Accounting Matters and Disclosure and Internal Control

Critical Accounting Estimates

The most significant assets and liabilities for which we must make estimates include: allowance for credit losses; financial instruments measured at fair value; pension and other employee future benefits; impairment of securities; provisions for income taxes and deferred tax asset; goodwill, intangible assets; insurance-related liabilities; and provisions, including legal provisions. We make judgments in assessing 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, respectively, on pages 164 and 165 of the consolidated financial statements. Note 17 on page 184 of the consolidated financial statements discusses the judgments made in determining the fair value of financial instruments. If actual results were to differ from our estimates, the impact would be recorded in future periods. We have established detailed policies and control procedures that are intended to ensure the judgments we make in estimating these amounts are well controlled, independently reviewed and consistently applied from period to period. We believe that our estimates of the value of BMO's assets and liabilities are appropriate.

For a more detailed discussion of the use of estimates, please see Note 1 on page 148 of the consolidated financial statements.

Allowance for Credit Losses

The allowance for credit losses (ACL) consists of allowances for impaired loans, which represent estimated losses related to impaired loans in the portfolio provided for but not yet written off, and allowances for performing loans, which is 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 for performing loans is based on the requirements of IFRS, considering the guideline issued by 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 the economic scenarios described below, 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 up to 12 months of ECL is recorded. Significant increase in credit risk is based on the change in PD between the reporting date and origination. We may apply experienced credit judgment to reflect factors not captured in the results produced by the ECL models. We have controls and processes in place to govern the ECL process including judgments and assumptions used in the determination of the allowance for performing loans. These judgments and assumptions will change over time, and the impact of the change will be recorded in future periods.

In establishing our allowance for performing loans, we attach probability weightings to three economic scenarios, which are representative of our view of forecast economic conditions – a base case scenario, which in our view represents the most probable outcome, and is described below, as well as benign and adverse scenarios, all developed by our Economics group. The adverse scenario is also described below given the focus on such a scenario at this point of the economic cycle. The allowance for performing loans is sensitive to changes in both economic forecasts and the probability weight assigned to each forecast scenario. Many of the factors have a high degree of interdependency, although there is no single factor to which loan impairment allowances as a whole are sensitive.

Our base case economic forecast depicts a Canadian economy that grows by a moderate 1.7% on average over the forecast period, similar to long-run potential growth, reducing the unemployment rate slightly to 5.6% in 2020. The U.S. economy grows moderately faster than Canada, averaging 2.1% over the forecast period, due to the near-term fiscal stimulus. If we assumed a 100% base case economic forecast and included the impact of loan migration by restaging with other assumptions held constant, including the application of experienced credit judgment, the allowance for performing loans would be approximately $1,250 million as at October 31, 2018, compared with the reported allowance for performing loans of $1,473 million.

Our adverse case economic forecast depicts a typical recession in Canada and the United States occurring in the first year of our forecast horizon that involves the economy contracting approximately 3% over five quarters and the unemployment rate rising more than 3 percentage points to 9.5% in Canada and 7.0% in the U.S. This is followed by a slow recovery initially, then more moderate growth towards the end of the projection period. If we assumed a 100% adverse economic forecast and included the impact of loan migration by restaging with other assumptions held constant, including the application of experienced credit judgment, the allowance for performing loans would be approximately $2,650 million as at October 31, 2018, compared with the reported allowance for performing loans of $1,473 million. Actual results in a recession will differ, as our portfolio will change through time due to migration, growth, risk mitigation actions and other factors. In addition, our allowance will reflect the three economic scenarios used in assessing the allowance, with weightings attached to adverse and benign scenarios often unequally weighted, and those weightings will change through time.

The following table shows the key economic variables we use to estimate our allowance for performing loans during the forecast period. The values shown represent the end of period national average values for the first 12 months and then the national average for the remaining horizon. While the values disclosed below are national variables, in our underlying models we use regional variables where considered appropriate.

