# **BANK OF MONTREAL EUROPE PLC**

# **DIRECTORS' REPORT AND FINANCIAL STATEMENTS**

FINANCIAL YEAR ENDED 31 OCTOBER 2019

**REGISTERED NUMBER: 255687** 

# **DIRECTORS' REPORT AND FINANCIAL STATEMENTS**

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### **DIRECTORS AND OTHER INFORMATION**

### **Board of Directors**

### **Independent Non-Executive Directors**

Brian Hayes (appointed Chair 20 June 2019) Roslyn O'Shea John McCormick (appointed 4 September 2019)

### Non-Executive Directors

William Smith
Michelle Liposky (appointed 5 April 2019)
Jean Jacques van Helten (resigned 30 June 2019)

### **Executive Directors**

Noel Reynolds Jane Anne Negi (appointed 24 May 2019) Mark Caplan (appointed 20 August 2019)

### **Registered Office Secretary**

6<sup>th</sup> Floor 2 Harbourmaster Place IFSC Dublin 1 D01 X5P3 Ireland

### **Audit & Compliance Committee**

Roslyn O'Shea (Chair) John McCormick (appointed 4 September 2019) Michelle Liposky (appointed 5 April 2019)

### **Nomination Committee**

Roslyn O'Shea (appointed Chair 26 March 2019) Brian Hayes William Smith

### **Auditors**

Grant Thornton
Chartered Accountants & Statutory Audit Firm
13-18 City Quay
Dublin 2
D02 ED70
Ireland

### **Secretary**

Colin Rafferty

### **BMO Group Head Office**

105 Rue St Jacques Montreal Quebec Canada

### **Risk & Capital Committee**

John McCormick (appointed 4 September 2019, appointed Chair 20 November 2019) Brian Hayes Roslyn O'Shea Michelle Liposky (appointed 5 April 2019)

### **Registered Number**

255687

### **Solicitors**

Matheson 70 Sir John Rogerson's Quay Dublin 2 D02 R296 Ireland

### **DIRECTORS' REPORT**

The Directors of Bank of Montreal Europe plc ("the Company") present their report and the audited Financial Statements for the financial year ended 31 October 2019.

The Company changed its name from Bank of Montreal Ireland plc to Bank of Montreal Europe plc effective 2 September 2019.

### **Accounting records**

The Directors have taken appropriate measures to ensure compliance with the requirements of Sections 281 to 285 of the Companies Act, 2014 with regard to the keeping of adequate accounting records. The measures taken by the Directors to secure compliance with the Company's obligation to keep adequate accounting records include the use of appropriate systems, procedures and the employment of competent persons.

The accounting records are kept at 6<sup>th</sup> Floor, 2 Harbourmaster Place, IFSC, Dublin 1, D01 X5P3, Ireland.

### **Ownership**

The Company is a wholly owned subsidiary of Bank of Montreal ("BMO"). BMO and its direct and indirect subsidiaries, including the Company, are collectively referred to herein as ("the BMO Group").

### **Relevant audit information**

The Directors confirm, in so far as they are aware, that all relevant audit information has been made available to the Company's statutory auditors and that they have taken all steps they ought to have taken in order to make themselves aware of any relevant audit information and have established that the Company's statutory auditors are aware of that information.

### **Principal activities**

The Company is engaged in the business of banking including the provision of financial services. The Company is regulated by the Central Bank of Ireland and has a full banking licence.

### **Review of business**

As the BMO Group's only fully licenced bank in Europe, the Company uniquely holds passporting rights to do business, including loans and derivatives, in all jurisdictions across the European Union ("EU") region. As such, the Company is an integral part of the BMO Group's strategic and operating infrastructure, acting as the BMO Capital Markets ("BMO CM") European banking platform. The Company transacts on its own account, and within its own risk appetite, with local and franchise clients and counterparties in Europe, North America and Asia on a wide range of Fixed Income, Currency, Commodity, Equity and Corporate Banking products. As a licensed bank regulated by the Central Bank of Ireland, the Company also has full access to the European Central Bank standing facilities and is therefore also uniquely placed within the BMO Group to perform Euro-area funding and liquidity management.

BMO CM covers two lines of business: Investment & Corporate Banking (I&CB), and Global Markets ("GM"). GM (formerly called Trading Products) covers the Fixed Income, Currency and Commodities ("FICC") and Global Equity Products ("GEP") lines of business.

### **Review of business (continued)**

With the triggering of Article 50 of the Lisbon Treaty on 29 March 2017, the UK Government indicated its intention to exit from the European Union ("Brexit") effective 29 March 2019. The delay in the UK Parliament's approval of the withdrawal agreement means that the UK now intends to leave the European Union at the end of January 2020.

The BMO Group formed a Brexit Steering Committee comprising the senior management of the Company and the BMO Group specifically to ensure that all potential implications relating to Brexit were considered and solutions were executed to reduce risk to an acceptable level. Brexit working groups were formed for the main functional areas of the Company and met regularly to assess the risks and propose recommendations.

The Company planned its strategy assuming a "Hard-Brexit" scenario on 29 March 2019.

Under this scenario, the main impact was on the BMO Group's Cash Equities business which was undertaken by a related UK entity, BMO Capital Markets Limited, operating with a Paris Branch where the passporting rights related to European clients would cease.

The Company submitted an application to the CBI for an expanded business footprint post Brexit which included the establishment of a Paris Branch, the establishment of a Cash Equities business and an expanded FICC business.

The Company received authorisation from the CBI for an expanded business footprint post-Brexit on 29 March 2019. Following this authorisation, the BMO Group transferred the Paris branch of BMO Capital Markets Limited and the associated EEA Cash Equity and Research distribution business to the Company on 29 March 2019.

Going forward post-Brexit, the Company's business model will encompass an expanded FICC capability, including Debt Capital Market activities and a Cross Asset Solutions capability embedded in both the FICC and GEP lines of business.

This has resulted in a significant increases in investments in full time employee headcount and in capabilities, expertise and governance which are reflected in the increased operating costs for fiscal 2019.

The Company changed its name from Bank of Montreal Ireland plc to Bank of Montreal Europe plc on 2 September 2019 to reflect its post Brexit Europe client focused strategy.

The business model and asset profile of the Company seeks to maintain flexibility to support the global BMO Group and BMO CM strategies. Consequently, assets are primarily highly liquid or very short term in nature across the lines of business allowing for a low risk, yet adaptable business that remains profitable through the business cycle.

Products traded within FICC include:

- Supranational Sovereign and Agency ("SSA") bond portfolio
- Interest rate swaps, cross currency swaps and commodity swaps

### **Review of business (continued)**

SSA Bond Portfolio

The Company's FICC business manages a portfolio of high quality liquid bonds within the SSA sector which provide a low risk return for the Company while also contributing to the overall liquidity profile of the Company. The SSA sector offers some yield pickup over pure AAA government debt and FICC purchases only bonds issued by entities with a Long-Term Debt Rating of A or better. Approximately 86% of the SSA portfolio comprises fixed rate bonds which are hedged from an interest rate perspective via receive float / pay fixed interest rate swaps with notional volume per end of October 2019 of approximately US\$ 1.8BN. These swaps qualify for hedge accounting under International Financial Reporting Standards ("IFRSs") rules.

Interest Rate Swaps, Cross Currency Swaps and Commodity Swaps

In addition to the interest rate swaps hedging fixed rate SSA bonds mentioned above, The Company has a derivatives capability to support the hedging needs of those clients with whom BMO CM has a lending relationship through its Corporate Banking business. FICC executes client facing Interest Rate Swaps, Cross Currency and Commodity Swaps to provide clients with hedges to their loan and market exposure. With the anticipated growth of the loan book in the Company, this activity is forecast to increase over the next 18-24 months.

Equity and equity related products traded within GEP are categorised as:

- o Cash Equities
- o Equity Finance
- Equity Total Return Swaps
- Index Arbitrage

### Cash Equities

As noted above the Company commenced the origination and execution of EEA client orders in listed equities from 29 March 2019. The nature of the BMO Group franchise means that these are predominantly North American listed equities. The core client facing activities undertaken in relation to this business reside in the Company's Paris Branch, with a local sales trading presence established to originate business activity and expand into new geographies in the EEA as opportunities arise. The business activities include:

- Partnering with leading buy-side institutions in the EEA on cash equities.
- Servicing client requests to purchase/sell cash equities and instructing a BMO Group entity with the required exchange memberships to execute the client request.
- Offering direct market access to clients through third party providers as a secondary solution to reduce the reliance on the BMO Group.
- Distributing BMO Group equity research to clients in the EEA.

### **Review of business (continued)**

### **Equity Finance**

The Company's Equity Finance transactions involve GEP funding client equity positions by providing cash vs. receiving equity collateral. These transactions are traded under industry standard Global Master Securities Lending Agreements ("GMSLA") with collateral posted in line with Company Equity Finance limits and are typically no more than three months in term.

### Equity Total Return Swaps ("ETRS")

The ETRS product entails the Company entering into a total return swap with approved counterparties linked to the performance of a portfolio of listed equities. The Company pays/receives an amount equal to the performance of the equities plus dividends and respectively receives/pays the counterparty a floating interest rate based on the notional of the trade. The Company earns a spread on the notional of the trade. The Company hedges out the market risk on these trades by buying or selling the corresponding equities.

