

ROYAL BANK OF CANADA

(a Canadian chartered bank)

2nd Supplementary Notes Base Prospectus dated December 18, 2023

Pursuant to the Programme for the Issuance of Securities

This 2nd Notes Base Supplementary Prospectus (the "**2nd Supplementary Prospectus**") to the Notes Base Prospectus dated July 14, 2023 (the "**Original Base Prospectus**"), as supplemented by the 1st Supplementary Prospectus dated August 25, 2023 (the Original Base Prospectus, together with the 1st Supplementary Prospectus dated August 25, 2023 and the 2nd Supplementary Prospectus, the "**Base Prospectus**"), and Admission Particulars for Royal Bank of Canada ("**RBC**" or the "**Issuer**") constitutes a supplementary prospectus in respect of the Base Prospectus for the Issuer for the purposes of Article 23.1 of the U.K. Prospectus Regulation and supplementary admission particulars in respect of the Admission Particulars for the purposes of the ISM Rulebook, and is prepared in connection with the programme for the issuance of securities established by RBC (the "**Programme**"). When used in this 2nd Supplementary Prospectus, "**U.K. Prospectus Regulation**" means Regulation (EU) 2017/1129 as it forms part of U.K. domestic law by virtue of the European Union (Withdrawal) Act 2018, as amended.

Terms defined in the Base Prospectus have the same meaning when used in this 2nd Supplementary Prospectus. This 2nd Supplementary Prospectus is supplemental to, and shall be read in conjunction with, the Base Prospectus.

RBC accepts responsibility for the information contained in this 2nd Supplementary Prospectus. To the best of the knowledge of RBC, the information contained in this 2nd Supplementary Prospectus is in accordance with the facts and this 2nd Supplementary Prospectus makes no omission likely to affect its import.

The purpose of this 2nd Supplementary Prospectus is to (a) incorporate by reference in the Base Prospectus the Issuer's latest audited consolidated financial statements and management's discussion and analysis thereof and the 2023 AIF (as defined below); (b) update the section entitled "Caution Regarding Forward-Looking Statements" set out in the Original Base Prospectus; (c) delete and replace the risk factors, which are incorporated by reference in the Original Base Prospectus via the Registration Document dated July 13, 2023 in light of the publication of the 2023 MD&A (as defined below); (d) update the Singapore selling restriction in the Original Base Prospectus; (e) include an updated statement in respect of no significant change and no material adverse change in the Base Prospectus; and (f) update paragraph 3 of the section entitled "General Information" in the Base Prospectus regarding governmental, legal or arbitration proceedings which may have, or have had, a significant effect on the financial position or profitability of the Issuer and its subsidiaries taken as a whole in the Base Prospectus.

To the extent that there is any inconsistency between (a) any statement in this 2nd Supplementary Prospectus or any statement incorporated by reference into the Base Prospectus by this 2nd Supplementary Prospectus; and (b) any other statement in, or incorporated by reference in, the Base Prospectus, the statements in (a) above will prevail.

Save as disclosed in this 2nd Supplementary Prospectus, the 2023 AIF or the 2023 Annual Report (as defined below) incorporated by reference in the Base Prospectus by virtue of this 2nd Supplementary Prospectus, no significant new factor, material mistake or material inaccuracy relating to the information included in the Base Prospectus which may affect the assessment of Notes issued under the Programme has arisen or been noted, as the case may be, since approval by the Financial Conduct Authority (the "FCA") of the 1st Supplementary Prospectus dated August 25, 2023.

DOCUMENTS INCORPORATED BY REFERENCE

The following documents (or the specified sections thereof) are, by virtue of this 2nd Supplementary Prospectus, incorporated in, and form part of, the Base Prospectus:

- (a) RBC's Annual Information Form dated November 29, 2023 (the "**2023 AIF**"), including, without limitation, the following sections:
 - (i) "Description of the Business General Summary" on page 3;
 - (ii) "Description of the Business Competition" on pages 3 and 4; and
 - (iii) "Appendix A Principal Subsidiaries" on page 28;
- (b) the following sections of RBC's 2023 Annual Report (the "2023 Annual Report") for the year ended October 31, 2023:
 - (i) the Management's Discussion and Analysis on pages 22 through 131 (the "2023 MD&A");
 - (ii) the audited annual consolidated financial statements, which comprise the consolidated balance sheets as of October 31, 2023 and 2022, and the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for the years then ended, including the related notes (the "2023 Audited Consolidated Financial Statements"), prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board on pages 140 through 234, together with Management's Report on Internal Control over Financial Reporting as of October 31, 2023 on page 134, the Independent Auditor's Report and the Report of Independent Registered Public Accounting Firm, each dated November 29, 2023, on pages 135 through 137 and 138 through 139, respectively; and
 - (iii) the information about tax examinations and assessments and legal and regulatory matters to which the Issuer and its consolidated subsidiaries are or have been subject in Note 22 on page 218 and Note 25 on pages 223 and 224, respectively.

The remainder of the 2023 Annual Report is either covered elsewhere in the Base Prospectus or is not relevant for investors.

The 2023 AIF and the 2023 Annual Report, which includes the 2023 Audited Consolidated Financial Statements and the 2023 MD&A, are available for viewing at:

2023 AIF

https://www.rbc.com/investor-relations/ assets-custom/pdf/aif2023.pdf

2023 Annual Report

https://www.rbc.com/investor-relations/_assets-custom/pdf/ar_2023_e.pdf

The 2023 AIF and 2023 Annual Report, which includes the 2023 Audited Consolidated Financial Statements and 2023 MD&A, have been filed with the National Storage Mechanism and are available for viewing at https://data.fca.org.uk/#/nsm/nationalstoragemechanism and have been announced via the Regulatory News Service operated by the London Stock Exchange.

For the avoidance of doubt, any document incorporated by reference in the 2023 AIF, the 2023 Audited Consolidated Financial Statements or the 2023 MD&A, shall not form part of this 2nd Supplementary Prospectus for the purposes of the U.K. Prospectus Regulation or the ISM Rulebook except where such information or other documents are specifically incorporated by reference in or attached to this 2nd Supplementary Prospectus.

Copies of this 2nd Supplementary Prospectus, the Base Prospectus and the documents incorporated by reference in either of these can be (1) viewed on the Issuer's website maintained in respect of the Programme at https://www.rbc.com/investor-relations/european-senior-notes-program.html; (2) obtained on written request and without charge from the Issuer at Investor Relations, Royal Bank of Canada, 200 Bay Street, South Tower, Toronto, Ontario, Canada M5J 2J5 and from the office of the Issuing and Paying Agent, The Bank of New York Mellon, London Branch, 160 Queen Victoria Street, London EC4V 4LA, England, Attention: Manager, EMEA Corporate & Sovereign Department; and (3) viewed on the website of the Regulatory News Service operated the London Stock by Exchange at http://www.londonstockexchange.com/exchange/news/market-news/market-news-home.html the name of the Issuer and the headline "Publication of Prospectus". Copies of the Issuer's periodic financial reporting can also be viewed by accessing the Issuer's disclosure documents through the internet on the Canadian System for Electronic Document Analysis and Retrieval at www.sedarplus.ca (an internet based securities regulatory filing system). Any websites referenced in this 2nd Supplementary Prospectus other than in respect of the information incorporated by reference are for information purposes only and do not form part of this 2nd Supplementary Prospectus or the Base Prospectus and the FCA has neither scrutinised nor approved the information contained therein.

