	22.9	14.9	10.1	12.6	13.3	13.2	12.1	12.5	14.0
Efficiency ratio	**68.0**	48.0	57.0	56.3	57.4	58.8	59.7	61.6	63.2	60.1
Net interest margin on average earning assets	**1.63**	1.62	1.59	1.64	1.70	1.67	1.74	1.76	1.69	1.57
Total PCL-to-average net loans and acceptances	**0.35**	0.06	–	0.63	0.20	0.17	0.20	0.22	0.17	0.18
PCL on impaired loans-to-average net loans and acceptances	**0.19**	0.10	0.11	0.33	0.17	0.18	0.22	0.22	–	–
Return on average assets	**0.35**	1.26	0.79	0.54	0.69	0.72	0.74	0.65	0.66	0.72
Return on average risk-weighted assets (1)	**1.08**	3.89	2.38	1.51	1.86	1.97	1.98	1.71	1.84	1.85
Average assets ($ millions)	**1,248,356**	1,072,497	981,140	942,450	833,252	754,295	722,626	707,122	664,391	593,928
Capital Measures (%) (1)										
Common Equity Tier 1 Ratio	**12.5**	16.7	13.7	11.9	11.4	11.3	11.4	10.1	10.7	10.1
Tier 1 Capital Ratio	**14.1**	18.4	15.4	13.6	13.0	12.9	13.0	11.6	12.3	12.0
Total Capital Ratio	**16.2**	20.7	17.6	16.2	15.2	15.2	15.1	13.6	14.4	14.3
Leverage Ratio	**4.2**	5.6	5.1	4.8	4.3	4.2	4.4	4.2	4.2	na
Other Statistical Information										
Number of employees	**55,767**	46,722	43,863	43,360	45,513	45,454	45,200	45,234	46,353	46,778
Number of bank branches	**1,890**	1,383	1,405	1,409	1,456	1,483	1,503	1,522	1,535	1,553
Number of automated teller machines	**5,765**	4,717	4,851	4,820	4,967	4,828	4,731	4,599	4,761	4,338

BMO adopted various new and amended IFRS standards in 2015, IFRS 9 *Financial Instruments* in 2018 and IFRS 16 *Leases* in 2020 prospectively, with no changes to prior periods. In 2019, BMO adopted IFRS 15 *Revenue from Contracts with Customers* and elected to reclassify 2017 and 2018 amounts.

(1) Capital ratios and risk-weighted assets are disclosed in accordance with the Capital Adequacy Requirements (CAR) Guideline, as set out by OSFI, as applicable.

na – not applicable

Table 2: Average Assets, Liabilities and Interest Rates

($ millions, except as noted) For the year ended October 31	2023 Average balances	2023 Average interest rate (%)	2023 Interest income/ expense	2022 Average balances	2022 Average interest rate (%)	2022 Interest income/ expense
Assets						
Canadian Dollar						
Interest bearing deposits with banks and other interest bearing assets	**33,102**	**4.77**	**1,579**	33,950	1.23	416
Securities	**94,697**	**4.08**	**3,859**	80,971	2.52	2,043
Securities borrowed or purchased under resale agreements	**47,239**	**4.90**	**2,317**	50,090	1.39	695
Loans						
Residential mortgages	**143,958**	**3.96**	**5,696**	132,118	2.53	3,345
Consumer instalment and other personal	**69,611**	**5.70**	**3,969**	66,899	3.65	2,442
Credit cards	**9,519**	**14.69**	**1,399**	7,933	13.37	1,061
Business and government	**114,176**	**4.88**	**5,575**	101,011	3.90	3,940
Total loans	**337,264**	**4.93**	**16,639**	307,961	3.50	10,788
Total Canadian dollar	**512,302**	**4.76**	**24,394**	472,972	2.95	13,942
U.S. Dollar and Other Currencies						
Interest bearing deposits with banks and other interest bearing assets	**66,212**	**4.33**	**2,866**	60,463	0.83	504
Securities	**218,443**	**3.45**	**7,533**	185,099	1.92	3,548
Securities borrowed or purchased under resale agreements	**69,405**	**5.11**	**3,543**	62,416	1.02	640
Loans						
Residential mortgages	**20,168**	**4.41**	**890**	8,312	2.97	247
Consumer instalment and other personal	**29,021**	**6.54**	**1,899**	14,439	3.63	525
Credit cards	**1,265**	**10.70**	**135**	621	9.92	61
Business and government	**225,567**	**6.35**	**14,314**	172,583	4.31	7,430
Total loans	**276,021**	**6.25**	**17,238**	195,955	4.22	8,263
Total U.S. dollar and other currencies	**630,081**	**4.95**	**31,180**	503,933	2.57	12,955
Other non-interest bearing assets	**105,973**			95,592		
Total All Currencies						
Total assets and interest income	**1,248,356**	**4.45**	**55,574**	1,072,497	2.51	26,897
Liabilities						
Canadian Dollar						
Deposits						
Banks	**4,415**	**2.01**	**89**	4,983	0.37	19
Business and government	**181,371**	**3.47**	**6,301**	169,063	1.31	2,221
Individuals	**166,134**	**2.02**	**3,352**	149,329	0.58	866
Total deposits	**351,920**	**2.77**	**9,742**	323,375	0.96	3,106
Securities sold but not yet purchased and securities lent or sold under repurchase agreements (1)	**55,466**	**4.22**	**2,340**	60,163	1.62	974
Subordinated debt and other interest bearing liabilities	**25,750**	**3.58**	**921**	25,788	2.39	616
Total Canadian dollar	**433,136**	**3.00**	**13,003**	409,326	1.15	4,696
U.S. Dollar and Other Currencies						
Deposits						
Banks	**25,940**	**4.43**	**1,148**	23,583	1.21	285
Business and government	**368,237**	**3.70**	**13,617**	305,576	1.02	3,104
Individuals	**119,710**	**1.70**	**2,040**	75,160	0.29	216
Total deposits	**513,887**	**3.27**	**16,805**	404,319	0.89	3,605
Securities sold but not yet purchased and securities lent or sold under repurchase agreements (1)	**100,084**	**4.95**	**4,957**	90,324	1.85	1,671
Subordinated debt and other interest bearing liabilities	**33,403**	**6.37**	**2,128**	20,600	5.05	1,040
Total U.S. dollar and other currencies	**647,374**	**3.69**	**23,890**	515,243	1.23	6,316
Other non-interest bearing liabilities	**93,548**			84,253		
Total All Currencies						
Total liabilities and interest expense	**1,174,058**	**3.14**	**36,893**	1,008,822	1.09	11,012
Total equity	**74,298**			63,675		
Total Liabilities, Equity and Interest Expense	**1,248,356**	**2.96**	**36,893**	1,072,497	1.03	11,012
Net interest margin						
– based on earning assets		**1.63**			1.62	
– based on total assets		**1.50**			1.48	
Net interest income			**18,681**			15,885