### Index Arbitrage

GEPs' Index Arbitrage activity centres around the Company shorting a basket of Canadian equities comprising the TSX60 Index while at the same time purchasing a number of TSX60 Index futures on the Montreal Exchange with a view to generating funding that can be deployed at higher yields in the Company's core businesses. GEP enters into these trades only where the market dislocation generates the potential to do so on a profitable basis.

### Corporate Banking ("CB"):

CB deploys Company resources by providing lending facilities (bilateral and as part of a syndicate) to existing and new target BMO Group clients to build on BMO Group relationships and enhance local income. The Company's client-side derivative activity, linked to its lending portfolio is progressing and represents a development of synergies between Global Markets and CB client coverage. CB clients tend to be global borrowers but with a focus on the EEA given the Company's EEA passporting rights. Such clients are sourced through existing BMO Group relationships and are primarily large corporate sector and private equity clients (or their subsidiaries/affiliates). Lending is typically to sectors in which the BMO Group has global expertise including energy, mining and infrastructure. CB is seeking to originate infrastructure lending transactions.

### **Review of business (continued)**

The Company's FICC, GEP and CB activities deliver client and product coverage across Europe, with equity clients also in Asia and North America, and are closely tied to the overall market opportunities and challenges of the European banking market as a whole. The nature of the Company's business model means that the external environment and competitive landscape is influenced by pan-European financial industry environmental factors rather than any forces specific to Ireland. In this context the environment remains challenging, including:

- o Moderate growth in European markets.
- An increase in the number of institutions (bank and non-bank) chasing the same trades as the Company with a consequent impact on spreads.
- Erosion of return potential in traditional markets for the Company.
- o Higher funding costs.
- Geopolitical uncertainty including questions around the stability of Europe and a hard-Brexit.
- A heavy regulatory agenda including capital, liquidity and funding measures that impact on costs of doing business.

In pursuit of its strategic priorities in fiscal 2019 the Company was successful in making significant progress in the following financial and non-financial key areas:

- Paris branch established. Cash equity and equity research distribution operational.
- Change of name to Bank of Montreal Europe plc to reflect its post Brexit Europe client focused strategy.
- Rated by two external Credit Rating Agencies (S&P A+/A-1; Fitch AA-).
- Risk Appetite Limits reviewed to reflect the Company's future business and credit risk profile.
- European Corporate Banking Infrastructure business launched.
- Governance Framework reviewed and updated; an independent Board Chair appointed along with the appointment of 1 new INED and 1 new NED.
- Second Line of Defence strengthened with increased seniority and staffing within the Company's Risk Management and Compliance functions.
- Establishment of a Corporate Treasury function; an Operations function (including Collateral Management) and a Chief Operating Officer function.

### Results

Profit for the financial year is set out in the Statement of Comprehensive Income on page 23. In a challenging market in fiscal 2019, the Company contributed US\$45.2 million in operating income down 3% (year on year "YoY"). At the same time, operating costs increased to US\$31.6 million, up from US\$20.7 million in fiscal 2018, a 53% YoY increase) due to an increase in the provision for credit losses, a significant increase in full time employee head count, investments in capabilities, expertise and governance and the settlement of a fine issued by the CBI for breaching a condition of its banking licence in 2014.

Overall the profit for the financial year decreased 48% YoY, down to US\$12.9 million, representing a 1.6% Return on Total Equity.

The Statement of Financial Position shows a 24% YoY increase in total assets to US\$9,639 million primarily representing an increase in loans and advances to banks of US\$1,576 million and an increase in loans and advances to customers of US\$581 million.

### **Future developments**

The Company's business strategy stems from the following four overarching objectives:

- o Grow the client footprint. Increase the proportion of profit attributable to client activity.
- Implement and effectively integrate the identified new post-Brexit business and other opportunities as they arise.
- Improve capital efficiency and availability.
- Effectively deploy our increased human capital while maintaining high standards of conduct and engagement.

These four objectives underpin the following strategic priorities:

- Client design and execute a client acquisition and marketing strategy.
- Global Markets and Corporate Banking deepen client relationships and diversify profitability through greater product capabilities and origination channels.
- Utilise the investment in capabilities, expertise and governance demonstrate internally and externally the Company's ability to build upon its fit for purpose banking platform.
- Attract, develop and retain the best talent to and across the region while exemplifying 'Being BMO'. Make the Company an employer of choice in Europe and a sought after assignment within the BMO Group.

It is important to note that, as described in the Application approved by the CBI on 29 March 2019 and the Revised Proposal for the Company's Business Expansion, approved by the Board on 20 June 2019, the anticipated expanded business activity resulting from Brexit is forecast to develop gradually over the next 18 -24 months.

Global Markets (FICC and GEP) fiscal 2020 strategy is to grow and expand its European client base and to strengthen its existing relationships for the new products/businesses that the Company is anticipated to begin to undertake as result of Brexit. The Corporate Banking platform has the strategic priority of diversifying its business footprint by seeking to originate transactions to support other BMO Group entities/divisions in expanding their capabilities and franchises.

### **Future developments (continued)**

As part of its strategic planning, the Company has analysed the external environment including market conditions and competitive landscape at a global level, as well as at the product/desk level. A Strengths, Weaknesses, Opportunities and Threats analysis specific to the Company's strategic footprint was also carried out.

### **FICC**

### SSA Bond Portfolio

A fiscal 2020 FICC strategic initiative is to split the current FICC portfolio into two component parts, each with different accounting treatments and exemptions, to provide a robust and future proofed platform to build a sustainable business model during a changing regulatory environment. Additional diversification of the portfolio will be a key to long term growth and success.

### Interest Rate Swaps, Cross Currency Swaps and Commodity Swaps

The Company has recently established commodity derivatives capability in order to offer hedging products to clients with whom BMO CM has a lending relationship through its Corporate Banking business. This will be built out further by leveraging the Company's European passport to establish an EU client focused Metals Sales and Structuring business over the next 24 months.

### **GEP**

A GEP fiscal 2020 strategic initiative is to trade listed equity derivatives, enabling the Company to access a larger market through the exchange. Products will include Single Stock Futures, Index Futures and Options.

### CB

CB's fiscal 2020 strategy focuses on opportunities in three areas:

- European Infrastructure: New European sector coverage, lead at an EMEA level by the Company's Corporate Banking function.
- Corporate Banking Global partnerships: focusing on BMO Group London Oil & Gas, Metals & Mining and Infrastructure core sectors and partnership with the North America Corporate Lending and Asset Backed Lending teams. The Company is the preferred location for all BMO Group loans to EU clients (excluding UK).
- Ancillary GM Business: further building out derivative transactions with corporate lending clients or corporate clients where there are standalone derivative transactions.

### **Future developments (continued)**

New businesses and products post Brexit

The anticipated expanded business activity resulting from Brexit is forecast to develop gradually over the next 18 -24 months.

### Debt Capital Markets ("DCM")

DCM will provide origination and syndication services to bonds issuers and activities planned include:

- Marketing Non-European Union (EU) debt securities to EU investors and acting as the distributor of the issue to European eligible counterparties and per se professional clients.
- o Acting as a syndicate member to underwrite and distribute EU issues to investors.
- Coordinating the execution of any transactions to be underwritten in the Company including relevant legal documentation, underwriting agreements and related swap/hedge transactions.

The Company will seek to continue to expand existing relationships within the SSA and EU public sector, with a view to offering underwriting and distribution services. Alongside this, the Company will identify and expand any other new bond issue opportunities available within the EU.

### Cash Bonds

The Cash Bond / International Rates business in the Company will provide clients with access to North American and EU government and corporate bonds. Activities planned include:

- Maintaining client relationships within the EU and servicing client inquires around primary and secondary cash fixed income flow, including coordinating with BMO Group research, trading and DCM colleagues in response to client activities and market movements.
- Acting as a principal to execute client orders in EUR and USD government bonds.

The Company will work to grow BMO CM's market share in the SSA market to drive an increase in ancillary swap revenue opportunities.

### **Interest Rate and Cross Currency Swaps**

The Company will broaden its current activity in interest rate and cross currency swaps to include:

- Increasing Interest Rate and Cross Currency swap activity with corporate clients in support of the continued growth of the CB book.
- Providing interest rate and cross currency swap markets to EU DCM clients and issuers in support of BMO Group's global offering.
- Providing hedging services for EU corporate clients with the Company managing its risks with BMO Group or third party dealers.

### Future developments (continued)

The Company will work to expand its capability to quote swaps on electronic platforms, thereby increasing volumes through the expanded distribution channels.

### FX Spot/Forward/Swap

The Company will broaden its current activity in FX Spot/Forward/Swap activities to include:

- Offering deliverable or non-deliverable transactions to EU clients within a preestablished set of currency pairs.
- Providing hedging services to EU clients in support of a complete offering to the Company's corporate clients.

The Company seeks to support BMO CM's global strategy to maintain its top tier rank in CAD FX, whilst targeting European Central Banks, Sovereign Wealth Funds, fund managers and corporate clients.