CAUTION REGARDING FORWARD-LOOKING STATEMENTS

The section entitled "CAUTION REGARDING FORWARD-LOOKING STATEMENTS" on pages 10 to 11 of the Original Base Prospectus is deleted and replaced with the following:

From time to time, the Issuer makes written or oral forward-looking statements within the meaning of certain securities laws, including the "safe harbour" provisions of the United States Private Securities Litigation Reform Act of 1995 and any applicable Canadian securities legislation. The Issuer may make forward-looking statements in this Base Prospectus and in the documents incorporated by reference herein, in filings with Canadian regulators, the United States Securities and Exchange Commission or other securities regulators or, in reports to shareholders, and in other communications. In addition, the Issuer's representatives may communicate forward-looking statements orally to analysts, investors, the media and others. Forward-looking statements in this Base Prospectus and in the documents incorporated by reference herein include, but are not limited to, statements relating to the Issuer's financial performance objectives, vision and strategic goals, the economic, market, and regulatory review and outlook for Canadian, U.S., U.K., European and global

economies, the regulatory environment in which the Issuer operates, the implementation of IFRS 17 Insurance Contracts, the expected closing of the transaction involving HSBC Bank Canada, including plans for the combination of the Issuer's operations with HSBC Bank Canada and the financial, operational and capital impacts of the transaction, the expected closing of the transaction involving the U.K. branch of RBC Investor Services Trust and the RBC Investor Services business in Jersey, the expected impact of the Federal Deposit Insurance Corporation's special assessment, the Strategic priorities and Outlook sections for each of the Issuer's business segments as set out in the Issuer's 2023 Annual Report (as defined in the section entitled "Documents Incorporated by Reference"), the risk environment including the Issuer's credit risk, market risk, liquidity and funding risk as well as the effectiveness of the Issuer's risk monitoring, the Issuer's climate- and sustainability-related beliefs, targets and goals (including the Issuer's net-zero and sustainable finance commitments) and related legal and regulatory developments, and includes statements made by the Issuer's President and Chief Executive Officer and other members of the Issuer's management. The forwardlooking statements contained in this Base Prospectus represent the views of the Issuer's management and are presented for the purpose of assisting the holders and potential purchasers of the Notes issued by the Issuer and financial analysts in understanding the Issuer's financial position and results of operations as at and for the periods ended on the dates presented, as well as the Issuer's financial performance objectives, vision, strategic goals and priorities and anticipated financial performance, and may not be appropriate for other purposes. Forward-looking statements are typically identified by words such as "believe", "expect", "suggest", "seek", "foresee", "forecast", "schedule", "anticipate", "intend", "estimate", "goal", "commit", "target", "objective", "plan", "outlook", "timeline" and "project" and similar expressions of future or conditional verbs such as "will", "may", "might", "should", "could", "can" or "would" or negative or grammatical variations thereof. By their very nature, forward-looking statements require the Issuer to make assumptions and are subject to inherent risks and uncertainties, both general and specific in nature, which give rise to the possibility that the Issuer's predictions, forecasts, projections, expectations or conclusions will not prove to be accurate, that the Issuer's assumptions may not be correct, that the Issuer's financial performance, environmental & social or other objectives, vision and strategic goals will not be achieved, and that the Issuer's actual results may differ materially from such predictions, forecasts, projections, expectations or conclusions,

The Issuer cautions readers not to place undue reliance on the Issuer's forward-looking statements as a number of risk factors could cause the Issuer's actual results to differ materially from the expectations expressed in such forward-looking statements. These factors - many of which are beyond the Issuer's control and the effects of which can be difficult to predict - include, but are not limited to: credit, market, liquidity and funding, insurance, operational, regulatory compliance (which could lead to the Issuer being subject to various legal and regulatory proceedings, the potential outcome of which could include regulatory restrictions, penalties and fines), strategic, reputation, legal and regulatory environment, competitive, model, systemic risks and other risks discussed in the risk sections of the Issuer's 2023 Annual Report and incorporated by reference herein; including business and economic conditions in the geographic regions in which the Issuer operates. Canadian housing and household indebtedness, information technology, cyber and third-party risks, geopolitical uncertainty, environmental and social risk (including climate change), digital disruption and innovation, privacy and data related risks, regulatory changes, culture and conduct risks, the effects of changes in government fiscal, monetary and other policies, tax risk and transparency, and the Issuer's ability to anticipate and successfully manage risks arising from all of the foregoing factors. Additional factors that could cause actual results to differ materially from the expectations in such forward-looking statements can be found in the risk sections of the Issuer's 2023 MD&A contained in the Issuer's 2023 Annual Report and incorporated by reference herein, as may be updated by subsequent quarterly reports.

The Issuer cautions that the foregoing list of risk factors is not exhaustive and other factors could also adversely affect the Issuer's results. When relying on the Issuer's forward-looking statements to make decisions with respect to the Issuer, investors and others should carefully consider the foregoing factors and

other uncertainties and potential events, as well as the inherent uncertainty of forward-looking statements. Material economic assumptions underlying the forward-looking statements contained in this Base Prospectus and in the documents incorporated by reference herein are set out in the Economic, market and regulatory review and outlook section and for each business segment under the Strategic priorities and Outlook sections of the Issuer's 2023 MD&A contained in its 2023 Annual Report, which sections are incorporated by reference herein, as may be updated by subsequent quarterly reports. Except as required by law, none of the Issuer, any Dealer or any other person undertakes to update any forward-looking statement, whether written or oral, that may be made from time to time by or on behalf of the Issuer.

Additional information about these and other factors can be found in the risk sections of the Issuer's 2023 MD&A contained in its 2023 Annual Report, which sections are incorporated by reference herein, as may be updated by subsequent quarterly reports.

RISK FACTORS

The current risk factors under the section entitled "Risks relating to the Issuer" in the Registration Document, which Registration Document is incorporated by reference in the Original Base Prospectus, are deleted and replaced by the risks relating to the Issuer set out below. For the avoidance of doubt, all revisions to the risk factors noted herein are only for the purposes of the Base Prospectus and do not constitute a supplement to the Registration Document itself.

"Prospective investors should consider the following risks to which the Issuer's businesses are exposed.

1. Top and emerging risks

An important component of the Issuer's risk management approach is to ensure that top and emerging risks, as they evolve, are identified, managed, and incorporated into the Issuer's existing risk management assessment, measurement, monitoring and escalation processes and addressed in the Issuer's risk frameworks and policies. These practices are intended to ensure a forward-looking risk assessment is maintained by management in the course of business development and as part of the execution of ongoing risk oversight responsibilities. Top and emerging risks are discussed by the Issuer's senior management and the Board on a regular basis. The Issuer has developed supplementary internal guidance to support enterprise-wide identification and assessment of all material risks, including those that are not readily apparent.

Top and emerging risks encompass those that could materially impact the Issuer's financial results, financial and operational resilience, reputation, business model or strategy, as well as those that may materially impact the Issuer as the risks evolve.

The table below sets out the risk factors that the Issuer currently considers its top and emerging risks, but it should be highlighted that the risks set out in these tables are not exhaustive and investors should consider all the risk factors disclosed in this Risk Factors section.

Top & emerging risks	Description
1.1 Business and	The Issuer's financial results are affected to varying degrees by the general
economic conditions	business and economic conditions in the geographic regions in which the
	Issuer operates. These conditions may include factors such as: economic

growth or contraction trends, consumer saving and spending habits, and corporate borrowing and repayment consumer patterns. unemployment rates, the differing economic trajectories among nations across the globe, global tensions and geopolitical uncertainty; the level of business investment and overall business sentiment; trade; the emergence of a new outbreak of a pandemic or other health crisis; the level of government spending as well as fiscal and monetary policy; the level of activity and volatility of the financial markets; disruptions to energy and other commodity markets; competitiveness; supply chain challenges and labour shortages; the evolution of elevated inflationary pressures; possible stagflation or deflation, monetary policies that are adopted by the Bank of Canada, the Federal Reserve in the U.S., the European Central Bank in the European Union, the Bank of England in the U.K. and monetary authorities in other jurisdictions in which the Issuer operates, and the fiscal policies of the governments of Canada, the U.S., Europe and such other jurisdictions. Such policies can also adversely affect the Issuer's clients and counterparties in Canada, the U.S. and internationally, which may increase the risk of default by such clients and counterparties.

Moreover, interest rate changes and actions taken by central banks to manage inflation or the broader economy have implications for the Issuer. The Issuer's financial results are sensitive to changes in interest rates, as described in the "Systemic Risk" section below.

For example, a slowdown in economic growth or an economic downturn could adversely impact employment rates and household incomes, consumer spending, housing prices, corporate earnings and business investment, and could adversely affect the Issuer's business, including, but not limited to, the demand for its loan and other products, and result in lower earnings, and higher credit losses. In addition to risks arising from monetary policy tightening, risks are also emerging around how governments may continue to seek to recoup pandemic-related support, or any new support provided to deal with emerging economic challenges. This may include, for example, changes to tax policy to address fiscal capacity concerns and to balance budgets in the future.

There are also emerging risks related to wealth and income inequality, as well as changing demographics and immigration, which could impact the labour market, the housing market, inflation, demand and consumer trends, and potentially have broader societal and government policy implications.