Certain comparative figures have been reclassified to conform with the current year's presentation.

(1) For the years ended October 31, 2023 and 2022, the maximum amount of securities lent or sold under repurchase agreements at any month end was $111,685 million and $129,549 million, respectively.

Table 3: Volume/Rate Analysis of Changes in Net Interest Income

($ millions) For the year ended October 31	2023/2022 Increase (decrease) due to change in Average balance	Average rate	Total
Assets			
Canadian Dollar			
Interest bearing deposits with banks and other interest bearing assets	(10)	1,173	1,163
Securities	346	1,470	1,816
Securities borrowed or purchased under resale agreements	(40)	1,662	1,622
Loans			
Residential mortgages	300	2,051	2,351
Consumer instalment and other personal	99	1,428	1,527
Credit cards	212	126	338
Business and government	513	1,122	1,635
Total loans	1,124	4,727	5,851
Change in Canadian dollar interest income	1,420	9,032	10,452
U.S. Dollar and Other Currencies			
Interest bearing deposits with banks and other interest bearing assets	48	2,314	2,362
Securities	639	3,346	3,985
Securities borrowed or purchased under resale agreements	71	2,832	2,903
Loans			
Residential mortgages	353	290	643
Consumer instalment and other personal	530	844	1,374
Credit cards	64	10	74
Business and government	2,281	4,603	6,884
Total loans	3,228	5,747	8,975
Change in U.S. dollar and other currencies interest income	3,986	14,239	18,225
Total All Currencies			
Change in total interest income (a)	5,406	23,271	28,677
Liabilities			
Canadian Dollar			
Deposits			
Banks	(2)	72	70
Business and government	162	3,918	4,080
Individuals	98	2,388	2,486
Total deposits	258	6,378	6,636
Securities sold but not yet purchased and securities lent or sold under repurchase agreements	(76)	1,442	1,366
Subordinated debt and other interest bearing liabilities	(1)	306	305
Change in Canadian dollar interest expense	181	8,126	8,307
U.S. Dollar and Other Currencies			
Deposits			
Banks	29	834	863
Business and government	636	9,877	10,513
Individuals	128	1,696	1,824
Total deposits	793	12,407	13,200
Securities sold but not yet purchased and securities lent or sold under repurchase agreements	180	3,106	3,286
Subordinated debt and other interest bearing liabilities	646	442	1,088
Change in U.S. dollar and other currencies interest expense	1,619	15,955	17,574
Total All Currencies			
Change in total interest expense (b)	1,800	24,081	25,881
Change in total net interest income (a – b)	3,606	(810)	2,796

Table 4: Net Loans and Acceptances – by Geography (1)

($ millions)	Canada		United States		Other countries		Total	
As at October 31	**2023**	2022	**2023**	2022	**2023**	2022	**2023**	2022
Consumer								
Residential mortgages	**150,570**	139,387	**26,675**	9,483	**–**	–	**177,245**	148,870
Credit cards	**10,880**	9,069	**1,414**	594	**–**	–	**12,294**	9,663
Consumer instalment and other personal loans	**69,919**	71,070	**33,969**	14,931	**–**	–	**103,888**	86,001
Total consumer	**231,369**	219,526	**62,058**	25,008	**–**	–	**293,427**	244,534
Business and government	**141,405**	135,317	**221,218**	175,571	**11,662**	11,225	**374,285**	322,113
Total loans and acceptances, net of allowance for credit losses on impaired loans	**372,774**	354,843	**283,276**	200,579	**11,662**	11,225	**667,712**	566,647
Allowance for credit losses on performing loans	**(1,272)**	(1,102)	**(1,833)**	(959)	**(18)**	(12)	**(3,123)**	(2,073)
Total net loans and acceptances	**371,502**	353,741	**281,443**	199,620	**11,644**	11,213	**664,589**	564,574

Table 5: Net Loans and Acceptances – Segmented Information (1)