	Benign scenario		Base case scenario		Adverse scenario	
As at October 31, 2018	First 12 months	Remaining horizon (1)	First 12 months	Remaining horizon (1)	First 12 months	Remaining horizon (1)
Real gross domestic product growth rates (2)						
Canada	3.1%	2.4%	1.8%	1.6%	(3.2)%	0.8%
United States	2.9%	1.9%	2.4%	1.6%	(2.9)%	0.9%
Corporate BBB 10-year spread						
Canada	2.0%	2.1%	2.3%	2.3%	4.7%	3.9%
United States	1.8%	2.0%	2.2%	2.3%	4.3%	3.5%
Unemployment rates						
Canada	5.4%	5.2%	5.6%	5.6%	9.3%	9.3%
United States	3.2%	3.1%	3.6%	3.7%	6.7%	6.8%
Housing price index						
Canada (3)	2.4%	2.6%	1.4%	1.8%	(12.8)%	(3.2)%
United States (4)	5.1%	4.3%	3.6%	3.0%	(7.3)%	(1.2)%

(1) The remaining forecast period is two years.
(2) Real gross domestic product is based on year-over-year growth.
(3) In Canada, we use the HPI Benchmark Composite.
(4) In the United States, we use the National Case-Shiller House Price Index.

The ECL approach requires the recognition of credit losses based on up to 12 months of expected losses for performing loans (Stage 1) and the recognition of lifetime expected losses on performing loans that have experienced a significant increase in credit risk since origination (Stage 2). Under our current probability-weighted scenarios, if all our performing loans were in Stage 1, our models would generate an allowance for performing loans of approximately $1,000 million, compared with the reported allowance for performing loans of $1,473 million.

Our provision for credit losses in 2018 was $662 million, comprised of $700 million on impaired loans and a recovery of $38 million on performing loans. Our total allowance for performing and impaired loans at October 31, 2018, was $1,870 million. 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 on page 87, as well as in Note 4 on page 157 of the consolidated financial statements.

Financial Instruments Measured at Fair Value

BMO records trading securities, fair value through profit and loss securities, fair value through other comprehensive income securities and derivatives and certain other assets and liabilities are designated under the fair value option at fair value. Fair value represents our estimate of the amount we would receive, or would be required to pay in the case of a liability, in an orderly transaction between willing parties at the measurement date. We employ a fair value hierarchy to categorize the inputs we use in valuation techniques to measure fair value. 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 securities, derivative assets and liabilities, and liabilities recorded at fair value as at October 31, 2018, as well as a sensitivity analysis of our Level 3 financial instruments, is disclosed in Note 17 on page 184 of the consolidated financial statements.

Our valuation models use general assumptions and market data, and therefore do not reflect the specific risks and other factors that could affect a particular instrument's fair value. Valuation Product Control (VPC), a group independent of the trading lines of business, ensures that the fair values at which financial instruments are recorded are materially accurate by:

- Developing and maintaining valuation policies and procedures in accordance with regulatory requirements and IFRS;
- Establishing official rate sources for valuation of all portfolios; and
- Providing independent review of portfolios for which prices supplied by traders are used for valuation.

For instruments that are valued using models, VPC identifies situations in which valuation adjustments must be made to the model estimates in order to arrive at fair value. As a result, we incorporate certain adjustments when using internal models to establish fair values. These fair value adjustments take into account the estimated impact of credit risk, liquidity risk and other items, including closeout costs. For example, the credit risk valuation adjustment for derivative financial instruments incorporates credit risk into our determination of fair values by taking into account factors such as the counterparty's credit rating, the duration of the instrument and changes in credit spreads. We also incorporate an estimate of the implicit funding costs borne by BMO for over-the-counter derivative positions (the funding valuation adjustment).

The methodologies used for calculating these adjustments are reviewed on an ongoing basis to ensure that they remain appropriate. Significant changes in methodologies are made only when we believe that a change will result in better estimates of fair value.

The Valuation Steering Committee is BMO's senior management valuation committee. It meets at least monthly to address the more challenging material valuation issues related to BMO's portfolios, approves valuation adjustments and methodology changes, and acts as a key forum for the discussion of positions categorized as Level 3 for financial reporting purposes and their inherent uncertainty.