1.2 Canadian housing and household indebtedness

Canadian housing and household indebtedness risks remain heightened in the current interest rate environment. Concerns around elevated levels of Canadian household debt, which accelerated during the COVID-19 pandemic, could escalate if interest rates remain higher for longer, if the cost of living increases further, or if job losses increase significantly, potentially resulting in, among other things, higher credit losses. Moreover, continued interest rate increases or slowing economic growth could adversely impact housing market activity and housing prices, which could push loan-to-value ratios higher and further increase credit losses.

While real estate rental activity has rebounded in certain markets, challenging affordability conditions, supply constraints, elevated borrowing and construction costs may have an adverse impact on future real estate investment and demand. As at October 31, 2023, the Issuer's retail credit risk exposure, which includes residential mortgages, home equity lines of credit, credit cards, unsecured lines of credit and overdraft protection products, was C\$781,888 million reflecting exposure at default.

If this risk is not properly managed, it may have a negative impact on the Issuer's financial performance, condition and prospects.

1.3 Information technology, cyber and third-party risks

Information technology risk, cyber risks and third-party risk remain top risks, not only for the financial services sector, but for other industries worldwide. Geopolitical tensions have increased the risk of nation state actors attacking critical infrastructure, including banks and critical third parties (e.g., utilities, telecom providers, etc.).

Information technology risk is the risk associated with the use, ownership, operation and adoption of information systems that can result in business interruptions, client service disruptions and loss of confidential information causing financial loss, reputational damage, and regulatory fines and pensalties.

Cybersecurity risk is the risk to the Issuer associated with cyberattacks initiatied to disrupt or disable its operations or to expose or damage data. The Issuer continues to be subject to heightened inherent risk of cyberattacks, data breaches, cyber extortion and similar compromises, due to: (i) the size, scale, and global nature of its operations; (ii) its heavy reliance on the internet to conduct day-to-day business activities; (iii) its intricate technological infrastructure; and (iv) its reliance on third-party service providers.

Third-party risk is the risk or failure to effectively manage third parties which may expose us to service disruptions, regulatory action, financial loss, litigation or reputational damage. The Issuer's exposure to information technology, cyber and third-party risks increases as it continues to partner with third-party service providers and adopt new business models and technologies (e.g., cloud computing, Artificial Intelligence ("AI") and machine learning). Threat actors gravitate towards vulnerabilities in an

ecosystem, and the weakest link in the supply chain can be a supplier or third-party service provider that may not have sufficiently robust controls. Other key drivers of third-party risk include global economic pressures related to inflation, and concentration of suppliers and fourth parties (i.e. vendors of our third-party providers) within the broader supply chain. Third-party providers critical to the Issuer's operations are actively monitored for impacts on their ability to delvier services to the Issuer, including impacts resulting from fourth parties. On April 24, 2023, OSFI released its final Guideline B-10 — Third-Party Risk Management, which sets out expectations for managing risks associated with third-party arrangements for FRFIs. This guideline will be effective on May 1, 2024. The Issuer has assessed the requirements and does not anticipate any issues in complying with the requirements by the effective date.

Ransomware threats are growing in sophistication and being used to launch major supply chain attacks. Additionally, clients' use of personal devices can create further avenues for potential cyber-related incidents, as the Issuer has little or no control over the safety of these devices. Resulting implications could include business interruptions, client service disruptions, financial loss, theft of intellectual property and confidential information, litigation, enhanced regulatory attention and penalties, as well as reputational damage. Furthermore, the adoption of emerging technologies, such as cloud computing, AI, including generative AI, and robotics, call for continued focus and investment to manage risks effectively.

Not managing these risks may have an adverse impact on the Issuer's financial performance and condition.

1.4 Geopolitical uncertainty

In 2023, the Russia-Ukraine conflict continued to produce turmoil in the geopolitical landscape, with ongoing impacts to the global economy and markets. Domestic disturbances in Russia may also signal weakening internal stability and growing tail risks associated with Russia-West tensions. The duration and path of the conflict remains uncertain, and could continue to exacerbate global tensions, energy and other commodity shortages, supply chain disruptions, inflationary pressures, weakening sentiment and growth prospects, market volatility, cyberattacks, and the proliferation of sanctions and trade measures. In particular, Europe continues to face uncertainty given its trade relationships with impacted regions and its weakening economic prospects.

Tensions remain elevated between China and the U.S. and its allies over a number of issues, including trade, technology, human rights, Taiwan, Hong Kong and Macau. Moreover, these trade tensions produce additional vulnerabilities to the Canadian economy given the country's trading relationship with the U.S. and China, Canada's two largest trading partners. Tensions between China and its neighbours over territorial claims, and the prospect of closer relations between China and Russia, as well as closer relations between these two countries and Iran and North Korea, add further global and economic uncertainty.

Geopolitical tensions in the Middle East and other regions could also add to economic and market uncertainties. Should the war between Israel and Hamas broaden or escalate regionally, this may destabilize global security, markets, and economic growth, along with key commodity markets. In addition, an uncertain geopolitical or economic environment could lead to increases in polarization, social unrest, or terrorism, each of which could have direct or indirect impacts to the Issuer.

More broadly, the future of global trade remains uncertain, as countries look to decrease reliance on the global supply chain and nations with differing values. Increased protectionism and economic nationalism could reshape global alliances and financial systems as the supply of critical goods of economic and national importance (e.g., energy, critical minerals, semiconductors) remains one of the top priorities of governments. The Issuer will continue to monitor these developments and others, and will assess the implications they have on it. Failure to properly manage this risk may adversely impact the Issuer's financial performance, position and prospects.

1.5 Environmental and social risk (including climate change)

Environmental and Social ("**E&S**") risk is the potential for an E&S issue associated with the Issuer, a client, transaction, product, supplier or activity, to have a negative impact on the Issuer, including its financial position, operations, legal and regulatory compliance, or reputation. E&S risks may be a result of the manner in which the Issuer, a supplier or a client manages E&S issues or relationships with stakeholders and communities.

E&S issues include, but are not limited to, site contamination, waste management, land and resource use, biodiversity, water quality and availability, climate change, environmental regulation, human rights (including, but not limited to social and racial inequality and Indigenous Peoples' rights), and community engagement.

The Issuer, like other organizations, is subject to increased regulatory requirements and stakeholder expectations to address social and racial inequality and other human rights issues.

Risks associated with climate change are evolving as it relates to the global transition to a net-zero economy and physical climate risks (e.g., extreme weather events and chronic shifts in climate). Both the Issuer and its clients may be exposed to climate-related transition risk, including through emerging regulatory and legal requirements, changing business and consumer sentiment towards products and services, technological developments, and changes in stakeholder expectations. Additionally, the Issuer and its clients may be vulnerable to climate-related physical risk through disruptions to operations and services.

E&S risks, including climate change, are each unique and transverse risks, and impact all of the Issuer's principal risk types in different ways and to

varying degrees, including but not limited to strategic, operational, credit, reputation, legal and regulatory environment, and regulatory compliance risks. If not managed effectively, these risks could lead to negative reputational and financial impacts.

The Issuer is a participant or signatory to various industry principles and initiatives that are designed to help mitigate E&S risk within its business activities or advance responsible business practices. The Issuer may be exposed to legal, regulatory or reputation risk in the event that it does not fully implement these frameworks or meet these commitments, goals or targets, either as a result of its own actions or due to external factors. More specifically, the Issuer's ability to achieve its climate and sustainable finance-related commitments, goals and targets will depend on the collective efforts and actions across a wide range of stakeholders outside of its control, and there can be no assurance that they will be achieved.

1.6 Digital disruption and innovation

As the demand for digital banking services grow, the need to meet the rapidly evolving needs of clients and compete with traditional and non-traditional competitors has increased the Issuer's strategic and reputation risks. Additional risks continue to emerge as demographic trends, evolving client expectations, the increased power to analyze data and the emergence of disruptors are creating competitive pressures across a number of sectors. Moreover, established technology companies, new competitors, and regulatory changes continue to foster new business models that are challenging or could challenge traditional banks and financial products. Finally, while the adoption of new technologies, such as AI (including generative AI) and machine learning presents opportunities for the Issuer, it is resulting or could result in new and complex strategic, operational, regulatory, compliance and reputation risks that would need to be managed effectively and, if not, may adversely impact its financial performance and condition.