### Cross Assets Solutions ("CAS")

CAS will offer a range of structured solutions to clients including financing activities and structured products with specific synthetic exposure. Activities planned include:

- Marketing and placement of structured notes issued by BMO CM or other third party issuers to EU counterparties, coordination of client interest and work with issuing desks outside of the EU to tailor fully-funded notes to be sold into Europe.
- Structuring of solutions for EU counterparties along with CAS financing initiatives with risk profiles in line with the current Equities businesses within the Company.

The Company will seek to target an institutional client base offering equity-linked opportunities and increase balances of financing activities across a diversified client base.

### **Dividends**

The Directors do not propose the payment of a dividend in respect of the financial year ended 31 October 2019 (2018: US\$ nil).

### Risk Management – principal risks and uncertainties

The Company's Statement of Financial Position is low risk in terms of credit risk, market risk and liquidity risk. This is reflected in the Company's risk appetite and managed through its Risk Management Framework. Information regarding principal risks and uncertainties facing the Company is set out in Note 27 to the Financial Statements.

### Corporate governance

The Company is subject to the Central Bank of Ireland's Corporate Governance Requirements for Credit Institutions 2015 ("the Requirements") but is not subject to the additional obligations on high impact designated credit institutions as set out in Appendix 1 of the Requirements. The Directors have satisfied themselves that the Company is in material compliance with the Requirements.

### **Directors**

The names of the Directors in office at the date of signing of the Financial Statements for the financial year ended 31 October 2019 are Mark Caplan, Brian Hayes, Michelle Liposky, John McCormick, Jane Anne Negi, Roslyn O'Shea, Noel Reynolds and William Smith. Any changes to the Board of Directors during the financial year and up to the date of signing are detailed on page 3.

### **Directors' Compliance Statement**

Pursuant to Section 225 of the Companies Act 2014, the Directors acknowledge their responsibility for securing the Company's compliance with its relevant obligations.

The Directors also confirm the following:

- (a) The Company has in place a compliance policy statement setting out the Company's policies (that, in their opinion, are appropriate to the Company) concerning compliance by the Company with its relevant obligations.
- (b) There are appropriate arrangements and structures in place that are, in their opinion, designed to secure material compliance with the Company's relevant obligations, on the basis that they provide a reasonable assurance of compliance in all material respects with the obligations.
- (c) A review has been conducted, during the financial year, of the arrangements and structures referred to in paragraph (b).

# Directors' and Secretary's interest in the share capital of the Company or of BMO Group Companies

In accordance with Section 260(f)(i) of the Companies Act 2014, there were no disclosable interests of the Directors' and the Company Secretary's interest in shares of the Company or BMO Group Companies at 31 October 2019.

### **Political donations**

The Electoral Act, 2012 requires Companies to disclose all political donations over €200 in aggregated made during the financial year. The Directors, on enquiry, have satisfied themselves that no such donations have been made by the Company during the financial year.

### Post financial year end events

There were no significant post financial year end events requiring adjustment to the disclosures to the Company's Financial Statements at 31 October 2019.

### **Audit Committee**

In accordance with Section 352(2) of the Companies Act 2014, the Directors confirm that an Audit Committee is established. This committee is referred to as the Audit and Compliance Committee.

### **Auditors**

The Auditors, Grant Thornton have indicated their willingness to continue in office in accordance with Section 383(2) of Companies Act, 2014.

On behalf of the Board

Roslyn O'Shea

Director

Brian Hayes

Director

**Noel Reynolds** 

Director

Colin Raffer

Company Secretary

30 January 2020

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### STATEMENT OF DIRECTORS' RESPONSIBILITIES

The Directors are responsible for preparing the Directors' Report and Financial Statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare Financial Statements for each financial year giving a true and fair view of the state of affairs of the Company. Under that law the Directors have elected to prepare the Company Financial Statements in accordance with International Financial Reporting Standards ("IFRSs"), as issued by the International Accounting Standards Board ("IASB") and adopted by the European Union ("EU") and in accordance with the provisions of the Companies Act 2014.

The Company's Financial Statements are required by law to give a true and fair view of the state of affairs of the Company and of its profit or loss for the financial year.

In preparing the Financial Statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgments and estimates that are reasonable and prudent;
- state that the financial statements comply with IFRSs as issued by the IASB and adopted by the EU and in accordance with the provisions of the Companies Act 2014; and
- prepare the Financial Statements on a going concern basis unless it is inappropriate to presume that the Company will continue in business.

The Directors are responsible for keeping adequate accounting records that disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that the Financial Statements comply with the Companies Acts 2014. They are also responsible for taking such steps as are reasonably open to them to safeguard the assets of the Company and to prevent and detect fraud and other irregularities.

The Directors are also responsible for preparing a Directors' Report that complies with the requirements of the Companies Act 2014.

On behalf of the Board

Roslyn O'Shea

Director

**Brian Hayes** 

Director

Noel Reynolds

Director

Colin Rafferty

Company Secretary

30 January 2020

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### **INDEPENDENT AUDITORS' REPORT**

### To the members of Bank of Montreal Europe plc

### Report on the audit of the financial statements

### **Opinion**

We have audited the financial statements of Bank of Montreal Europe plc (or the "Company"), which comprise the Statement of Comprehensive Income, the Statement of Financial Position, the Statement of Changes in Shareholders' Equity and the Statement of Cash Flows for the financial year ended 31 October 2019, and the related notes to the financial statements, including the summary of significant accounting policies.

The financial reporting framework that has been applied in the preparation of the financial statements is Irish law and International Financial Reporting Standards as adopted by the European Union (or "IFRS").

In our opinion, the Company's financial statements:

- give a true and fair view in accordance with IFRS of the assets, liabilities and financial
  position of the Company as at 31 October 2019 and of its financial performance and
  cash flows for the financial year then ended; and
- have been properly prepared in accordance with the requirements of the Companies Act 2014, and the European Union (Credit Institutions: Financial Statements) Regulations 2015.

### **Basis for our opinion**

We conducted our audit in accordance with International Standards on Auditing (Ireland) (or "ISAs (Ireland)") and applicable law. Our responsibilities under those standards are further described in the 'responsibilities of the auditor for the audit of the financial statements' section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in Ireland, namely the Irish Auditing and Accounting Supervisory Authority (or "IAASA") Ethical Standard concerning the integrity, objectivity and independence of the auditor, and the ethical pronouncements established by Chartered Accountants Ireland, applied as determined to be appropriate in the circumstances for the entity. We have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which the ISAs (Ireland) require us to report to you where:

- the Directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the Directors have not disclosed in the financial statements any identified material
  uncertainties that may cast significant doubt about the Company's ability to continue
  to adopt the going concern basis of accounting for a period of at least twelve months
  from the date when the financial statements are authorised for issue.

### **Key audit matters**

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current financial year and include the most significant assessed risks of material misstatement (whether or not due to fraud) we identified, including those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit, and the directing of efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and therefore we do not provide a separate opinion on these matters.

### Overall audit strategy

We designed our audit by determining materiality and assessing the risks of material misstatement in the financial statements. In particular, we looked at where the Directors made subjective judgements, for example in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits we also addressed the risk of management override of internal controls, including evaluating whether there was evidence of bias by the Directors that represented a risk of material misstatement due to fraud.

### How we tailored our audit approach

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the operational structure of the Company, the accounting processes and controls, and the industry in which the Company operates.

The risks of material misstatement that had the greatest effect on our audit, including the allocation of our resources and effort, are identified as 'Key audit matters' in the table below.

We have also set out how we tailored our audit to address the key audit areas in order to provide an opinion on the financial statements as a whole. This is not a complete list of all risks identified by our audit.

### Materiality

The scope of our audit is influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the Company based on a metric of 1% of Net Asset Value as at 31 October 2019. We believe that Net Asset Value provides us with the most appropriate basis for materiality having considered the users of the financial statements, the ultimate parent entity and the overall business environment of the Company.

Performance materiality is the threshold for application of materiality at the individual account or balance level. On the basis of our risk assessments, together with our assessment of the Company's overall control environment, our judgment was that the performance materiality threshold was appropriate to set at 60% of our materiality. We have determined this based on our prior year experience of the risk of misstatements, both corrected and uncorrected, and our understanding of the business and processes at the Company.

The reporting threshold is set as the amount below which identified misstatements are considered as being clearly trivial. We agreed with the audit committee that we would report to them misstatements identified during our audit of amounts greater than 5% of materiality as well as misstatements below that amount that, in our view, warranted reporting for qualitative reasons.

We evaluate any uncorrected misstatements against both the quantitative measures of materiality discussed above and in light of other relevant qualitative considerations in forming our opinion.

### **Key audit matters**

# Fair value of financial instruments – valuation and presentation and disclosure

The Company's financial instrument products include debt securities, derivatives and trading equities. Valuation techniques depend on the nature and complexity of each security.

Given the scale and complexity of the portfolios held, we have focused our audit procedures on ensuring that these are complete, that individual title resides with the Company and that instruments are appropriately valued in line with the recognition and measurement requirements of IFRS.