Valuation Adjustments

(Canadian $ in millions) As at October 31	2018	2017
Credit risk	**55**	63
Funding risk	**19**	15
Liquidity risk	**79**	33
Total	**153**	111

Valuation adjustments increased in 2018, primarily due to the increased size of the trading book.

Pension and Other Employee Future Benefits

Our pension and other employee future benefits expense is calculated by independent actuaries using assumptions determined by management. If actual experience were to differ from the assumptions used, the difference would be recognized in other comprehensive income.

Pension and other employee future benefits expense and the related obligations are sensitive to changes in discount rates. We determine discount rates at each year end for all our plans using high-quality corporate bonds with terms matching the plans' specific cash flows.

Additional information regarding our accounting for pension and other employee future benefits, including a sensitivity analysis for key assumptions, is included in Note 21 on page 194 of the consolidated financial statements.

Impairment of Securities

We have investments in associates and joint ventures, which are classified as other securities. We review other securities at each quarter-end reporting period to identify and evaluate instruments that show indications of possible impairment.

For these equity securities, a significant or prolonged decline in the fair value of a security below its 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 our accounting for debt securities measured at amortized cost or FVOCI and other securities, allowance for credit losses and the determination of fair value is included in Note 3 on page 153 and Note 17 on page 184 of the consolidated financial statements.

Income Taxes and Deferred Tax Assets

Our approach to tax is governed by our tax risk management framework, which is implemented through internal controls and processes. We actively seek to identify, evaluate, monitor and manage any tax risks that may arise to ensure our financial exposure is well understood and is within a level consistent with our objectives for the management of tax risk, as set out in our tax risk management framework. 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 change. We do not knowingly do business with customers we believe are transacting with us to evade taxes. We are committed to maintaining productive relationships and cooperating with taxing authorities in all tax matters. We seek to resolve disputes in a collaborative manner; however, where our interpretation of tax law differs from that of taxing 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 our Consolidated Statement of Income or our 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, record our 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 our interpretations and assumptions differ from those of taxing authorities or if the timing of reversals is not as expected, our 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 may be utilized. We are required to assess whether it is probable that our deferred income tax assets will be realized. The factors used to assess the probability of realization are our past experience of income and capital gains, our forecast of future net income before taxes, and the remaining expiration period of tax loss carryforwards. Changes in our assessment of these factors could increase or decrease our provision for income taxes in future periods.

If income tax rates increase or decrease in future periods in a jurisdiction, our provision for income taxes for future periods will increase or decrease accordingly. Furthermore, our deferred tax assets and liabilities will increase or decrease as income tax rates increase or decrease, respectively, and will result in an income tax impact. For example, the reduction in the U.S. federal tax rate from 35% to 21% as a result of the enactment of the U.S. *Tax Cuts and Jobs Act* (Act) resulted in a $425 million one-time non-cash tax charge to our net income in 2018 and a corresponding reduction in our net deferred tax assets. In addition, U.S. tax reform increased our annual net income by approximately US$100 million. Since its enactment, we have been monitoring the release of guidance to assist in interpreting the Act. Guidance on tax base broadening measures is expected to be released later in 2018, or early in 2019. We will reflect the impact, if any, in the period in which the applicable guidance is released.

In fiscal 2018, we were reassessed by the Canada Revenue Agency (CRA) for additional income taxes and interest in an amount of approximately $169 million in respect of certain 2013 Canadian corporate dividends. In prior fiscal years, we were reassessed for additional income taxes and interest of approximately $116 million and $76 million, respectively, for certain 2012 and 2011 Canadian corporate dividends. In its reassessments, the CRA denied dividend deductions on the basis that the dividends were received as part of a "dividend rental arrangement". The tax rules raised by the CRA in its reassessments were prospectively addressed in the 2015 and 2018 Canadian federal budgets. In the future, it is possible that we may be reassessed for significant additional income taxes for similar activities in 2014 and subsequent years. We remain of the view that our tax filing positions were appropriate and intend to challenge any reassessment. If our challenge is unsuccessful, the additional expense would negatively impact our net income.