1.7 Privacy and data related risks

The protection and responsible use of personal information are critical to maintaining the Issuer's clients' trust. Privacy risk is defined as the risk of improper creation or collection, use, disclosure, retention or destruction of personal information ("PI") that identifies an individual of can be reasonably used to identify an individual. PI includes the personal information entrusted to the Issuer by its clients and employees. Privacy risk includes the risk of failure to safeguard PI against unauthorized access or use. In addition, the management and governance of the Issuer's data also remains a top risk given the high value attributed to its data for the insights it can generate for clients and communities. Data management risk is the risk of failing to manage information appropriately throughout its lifecycle due to inadequate processes and controls, resulting in legal or regulatory consequences, reputational damage or financial loss.

Resulting implications from failing to manage data and privacy risks could include financial loss, theft of intellectual property and/or confidential information, litigation, enhanced regulatory attention and penalties, as well

as reputational damage. Effective privacy and information management practices continue to grow in importance, as demonstrated by the continued development of complex regulations in the jurisdictions in which the Issuer operates. Privacy and data related risks have also heightened as a result of the evolving threat landscape, and associated data breach risks.

1.8 Regulatory changes

The ongoing introduction of new or revised regulations requires enhanced focus across the organization on meeting additional regulatory requirements across the multiple jurisdictions in which the Issuer operates. See business segment results on pages 32 to 57 of the 2023 MD&A incorporated by reference in the Base Prospectus for information on the Issuer's business segments and the jurisdictions in which it operates. Financial and other reforms that have been implemented or are being implemented, across multiple jurisdictions, such as digital, data and technology reforms, cyber security and anti-money laundering regulations, interest rate benchmark and payments reform, as well as privacy, climate, sustainability and consumer protection regulatory initiatives, continue to impact the Issuer's operations and strategies and may negatively impact its financial performance, condition and prospects.

1.9 Culture and conduct risks

The Issuer's purpose, values and risk principles are key dimensions of its culture. The Issuer demonstrates its culture through its conduct – the behaviours, decisions and actions of the organization and its employees. Culture and conduct risks are considered top risks for the financial services industry due to the impact the Issuer's choices, behaviours, and overall risk governance can have on outcomes for its clients and other stakeholders. The Issuer embeds client considerations into its decision-making processes and continues to focus on the fair treatment of clients which also aligns with regulatory direction. The Issuer seeks to be responsive to evolving employee needs while expecting employees to always act with integrity.

Regulators continue to focus on conduct risks and heightened expectations generally from regulators could lead to investigations, remediation requirements, higher compliance costs and enforcement actions and fines, and potential criminal prosecutions or imposition of sanctions, which may involve prohibitions or restictions on some of the Issuer's activities. While the Issuer takes steps to continue to strengthen its conduct practices and prevent and detect risk outcomes which could potentially harm clients, employees or the integrity of the markets, such outcomes may not always be prevented or detected and if not, may negatively impact its financial position and performance as well as its prospects.

2. Transactional/Positional risks

2.1 Credit risk

Credit risk is the risk of loss associated with an obligor's potential inability or unwillingness to fulfil its contractual obligations on a timely basis and may arise directly from the risk of default of a primary obligor of the Issuer (e.g., issuer, debtor, counterparty, borrower or policyholder), indirectly from a secondary obligor of the Issuer (e.g., guarantor or reinsurer), and/or through off-balance sheet exposures, contingent credit risk, associated credit risk and/or transactional risk. Credit risk includes counterparty credit risk arising from both trading and non-trading activities. Exposure to credit risk may occur any time funds are extended, committed or invested through an actual or implied contractual agreement.

Credit risk is inherent in a wide range of the Issuer's businesses. This includes lending to businesses, sovereigns, public sector entities, banks and other financial institutions, as well as certain high net worth individuals, which comprise the Issuer's wholesale portfolio and residential mortgages, personal loans, credit cards, and small business loans, which comprise the Issuer's retail portfolio.

The Issuer's gross credit exposure includes lending-related and other credit risk and trading-related credit risk. Lending-related and other credit risk includes: loans and acceptances outstanding, undrawn commitments, and other exposures, including contingent liabilities such as letters of credit and guarantees, debt securities carried at fair value through other comprehensive income ("FVOCI") or amortized cost and deposits with financial institutions. Trading-related credit risk includes: Repo-style transactions, which include repurchase and reverse repurchase agreements and securities lending and borrowing transactions, and derivative amounts. The Issuer's gross credit risk exposure as at October 31, 2023 was C\$1,973,466 million. See the table "Credit Risk exposure by portfolio, sector and geography" on page 76 of the 2023 MD&A incorporated by reference in the Base Prospectus for further information.

Credit risk also includes (i) counterparty credit risk; and (ii) wrong-way risk. Counterparty credit risk is the risk that a party with whom the Issuer has entered into a financial or non-financial contract will fail to fulfil its contractual agreement and default on its obligation. It incorporates not only the contract's current value, but also considers how that value can move as market conditions change. Counterparty credit risk usually arises from trading-related derivative and repo-style transactions. Derivative transactions include forwards, futures, swaps and options, and can have underlying references that are either financial (e.g., interest rate, foreign exchange, credit or equity) or non-financial (e.g., precious metal and commodities). For more information on derivatives instruments and credit risk mitigation, see page 74 and Note 9 of the 2023 Audited Consolidated Financial Statements incorporated by reference into the Base Prospectus.

Wrong-way risk is the risk that exposure to a counterparty is adversely correlated with the credit quality of that counterparty. There are two types of wrong-way risk: (i) specific wrong-way risk, which exists when the Issuer's exposure to a particular counterparty is positively correlated with the probability of default of the counterparty due to the nature of the Issuer's transactions with them (e.g., loans collateralized by shares or debt issued by the counterparty or a related party); and (ii) general wrong-way risk, which exists when there is a positive correlation between the probability of default of counterparties and general macroeconomic or market factors. General wrong-way risk can arise in various circumstances, depending on the transaction, collateral type, and the nature of the counterparty.

Geographically, as at October 31, 2023, Canada represented approximately 59 per cent. of the Issuer's credit risk exposure while the U.S. represented 27 per cent., Europe 7 per cent. and the other international regions 6 per cent. Accordingly, deterioration in general business and economic conditions in Canada and the U.S.

could adversely affect the credit quality of the Issuer's borrowers and counterparties and could thus affect the value of the Issuer's assets and result in an increase in credit losses.

The Issuer has put in place specific frameworks to manage credit risk. See pages 71 to 81 of the 2023 MD&A incorporated by reference in the Base Prospectus for more information. Notwithstanding such frameworks, the Issuer recorded provisions for credit losses ("PCL") to recognize estimated credit losses on all financial assets, except for financial assets classified or designated as fair value through profit or loss ("FVTPL") and equity securities designated as FVOCI, which are not subject to impairment assessment. For the year ended October 31, 2023, the Issuer's total PCL was C\$2,468 million. See the Credit quality performance section on page 80 of the 2023 MD&A incorporated by reference in the Base Prospectus.

Failure to effectively manage credit risk may have an adverse impact on the Issuer's financial condition and performance.

2.2 Market risk

Market risk is defined to be the impact of market factors and prices upon the financial condition of the Issuer. This includes potential financial gains or losses due to changes in market determined variables such as interest rates, credit spreads, equity prices, commodity prices, foreign exchange rates and implied volatilities.

The Issuer has adopted specific frameworks to manage market risk as described on pages 81 to of 86 the 2023 MD&A incorporated by reference in the Base Prospectus. Despite these frameworks, the Issuer remains exposed to the risk of loss as a result of market risk which may negatively impact its financial performance and condition.

The measures of financial condition impacted by market risk are as follows:

- 1. Positions whose revaluation gains and losses are reported in revenue, which includes:
 - a) Changes in the fair value of instruments classified or designated as FVTPL, and
 - b) Hedge ineffectiveness.
- 2. Common Equity Tier 1 ("CET1") capital, which includes:
 - a) All of the above, plus
 - b) Changes in the fair value of FVOCI securities where revaluation gains and losses are reported as other comprehensive income ("OCI"),
 - c) Changes in the Canadian dollar value of investments in foreign subsidiaries, net of hedges, due to foreign exchange translation, and
 - d) Changes in the fair value of employee benefit plan deficits.
- CET1 ratio, which includes:
 - a) All of the above, plus
 - b) Changes in Risk-weighted assets ("**RWA**") resulting from changes in traded market risk factors, and

- c) Changes in the Canadian dollar value of RWA due to foreign exchange translation.
- 4. The economic value of the Issuer, which includes:
 - a) Points 1 and 2 above, plus
 - b) Changes in the economic value of other non-trading positions, net interest income, and fee based income, as a result of changes in market risk factors.