($ millions) As at October 31	**2023**	2022
Net Loans and Acceptances by Province		
Atlantic provinces	**17,741**	17,617
Quebec	**55,978**	53,975
Ontario	**171,236**	159,862
Prairie provinces	**57,877**	54,607
British Columbia and territories	**68,670**	67,680
Total net loans and acceptances in Canada	**371,502**	353,741
Net Business and Government Loans by Industry		
Commercial real estate	**69,726**	54,478
Construction (non-real estate)	**7,531**	5,761
Retail trade	**30,374**	23,716
Wholesale trade	**23,643**	20,693
Agriculture	**18,400**	14,181
Communications	**1,917**	876
Financing products	**4,710**	1,588
Manufacturing	**40,547**	36,607
Mining	**3,268**	3,503
Oil and gas	**3,711**	3,780
Transportation	**15,656**	14,691
Utilities	**12,247**	9,754
Forest products	**1,302**	1,113
Service industries	**65,593**	55,658
Financial	**71,179**	70,438
Government	**2,746**	1,859
Other	**1,735**	3,417
Total business and government (2)	**374,285**	322,113

(1) Segmented credit information by geographic area is based upon the country of ultimate risk.
(2) The Business and government Net Loans and Acceptances balances are net of allowance for credit losses on impaired loans only.

Table 6: Gross Impaired Loans (GIL) – by Geography [1]

($ millions, except as noted)	Canada		United States		Other countries		Total	
As at October 31	**2023**	2022	**2023**	2022	**2023**	2022	**2023**	2022
Consumer								
Residential mortgages	**249**	194	**175**	101	**–**	–	**424**	295
Consumer instalment and other personal loans	**291**	197	**258**	115	**–**	–	**549**	312
Total consumer	**540**	391	**433**	216	**–**	–	**973**	607
Business and government	**1,089**	767	**1,898**	604	**–**	13	**2,987**	1,384
Total impaired loans and acceptances, net of allowance for credit losses on impaired loans	**1,629**	1,158	**2,331**	820	**–**	13	**3,960**	1,991
Condition Ratios								
GIL as a % of gross loans and acceptances	**0.44**	0.33	**0.82**	0.41	**–**	0.12	**0.59**	0.35
Consumer	**0.23**	0.18	**0.70**	0.86	**–**	–	**0.33**	0.25
Business and government	**0.77**	0.57	**0.86**	0.34	**–**	0.12	**0.80**	0.43

Table 7: Gross Impaired Loans – Segmented Information

($ millions) As at October 31	**2023**	2022
Gross Impaired Business and Government Loans		
Commercial real estate	**438**	72
Construction (non-real estate)	**123**	59
Retail trade	**479**	173
Wholesale trade	**243**	78
Agriculture	**135**	202
Communications	**4**	1
Financing products	**–**	–
Manufacturing	**422**	184
Mining	**2**	19
Oil and gas	**22**	39
Transportation	**170**	73
Utilities	**3**	4
Forest products	**4**	3
Service industries	**868**	410
Financial	**52**	54
Government	**3**	3
Other	**19**	10
Total business and government	**2,987**	1,384

(1) Segmented credit information by geographic area is based upon the country of ultimate risk.

Table 8: Changes in Gross Impaired Loans – by Geography (1)

($ millions, except as noted)	Canada		United States		Other countries		Total	
As at October 31	**2023**	2022	**2023**	2022	**2023**	2022	**2023**	2022
Gross impaired loans and acceptances (GIL), beginning of year								
Consumer	**391**	382	**216**	256	**–**	–	**607**	638
Business and government	**767**	813	**604**	718	**13**	–	**1,384**	1,531
Total GIL, beginning of year	**1,158**	1,195	**820**	974	**13**	–	**1,991**	2,169
Purchased credit impaired (PCI) loans								
Consumer	**–**	–	**104**	–	**–**	–	**104**	–
Business and government	**–**	–	**311**	–	**–**	–	**311**	–
Total PCI	**–**	–	**415**	–	**–**	–	**415**	–
Additions to impaired loans and acceptances								
Consumer	**897**	630	**332**	77	**–**	–	**1,229**	707
Business and government	**819**	538	**1,994**	377	**5**	13	**2,818**	928
Total additions	**1,716**	1,168	**2,326**	454	**5**	13	**4,047**	1,635
Reductions to impaired loans and acceptances (2)								
Consumer	**(506)**	(462)	**(80)**	(66)	**–**	–	**(586)**	(528)
Business and government	**(413)**	(533)	**(723)**	(389)	**(18)**	–	**(1,154)**	(922)
Total reductions due to net repayments and other	**(919)**	(995)	**(803)**	(455)	**(18)**	–	**(1,740)**	(1,450)
Write-offs (3)								
Consumer	**(243)**	(159)	**(138)**	(51)	**–**	–	**(381)**	(210)
Business and government	**(83)**	(51)	**(289)**	(102)	**–**	–	**(372)**	(153)
Total write-offs	**(326)**	(210)	**(427)**	(153)	**–**	–	**(753)**	(363)
Gross impaired loans and acceptances, end of year								
Consumer	**539**	391	**434**	216	**–**	–	**973**	607
Business and government	**1,090**	767	**1,897**	604	**–**	13	**2,987**	1,384
Total GIL, end of year	**1,629**	1,158	**2,331**	820	**–**	13	**3,960**	1,991
Condition Ratios								
GIL as a % of Gross Loans								
Consumer	**0.23**	0.18	**0.70**	0.86	**–**	–	**0.33**	0.25
Business and government	**0.77**	0.57	**0.86**	0.34	**–**	0.12	**0.80**	0.43
GIL as a % of gross loans and acceptances	**0.44**	0.33	**0.82**	0.41	**–**	0.12	**0.59**	0.35