(Please refer to pages 24, 30, 43 and 45-47)

### Our audit approach

In obtaining sufficient audit evidence we:

- Assessed and tested the design and implementation of the controls over financial instrument valuation, independent price verification, model validation and approval.
- Obtained independent confirmation of financial instruments held to confirm that they are held in the Company's name at the financial year end date. Verified the valuation of all financial instruments at the balance sheet date by re-pricing to external market sources where available or independently agreeing prices to third party brokers.
- Reviewed the related disclosures in the financial statements to ensure completeness in line with the requirements of IFRS 9.

Our planned audit procedures were completed without material exception.

### **Key audit matters**

# Loans and advances to customers – recoverability and impairment

As at 31 October 2019, gross loans and advances to customers amounted to \$1,395m (2018: \$810m) and the related impairment provision amounted to \$4.6m (2018: \$0.1m).

The determination of impairment provisions requires a significant amount of management judgement, using subjective assumptions, when determining both the timing and the amounts of the impairment provisions for loans and advances to customers. Calculations depend upon available reliable data. There is a risk that the provisions for impairment of loans and advances to customers do not represent a reasonable estimate of the losses incurred if the completeness and timing of recognition of loss events are not appropriate.

(Please refer to pages 24 and 44)

### Our audit approach

In obtaining sufficient audit evidence we:

- Evaluated the design and implementation of the controls over impairment identification and calculation.
- Evaluated the design and implementation of the controls over key credit management processes, new lending and re-financing transactions.
- Reviewed and assessed the work of group auditors around collective impairment models, including source data and calculations.
- Tested the underlying loans and advances for impairment, challenging management judgements by testing samples of the data used in models.
- Reviewed impairment methodology to establish model parameters and utilised our credit risk specialists to test the assumptions and benchmark judgmental inputs of modelled provisions against market practice.
- Reviewed and assessed regulatory observations around the effectiveness of models and suitability for the local market.
- Reviewed the related disclosures in the financial statements to ensure completeness in line with the requirements of IFRS 9.

Our planned audit procedures were completed without material exception.

# Other information

Other information comprises information included in the annual report, other than the financial statements and our auditors' report thereon. The Directors are responsible for the other information. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies in the financial statements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information; we are required to report that fact.

We have nothing to report in this regard.

### Matters on which we are required to report by the Companies Act 2014

- We have obtained all the information and explanations which we consider necessary for the purposes of our audit.
- In our opinion the accounting records of the Company were sufficient to permit the financial statements to be readily and properly audited.
- The financial statements are in agreement with the accounting records.
- In our opinion the information given in the Directors' report is consistent with the financial statements. Based solely on the work undertaken in the course of our audit, in our opinion, the Directors' report has been prepared in accordance with the requirements of the Companies Act 2014.

### Matters on which we are required to report by exception

Based on our knowledge and understanding of the Company and its environment obtained in the course of the audit, we have not identified material misstatements in the Directors' report.

Under the Companies Act 2014 we are required to report to you if, in our opinion, the disclosures of Directors' remuneration and transactions specified by section 305 to 312 of the Companies Act 2014 have not been made. We have no exceptions to report arising from this responsibility.

# Responsibilities of management and those charged with governance for the financial statements

As explained more fully in the Statement of Directors' Responsibilities, management are responsible for the preparation of the financial statements which give a true and fair view in accordance with IFRS, and for such internal control as they determine necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

### Responsibilities of the auditor for the audit of the financial statements

The auditors' objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes their opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (Ireland) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs (Ireland), the auditor will exercise professional judgment and maintain professional scepticism throughout the audit. The auditor will also:

 Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for their opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If they conclude that a material uncertainty exists, they are required to draw attention in the auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify their opinion. Their conclusions are based on the audit evidence obtained up to the date of the auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a matter that achieves a true and fair view.

The auditor communicates with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that may be identified during the audit.

From the matters communicated with those charged with governance, the auditor determines those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. These matters are described in the auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, the auditor determines that a matter should not be communicated in the report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

### The purpose of our audit work and to whom we owe our responsibilities

This report is made solely to the Company's members, as a body, in accordance with section 391 of the Companies Act 2014. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditors' report and for no other purpose.

To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

## Report on other legal and regulatory requirements

We were appointed by the Board Audit Committee on 09 October 2019. This is the third year we have been engaged to audit the financial statements of the Company.

We are responsible for obtaining reasonable assurance that the financial statements taken as a whole are free from material misstatement, whether caused by fraud or error. Owing to the inherent limitations of an audit, there is an unavoidable risk that material misstatements of the financial statements may not be detected, even though the audit is properly planned and performed in accordance with the ISAs (Ireland). Our audit approach is a risk-based approach and is explained more fully in the 'Responsibilities of the auditor for the audit of the financial statements' section of our report.

We have not provided non-audit services prohibited by the IAASA's Ethical Standard to the Company and we remain independent of the Company in conducting our audit.

30 January 2020

The audit opinion is consistent with the additional report to the audit committee.

Colin Feely

For and on behalf of

**Grant Thornton** 

Chartered Accountants & Statutory Audit Firm

13-18 City Quay

Dublin 2

D02 ED70

Ireland

# STATEMENT OF COMPREHENSIVE INCOME

		Financial	Financial
		Year	Year
		ended 31	ended 31
2		October	October
		2019	2018
		14	2010
(US\$ in thousands)	Note		
Interest income	4	274,610	221,984
Interest expense	4	(237,315)	(175,831)
Net interest income	•	37,295	46,153
Net interest income		37,293	40,155
77			
Fee and commission income	5	4,035	585
Fee and commission expense	5	(11,660)	(10,035)
Net fee and commission expense		(7,625)	(9,450)
Not trading income	6	15 557	0.022
Net trading income	O	15,557	9,822
On anything in come		45.227	46 505
Operating income		45,227	46,525
Provision for credit losses	27	(4,624)	(109)
Personnel expenses	a 7	(11,914)	(9,923)
Operating lease expenses	8	(1,047)	(867)
Depreciation	19	(444)	(302)
Other operating expenses	9	(13,569)	(9,475)
	9		
Profit before income tax		13,629	25,849
Income tax expense	10	(641)	(973)
Profit for the year		12,988	24,876
7.0			
Other comprehensive income ("OCI")			
Net change in unrealised gains on			
fair value through OCI securities		(4,622)	704
Income tax on other comprehensive			
income tax on other comprehensive		E70	(00)
=		578	(88)
Other comprehensive income/(loss)		(4.044)	
for the year, net of income tax		(4,044)	616
		GB	
Total comprehensive income for the			
year		8,944	25,492

# STATEMENT OF FINANCIAL POSITION

		As At	As At
		31 October	31 October
(US\$ in thousands)	Note	2019	2018
			2010
Assets			
Cash and balances with central banks	12	3,421,219	3,157,282
Debt securities	16	2,080,535	1,864,440
Derivative assets	13	58,503	175,002
Trading equities	17	544,378	1,209,819
Loans and advances to banks	14	2,126,292	550,134
Loans and advances to customers	15	1,390,947	810,373
Current tax assets	_ 11	3,901	4,130
Deferred tax assets	11	224	37
Property and equipment	19	1,353	1,117
Other assets	18	12,590	5,390
Total assets	_	9,639,942	7,777,724
87			
Liabilities			
Securities sold but not yet purchased	20	846,736	606,323
Derivative liabilities	21	178,301	185,937
Deposits from banks	22	1,563,719	29,718
Deposits from customers	23	152,590	84,840
Debt securities in issue	24	6,083,809	6,082,459
Current tax Jiabilities	11	1,476	1,869
Deferred tax liabilities	11		408
Other liabilities	25	25,905	7,708
- 2		8,852,536	6,999,262
Equity			, ,
Share capital	26	10,049	10,042
Capital contribution		503,994	504,001
Retained earnings		274,549	261,561
OCI reserve	MAT 12	(1,186)	2,858
Total shareholders' equity		787,406	778,462
Total liabilities and shareholders'		17. 11	,
equity		9,639,942	7,777,724
Off balance sheet items			
Committed lending and undrawn			
facilities	28	386,407	489,921
	_	-,	

On behalf of the Board

Roslyn O'Shea Director

Brian Hayes Director

Noel Reynolds Director

Colin Rafferty Company Secretary

30 January 2020

# STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

As at 31 October 2019 (US\$ in thousands)	Share capital	Capital Contribution	Retained earnings	OCI reserve	Total
1 November 2018	10,042	504,001	261,561	2,858	778,462
Profit for the year			12,988	-	12,988
Other OCI, net of tax OCI reserve: Net change in fair value OCI reserve: Net amount transferred to	*	<b>*</b> **		(3,381)	(3,381)
profit and loss	=	-		(663)	(663)
Total OCI	_	_	12,988	(4,044)	8,944
Total comprehensive income for the year Issued during the year	- 7	3	12,988	(4,044)	8,944 7
Redeemed during the year	-	(7)			(7)
31 October 2019	10,049	503,994	274,549	(1,186)	787,406
As at 31 October 2018 (US\$ in thousands)	Share capital	Capital Contribution	Retained earnings	OCI reserve	Total
1 November 2017	10,044	504,001	236,825	2,242	753,112
Total OCI for the year Impact from adopting IFRS 9 Profit for the year		#0 #0	(140) 24,876	 	(140) 24,876
Other OCI, net of tax OCI Reserve: Net change in fair value OCI Reserve: Net amount transferred to profit and loss			;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	2,163 (1,547)	2,163 (1,547)
Total OCI			24,736	616	25,352
Total comprehensive			۷٦,/٥٥	010	23,332
income for the year		i i	24,736	616	25,352
FX translation	(2)	<u>.</u>	-		(2)
	(-/				(-)
31 October 2018	10,042	504,001	261,561	2,858	778,462
			/		