2.2.1 The key measures of market risk are as follows:

(a) FVTPL positions

FVTPL is an accounting concept which indicates that the assets and liabilities are measured at fair value on the balance sheet. The measurement is generally used for financial instruments that are part of the Issuer's trading activities (purchased with intent to sell or repurchase) and are classified as FVTPL, but can be elected for financial assets if it eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities, or recognizing related gains and losses on a different basis (an accounting mismatch).

The fair value option can be elected for financial liabilities if: (i) the election eliminates an accounting mismatch; (ii) the financial liability is part of a portfolio that is managed on a fair value basis, in accordance with a documented risk management or investment strategy; or (iii) there is an embedded derivative in the financial or non-financial host contract and the derivative is not closely related to the host contract. These instruments cannot be reclassified out of the FVTPL category while they are held or issued (i.e. designated as FVTPL). Any loss or gain in the fair value of these instruments between quarterly balance sheet dates due to changes in market prices and rates are accounted for as losses or gains, and so directly impact the Issuer's financial performance and condition. Financial liabilities designated as FVTPL are recorded at fair value and fair value changes attributable to changes in the Issuer's own credit risk are recorded in OCI. See "Fair value of financial instruments" on pages 118 to 119 and "Securities" on page 147 of the 2023 Annual Report incorporated by reference in the Base Prospectus for more information on how fair value is determined.

As an element of the Enterprise Risk Appetite Framework, the Board approves the Issuer's overall market risk constraints. Group Risk Management ("GRM") creates and manages the control structure for FVTPL positions which are designed to ensure that business is conducted on a basis consistent with Board requirements. The market and counterparty risk function within GRM is responsible for creating and managing the controls and governance procedures that are designed to ensure that risk taken is consistent with risk appetite constraints set by the Board. These controls include limits on probabilistic measures of potential loss such as VaR and Trading VaR as defined below:

"VaR" is a statistical measure of potential loss for a financial portfolio computed at a given level of confidence and over a defined holding period. The Issuer measures VaR at the 99th percentile confidence level for price movements over a one-day holding period using historic simulation of the last two years of equally weighted historic market data. These calculations are updated daily with current risk positions, with the exception of certain less material positions that are not actively traded and are updated on at least a monthly basis.

"Trading VaR" captures potential loss for the Issuer's trading portdolio that excludes the impacts of non-trading FVTPL positions such as loan underwriting commitments. Total VaR captures potential loss for all positions classified as FVTPL.

Average market risk VaR and Trading VaR for the year ended October 31, 2023 was C\$51 million (down from C\$53 million for the year ended October 31, 2022) and C\$25 million (down from C\$30 million for the year ended October 31, 2022), respectively. See the table under "Market risk measures — FVTPL positions" on page 82 of the 2023 MD&A incorporated by reference in the Base Prospectus for more information on the quantitative impact of market risk on FVTPL positions for the year ended October 31, 2023.

(b) Interest Rate Risk in the Banking Book ("IRRBB") positions

IRRBB activity arises primarily from traditional customer-originated banking products such as deposits and loans, and includes related hedges as well as the interest rate risk from securities held for liquidity management purposes. Factors contributing to IRRBB include mismatches between asset and liability repricing dates, relative changes in asset and liability rates in response to market rate scenarios, and other product features affecting the expected timing of cash flows, such as options to pre-pay loans or redeem term deposits prior to contractual maturity. IRRBB sensitivities are regularly measured and reported, and subject to limits and controls with independent oversight from GRM.

To monitor and control IRRBB, the Issuer assesses two primary metrics, Net Interest Income ("NII") risk and Economic Value of Equity ("EVE") risk, under a range of market shocks, scenarios, and time horizons. Market scenarios include currency-specific parallel and non-parallel yield curve changes, interest rate volatility shocks, and interest rate shock scenarios prescribed by regulators. The table on page 84 of the 2023 MD&A shows the potential before-tax impact of an immediate and sustained 100 basis points ("bps") increase or decrease in interest rates on projected 12-month NII and EVE assuming no subsequent hedging. Rate floors are applied within the declining rates scenarios which prevent EVE valuation and NII simulation rate levels from falling below a minimum average level of negative 25 bps across major currencies. Interest rate risk measures are based on current on and off-balance sheet positions which can change over time in response to business activity and management actions.

As at October 31, 2023, an immediate and sustained -100 bps shock would have had a negative impact to the Issuer's NII of C\$751 million. An immediate and sustained +100 bps shock at the end of October 31, 2023 would have had a negative impact to the Issuer's EVE of C\$1,552 million.

(c) Investment securities carried at FVOCI

The Issuer held \$128 billion of investment securities carried at FVOCI as at October 31, 2023, compared to \$93 billion at the end of the prior year. The Issuer holds debt securities carried at FVOCI primarily as investments, as well as to manage liquidity risk and hedge interest rate risk in its non-trading banking balance sheet. As at October 31, 2023, the Issuer's portfolio of investment securities carried at FVOCI is interest rate sensitive and would impact OCI by a pre-tax change in value of \$5 million as measured by the change in the value of the securities for a one basis point parallel increase in yields. The portfolio also exposes the Issuer to credit spread risk of a pre-tax change in value of \$28 million, as measured by the change in value for a one basis point widening of credit spreads. The value of the investment securities carried at FVOCI included in the Issuer's IRRBB measures as at October 31, 2023 was \$125 billion. The Issuer's investment securities carried at FVOCI also include equity exposures of \$1 billion as at October 31, 2023, compared to \$1 billion at the end of the prior year.

(d) Non-trading foreign exchange rate risk

Foreign exchange rate risk is the potential adverse impact on earnings and economic value due to changes in foreign currency rates. The Issuer's revenue, expenses and income denominated in currencies other than the Canadian dollar are subject to fluctuations as a result of changes in the value of the average Canadian

dollar relative to the average value of those currencies. The Issuer's most significant exposure is to the U.S. dollar, due to the Issuer's operations in the U.S. and other activities conducted in U.S. dollars. The Issuer's other significant exposure is to the British pound due to the Issuer's activities conducted internationally in this currency. A strengthening or weakening of the Canadian dollar compared to the U.S. dollar and British pound could reduce or increase, as applicable, the translated value of the Issuer's foreign currency denominated revenue, expenses and earnings and could have a significant effect on the results of the Issuer's operations. The Issuer is also exposed to foreign exchange rate risk arising from its investments in foreign operations. For unhedged equity investments, when the Canadian dollar appreciates against other currencies, the unrealized translation losses on net foreign investments decreases the Issuer's shareholder equity through the other components of equity and decreases the translated value of the RWA of the foreign currency-denominated asset. The reverse is true when the Canadian dollar depreciates against other currencies. Consequently, the Issuer considers these impacts in selecting an appropriate level of its investments in foreign operations to be hedged.

2.3 Liquidity and funding risk

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

Core funding, comprising capital, longer-term wholesale liabilities and a diversified pool of personal as well as the stable portion of the Issuer's commercial and institutional deposits, is the foundation of the Issuer's structural liquidity position. The Issuer's ability to access unsecured funding markets and to engage in certain collateralized business activities on a cost-effective basis are largely dependent on maintaining competitive credit ratings. Credit ratings and outlooks provided by rating agencies reflect their views and methodologies. Ratings are subject to change, based on a number of factors including, but not limited to, the Issuer's financial strength, competitive position, liquidity and other factors not completely within the Issuer's control. A lowering of the Issuer's credit ratings may have potentially adverse consequences for the Issuer's funding capacity or access to the capital markets, may affect the Issuer's ability, and the cost, to enter into normal course derivative or hedging transactions and may require the Issuer to post additional collateral under certain contracts, any of which may have an adverse effect on its results of operations and financial condition.

The Liquidity Coverage Ratio ("LCR") is a Basel III metric that measures the sufficiency of high-quality liquid assets ("HQLA") available to meet liquidity needs over a 30-day period in an acute stress scenario. The Basel Committee on Banking Supervision ("BCBS") and Office of the Superintendent of Financial Institutions ("OSFI") regulatory minimum coverage level for LCR is 100per cent. The Issuer's average LCR for the quarter ended October 31, 2023 was 131per cent., which translates into a surplus of approximately C\$91 billion. Net Stable Funding Ratio ("NSFR") is a Basel III metric that measures the sufficiency of available stable funding relative to the amount of required stable funding. The BCBS and OSFI regulatory minimum coverage level for NSFR is 100per cent. The Issuer's NSFR as at October 31, 2023 was 113per cent., which translates into a surplus of approximately C\$109 billion. Despite the Issuer's liquidity risk management policy described on pages 86 to 99 of the 2023 MD&A incorporated by reference into the Base Prospectus, any significant deterioration in its liquidity position may lead to an increase in funding costs or constrain the volume of new lending. These factors may adversely impact the Issuer's financial performance and position.