Table 9: Allowance for Credit Losses – by Geography (1)(2)(4)

($ millions, except as noted)	Canada		United States		Other countries		Total	
As at October 31	**2023**	2022	**2023**	2022	**2023**	2022	**2023**	2022
Consumer								
Residential mortgages	**5**	7	**–**	3	**–**	–	**5**	10
Consumer instalment and other personal loans	**118**	88	**34**	14	**–**	–	**152**	102
Total consumer	**123**	95	**34**	17	**–**	–	**157**	112
Business and government	**334**	268	**193**	159	**–**	5	**527**	432
Total allowance for credit losses on impaired loans	**457**	363	**227**	176	**–**	5	**684**	544
Allowance for credit losses on performing loans	**1,272**	1,102	**1,833**	959	**18**	12	**3,123**	2,073
Allowance for credit losses	**1,729**	1,465	**2,060**	1,135	**18**	17	**3,807**	2,617
Coverage Ratios								
Allowance for credit losses on impaired loans as a % of gross impaired loans and acceptances								
Total	**28.1**	31.3	**9.7**	21.5	**–**	38.5	**17.3**	27.3
Consumer	**22.8**	24.3	**7.8**	7.9	**–**	–	**16.1**	18.5
Business and government	**30.6**	34.9	**10.2**	26.3	**–**	38.5	**17.6**	31.2

(1) Segmented credit information by geographic area is based upon the country of ultimate risk.
(2) Includes impaired amounts returned to performing status, sales, repayments, the impact of foreign exchange fluctuations and offsets for consumer write-offs which have not been recognized in formations.
(3) Excludes certain loans that are written off directly and not classified as new formations.
(4) Amounts exclude Allowance for Credit Losses related to off-balance sheet instruments, which are reported in Other Liabilities.

Table 10: Allowance for Credit Losses on Impaired Loans – Segmented Information

($ millions) As at October 31	2023	2022
Business and Government		
Allowance for Credit Losses on Impaired Loans by Industry		
Commercial real estate	**34**	11
Construction (non-real estate)	**55**	25
Retail trade	**167**	81
Wholesale trade	**43**	31
Agriculture	**4**	13
Communications	**–**	–
Financing products	**–**	–
Manufacturing	**61**	41
Mining	**–**	5
Oil and gas	**22**	39
Transportation	**20**	10
Utilities	**2**	1
Forest products	**2**	1
Service industries	**108**	144
Financial	**9**	29
Government	**–**	–
Other	**–**	1
Total business and government (1)	**527**	432

Table 11: Changes in Allowance for Credit Losses – by Geography (2)

($ millions, except as noted)	Canada		United States		Other countries		Total	
As at October 31	2023	2022	2023	2022	2023	2022	2023	2022
Allowance for credit losses (ACL), beginning of year								
Consumer	**851**	907	**173**	133	**–**	–	**1,024**	1,040
Business and government	**797**	792	**1,162**	1,111	**15**	15	**1,974**	1,918
Total ACL, beginning of year	**1,648**	1,699	**1,335**	1,244	**15**	15	**2,998**	2,958
Provision for credit losses (3)								
Consumer	**789**	268	**437**	45	**–**	–	**1,226**	313
Business and government	**124**	48	**845**	(43)	**(9)**	(7)	**960**	(2)
Total provision for credit losses	**913**	316	**1,282**	2	**(9)**	(7)	**2,186**	311
Recoveries								
Consumer	**121**	105	**63**	60	**–**	–	**184**	165
Business and government	**26**	–	**55**	50	**–**	–	**81**	50
Total recoveries	**147**	105	**118**	110	**–**	–	**265**	215
Write-offs								
Consumer	**(621)**	(390)	**(196)**	(69)	**–**	–	**(817)**	(459)
Business and government	**(83)**	(51)	**(289)**	(102)	**–**	–	**(372)**	(153)
Total write-offs	**(704)**	(441)	**(485)**	(171)	**–**	–	**(1,189)**	(612)
Other, including foreign exchange rate changes								
Consumer	**(66)**	(39)	**(15)**	4	**–**	–	**(81)**	(35)
Business and government	**(40)**	8	**112**	146	**16**	7	**88**	161
Total other, including foreign exchange rate changes	**(106)**	(31)	**97**	150	**16**	7	**7**	126
ACL, end of year								
Consumer	**1,074**	851	**462**	173	**–**	–	**1,536**	1,024
Business and government	**824**	797	**1,885**	1,162	**22**	15	**2,731**	1,974
Total ACL, end of year	**1,898**	1,648	**2,347**	1,335	**22**	15	**4,267**	2,998
Net write-offs as a % of average loans and acceptances (4)	**un**	un	**un**	un	**un**	un	**0.15**	0.08

(1) Amounts exclude Allowance for Credit Losses related to off-balance sheet instruments, which are reported in Other Liabilities.
(2) Segmented credit information by geographic area is based upon the country of ultimate risk.
(3) Excludes provision for credit losses on other assets.
(4) Aggregate Net Loans and Acceptances balances are net of allowance for credit losses on performing loans and impaired loans (excluding those related to off-balance sheet instruments).
un – unavailable