# **STATEMENT OF CASH FLOWS**

	Year	Year
	ended 31	ended 31
· ·	October	October
(1104 to the comment of the comment	2019	2018
(US\$ in thousands)		
Cash flows from operating activities		
Profit before income tax	13,629	25,849
Front before income tax	13,029	23,019
Adjusted for non-cash items included in income statement and other adjustments		
Depreciation	444	302
Gain on sale of debt securities	(663)	(1,547)
Cum on sale of debt securities	13,410	24,604
· ·	13,410	24,004
Net increase/decrease in operating		
assets/liabilities		
Decrease/(increase) in derivative assets	116,499	(79,393)
(Increase)/decrease in loans and advances to banks	(1,576,158)	730,666
(Increase)/decrease in loans and advances to customers	(580,574)	941,712
Decrease in equities	665,441	968,289
Decrease/(increase) in Current Tax Assets	229	(2,165)
(Increase)/decrease in other assets	(7,200)	1,763
Increase/(decrease) in trading liabilities	240,413	(350,254)
(Decrease) in derivative liabilities	(7,636)	(98,300)
Increase/(decrease) in deposits from banks	1,534,001	(1,680,788)
Increase in deposits from customers	67,750	12,765
	•	
Increase/(decrease) in debt securities in issue	1,350	(126,334)
Increase in other liabilities	18,197	244
Tax paid	(850)	(2,829)
Net cash inflow from operating activities	471,462	315,376
Cashflows from investing activities		
Acquisition of debt securities	(930,707)	(1,219,894)
•		
Maturity and sale of debt securities	710,467	1,103,981
Increase in fixed assets	(695)	(877)
Net cash outflow from investing activities	(220,935)	(116,790)
Net increase in cash and balances with central banks	263,937	223,190
Cash and balances with central banks at the beginning of	3,157,282	2,934,092
the year	3,137,202	2,357,032
Cash and balances with central banks at the end of the year	3,421,219	3,157,282
included in the cash flows from operating activities for the ye	ear are the followi	ng amounts:
Interest income received	270,867	. 220,220
Interest expense paid	(236,910)	(173,247)

### **NOTES TO THE FINANCIAL STATEMENTS**

#### 1. General information

Bank of Montreal Europe plc (the "Company") is a public limited company domiciled in Ireland. The address of the Company's registered office is 6th Floor, 2 Harbourmaster Place, IFSC, Dublin 1, D01 X5P3, Ireland.

The Company changed its name from Bank of Montreal Ireland plc to Bank of Montreal Europe plc effective 2 September 2019.

The Company is engaged in the business of banking including the provision of financial services, is regulated by the Central Bank of Ireland (the "CBI") and has a full banking licence. The Company is a wholly owned subsidiary of Bank of Montreal ("BMO"). BMO and its direct and indirect subsidiaries, including the Company, are collectively referred to herein as the "BMO Group". As the BMO Group's only fully licenced bank in Europe, the Company acts as BMO Capital Markets' ("BMO CM") European banking platform, transacting on its own account, and within its own risk appetite, with local and franchise clients and counterparties on a wide range of financial products.

### 2. Basis of preparation

### Statement of compliance

The Financial Statements are prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and adopted by the European Union ("EU") and in accordance with the provisions of the Companies Act 2014.

The Financial Statements were approved by the Board of Directors on 30 January 2020.

### Basis of measurement

The Financial Statements are prepared on a going concern basis and have been prepared under the historical cost convention as modified to include the following:

- derivative financial instruments are measured at fair value;
- o financial assets measured or designated at fair value through other comprehensive income ("FVOCI") are measured at fair value;
- held for trading equities are measured at fair value; and
- o trading liabilities are measured at fair value.

### 3. Accounting policies

The following accounting policies have been applied consistently to all periods presented in these Financial Statements.

### Functional and presentation currency

These Financial Statements are presented in United States dollars ("US\$"), which is the Company's functional currency. Except as indicated, financial information presented in US\$ has been rounded to the nearest thousand.

### Use of estimates and judgements

The preparation of financial statements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. The most significant assets and liabilities for which the Company must make estimates include allowance for credit losses and financial instruments measured at fair value. If actual results differ from the estimates, the impact would be recorded in future periods.

### 3. Accounting policies (continued)

The Company has established detailed policies and control procedures that are intended to ensure these judgments are well controlled, independently reviewed and consistently applied from period to period. The Company believes that its estimates of the value of its assets and liabilities are appropriate.

### Allowance for Credit Losses

The expected credit loss ("ECL") model requires the recognition of credit losses generally based on 12 months of expected losses for performing loans and the recognition of lifetime losses on performing loans that have experienced a significant increase in credit risk since origination. The determination of a significant increase in credit risk takes into account many different factors and varies by product and risk segment. The main factors considered in making this determination are relative changes in probability of default since origination, and certain other criteria, such as 30-day past due and watchlist status. The assessment of a significant increase in credit risk requires experienced credit judgment. In determining whether there has been a significant increase in credit risk and in calculating the amount of expected credit losses, the Company must rely on estimates and exercise judgment regarding matters for which the ultimate outcome is unknown. These judgments include changes in circumstances that may cause future assessments of credit risk to be materially different from current assessments, which could require an increase or decrease in the allowance for credit losses. The calculation of expected credit losses includes the explicit incorporation of forecasts of future economic conditions. The BMO Group has developed models incorporating specific macroeconomic variables that are relevant to each portfolio. Forecasts are developed internally by the BMO Group Economics group, considering external data and its view of future economic conditions. The Company exercises experienced credit judgment to a) incorporate multiple economic forecasts which are probability-weighted in the determination of the final expected credit loss, the allowance is sensitive to changes in both economic forecasts and the probability weight assigned to each forecast scenario, and b) determine if any non-model adjustments are required, based on the local credit assessment process. Additional information regarding the allowance for credit losses is included in Note 27.

### Financial Instruments Measured at Fair Value

Fair value measurement techniques are used to value various financial assets and financial liabilities. Additional information regarding the fair value measurement techniques is included in Note 30.

### Income Taxes and Deferred Tax Assets

The provision for income taxes is calculated based on the expected tax treatment of transactions recorded in either the Statement of Income or Statement of Changes in Equity. In determining the provision for income taxes, the Company interprets tax legislation, case law and administrative positions in numerous jurisdictions and, based on its judgment, records the estimate of the amount required to settle tax obligations.

The Company will also make assumptions about the expected timing of the reversal of deferred tax assets and liabilities. If its interpretations and assumptions differ from those of tax authorities or if the timing of reversals is not as expected, the provision for income taxes could increase or decrease in future periods. The amount of any such increase or decrease cannot be reasonably estimated.

Deferred tax assets are recognised only when it is probable that sufficient taxable profit will be available in future periods against which deductible temporary differences or unused tax losses and tax credits may be utilised. The Company assesses whether it is probable that its deferred income tax assets will be realised. The factors used to assess the probability of realization are its past experience of income and capital gains, forecast of future net income before taxes, and the remaining expiration period of tax loss carry forwards and tax credits. Changes in the assessment of these factors could increase or decrease the provision for income taxes in future periods.

Additional information regarding accounting for income taxes is included in Notes 10 and 11.

### 3. Accounting policies (continued)

### Going concern

The Company's management has made an assessment of its ability to continue as a going concern and is satisfied that it has the resources to continue in business for the foreseeable future. Furthermore, management is not aware of any material uncertainties that may cast significant doubt on the Company's ability to continue as a going concern. Therefore, the financial statements continue to be prepared on the going concern basis.

### Foreign currency translation

Transactions in foreign currencies are translated to the functional currency of the Company at month end exchange rates in the month the transaction occurred. Monetary assets and liabilities that are denominated in foreign currencies are translated into US\$ at the exchange rate in effect at the reporting date. Non-monetary assets and liabilities that are measured based on historical cost in a foreign currency are translated into US\$ at the date of the transaction. Resulting exchange gains and losses are recorded in the profit or loss in the Statement of Comprehensive Income.

### Interest income and expense

Interest income and expense are recognised in the profit or loss of the Statement of Comprehensive Income for all interest bearing financial instruments using the effective interest rate method. The effective interest rate is the rate that exactly discounts the estimated future cash payments and receipts through the expected life of the financial asset or liability.

The calculation of the effective interest rate includes all fees and points paid or received, transaction costs, and discounts or premiums that are an integral part of the effective interest rate. Transaction costs are incremental costs that are directly attributable to the acquisition, issue or disposal of a financial asset or liability.

Interest income and expense presented in the Statement of Comprehensive Income includes:

- interest on financial assets and liabilities at amortised cost on an effective interest rate basis;
- o interest on FVOCI debt securities on an effective interest rate basis; and
- o interest on derivative financial instruments.