Additional information regarding our accounting for income taxes is included in Note 22 on page 198 of the 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 the CGU is greater than its carrying value. If the carrying value were to exceed the recoverable amount of the CGU, 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 was used to perform the impairment test in all periods. In determining fair value less costs to sell, we employ a discounted cash flow model, consistent with that used when we acquire businesses. 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, and differences in judgments and assumptions could affect the determination of fair value and any resulting impairment write-down. At October 31, 2018, the estimated fair value of each of our CGUs was greater than its 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 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, we write it 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 on page 176 of the consolidated financial statements.

Insurance-Related Liabilities

Insurance claims and policy benefit liabilities represent current claims and estimates of future insurance policy obligation 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. The most significant potential impact on the valuation of these liabilities would be the result of a change in the assumption for future investment yields.

Additional information on insurance-related liabilities is provided in Note 14 on page 179 of the consolidated financial statements, and information on insurance risk is provided on page 100.

Provisions

BMO and its subsidiaries are involved in various legal actions in the ordinary course of business.

Provisions are recorded at the best estimate of the amount required to settle any obligation related to these legal actions as at the balance sheet date, taking into account the risks and uncertainties surrounding the obligation. Factors considered in making the estimate include a case-by-case assessment of specific facts and circumstances, our past experience and the opinions of legal experts. Management and internal and external experts are involved in estimating any amounts that may be required. The actual costs of resolving these claims may be substantially higher or lower than the amounts of the provisions.

Additional information regarding provisions is provided in Note 24 on page 201 of the consolidated financial statements.

Transfers of Financial Assets and Consolidation of Structured Entities

We sell Canadian mortgage loans 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 assess whether substantially all of the risks and rewards of the loans have been transferred in order to determine if they qualify for derecognition. Since we continue to be exposed to substantially all of the prepayment, interest rate and/or credit risk associated with the securitized loans, they do not qualify for derecognition. We continue to recognize the loans, and we recognize the related cash proceeds as secured financing in our Consolidated Balance Sheet. Additional information concerning the transfer of financial assets is included on page 76, as well as in Note 6 on page 164 of the consolidated financial statements.

In the normal course of business, BMO enters into arrangements with SEs. We are required to consolidate an SE if we determine that we control the SE. We control an SE when we have power over the entity, exposure or rights to variable returns from our investment and the ability to exercise power to affect the amount of our returns.

Additional information concerning BMO's interests in SEs is included on page 77, as well as in Note 7 on page 165 of the consolidated financial statements.

Caution

This Critical Accounting Estimates section contains forward-looking statements. Please see the Caution Regarding Forward-Looking Statements.

Changes in Accounting Policies in 2018

Effective November 1, 2017, we prospectively adopted IFRS 9 *Financial Instruments* (IFRS 9), which addresses impairment, classification and measurement, and hedge accounting. The impact on shareholders' equity at November 1, 2017 was an increase of $70 million ($44 million after-tax) related to the impairment requirements of the standard. Prior periods have not been restated.

Impairment

IFRS 9 introduces a new single expected credit loss (ECL) impairment model for all financial assets and certain off-balance sheet loan commitments and guarantees. The ECL model results in an allowance for credit losses being recorded on financial assets, regardless of whether there has been an actual loss event. This differs from our previous approach, where the allowance recorded on performing loans is designed to capture only losses that have been incurred whether or not they have been specifically identified.

Classification and Measurement

IFRS 9 requires that we classify debt instruments based on our business model for managing the assets and the contractual cash flow characteristics of the asset. Equity instruments are measured at fair value through profit or loss unless we elect to measure at fair value through other comprehensive income.

Hedge Accounting

IFRS 9 introduces a new hedge accounting model that expands the scope of hedged items and risks eligible for hedge accounting and aligns hedge accounting more closely with risk management. The new model no longer specifies quantitative measures for effectiveness testing and does not permit hedge de-designation. Consistent with a policy choice allowed in IFRS 9, we have elected to continue to apply the existing hedge accounting rules.

Notes 1 and 28 on pages 148 and 207, respectively, of the consolidated financial statements, provide further details on the impact of the new standard.