Table 12: Provision for Credit Losses – Segmented Information

($ millions) For the year ended October 31	2023	2022
Consumer		
Residential mortgages	**19**	7
Cards	**366**	190
Consumer instalment and other personal loans	**379**	151
Total consumer	**764**	348
Business and Government		
Commercial real estate	**60**	2
Construction (non-real estate)	**37**	20
Retail trade	**113**	4
Wholesale trade	**31**	7
Agriculture	**(50)**	(2)
Communications	**1**	(5)
Financing products	**–**	–
Manufacturing	**37**	10
Mining	**(6)**	5
Oil and gas	**(10)**	(32)
Transportation	**69**	(7)
Utilities	**–**	1
Forest products	**2**	–
Service industries	**92**	133
Financial	**14**	16
Government	**–**	–
Other	**26**	2
Total business and government	**416**	154
Total provision for credit losses on impaired loans	**1,180**	502
Provision for credit losses on performing loans	**998**	(189)
	2,178	313
Performance Ratios (%)		
PCL-to-average net loans and acceptances	**0.35**	0.06
PCL on impaired loans-to-segmented average net loans and acceptances		
Consumer	**0.28**	0.15
Business and government	**0.12**	0.05
PCL on impaired loans-to-average net loans and acceptances	**0.19**	0.10

Table 13: Average Deposits

	2023		2022	
($ millions, except as noted)	**Average balance**	**Average rate paid (%)**	Average balance	Average rate paid (%)
Deposits Booked in Canada				
Payable on demand – interest bearing	**51,830**	**4.24**	51,184	1.09
Payable on demand – non-interest bearing	**71,789**	**–**	84,280	–
Payable after notice	**125,664**	**3.03**	130,812	0.90
Payable on a fixed date	**292,597**	**4.11**	205,284	1.74
Total deposits booked in Canada	**541,880**	**3.33**	471,560	1.13
Deposits Booked in the United States				
Payable on demand – interest bearing	**17,837**	**3.30**	8,856	1.02
Payable on demand – non-interest bearing	**26,656**	**–**	10,699	–
Payable after notice	**164,149**	**1.74**	139,952	0.29
Payable on a fixed date	**71,643**	**4.43**	63,047	0.94
Total deposits booked in the United States	**280,285**	**2.36**	222,554	0.49
Deposits Booked in Other Countries				
Payable on demand – interest bearing	**178**	**2.53**	318	0.77
Payable on demand – non-interest bearing	**44**	**–**	73	–
Payable after notice	**2,161**	**4.27**	1,486	0.87
Payable on a fixed date	**41,259**	**4.35**	31,703	0.91
Total deposits booked in other countries	**43,642**	**4.34**	33,580	0.91
Total average deposits (1)	**865,807**	**3.07**	727,694	0.92

Certain comparative figures have been reclassified to conform with the current year's presentation.

As at October 31, 2023 and 2022, deposits by foreign depositors in our Canadian bank offices amounted to $112,818 million and $95,292 million, respectively.

(1) Average deposits payable on a fixed date included $88 million, $44,520 million and $17,664 million of federal funds purchased, commercial paper issued and other deposit liabilities, respectively, as at October 31, 2023 ($101 million, $27,287 million and $17,394 million, respectively, as at October 31, 2022).

Glossary of Financial Terms

Adjusted Earnings and Measures

Management considers both reported and adjusted results to be useful in assessing underlying ongoing business performance, as set out in the Non-GAAP and Other Financial Measures section.

- *Adjusted Revenue* – calculated as revenue excluding the impact of certain non-recurring items, and adjusted net revenue is adjusted revenue, net of CCPB.
- *Adjusted Provision for Credit Losses* – calculated as provision for credit losses excluding the impact of certain non-recurring items.
- *Adjusted Non-Interest Expense* – calculated as non-interest expense excluding the impact of certain non-recurring items.
- *Adjusted Effective Tax Rate* – calculated as adjusted provision for income taxes divided by adjusted income before provision for income taxes.
- *Adjusted Net Income* – calculated as net income excluding the impact of certain non-recurring items.

Allowance for Credit Losses represents an amount deemed appropriate by management to absorb credit-related losses on loans and acceptances and other credit instruments, in accordance with applicable accounting standards. Allowance on Performing Loans is maintained to cover impairment in the existing portfolio for loans that have not yet been individually identified as impaired. Allowance on Impaired Loans is maintained to reduce the carrying value of individually identified impaired loans to the expected recoverable amount.

Assets under Administration and Assets under Management refers to assets administered or managed by a financial institution that are beneficially owned by clients and therefore not reported on the balance sheet of the administering or managing financial institution.

Asset-Backed Commercial Paper (ABCP) is a short-term investment. The commercial paper is backed by assets such as trade receivables, and is generally used for short-term financing needs.

Average Annual Total Shareholder Return (TSR) represents the average annual total return earned on an investment in BMO common shares made at the beginning of a fixed period. The return includes the change in share price and assumes dividends received were reinvested in additional common shares.

Average Earning Assets represents the daily average balance of deposits at central banks, deposits with other banks, securities borrowed or purchased under resale agreements, securities, and loans over a one-year period.

Average Net Loans and Acceptances is the daily or monthly average balance of loans and customers' liability under acceptances, net of the allowance for credit losses, over a one-year period.

Bail-In Debt is senior unsecured debt subject to the Canadian Bail-In Regime. Bail-in debt includes senior unsecured debt issued directly by the bank on or after September 23, 2018, which has an original term greater than 400 days and is marketable, subject to certain exceptions. Some or all of this debt may be statutorily converted into common shares of the bank under the Bail-In Regime if the bank enters resolution.

Bankers' Acceptances (BAs) are bills of exchange or negotiable instruments drawn by a borrower for payment at maturity and accepted by a bank. BAs constitute 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.

Basis Point is one one-hundredth of a percentage point.