2.4 Insurance risk

Insurance risk refers to the potential financial loss to the Issuer that may arise where the amount, timing and/or frequency of benefit and/or premium payments under insurance or reinsurance contracts are different than expected. Insurance risk is distinct from those risks covered by other parts of the Issuer's risk

management framework (e.g., credit, market and operational risk) where those risks are ancillary to, or accompany, the risk transfer. The Issuer's five insurance sub-risks are: morbidity, mortality, longevity, policyholder behavior (lapse), and travel risk. Insurance risk may negatively impact the Issuer's financial performance and condition. See a description of the Issuer's insurance business on pages 49 to 52 of the 2023 MD&A incorporated by reference into the Base Prospectus.

Operational risk

Operational risk is the risk of loss or harm resulting from people, inadequate or failed internal processes, controls and systems or from external events. Operational risk is inherent in all of the Issuer's activities and third-party activities and failure to manage operational risk can result in direct or indirect financial loss, reputational impact or regulatory scrutiny and proceedings in the various jurisdictions where the Issuer operates.

Notwithstanding anything in this risk factor, this risk factor should not be taken as implying that the Issuer will be unable to comply with its obligations as a company with securities admitted to the Official List of the UK Financial Conduct Authority (the "FCA") or as a supervised firm regulated by the FCA or the UK Prudential Regulation Authority (the "PRA").

The Issuer's operations expose it to many different operational risks, which may adversely affect its businesses and financial results. In addition to information technology and cybersecurity risk, information management and privacy risk, and third-party risk, which are also discussed above in "1. Top and emerging risks", the Issuer's results could also be adversely affected by risks associated with money laundering and terrorist financing and business continuity.

Money laundering and terrorist financing risk is the risk that the Issuer's products, services and delivery channels are misused to facilitate the laundering of proceeds of crime, financing of terrorist activity, bribery, corruption and other activities that may violate applicable economic sanctions (collectively, "Financial Crimes"). The Issuer maintains an enterprise-wide program designed to deter, detect and report suspected money laundering and terrorist financing or suspicious activities across its organization, while seeking to ensure compliance with the laws and regulations of the various jurisdictions in which the Issuer operates. Despite the Issuer's compliance programmes, non-compliance may still occur, leading to enforcement action, criminal prosecutions and reputational damage which could negatively impact its financial performance and condition.

Business continuity risk is the risk of being unable to maintain, continue or restore essential business operations during and/or after an event that prevents the Issuer from conducting business in the normal course. Exposure to disruptive operational events interrupts the continuity of the Issuer's business operations and could negatively impact the Issuer's financial results, reputation, client outcomes and/or result in harm to the Issuer's employees. These operational events could result from the impact of severe weather, outbreak of a pandemic or other health crisis, failed processes, technology failures or cyber threats.

4. Regulatory compliance risk and legal and regulatory environment

4.1 Regulatory compliance risk

Regulatory compliance risk is the risk of potential non-conformance with laws, rules, regulations and prescribed practices in any jurisdiction in which the Issuer operates. Issues regarding compliance with laws and regulations can arise in a number of areas in large complex financial institutions, such as the Issuer, and are often the result of inadequate or failed internal processes, controls, people or systems. The Issuer

currently is, and may be at any given time, subject to a number of legal and regulatory proceedings and subject to numerous governmental and regulatory examinations, investigations and other inquiries.

Laws and regulations are in place to protect the financial and other interests of the Issuer's clients, shareholders and the public. As a large-scale global financial institution, the Issuer is subject to numerous laws and extensive and evolving regulation by governmental agencies, supervisory authorities and self-regulatory organizations in Canada, the U.S., the U.K., Europe and other jurisdictions in which it operates. Such regulation continues to become increasingly extensive and complex. In addition, regulatory scrutiny and expectations in Canada, the U.S., the U.K., Europe and other jurisdictions for large financial institutions with respect to, among other things, governance, risk management practices and controls, and conduct, as well as the enforcement of regulatory compliance matters, has intensified. Failure to comply with these regulatory requirements and expectations or to resolve any identified deficiencies could result in increased regulatory oversight and restrictions. Resolution of such matters can also result in the payment of substantial penalties, agreements with respect to future operation of their business, actions with respect to relevant personnel, admission of wrongdoing, and guilty pleas with respect to criminal charges, which may in turn prohibit the Issuer from conducting certain types of business absent regulatory relief.

Operating in this increasingly complex regulatory environment and intense regulatory enforcement environment, the Issuer is and has been subject to a variety of legal proceedings, including civil claims and lawsuits, criminal charges, regulatory scrutiny, examinations and proceedings, investigations, audits and requests for information by various governmental regulatory agencies and law enforcement authorities in various jurisdictions (see Notes 22 and 25 of the 2023 Audited Consolidated Financial Statements, which is incorporated by reference in the Base Prospectus, for information on current legal and regulatory matters as well as tax examinations and assessments), and the Issuer anticipates that its ongoing business activities will give rise to such matters in the future. The global scope of the Issuer's operations also means that a single issue may give rise to overlapping regulatory investigations, regulatory proceedings and or civil litigation claims in different jurisdictions. The Issuer can be subject to such proceedings due to alleged violations of law or, if determined by regulators, allegedly inadequate policies, procedures, controls or remediation of deficiencies. Changes to laws, including tax laws, regulations or regulatory policies, as well as the changes in how they are interpreted, implemented or enforced, could adversely affect the Issuer, for example, by lowering barriers to entry in the businesses in which it operates, increasing its costs of compliance, or limiting its activities and ability to execute its strategic plans. In addition, the severity of the remedies sought in legal and regulatory proceedings to which the Issuer is subject have increased. Further, there is no assurance that the Issuer always will be, or be deemed to be, in compliance with laws, regulations or regulatory policies or expectations. Accordingly, it is possible that the Issuer could receive a judicial or regulatory enforcement judgment or decision that results in significant fines, damages, penalties, and other costs or injunctions, criminal convictions, or loss of licenses or registrations that would damage its reputation, and negatively impact its earnings and ability to conduct some of its businesses. The Issuer is also subject to litigation arising in the ordinary course of its business and the adverse resolution of any litigation could have a significant adverse effect on its results or could give rise to significant reputational damage, which in turn could impact its future business prospects.

The Issuer's Regulatory Compliance Management Framework outlines how it manages and mitigates the regulatory compliance risks associated with failing to comply with, or adapt to, current and changing laws and regulations in the jurisdictions in which it operates. Regulatory compliance risk includes the regulatory risks associated with Financial Crimes, privacy, market conduct, consumer protection and business conduct, as well as prudential and other generally applicable non-financial requirements. Specific compliance policies, procedures and supporting frameworks have been developed to seek to manage regulatory compliance risk.

4.2 Legal and regulatory environment

Legal and regulatory environment risk is the risk that new or modified laws and regulations, and the interpretation or application of laws and regulations, will negatively impact the way in which the Issuer operates, both in Canada and in the other jurisdictions in which it conducts business. The full impact of some of these changes on the Issuer's business will not be known until final rules are implemented and market practices have developed in response. The Issuer continues to respond to these and other developments and is working to minimize any potential adverse business or economic impact. The following provides a high-level summary of some of the key regulatory changes that have the potential to increase or decrease the Issuer's costs, impact its profitability and increase the complexity of its operations.