Future Changes in Accounting Policies

BMO monitors the potential changes to IFRS proposed by the International Accounting Standards Board (IASB) and analyzes the effects that any such changes to the standards may have on BMO's financial reporting and accounting policies. New standards and amendments to existing standards that will be effective for BMO in future reporting periods are described in Note 1 on page 148 of the consolidated financial statements.

Transactions with Related Parties

In the ordinary course of business, we provide banking services to our key management personnel on the same terms that we offer these services to our preferred customers. Key management personnel are defined as 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. We provide banking services to our joint ventures and equity-accounted investees on the same terms offered to our customers for these services. We also offer employees a subsidy on annual credit card fees.

Details of our investments in joint arrangements and associates and the compensation of key management personnel are disclosed in Note 27 on page 206 of the consolidated financial statements.

Shareholders' Auditors' Services and Fees

Review of Shareholders' Auditors

The Audit and Conduct Review Committee (ACRC) 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: (i) the quality of the services provided by the engagement team of the shareholders' auditors during the audit period; (ii) the relevant qualifications, experience and geographical reach to serve BMO Financial Group; (iii) the quality of communications received from the shareholders' auditors; and (iv) 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 emphasis on the more complex and risky areas of the audit;
- reviewing and evaluating the audit findings, including 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; and
- performing a comprehensive review of the shareholders' auditors every five years, and performing an annual review between these comprehensive reviews, following the guidelines set out by the Chartered Professional Accountants of Canada (CPA of Canada) and the CPAB.

In 2018, an annual review of the shareholders' auditors was completed. Input was sought from ACRC members and management on areas such as communication effectiveness, industry insights and audit performance. In 2015, the ACRC completed a periodic comprehensive review of the shareholders' auditors. The comprehensive review was based on the recommendations of the CPA of 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 these 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 our Auditor Independence Standard. The ACRC also ensures 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 our policy limiting the services provided by the shareholders' auditors that are not related to their role as auditors. 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 obtained and the services to be provided are presented to the ACRC for ratification at its next meeting. All services must comply with our Auditor Independence Standard, as well as professional standards and securities regulations governing auditor independence.

Shareholders' Auditors' Fees

Aggregate fees paid to the shareholders' auditors during the fiscal years ended October 31, 2018 and 2017 were as follows:

(Canadian $ in millions) Fees (1)	**2018**	2017
Audit fees	**18.2**	19.1
Audit-related fees (2)	**2.2**	2.5
All other fees (3)	**2.1**	2.1
Total	**22.5**	23.7

(1) The classification of fees is based on applicable Canadian securities laws and U.S. Securities and Exchange Commission definitions.

(2) Audit-related fees for 2018 and 2017 relate to fees paid for accounting advice, specified procedures on our Proxy Circular and other specified procedures.

(3) All other fees for 2018 and 2017 relate primarily to fees paid for reviews of compliance with regulatory requirements for financial information and reports on internal controls over services provided by various BMO Financial Group businesses. They also include the costs of translation services.

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, 2018, under the supervision of the CEO and the CFO, Bank of Montreal's management evaluated the effectiveness of the design and operation of our 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) under the *Securities Exchange Act of 1934* (the Exchange Act). Based on this evaluation, the CEO and the CFO have concluded that our disclosure controls and procedures were effective, as at October 31, 2018.

Internal Control over Financial Reporting

Internal control over financial reporting is a process designed under the supervision of the bank's CEO and CFO, in order to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements in accordance with IFRS. Management is responsible for establishing and maintaining adequate internal control over financial reporting for Bank of Montreal.

Bank of Montreal's internal control over financial reporting includes policies and procedures that:

(i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of Bank of Montreal;

(ii) 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 that receipts and expenditures of Bank of Montreal are being made only in accordance with authorizations by management and directors of Bank of Montreal; and

(iii) are designed to provide reasonable assurance that any unauthorized acquisition, use or disposition of Bank of Montreal's assets which 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.

Bank of Montreal'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, 2018.