Collateralized Mortgage Obligations (CMOs) are debt securities with multiple tranches, issued by structured entities and collateralized by a pool of mortgages. Each tranche offers different terms, interest rates, and risks.

Common Equity Tier 1 (CET1) Capital comprises common shareholders' equity net of deductions for goodwill, intangible assets, pension assets, certain deferred tax assets and other items, which may include a portion of expected credit loss provisions.

Common Equity Tier 1 (CET1) Ratio is calculated as CET1 Capital, which comprises common shareholders' equity, net of deductions for goodwill, intangible assets, pension assets, certain deferred tax assets and other items (which may include a portion of expected credit loss provisions), divided by risk-weighted assets. The CET1 Ratio is calculated in accordance with OSFI's Capital Adequacy Requirements (CAR) Guideline.

Common Shareholders' Equity is the most permanent form of capital. For regulatory capital purposes, common shareholders' equity comprises common shareholders' equity, net of capital deductions.

Credit and Counterparty Risk is the potential for financial loss due to the failure of an obligor (i.e., a borrower, endorser, guarantor or counterparty) to repay a loan or honour another predetermined financial obligation.

Derivatives are contracts, requiring no initial or little investment, with a value that is derived from movements in underlying interest or foreign exchange rates, equity or commodity prices or other indices. Derivatives are used to transfer, modify or reduce current or expected risks from changes in rates and prices.

Dividend Payout Ratio represents common share dividends as a percentage of net income available to common shareholders. It is computed by dividing dividends per share by basic earnings per share. Adjusted dividend payout ratio is calculated in the same manner, using adjusted net income.

Dividend Yield represents dividends per common share divided by the closing share price.

Earnings per Share (EPS) is calculated by dividing net income attributable to bank shareholders, after deducting preferred share dividends and distributions on other equity instruments, by the average number of common shares outstanding. Adjusted EPS is calculated in the same manner, using adjusted net income attributable to bank shareholders. Diluted EPS, which is BMO's basis for measuring performance, adjusts for possible conversions of financial instruments into common shares if those conversions would reduce EPS, and is more fully explained in Note 23 of the consolidated financial statements.

Earnings Sensitivity is a measure of the impact of potential changes in interest rates on the projected 12-month pre-tax net income from a portfolio of assets, liabilities and off-balance sheet positions in response to prescribed parallel interest rate movements, with interest rates floored at zero.

Economic Capital is an expression of the enterprise's capital demand requirement relative to its view of the economic risks in its underlying business activities. It represents management's estimation of the likely magnitude of economic losses that could occur should severely adverse situations arise. Economic capital is calculated for various types of risk, including credit, market (trading and non-trading), operational non-financial, business and insurance, based on a one-year time horizon using a defined confidence level.

Economic Value Sensitivity is a measure of the impact of potential changes in interest rates on the market value of a portfolio of assets, liabilities and off-balance sheet positions in response to prescribed parallel interest rate movements, with interest rates floored at zero.

Effective Tax Rate is calculated as provision for income taxes divided by income before provision for income taxes.

Efficiency Ratio (or Expense-to-Revenue Ratio) is a measure of productivity. It is calculated as non-interest expense divided by total revenue (on a taxable equivalent basis in the operating groups), expressed as a percentage.

Efficiency Ratio, net of CCPB, is calculated as non-interest expense divided by total revenue, net of CCPB. Adjusted efficiency ratio, net of CCPB, is calculated in the same manner, utilizing adjusted revenue, net of CCPB, and adjusted non-interest expense.

Environmental and Social Risk is the potential for loss or harm, directly or indirectly, resulting from environmental and social factors that impact BMO or its customers, and BMO's impact on the environment and society.

Fair Value is the amount of consideration that would be agreed upon in an arm's-length transaction between knowledgeable, willing parties who are under no compulsion to act in an orderly market transaction.

Forwards and Futures are contractual agreements to either buy or sell a specified amount of a currency, commodity, interest-rate-sensitive financial instrument or security at a specified price and date in the future. Forwards are customized contracts transacted in the over-the-counter market. Futures are transacted in standardized amounts on regulated exchanges and are subject to daily cash margin requirements.

Gross Impaired Loans and Acceptances (GIL) is calculated as the credit impaired balance of loans and customers' liability under acceptances.

Guarantees and Standby Letters of Credit represent our obligation to make payments to third parties on behalf of a customer if the customer is unable to make the required payments or meet other contractual requirements.

Hedging is a risk management technique used to neutralize, manage or offset interest rate, foreign currency, equity, commodity or credit risk exposures arising from normal banking activities.

Impaired Loans are loans for which there is no longer a reasonable assurance of the timely collection of principal or interest.

Insurance Risk is the potential for loss as a result of actual experience differing from that assumed when an insurance product was designed and priced, and comprises claims risk, policyholder behaviour risk and expense risk.

Insurance Revenue, net of CCPB, is insurance revenue, net of insurance claims, commissions and changes in policy benefit liabilities (CCPB).

Legal and Regulatory Risk is the potential for loss or harm resulting from a failure to comply with laws or satisfy contractual obligations or regulatory requirements. This includes the risk of failure to: comply with the law (in letter or in spirit) or maintain standards of care; implement legal or regulatory requirements; enforce or comply with contractual terms; assert non-contractual rights; effectively manage disputes; or act in a manner so as to maintain our reputation.

Leverage Exposures (LE) consist of on-balance sheet items and specified off-balance sheet items, net of specified adjustments.

Leverage Ratio reflects Tier 1 Capital divided by LE.