Interest income and expense on all trading assets and liabilities are considered to be incidental to the Company's trading operations and are presented together with all other changes in the fair value of trading assets and liabilities in net trading income.

### Fees and commission

Fees and commission income and expenses that are integral to the effective interest rate on a financial asset or liability are included in the measurement of the effective interest rate.

Other fees and commission income are recognised as the related services are performed. When a loan commitment is not expected to result in the draw-down of a loan, loan commitment fees are recognised on an accruals basis over the commitment period.

### 3. Accounting policies (continued)

### Net trading income

Net trading income comprises gains less losses related to trading assets and liabilities, and includes all realised and unrealised fair value changes, dividends and foreign exchange differences.

### Net income from other financial instruments at fair value through profit or loss

Fair value changes on other derivatives held for risk management purposes and other financial assets and liabilities carried at fair value through profit or loss, are presented in net income from other financial instruments at fair value through profit and loss. Net income from other financial instruments at fair value through profit and loss comprises gains less losses related to financial instruments designated at fair value through profit or loss and includes all realised and unrealised fair value changes, dividends and foreign exchange differences.

### Dividends

Dividend income or expense is recognised when the right to receive or pay income is established. Usually this is the ex-dividend date for equity securities. Dividends are reflected as a component of net trading income, net income on other financial instruments at fair value or other operating income based on the underlying classification of the equity instrument.

#### Financial assets and liabilities

### Recognition and initial measurement

The Company initially recognises loans and advances, debt securities, deposits, debt securities issued and subordinated liabilities on the date that they are originated. All other financial assets and liabilities (including regular-way purchases and sales of financial assets) are initially recognised on the settlement date at which the Company becomes a party to the contractual provisions of the instrument.

### Classification and subsequent measurement of financial assets

The Company classifies its financial assets, other than those designated and effective as hedging instruments, as measured at: amortised cost, FVOCI or FVTPL. The classification is determined by both: the Company's business model for managing the financial assets and the contractual cash flow characteristics of the financial assets.

For purposes of subsequent measurement, the Company's financial assets are classified into the following categories:

- Debt instruments at amortised cost (loans and advances and cash and balances with central banks)
- Debt instruments at FVOCI (debt securities)
- Equity instruments at FVTPL (trading equities)

### Debt instruments at amortised cost

Debt instruments are measured at amortised cost if they are held within a business model whose objective is to hold assets to collect contractual cash flows and those cash flows represent solely payments of principal and interest. Gains or losses on disposal and impairment losses are recognised in profit or loss in the Statement of comprehensive income.

### Debt instruments at FVOCI

Debt instruments are measured at FVOCI if they are held within a business model whose objective is achieved by both selling the assets and collecting contractual cash flows and those cash flows represent solely payments of principal and interest. These debt securities may be sold in response to or in anticipation of changes in interest rates and resulting prepayment risk, changes in credit risk, changes in foreign currency risk, changes in funding sources or terms, or to meet liquidity needs.

### 3. Accounting policies (continued)

Changes in fair value are recorded in other comprehensive income; gains or losses on disposal, interest income calculated using the effective interest method, impairment losses and foreign exchange gains and losses are recorded in profit or loss in the Statement of comprehensive income.

### Equity instruments at FVTPL

Equity instruments are measured at FVTPL unless an election is made to measure at FVOCI, in which case gains and losses are never recognised in income.

### Amortised cost measurement

The amortised cost of a financial asset or liability is the amount at which the financial asset or liability is measured at initial recognition, minus principal repayments, plus or minus the cumulative amortisation using the effective interest method of any difference between the initial amount recognised and the maturity amount, minus any reduction for impairment.

### Fair value measurement

For traded securities, quoted market value is based on bid prices, where available. For all other financial instruments where market quotes are not available, fair value is determined using valuation techniques. These estimation techniques include discounted cash flows, internal models that utilize observable market data or comparisons with other securities that are substantially the same.

### Identification and measurement of impairment

IFRS 9 Financial Instruments ("IFRS 9") uses an ECL impairment model for all debt instruments measured at amortised cost or FVOCI as well as certain off-balance sheet loan commitments and guarantees. The new ECL model results in an allowance for credit losses ("ACL") being recorded on financial assets regardless of whether there has been an actual impairment.

The ECL model 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).

The determination of a significant increase in credit risk takes into account many different factors. The main factors considered in making this determination are credit judgement, relative changes in probability-weighted probability of default since origination and certain other criteria such as 30-day past due and Watch list status. The allowance for assets in Stage 2 will be higher than for those in Stage 1 as a result of the longer time horizon associated with this stage. Stage 3 requires the recognition of lifetime losses for all credit impaired assets.

IFRS 9 requires consideration of past events, current market conditions and reasonable supportable information about future economic conditions, in determining whether there has been a significant increase in credit risk and in calculating the amount of expected losses. The standard also requires future economic conditions to be based on an unbiased, probability-weighted assessment of possible future outcomes.

In considering the lifetime of an instrument, IFRS 9 generally requires the use of the contractual period, including pre-payment, extension and other options.

### 3. Accounting policies (continued)

### Classification and subsequent measurement of financial liabilities

The Company classifies its financial liabilities as either financial liabilities at FVTPL or other financial liabilities.

### Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is held for trading or it is designated as at FVTPL. As at reporting date, the company does not have financial liabilities designated at FVTPL.

### Other financial liabilities

Other financial liabilities, including deposits and debt securities in issue are subsequently measured at amortised cost using the effective interest method.

### Trading assets and liabilities

Trading assets and liabilities are those assets and liabilities that the Company acquires or incurs principally for the purpose of selling or repurchasing in the near term, or holds as part of a portfolio that is managed together for short-term profit or position taking.

Trading assets and liabilities are initially recognised and subsequently measured at fair value in the Statement of Financial Position with transaction costs taken directly to profit or loss. All changes in fair value are recognised as part of net trading income/(expense) in the Statement of Comprehensive Income.

### Cash and balances with central banks

Cash and balances with central banks comprise cash reserves including balances held with central banks other than mandatory reserve deposits with original maturity of less than 3 months. They are carried at amortised cost.

### Loans and advances

Loans and advances are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and that the Company does not intend to sell immediately or in the near term.

Loans and advances are initially measured at fair value plus incremental direct transaction costs, and subsequently measured at amortised cost using the effective interest method.

### Securities

Securities are initially measured at fair value plus incremental direct transaction costs and subsequently accounted for depending on their classification as either fair value through profit or loss, or FVOCI for those instruments that are not subsequently measured at fair value through profit and loss.

### Derecognition

The Company derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in transferred financial assets that is created or retained by the Company is recognised as a separate asset or liability. The Company derecognises a financial liability when its contractual obligations are discharged, cancelled or expired.

### 3. Accounting policies (continued)

The Company enters into transactions whereby it transfers assets recognised on its Statement of Financial Position, but retains both risks and rewards of the transferred assets or a portion of them. If all or substantially all risks and rewards are retained, then the transferred assets are not derecognised from the Statement of Financial Position. Transfers of assets with retention of all or substantially all risks and rewards include, for example, securities lending and repurchase transactions.

### Offsetting financial instruments

Financial assets and liabilities are offset and the net amount presented in the Statement of Financial Position only when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or realize the asset and settle the liability simultaneously.

Income and expenses are presented on a net basis only when permitted by IFRS, or for gains and losses arising from a group of similar transactions such as in the Company's trading activity.

### Derivative financial instruments

Derivative financial instruments are financial contracts that derive their value from underlying changes in interest rates, foreign exchange rates or financial or commodity prices or indices.

Derivative financial instruments are either regulated exchange-traded contracts or negotiated over-the-counter contracts. Derivative financial instruments are used for trading or risk management purposes. Derivatives are measured at fair value.

Trading derivatives are entered into to generate trading income from client facilitation trading positions.

### Derivatives held for risk management purposes

Derivatives held for risk management purposes include all derivative assets and liabilities that are not classified as trading assets or liabilities.

The Company's policy is to hedge certain of the following banking or trading book exposures:

- interest rate risk using interest rate swaps
- o currency exposures using forward exchange swaps or contracts
- market risk using total return swaps or offsetting physical long/ short positions

The following table provides examples of certain activities undertaken by the Company, the related risks associated with such activities and the types of derivatives in managing such risks. Such risks may also be managed by using on-balance sheet instruments as part of an integrated approach to risk management.

<u>Activity</u>	Risk	Economic hedging instruments
Funding requirements	Receipt of funds in a certain currency and requirement to provide funding in a different currency	Foreign Exchange
Equity derivatives trading	Change in the value of the underlying asset/liability	Total Return Swap

### 3. Accounting policies (continued)

### Hedge accounting

In order to qualify as an accounting hedge, the hedging relationship must be designated and formally documented at its inception, detailing the particular risk management objective and strategy for the hedge and the specific asset being hedged, as well as how hedge effectiveness is being assessed. Changes in the fair value of the derivative must be highly effective in offsetting either changes in fair value or the amount of future cash flows.

Hedge effectiveness is evaluated at the inception of the hedging relationship and on an ongoing basis, retrospectively and prospectively, primarily using quantitative statistical measures of correlation. Any ineffectiveness in the hedging relationship is recognised in the Statement of Comprehensive Income as it arises.