(i) Global uncertainty

Significant uncertainty about inflationary pressures and geopolitical tensions continues to pose risks to the global economic outlook. In October 2023, the International Monetary Fund (IMF) projected global growth of 3.0per cent. in calendar 2023 which remains unchanged from its July 2023 forecast and is up from 2.7per cent, in October 2022. The IMF projected global growth in 2024 of 2.9per cent, The global growth recovery from the COVID-19 pandemic and the Russia-Ukraine conflict remains slow and uneven, as economic activity in certain geographies has not yet returned to pre-pandemic levels, resulting in regional divergences. The resolution of the U.S. debt ceiling standoff, and decisive actions taken by global authorities to contain instability in the U.S. regional banking sector have reduced the immediate risks of financial turmoil. However, uncertainty remains regarding: interest rates being sustained at higher levels for longer; the severity and impact of central banks' monetary policy tightening as they attempt to reduce persistent levels of elevated inflation; ongoing geopolitical tensions, including those between Russia and Ukraine and the conflict in the Middle East; extreme weather-related events; and the potential re-emergence of financial sector instability as banks face regulatory reform in the U.S. While the Issuer's diversified business model, as well as the Issuer's product and geographic diversification, combined with the Issuer's sound risk management practices, continue to help mitigate the risk posed by global uncertainty and in particular its effect on the Canadian and U.S. economies, it may still have an adverse impact on the Issuer's financial performance and condition.

(ii) Environment and social-related legal and regulatory activity

Environmental and social-related regulations, frameworks, and guidance that apply to banks, insurers and asset managers continue to rapidly evolve. As such, new or heightened requirements could result in increased regulatory, compliance or other costs or higher capital requirements, and may subject the Issuer to different and potentially conflicting requirements in the various jurisdictions in which the Issuer operates. The Issuer continues to monitor the development of applicable laws in this area, including but not limited to the evolution of disclosure requirements for public issuers and climate risk management requirements for financial institutions.

In Canada, OSFI released its final Guideline B-15 – Climate Risk Management on March 7, 2023, which sets out expectations for the management and disclosure of climate-related risks for federally regulated financial institutions ("FRFIs") and aims to support FRFIs in developing greater resilience to, and management of, these risks. The first set of guidelines will be effective fiscal year-end 2024, with annual disclosures required to be made publicly available no later than 180 days after fiscal year-end. OSFI intends to review and amend the guideline as practices and standards evolve. The Issuer is currently assessing the impact of the guideline and have initiated work to meet the requirements by the effective date.

In the U.S., the Securities and Exchange Commission issued proposed rule changes on March 21, 2022, which would require many registrants to include certain climate related disclosures in their regulatory filings,

including the financial statements. The Issuer continues to monitor developments in this area. In addition, various states in the U.S. have enacted or proposed statutes or regulations addressing environmental and/or social matters. As environmental and social issues become more politicized, statutes or regulations in certain states may be interpreted to prohibit governmental entities, such as public pension funds and issuers of municipal bonds, from doing business with certain financial institutions, and political pressure may be placed upon governmental entities to not do business with certain financial institutions, based on the financial institutions' perceived positions on certain environmental and/or social matters. The Issuer continues to monitor developments in this area and assess their impacts on the Issuer's businesses.

Internationally, the International Sustainability Standards Board (the "ISSB") issued its inaugural standards on June 26, 2023, being IFRS S1 General Requirements for Disclosures of Sustainability-related Financial Information and IFRS S2 Climate-related Disclosures (collectively, the "ISSB Standards"). IFRS S1 sets out general reporting requirements for disclosing sustainability-related financial information. IFRS S2 requires an entity to disclose information about climate-related risks and opportunities and the impact on an entity's financial position, performance, cash flows, strategy and business model. The applicability of the standards and the effective date for Canadian reporting issuers is subject to adoption by Canadian regulators, and the Issuer continues to monitor communication from the Canadian Securities Administrators.

In addition, the European Union's Corporate Sustainability Reporting Directive (the "CSRD") requires reporting under the European Sustainability Reporting Standards (the "ESRS"). The ESRS, which were adopted by the European Commission on July 31, 2023, set out the requirements for companies to report on sustainability-related impacts, opportunities and risks. The Issuer is currently assessing the impact of the CSRD.

The Issuer continues to monitor trends in climate-related litigation and regulatory enforcement actions, including those involving claims of "greenwashing", which generally refer to claims that false or misleading information about an organization's products or services or operations has been conveyed to suggest that the organization is doing more to protect the environment than it is, and to assess the impact on its litigation and regulatory compliance risks.

(iii) Government of Canada Budget 2023

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

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

(iv) Interest rate benchmark reform

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

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

(v) Federal Deposit Insurance Corporation (the "FDIC") special assessment

On November 16, 2023, the FDIC Board of Directors approved the imposition of a special assessment on certain U.S. depository institutions to recover the cost associated with protecting uninsured depositors following the closures of Silicon Valley Bank and Signature Bank. The special assessment will be assessed at an annual rate of approximately 13.4 basis points of a U.S. depository institution's uninsured deposits over a specified threshold, to be collected over an anticipated eight quarterly assessment periods with the first quarterly assessment period beginning January 1, 2024. The Issuer expects to recognize a charge of approximately US\$120 million for the cost of the special assessment in the first quarter of 2024.

All the regulations noted in (i) to (v) above could increase compliance costs for the Issuer and the interpretation and interpretation or application of these regulations could negatively impact the way in which the Issuer operates and consequently negatively impact its financial performance and condition and prospects.

5. Strategic risks

5.1 Strategic risk

Strategic risk is the risk that the Issuer or particular business areas of the Issuer will make inappropriate strategic choices or will be unable to successfully implement selected strategies or achieve the expected benefits. For more information on the Issuer's strategic goals in each of its business segments, see pages 38 to 39, 43, 50 and 54 of the 2023 MD&A incorporated by reference into the Base Prospectus. Business strategy is a major driver of the Issuer's risk appetite and consequently the strategic choices the Issuer makes in terms of business mix determine how the Issuer's risk profile changes. The Issuer's ability to execute on its objectives and strategic goals will influence its financial performance. If the Issuer is unable to successfully implement selected strategies or related plans and decisions, if the Issuer makes inappropriate strategic choices or if the Issuer makes a change to its strategic goals, its financial performance and condition could be adversely affected.

5.2 Reputation risk

Reputation risk is the risk of an adverse impact on stakeholders' perception of the Issuer due to (i) perceived or actual misalignment between stakeholder perceptions of the Issuer and the actions or inactions of the Issuer, its employees, or individuals or groups affiliated with the Issuer (e.g., stakeholder perceptions of the Issuer's role as a good corporate citizen), (ii) negative or shifting public sentiment on existing, evolving, or emerging industry or global issuers, or (iii) negative outcomes relating to any risk inherent to the financial services industry, including ineffective management of these risks, or situations beyond the Issuer's control

such as external events or systemic risks. A strong and trustworthy reputation will generally strengthen the Issuer's market position, reduce the cost of capital, increase shareholder value, strengthen its resiliency, and help attract and retain top talent. Conversely, damage to the Issuer's reputation can result in reduced share price and market capitalization, increased cost of capital, loss of strategic flexibility, inability to enter or expand into markets, loss of client loyalty and business, regulatory fines and penalties, restrictive agreements with regulators or prosecutors, or criminal prosecutions. The sources of reputation risk are widespread. Reputation risk is a transverse risk which can manifest as an outcome of other risk types including but not limited to credit, regulatory, legal, operational, and environmental and social risks. The Issuer can also experience reputation risk from a failure to maintain an effective control environment, exhibit good conduct and maintain appropriate culture practices.

5.3 Competitive risk

Competitive risk is the risk of an inability to build or maintain a sustainable competitive advantage in any given market(s) and includes the potential for loss of market share due to competitors offering superior products and services. Competitive risk can arise within or outside the financial sector, from traditional or non-traditional competitors, domestically or globally. There is intense competition for clients among financial services companies. Client loyalty and retention can be influenced by several factors, including new technology used or services offered by the Issuer's competitors, relative service levels and prices, product and service attributes, reputation, actions taken by its competitors, and adherence with competition and antitrust laws. Other companies, such as insurance companies and non-financial companies, as well as new technological applications, are increasingly offering services traditionally provided by banks. This competition could also reduce the Issuer's revenue which could adversely affect its results.

6. Macroeconomic risks

6.1 Systemic Risk

Systemic risk is the risk that the financial system as a whole, or a major part of it – either in an individual country, a region or globally – is put in real and immediate danger of collapse or serious damage due to an unforeseen event causing a substantive shock to the financial system with the likelihood of material damage to the economy, and which would result in financial, reputation, legal or other risks for the Issuer.

Systemic risk is considered to be the least controllable risk facing the Issuer, leading to increased vulnerabilities as experienced during the 2008 global financial crisis and the COVID-19 pandemic. In 2023, U.S. regional bank failures highlighted the potential vulnerability of the financial system to systemic risks, particularly given tightening regulations and technology-driven increases in transaction velocity. The Issuer's ability to mitigate systemic risk when undertaking business activities is limited, other than through collaborative mechanisms between key industry participants, and, as appropriate, the public sector and regulators to reduce the frequency and impact of these risks. The two most significant measures in mitigating the impact of systemic risk are diversification and stress testing.