At the request of Bank of Montreal'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, Bank of Montreal maintained, in all material respects, effective internal control over financial reporting as at October 31, 2018, in accordance with the criteria established in the 2013 COSO Framework. This audit report appears on page 141.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the year ended October 31, 2018 that have materially affected, or are reasonably likely to materially affect, the adequacy and effectiveness of our internal control over financial reporting.

Enhanced Disclosure Task Force

On October 29, 2012, the Enhanced Disclosure Task Force (EDTF) of the Financial Stability Board published its first report, Enhancing the Risk Disclosures of Banks. We support the recommendations issued by the EDTF for the provision of high-quality, transparent risk disclosures.

Disclosures related to the EDTF recommendations are detailed below.

General

1 Present all risk-related information in the Annual Report, Supplementary Financial Information and Supplementary Regulatory Capital Disclosure, and provide an index for easy navigation.

Annual Report: Risk-related information is presented in the Enterprise-Wide Risk Management section on pages 78 to 116.

Supplementary Financial Information: A general index is provided, as well as a detailed Pillar 3 index (pages 34 to 35), in our Supplementary Financial Information.

2 Define the bank's risk terminology and risk measures and present key parameters used.

Annual Report: Specific risk definitions and key parameters underpinning BMO's risk reporting are provided on pages 87 to 116.

A glossary of financial terms (including risk terminology) can be found on pages 210 to 211.

3 Discuss top and emerging risks for the bank.

Annual Report: BMO's top and emerging risks are discussed on pages 79 to 81.

4 Outline plans to meet new key regulatory ratios once the applicable rules are finalized.

Annual Report: We outline BMO's plans to meet new regulatory ratios on pages 71 and 106.

Risk Governance

5 Summarize the bank's risk management organization, processes, and key functions.

Annual Report: BMO's risk management organization, processes and key functions are summarized on pages 82 to 87.

6 Describe the bank's risk culture.

Annual Report: BMO's risk culture is described on page 84.

7 Describe key risks that arise from the bank's business model and activities.

Annual Report: A diagram of BMO's risk exposure by operating segment is provided on page 74 and descriptions of key risks arising from the bank's business models and activities are provided on pages 82 to 83 and 85 to 87.

8 Describe the use of stress testing within the bank's risk governance and capital frameworks.

Annual Report: BMO's stress testing process is described on page 86.

Capital Adequacy and Risk-Weighted Assets (RWA)

9 Provide minimum Pillar 1 capital requirements.

Annual Report: Pillar 1 capital requirements are described on pages 69 to 73.

Supplementary Financial Information: Regulatory capital is disclosed on pages 36 and 38.

10 Summarize information contained in the composition of capital templates adopted by the Basel Committee.

Annual Report: An abridged version of the regulatory capital template is provided on page 72.

Supplementary Financial Information: Pillar 3 disclosure is provided on pages 36 to 37 and 40. A Main Features template can be found on BMO's website at www.bmo.com under Investor Relations and Regulatory Filings.

11 Present a flow statement of movements in regulatory capital, including changes in Common Equity Tier 1, Additional Tier 1, and Tier 2 capital.

Supplementary Financial Information: Regulatory capital flow statement is provided on page 39.

12 Discuss capital planning within a more general discussion of management's strategic planning.

Annual Report: BMO's capital planning process is discussed under Capital Management Framework on page 69.

13 Provide granular information to explain how RWA relate to business activities.

Annual Report: A diagram of BMO's risk exposure, including RWA by operating group, is provided on page 74.

Supplementary Financial Information: RWA by operating group is provided on page 39.

14 Present a table showing the capital requirements for each method used for calculating RWA.

Annual Report: Regulatory capital requirement, as a percentage of RWA, is outlined on pages 70 and 71.

Information about significant models used to determine RWA is provided on pages 88 to 91.

Supplementary Financial Information: A table showing RWA by model approach and by risk type is provided on page 40.

15 Tabulate credit risk in the banking book for Basel asset classes.

Supplementary Financial Information: Wholesale and retail credit exposures by internal rating grades are provided on pages 45 and 51.

16 Present a flow statement that reconciles movements in RWA by credit risk and market risk.

Supplementary Financial Information: RWA flow statements are provided on page 46.