### Fair value hedges

Fair value hedges modify exposure to changes in a fixed rate instrument's fair value caused by changes in interest rates. These hedges convert fixed rate assets to floating rate assets. The Company's fair value hedges include hedges of fixed FVOCI debt securities by using an interest rate swap as a hedging derivative. For fair value hedges, the hedging derivative is recorded at fair value and any fixed rate assets that are part of a hedging relationship are adjusted for the changes in value of the risks being hedged ("fair value adjustment"). The nature of the risks being hedged are changes in the fair value of the FVOCI debt securities caused by changes in interest rates.

### **Equity reserves**

The reserves recorded in equity on the Company's statement of financial position include:

FVOCI reserve, which comprises changes in fair value of FVOCI investments

### Property and equipment

All property and equipment is stated at cost less accumulated depreciation. Historical cost includes any expenditure that is directly attributable to the acquisition of the items. All repairs and maintenance costs are charged to the Statement of Comprehensive Income during the financial period in which they are incurred.

Depreciation of tangible fixed assets is provided on a straight line basis over estimated useful lives as follows:

- Computers and other equipment 2 to 5 years
- Fixtures and fittings Lease term to a maximum of 10 years

### Operating leases

Assets classified as operating leases are not recognised in the Company's statement of financial position. Operating leases are charged to income on a straight line basis over the lease term.

### **Pensions**

The Company operates a defined contribution pension scheme. Under this pension scheme, the Company is responsible for contributing a predetermined amount to a participant's retirement savings, based on a percentage of that employee's salary. The costs of this scheme, recorded in personnel expenses, are equal to the Company's contributions to the scheme.

### 3. Accounting policies (continued)

### Share-based payments

Select employees are eligible to participate in the incentive-based compensation plan which has two components: 1) upfront compensation, and 2) deferred compensation, both equally split in cash and share-linked awards. A minimum portion of 40% or 60% of an employee's incentive award is deferred over a period of between three to seven years. Share linked awards are granted as restricted share units ("RSU"). One RSU is equivalent to one common share of the BMO Group. The costs of this plan, recorded in personnel expenses, are equal to the Company's contributions to the plan.

### Income tax

Income tax expense comprises current and deferred tax. It is recognised in profit or loss except to the extent that it relates to items recognised directly in equity or in other comprehensive income. The Company reports its provision for income taxes in the Statement of Comprehensive Income based upon transactions recorded in the Financial Statements regardless of when they are recognised for income tax purposes.

The provision for income taxes is calculated based on the applicable tax law and the tax treatment of transactions recorded in the Statement of Comprehensive Income or Changes in Shareholders' Equity. In determining the provision for income taxes, the Company makes assumptions about the expected timing of the reversal of deferred tax assets and liabilities. If the Company's interpretations differ from those of tax authorities or if the timing of reversals is not as expected, the provision for income taxes could increase or decrease in future periods.

Deferred income tax balances are the cumulative amount of tax applicable to temporary differences between the accounting and tax values of the Company's assets and liabilities. Deferred income tax assets and liabilities are measured at tax rates expected to apply when the differences reverse. Changes in deferred income tax assets and liabilities related to a change in tax rates are recorded in income in the year the tax rate change is substantively enacted.

The Company's deferred income tax asset is expected to be realised in the normal course of operations. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

### Securities lending

The Company funds client equity positions by providing cash and receiving equity collateral. These transactions are traded under industry standard Global Master Securities Lending Agreements ("GMSLA"). The Company account for these instruments as if they were loans and depending on the counterparty classification are reported in the Statement of Financial Position as Loans and advances to Banks or Loans to advances to customers. Please see Notes 14 and 15 for further breakdowns.

### Reverse repo

The Company is predominantly long cash and therefore enters reverse repos giving cash and receiving collateral. Eligible collateral includes government debt of certain countries, high quality securities, and bonds from selected supranational debt issuers.

### 3. Accounting policies (continued)

### Changes in accounting policies

The following new standards, interpretations and amendments were adopted by the Company for the first time in the financial reporting period. The impact of each is set out below:

### IFRS 15 Revenue from Contracts

Effective November 1, 2018, the Company adopted IFRS 15 Revenue from Contracts with Customers ("IFRS 15"). The new standard does not have any impact on the financial position or performance of the Company.

### **Share-based Payment**

Effective November 1, 2018, the Company adopted amendments to IFRS 2 Share-based Payment in relation to the classification and measurement of share-based payment transactions. There was no impact to the Company's financial statements.

### New standards not early adopted in 2019:

### **IFRS 16 Leases**

In January 2016, the IASB issued IFRS 16 Leases ("IFRS 16"), which provides guidance for leases whereby lessees will recognise a liability for the present value of future lease liabilities and record a corresponding asset on the balance sheet for most leases. Currently, real estate leases are classified as operating leases, whereby the Company records lease expense over the term of the lease with no asset or liability recorded on the statement of financial position other than any related leasehold improvements. Under IFRS 16, the Company will recognize right-of-use assets, which will depreciate and lease liabilities, which will accrete interest over the lease term.

On transition, the Company will elect to calculate the right-of-use asset equal to the lease liability. The Company will continue to account for short term leases (terms of 12 months or less) as executory contracts with lease expense recorded over the lease term and no corresponding right-of-use asset or lease liability. The Company has also elected to exclude intangibles from the scope of lease accounting, and to combine lease and non-lease components (for example maintenance and utilities that have fixed payments) in the calculation of right-of-use assets and lease liabilities.

When the Company adopts IFRS 16 on November 1, 2019 the impact will be an increase in both assets and liabilities of approximately US\$4.9 million, with no changes to prior years.

### Uncertainty Over Income Tax Treatments

On June 7, 2017, the IASB issued IFRIC Interpretation 23 Uncertainty over Income Tax Treatments, effective for the Company beginning November 1, 2019. The Interpretation clarifies the recognition and measurement requirements in IAS 12 Income Taxes when there is uncertainty over income tax treatments. The Company does not expect the Interpretation to have a significant impact on its financial results.

### **Insurance Contracts**

In May 2017, the IASB issued IFRS 17 Insurance Contracts ("IFRS 17"), which provides a comprehensive approach to accounting for all types of insurance contracts and will replace the existing IFRS 4 Insurance Contracts. In June 2019, the IASB published an Exposure Draft which proposes to defer the effective date by one year, which would change the anticipated effective date for the Company to November 1, 2022. The Company will continue to closely monitor the ongoing developments related to the standard.

### 3. Accounting policies (continued)

New standards not early adopted in 2019: (continued)

### Interbank Offered Rate ("IBOR") Reform

The IASB published Phase 1 of its amendments to IFRS 9 Financial Instruments and IAS 39 Financial Instruments: Recognition and Measurement, as well as IFRS 7 Financial Instruments: Disclosures in September 2019, to provide relief from the potential effects of the uncertainty arising from Interbank Offered Rate (IBOR) reform, focusing in particular on the period prior to replacement of interbank offered rates. These amendments modify hedge accounting requirements, allowing the Company to assume that the interest rate benchmark on which the cash flows of the hedged item and the hedging instrument are based are not altered as a result of IBOR reform, thereby allowing hedge accounting to continue. Mandatory application of the amendments ends at the earlier of when the uncertainty regarding the timing and amount of interest rate benchmark-based cash flows is no longer present and the discontinuation of the hedging relationship. Phase 2 of the IASB's project on IBOR is underway and will address transition to IBOR.

The Phase 1 amendments are effective for the Company's fiscal year beginning November 1, 2020, with early adoption permitted. The Company is in the process of assessing its inventory of IBOR-based instruments and related hedge accounting relationships to evaluate the impact of these amendments on the financial results. The Company provides disclosure on its current hedging relationships in Note 29.

### Conceptual Framework

In March 2018, the IASB issued the revised Conceptual Framework ("Framework"), which sets out the fundamental concepts for financial reporting to ensure consistency in standard-setting decisions and that similar transactions are treated in a similar way, so as to provide useful information to users of financial statements. The revised Framework, which is effective for the Company's fiscal year beginning November 1, 2020, will inform future standard-setting decisions but does not impact existing IFRS. The Company does not expect the Framework to have a significant impact on its accounting policies.

ŀ.	Net interest income		
	(US\$ in thousands)	Year e 2019	nded 31 October 2018
	Interest income		
	Cash and balances with central banks <sup>1</sup>	(20,774)	(16,423)
	Securities	49,433	33,763
	Derivative assets held for risk management	181,763	159,640
	Loans and advances to banks	40,049	20,812
	Loans and advances to customers	24,139	24,192
	96	274,610	221,984
	Interest expense		
	Debt securities in issue (see note 24)	150,895	118,776
	Derivative liabilities held for risk management	4,088	16,313
	Deposits from banks	80,474	39,297
	Deposits from customers	1,858	1,445
	To a second seco	237,315	175,831
	Net interest income by product type	37,295	46,153
	Interest income		
	BMO Group <sup>2</sup>	181,955	160,226
	Non BMO Group	92,655	61,758
	Non Brio Group	274,610	221,984
	Interest expense	- 14	
	BMO Group	236,947	175,789
	Non BMO Group	368_	42
		237,315	175,831
	Net interest income by related/non		\.
	related party	<u>37,295</u>	46,153

<sup>&</sup>lt;sup>1</sup> Negative interest income due to negative rates on underlying central bank placement.
<sup>2</sup> Majority of BMO Group Income relates to derivative assets held for risk management including FX and interest rate swaps economically hedging underlying financial instruments.