The Issuer's diversified business model, portfolios, products, activities and funding sources help mitigate the potential impacts from systemic risk as well as having established risk limits to ensure its portfolio is diversified, and concentration risk is reduced and remains within its risk appetite.

Stress testing involves consideration of the simultaneous movements in several risk factors. Stress testing seeks to ensure the Issuer's business strategies and capital planning are robust by measuring the potential impacts of credit, market, liquidity and operational risks on it, under adverse economic conditions. The Issuer's enterprise-wide stress testing program evaluates the potential effects of a set of specified changes

in risk factors, corresponding to exceptional but plausible adverse economic and financial market events. These stress scenarios are evaluated across the organization, and results are integrated to develop an enterprise-wide view of the impacts on the Issuer's financial results and capital requirements. For further details on the Issuer's stress testing, refer to the Enterprise risk management section on pages 66 through 71 of the Issuer's 2023 MD&A incorporated by reference into the Base Prospectus.

The Issuer's financial results are affected by the business and economic conditions in the geographic regions in which it operates. These conditions include consumer saving and spending habits as well as consumer borrowing and repayment patterns, business investment, government spending, exchange rates, sovereign debt risks, the level of activity and volatility of the capital markets, strength of the economy and inflation. Given the importance of the Issuer's Canadian and U.S. operations, an economic downturn may largely affect its personal and business lending activities and may result in higher provisions for credit losses. Deterioration and uncertainty in global capital markets could result in continued high volatility that would impact results in its Capital Markets business segment, while in the Wealth Management business segment weaker market conditions could lead to lower average fee-based client assets and transaction volumes. In addition, worsening financial and credit market conditions may adversely affect the Issuer's ability to access capital markets on favourable terms and could negatively affect its liquidity, resulting in increased funding costs and lower transaction volumes in the Issuer's Capital Markets and Wealth Management business segments.

The Issuer's financial results are also sensitive to changes in interest rates. To address persistent inflationary pressures, major central banks continued increasing benchmark interest rates during fiscal 2023 and the future path of monetary policy is uncertain. While there may be a potential benefit to the Issuer's net interest margin ("NIM"), elevated interest rates generally result in higher funding costs. If elevated interest rates are coupled with persistent inflation, it could increase market volatility and reduce asset values, and adversely impact household and corporate balance sheets. This could lead to credit deterioration and impact the Issuer's financial results, particularly in its Personal & Commercial Banking, Wealth Management, and Capital Markets businesses.

7. Overview of other risks

In addition to the risks described above, there are other risk factors described below, which may adversely affect the Issuer's businesses and financial results. The following discussion is not exhaustive as other factors could adversely affect the Issuer's results.

Tax risk and transparency

Tax risk refers to the risk of loss related to unexpected tax liabilities. The tax laws and systems that are applicable to the Issuer are complex and wide ranging. As a result, the Issuer seeks to ensure that any decisions or actions related to tax always reflect its assessment of the long-term costs and risks involved, including their impact on the Issuer's reputation and its relationship with clients, shareholders and regulators.

The Issuer's tax strategy is designed to provide transparency and support its business strategy, and is aligned with the Issuer's corporate vision and values. The Issuer seeks to maximize shareholder value by structuring its businesses in a tax-efficient manner while considering reputation risk by being in compliance with all laws and regulations. The Issuer's policy requires that it:

- Act with integrity and in a straightforward, open and honest manner in all tax matters;
- Ensure tax strategy is aligned with the Issuer's business strategy supporting only bona fide transactions with a business purpose and economic substance;

- Ensure all intercompany transactions are conducted in accordance with applicable transfer pricing requirements;
- · Ensure the Issuer's full compliance and full disclosure to tax authorities of its statutory obligations; and
- Endeavour to work with the tax authorities to build positive long-term relationships and where disputes
 occur, address them constructively.

With respect to assessing the needs of its clients, the Issuer considers a number of factors including the purpose of the transactions. The Issuer seeks to ensure that it only supports bona fide client transactions with a business purpose and economic substance. Should the Issuer become aware of client transactions that are aimed at evading their tax obligations, the Issuer will not proceed with the transactions.

Given that the Issuer operates globally, complex tax legislation and accounting principles have resulted in differing legal interpretations between the respective tax authorities the Issuer deals with and itself, and the Issuer is at risk of tax authorities disagreeing with prior positions the Issuer has taken for tax purposes. When this occurs, the Issuer is committed to an open and transparent dialogue with the tax authorities to facilitate a quick assessment and prompt resolution of the issues where possible. Failure to adequately manage tax risk and resolve issues with tax authorities in a satisfactory manner could adversely impact the Issuer's results, potentially to a material extent in a particular period, and/or significantly impact the Issuer's reputation."

SINGAPORE SELLING RESTRICTION IN ORIGINAL BASE PROSPECTUS

The first paragraph of the selling restriction relating to Singapore on pages 196 to 197 of the Original Base Prospectus is deleted and replaced with the following:

"Singapore

Unless the Final Terms (or Pricing Supplement, as the case may be) in respect of any Notes specifies "Singapore Sales to Institutional Investors and Accredited Investors only" as "Not Applicable", each Dealer will be required to acknowledge that this Base Prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each Dealer will be required to represent, warrant and agree, that it has not offered or sold any Notes or caused the Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell any Notes or cause the Notes to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this Base Prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act 2001 of Singapore, as modified or amended from time to time (the "SFA")) pursuant to Section 274 of the SFA or (ii) to an accredited investor (as defined in Section 4A of the SFA) pursuant to and in accordance with the conditions specified in Section 275 of the SFA.

If the Final Terms (or Pricing Supplement, as the case may be) in respect of any Notes specifies "Singapore Sales to Institutional Investors and Accredited Investors only" as "Not Applicable", each Dealer will be required to acknowledge that this Base Prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each Dealer will be required to represent, warrant and agree that it has not offered or sold any Notes or caused the Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell any Notes or cause the Notes to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute,

this Base Prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the SFA) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA."

By virtue of this 2nd Supplementary Prospectus, the following line item is added as a new item (vi) to "Part B – Other Information – 6 – Distribution" on page 157 in the "FORM OF FINAL TERMS OF THIS NOTES" and as a new item (xii) to "Part B – Other Information – 6 – Distribution" on page 177 in the "FORM OF PRICING SUPPLEMENT OF THE EXEMPT NOTES" of the Original Base Prospectus:

Singapore Sales to Institutional Investors and Accredited Investors only:	[Applicable] [Not Applicable]

AMENDMENT TO STATEMENT REGARDING GOVERNMENTAL, LEGAL OR ARBITRATION PROCEEDINGS

Paragraph 3 of the section entitled "**GENERAL INFORMATION**" on page 199 of the Base Prospectus is hereby deleted in its entirety and replaced with the following:

"Other than (i) the matters disclosed under the subsection entitled "Tax examinations and assessments" in Note 22 of the 2023 Audited Consolidated Financial Statements set out on page 218 of the Issuer's 2023 Annual Report and (ii) the legal and regulatory matters disclosed (with the exception of the subsection entitled "Other matters") in Note 25 of the 2023 Audited Consolidated Financial Statements set out on pages 223 and 224 of the Issuer's 2023 Annual Report and in each case incorporated by reference herein, there are no, nor have there been, any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Issuer is aware) during the twelve months prior to the date of this document which may have, or have had in the recent past, individually or in the aggregate, a significant effect on the financial position or profitability of the Issuer or of the Issuer and its subsidiaries taken as a whole."

STATEMENT OF NO SIGNIFICANT CHANGE AND NO MATERIAL ADVERSE CHANGE

Paragraph 4 under the heading "**GENERAL INFORMATION**" on page 199 of the Base Prospectus is hereby deleted in its entirety and replaced with the following:

"Since October 31, 2023, the last day of the financial period in respect of which the most recent audited consolidated financial statements of the Issuer have been published, there has been no significant change in the financial position or financial performance of the Issuer and its subsidiaries taken as a whole. Since October 31, 2023, the date of its last published audited annual consolidated financial statements, there has been no material adverse change in the prospects of the Issuer and its subsidiaries taken as a whole."