Liquidity and Funding Risk is the potential for loss if we are unable to meet our financial commitments in a timely manner at reasonable prices as they become due. Financial commitments include liabilities to depositors and suppliers, as well as lending, investment and pledging commitments.

Liquidity Coverage Ratio (LCR) is a Basel III regulatory metric calculated as the ratio of high-quality liquid assets to total net stressed cash outflows over a thirty-day period under a stress scenario prescribed by OSFI.

Market Risk is the potential for adverse changes in the value of our assets and liabilities resulting from changes in market variables such as interest rates, foreign exchange rates, equity and commodity prices and their implied volatilities, and credit spreads, and includes the risk of credit migration and default in our trading book.

Mark-to-Market represents the valuation of financial instruments at fair value (as defined above) as of the balance sheet date.

Master Netting Agreements are agreements between two parties designed to reduce the credit risk of multiple derivative transactions through the provision of a legal right to offset exposure in the event of default.

Model Risk is the potential for adverse outcomes resulting from decisions that are based on incorrect or misused model results. These adverse outcomes can include financial loss, poor business decision-making and damage to reputation.

Net Interest Income comprises earnings on assets, such as loans and securities, including interest and certain dividend income, less interest expense paid on liabilities, such as deposits. Net interest income, excluding trading, is presented on a basis that excludes trading-related interest income.

Net Interest Margin is the ratio of net interest income to average earning assets, expressed as a percentage or in basis points. Net interest margin, excluding trading, is computed in the same manner, excluding trading-related interest income and earning assets.

Net Non-Interest Revenue is non-interest revenue, net of insurance claims, commissions and changes in policy benefit liabilities (CCPB).

Net Promoter Score (NPS) is the percentage of customers surveyed who would recommend BMO to a friend or colleague. Data is gathered in a survey that uses a 0–10 point scale. "Detractors" are defined as those who provide a rating of 0–6, "Passives" are defined as those who provide a rating of 7 or 8, and "Promoters" are defined as those who provide a rating of 9 or 10. The score is calculated by subtracting the percentage of "Detractors" from the percentage of "Promoters".

Net Stable Funding Ratio (NSFR) is a regulatory liquidity measure that assesses the stability of a bank's funding profile in relation to the liquidity value of its assets and is calculated in accordance with OSFI's Liquidity Adequacy Requirements Guideline.

Notional Amount refers to the principal amount used to calculate interest and other payments under derivative contracts. The principal amount does not change hands under the terms of a derivative contract, except in the case of cross-currency swaps.

Off-Balance Sheet Financial Instruments consist of a variety of financial arrangements offered to clients, which include credit derivatives, written put options, backstop liquidity facilities, standby letters of credit, performance guarantees, credit enhancements, commitments to extend credit, securities lending, documentary and commercial letters of credit, and other indemnifications.

Office of the Superintendent of Financial Institutions (OSFI) is the government agency responsible for regulating banks, insurance companies, trust companies, loan companies and pension plans in Canada.

Operating Leverage is the difference between the growth rates of revenue and non-interest expense. Adjusted operating leverage is the difference between the growth rates of adjusted revenue and adjusted non-interest expense.

Operating Leverage, net of CCPB, is the difference between the growth rates of revenue, net of CCPB (net revenue), and non-interest expense. Adjusted net operating leverage, is the difference between the growth rates of adjusted net revenue and adjusted non-interest expense. The bank evaluates performance using adjusted revenue, net of CCPB.

Operational Non-Financial Risk (ONFR) encompasses a wide range of non-financial risks, including those related to business change, customer trust, reputation and data that can result in financial loss. These losses can stem from inadequate or failed internal processes or systems, human error or misconduct, and external events that may directly or indirectly impact the fair value of assets we hold in our credit or investment portfolios. Examples of these risks include cyber and cloud security risk, technology risk, fraud risk and business continuity risk, but exclude legal and regulatory risk, credit risk, market risk, liquidity risk and other types of financial risk.

Options are contractual agreements that convey to the purchaser the right but not the obligation to either buy or sell a specified amount of a currency, commodity, interest-rate-sensitive financial instrument or security at a fixed future date or at any time within a fixed future period.

Purchased Credit Impaired (PCI) Loans are loans for which the timely collection of interest and principal is no longer reasonably assured. These loans are credit-impaired upon initial recognition.

Pre-Provision, Pre-Tax Earnings (PPPT) is calculated as income before the provision for income taxes and provision for (recovery of) credit losses. We use PPPT on both a reported and an adjusted basis to assess our ability to generate sustained earnings growth excluding credit losses, which are impacted by the cyclical nature of a credit cycle.

Provision for Credit Losses (PCL) is a charge to income that represents an amount deemed adequate by management to fully provide for impairment in a portfolio of loans and acceptances and other credit instruments, given the composition of the portfolio, the probability of default, the economic outlook and the allowance for credit losses already established. PCL can comprise both a provision for credit losses on impaired loans and a provision for credit losses on performing loans.

Reputation Risk is the potential for loss or harm to the BMO brand. It can arise even if other risks are managed effectively.

Return on Equity or Return on Common Shareholders' Equity (ROE) is calculated as net income, less preferred dividends and distributions on other equity instruments, as a percentage of average common shareholders' equity. Common shareholders' equity comprises common share capital, contributed surplus, accumulated other comprehensive income (loss) and retained earnings. Adjusted ROE is calculated using adjusted net income rather than net income.