17 Describe the bank's Basel validation and back-testing process.

Annual Report: BMO's Basel validation and back-testing process for credit and market risk is described on pages 111 to 112.

Supplementary Financial Information: A table showing estimated and actual loss parameters is provided on page 57. The results of IRB back-testing of probability of default per portfolio is provided on page 58.

Liquidity

18 Describe how the bank manages its potential liquidity needs and the liquidity reserve held to meet those needs.

Annual Report: BMO's potential liquidity needs and the liquidity reserve held to meet those needs are described on pages 100 to 105.

Funding

19 Summarize encumbered and unencumbered assets in a table by balance sheet category.

Annual Report: An Asset Encumbrance table is provided on page 103.

Supplementary Financial Information: The Asset Encumbrance table by currency is provided on page 33.

20 Tabulate consolidated total assets, liabilities and off-balance sheet commitments by remaining contractual maturity.

Annual Report: A Contractual Maturities table is provided on pages 107 to 108.

21 Discuss the bank's sources of funding and describe the bank's funding strategy.

Annual Report: BMO's sources of funding and funding strategy are described on pages 104 to 105.

A table showing the composition and maturity of wholesale funding is provided on page 105.

Market Risk

22 Provide a breakdown of balance sheet positions into trading and non-trading market risk measures.

Annual Report: A table linking balance sheet items to market risk measures is provided on page 99.

23 Provide qualitative and quantitative breakdowns of significant trading and non-trading market risk measures.

Annual Report: Trading market risk exposures are described and quantified on pages 95 to 97.

Structural (non-trading) market risk exposures are described and quantified on pages 98 to 99.

24 Describe significant market risk measurement model validation procedures and back-testing and how these are used to enhance the parameters of the model.

Annual Report: Market risk measurement model validation procedures and back-testing for trading market risk and structural (non-trading) market risk are described on pages 111 to 112.

25 Describe the primary risk management techniques employed by the bank to measure and assess the risk of loss beyond reported risk measures.

Annual Report: The use of stress testing, scenario analysis and stressed VaR for market risk management is described on pages 95 to 97.

Credit Risk

26 Provide information about the bank's credit risk profile.

Annual Report: Information about BMO's credit risk profile is provided on pages 87 to 94 and in Note 4 on pages 158 to 164 of the consolidated financial statements.

Supplementary Financial Information: Tables detailing credit risk information are provided on pages 18 to 29 and 41 to 56.

27 Describe the bank's policies related to impaired loans and renegotiated loans.

Annual Report: Impaired loan and renegotiated loan policies are described in Note 4 on pages 158 and 163, respectively of the consolidated financial statements.

28 Provide reconciliations of impaired loans and the allowance for credit losses.

Annual Report: Continuity schedules for gross impaired loans acceptances, and allowance for credit losses are provided on pages 91 to 92 and Note 4 on pages 161 to 162 of the consolidated financial statements, respectively.

29 Provide a quantitative and qualitative analysis of the bank's counterparty credit risk that arises from its derivative transactions.

Annual Report: Quantitative disclosures on collateralization agreements for over-the-counter (OTC) derivatives are provided on page 94 and qualitative disclosures are provided on page 88.

Supplementary Financial Information: Quantitative disclosures for derivative instruments are provided on page 30 and pages 49 to 53.

30 Provide a discussion of credit risk mitigation.

Annual Report: A discussion of BMO's credit and counterparty risk management is provided on pages 87 to 88. Collateral management discussions are provided on page 88 and in Note 8 on pages 168, 170 and 173 and in Note 24 on page 202 of the consolidated financial statements.

Supplementary Financial Information: Information on credit risk mitigation techniques is provided on page 43 and on collateral for counter-party credit risk is provided on page 52.

Other Risks

31 Describe other risks and discuss how each is identified, governed, measured and managed.

Annual Report: Diagrams illustrating the risk governance process that supports BMO's risk culture and the risk types are provided on pages 82 and 87. Other risks are discussed on pages 109 to 116.

32 Discuss publicly known risk events related to other risks, where material or potentially material loss events have occurred.

Annual Report: Other risks are discussed on pages 109 to 116.