Return on Tangible Common Equity (ROTCE) is calculated as net income available to common shareholders, adjusted for the amortization of acquisition-related intangible assets, as a percentage of average tangible common equity. Adjusted ROTCE is calculated using adjusted net income rather than net income.

Risk-Weighted Assets (RWA) are defined as on-balance sheet and off-balance sheet exposures that are risk-weighted based on guidelines established by OSFI. The measure is used for capital management and regulatory reporting purposes.

Securities Borrowed or Purchased under Resale Agreements are low-cost, low-risk instruments, often supported by the pledge of cash collateral, which arise from transactions that involve the borrowing or purchasing of securities.

Securities Lent or Sold under Repurchase Agreements are low-cost, low-risk liabilities, often supported by cash collateral, which arise from transactions that involve the lending or selling of securities.

Securitization is the practice of selling pools of contractual debts, such as residential mortgages, auto loans and credit card debt obligations, to third parties or trusts, which then typically issue a series of asset-backed securities to investors to fund the purchase of the contractual debts.

Strategic Risk is the potential for loss due to fluctuations in the external business environment and/or failure to properly respond to these fluctuations due to inaction, ineffective strategies or poor implementation of strategies.

Stress Tests are used to determine the potential impact of low-frequency, high-severity events on the trading and underwriting portfolios. The portfolios are measured daily against a variety of hypothetical and historical event scenarios. Scenarios are continuously refined to reflect the latest market conditions and portfolio risk exposures.

Structured Entities (SEs) include entities for which voting or similar rights are not the dominant factor in determining control of the entity. BMO is required to consolidate a SE if it controls the entity by having power over the entity, exposure to variable returns as a result of its involvement and the ability to exercise power to affect the amount of those returns.

Structural (Non-Trading) Market Risk comprises interest rate risk arising from banking activities (loans and deposits) and foreign exchange risk arising from foreign currency operations and exposures.

Swaps are contractual agreements between two parties to exchange a series of cash flows. The various swap agreements that BMO enters into are as follows:

- *Commodity swaps* – counterparties generally exchange fixed-rate and floating-rate payments based on a notional value of a single commodity.
- *Credit default swaps* – one counterparty pays the other a fee in exchange for an agreement by the other counterparty to make a payment if a credit event occurs, such as bankruptcy or failure to pay.
- *Cross-currency interest rate swaps* – fixed-rate and floating-rate interest payments and principal amounts are exchanged in different currencies.
- *Cross-currency swaps* – fixed-rate interest payments and principal amounts are exchanged in different currencies.
- *Equity swaps* – counterparties exchange the return on an equity security or a group of equity securities for a return based on a fixed or floating interest rate or the return on another equity security or group of equity securities.
- *Interest rate swaps* – counterparties generally exchange fixed-rate and floating-rate interest payments based on a notional value in a single currency.
- *Total return swaps* – one counterparty agrees to pay or receive from the other cash amounts based on changes in the value of a reference asset or group of assets, including any returns such as interest earned on these assets, in exchange for amounts that are based on prevailing market funding rates.

Tangible Common Equity is calculated as common shareholders' equity, less goodwill and acquisition-related intangible assets, net of related deferred tax liabilities.

Taxable Equivalent Basis (teb): Operating segment revenue is presented on a taxable equivalent basis (teb). Revenue and the provision for income taxes in BMO Capital Markets and U.S. P&C are increased on tax-exempt securities to an equivalent pre-tax basis to facilitate comparisons of income between taxable and tax-exempt sources. The offset to operating segment teb adjustments is reflected in Corporate Services revenue and provision for (recovery of) income taxes.

Tier 1 Capital comprises CET1 Capital and **Additional Tier 1 (AT1) Capital.** AT1 Capital consists of preferred shares and other AT1 Capital instruments, less regulatory deductions.

Tier 1 Capital Ratio reflects Tier 1 Capital divided by risk-weighted assets.

Tier 2 Capital comprises subordinated debentures and may include certain credit loss provisions, less regulatory deductions.

Total Capital includes Tier 1 and Tier 2 Capital.

Total Capital Ratio reflects Total Capital divided by risk-weighted assets.

Total Loss Absorbing Capacity (TLAC) comprises Total Capital and senior unsecured debt subject to the Canadian Bail-In Regime, less regulatory deductions.

Total Loss Absorbing Capacity (TLAC) Ratio reflects TLAC divided by risk-weighted assets.

Total Loss Absorbing Capacity (TLAC) Leverage Ratio reflects TLAC divided by leverage exposures.

Total Shareholder Return: The annual total shareholder return (TSR) represents the average annual total return earned on an investment in BMO common shares made at the beginning of the respective period. The return includes the change in share price and assumes dividends received were reinvested in additional common shares.

Trading and Underwriting Market Risk is associated with buying and selling financial products in the course of meeting customer requirements, including market-making and related financing activities, and assisting clients to raise funds by way of securities issuance.

Trading-Related Revenue includes net interest income and non-interest revenue earned from on-balance sheet and off-balance sheet positions undertaken for trading purposes. The management of these positions typically includes marking them to market on a daily basis. Trading-related revenue also includes income (expense) and gains (losses) from both on-balance sheet instruments and interest rate, foreign exchange (including spot positions), equity, commodity and credit contracts.

Value-at-Risk (VaR) measures the maximum loss likely to be experienced in the trading and underwriting portfolios, measured at a 99% confidence level over a one-day holding period. VaR is calculated for specific classes of risk in BMO's trading and underwriting activities related to interest rates, foreign exchange rates, credit spreads, equity and commodity prices and their implied volatilities.