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	Not foo and commission expense		
	5. Net fee and commission expense	Year ended 3	21 October
	(US\$ in thousands)	2019	2018
	Fee and commission income		
	Lending fees	1,468	585
	Broker fees	1,500	303
		•	
	Advisory fees	831	. <del></del>
	Service agreements with BMO Group entities	236	
		4,035	585
	Fee and commission expense		
	Service agreements with BMO Group entities	9,609	7,901
	Securities lending fees	1,308	1,772
	Equity related fees	700	326
	Other	43	36
		11,660	10,035
	Net fee and commission expense	(7,625)	(9,450)
6	. Net trading income	Very anded 5	1 Octobou
	(IICt in the constant)	Year ended 3	
	(US\$ in thousands)	2019	2018
	Equity swaps	12,976	9,188
	Futures	567	14
	Interest rate swaps – hedge ineffectiveness	317	(527)
	Interest rate swaps	32	282
	Gain on sale of debt securities	663	1,547
	Foreign Exchange	28	(682)
	Commodity Swaps	974	(002)
	·		0.022
	Net trading income	15,557	9,822
7.	Personnel expenses		
	(1104.1.41	Year ended	
	(US\$ in thousands)	2019	2018
	Wages, salaries and other benefits	10,773	8,782
	Compulsory social security obligations	716	716
	Contribution to defined contribution pension Scheme	425	425
	Total personnel expenses	11,914	9,923
	*		
	Average number of employees		#
		40	25
	during the year	48	35_

All of the above are considered to be engaged in the business of banking including the provision of financial services. Pension contributions accrued but not paid at financial year end were US\$ nil in 2019 (2018 US\$ nil). No employee costs are capitalised, details of director remuneration are shown in Note 33.

## 8. Operating lease expenses

The Company has entered into an operating lease in relation to its premises. Operating lease commitments are future minimum lease payments. Operating lease fees paid in 2019 amounted to US\$545,252 (2018: US\$586,860). Other premises related expenses including cleaning and general maintenance were US\$272,555 (2018: US\$280,255). Current lease commitments (excluding operating expenses) under this lease are as follows:

	Year ended 31 October		
(US\$ in thousands)	2019	2018	
Within one year	656	587	
One to five years	2,046	2,347	
Five to fifteen years	1,846	2,256	
Total operating lease commitments	4,548	5,190	
9. Other operating expenses			
	Year ended 3	1 October	
(US\$ in thousands)	2019	2018	
Information technology costs	1,726	1,124	
Legal and consulting costs	3,746	1,784	
Auditors remuneration <sup>3</sup>	167	104	
Other overhead expenses	7,930	6,463	
Total other operating expenses	13,569	9,475	
10. Income tax expense			
'a	Year ended 3	1 October	
(US\$ in thousands)	2019	2018	
Current tax expense			
Current year	515	983	
Adjustments for prior year	144		
	659	983	
Deferred tax (benefit)/expense			
Temporary differences	(18)	(10)	
=	(18)	(10)	
Total income tax expense	641	973	

<sup>&</sup>lt;sup>3</sup> Auditors remuneration consists of the audit of the Company's Accounts. Fees paid for audit related services were US\$ 123,750 in 2019 (2018 US\$ 78,780) excluding VAT and fees paid for other assurance services, tax advisory services and other non-audit services were US\$ 9,900 in 2019 (2018 US\$ nil) excluding VAT.

<sup>40 |</sup> Bank of Montreal Europe plc - Directors' Report and Financial Statements 2019

## 10. Income tax expense (continued)

The reconciliation of statutory corporation tax to the effective rate on ordinary activities is as follows:

		Yea	ar ended 31	October
(US\$ in thousands)		2019		2018
Profit before tax	a)	13,629		25,849
Tax using the domestic corporation tax rate	12.5%	1,909	12.5%	3,199
Tax exempt income	(10.2%)	(1,394)	(8.6%)	(2,216)
Deferred tax	(0.1%)	(18)	0%	(10)
Prior year adjustment	1.1%	144_	0% _	12
Provision for income taxes		641	-	973

# Tax recognised in other comprehensive income (US\$ in thousands)

		2010	Year ended	31 October	2010		
	Before tax	Tax (expense) / benefit	Net of tax	Before tax	2018 Tax (expense)/ benefit	Net	of tax
Debt Securities	(4,622)	578	(4,044)	704	(88)		616
	(4,622)	578	(4,044)	704	(88)	ž	616

#### 11. Tax assets and liabilities

## Recognised deferred tax assets and liabilities

## Year ended 31 October

(US\$ in thousands)	201	L9		201	.8	
_	Assets	Liabilities	Net	<b>Assets</b>	Liabilities	Net
Property and equipment IFRS 9 Day 1	49	-	49	29	_	29
adjustments	6	14	6	8	-	8
Securities	169		169		(408)	(408)
_	224		224	37	(408)	(371)

## **Current tax assets and liabilities**

#### Year ended 31 October

(US\$ in thousands)	20:	19		201	8	
	Assets	Liabilities	Net	Assets	Liabilities	Net
Corporation tax preliminary payment	3,901	: 2	3,901	4,130	-	4,130
Corporation Tax payable		(1,476)	(1,476)	3 <del>=</del>	(1,869)	(1,869)
-	3,901	(1,476)	2,425	4,130	(1,869)	2,261

12. Cash and balances with central banks	Year ended 31 October		
(US\$ in thousands)	2019	2018	
Balances with Central Banks other than mandatory reverse deposits	3,398,147	3,140,010	
Reserve requirement <sup>4</sup>	23,072	17,272	
Cash and balances with central banks	3,421,219	3,157,282	

<sup>&</sup>lt;sup>4</sup> Mandatory reserve deposits with the Central Bank of Ireland.

<sup>42 |</sup> Bank of Montreal Europe plc – Directors' Report and Financial Statements 2019

13. Derivative assets	Year ended 31 October		
	2019	2018	
(US\$ in thousands)			
Interest rate swaps – fair value hedging	681	15,490	
Interest rate swaps	5,141	6,808	
FX swaps	6,388	135,870	
Equity swaps	2,005	16,710	
Cross currency swaps	35,121	124	
Commodity swaps	9,167		
Total derivative assets	58,503	175,002	
14. Loans and advances to banks	Year ended	31 October	
	2019	2018	
(US\$ in thousands)			
Loans and advances to banks	2,126,292	550,134	
Of which: securities lending	2,079,820	538,979	
	~		
Remaining contractual maturity			
1 to 3 months	1,000,000	241	
Less than 1 month	1,126,292	550,134	
	2,126,292	550,134	
Geographical split			
Ireland	242	368	
Europe other than Ireland	2,094,472	541,639	
Rest of world	31,578	8,127	
	2,126,292	550,134	

There were no assets past due but not impaired and no assets impaired in 2019 and 2018. The carrying value on these loans represents the maximum exposure to credit risk on these assets.

#### 15. Loans and advances to customers

(US\$ in thousands)

**Year ended 31 October 2019** 2018

Loans and advances to customers at amortised cost **1,390,947** 810,373

		Yea	ar ended 31 O	ctober		
(US\$ in thousands)		2019			2018	
	Gross amount	Impairment allowance <sup>5</sup>	Carrying amount	Gross amount	Impairment allowance	Carrying amount
<b>Corporate customers:</b> Secured						
lending Other	1,160,045	(2)	1,160,043	613,261	(1)	613,260
lending	235,453	(4,549)	230,904	197,226	(113)	197,113
	1,395,498	(4,551)	1,390,947	810,487	(114)	810,373

(US\$ in thousands)	Year ended 31 (	October
	2019	2018
Remaining contractual maturity		
3 months to 1 year	71,103	40,088
1 to 3 months	171,338	55,272
Less than 1 month	1,148,506_	715,013
	1,390,947	810,373
Geographical split		
Ireland	197,733	113,118
Europe other than Ireland	757,818	628,897
Rest of world	435,396	68,358_
	1,390,947	810,373

The gross amount on these loans represents the maximum exposure to credit risk on these assets. Additional detail with regard the credit quality of loans and advances to customers can be found in the credit risk section of Note 27.

<sup>&</sup>lt;sup>5</sup> Further detail in Credit Risk section of Note 27.

<sup>44 |</sup> Bank of Montreal Europe plc - Directors' Report and Financial Statements 2019

16. Debt securities		104011
(US\$ in thousands)	2019	<b>d 31 October</b> 2018
FVOCI securities	2,080,535	1,864,440
Government bonds	21,621	20,499
Public sector entities	516,056	522,827
Bank bonds carrying government guarantee	172,466	166,960
Multilateral development bank bonds	918,078	769,445
Bank bonds	452,314	384,709
	2,080,535	1,864,440
Remaining contractual maturity		
Greater than 5 years	· · · · · · · · · · · · · · · · · · ·	32,794
1 to 5 years	1,980,113	1,420,057
3 months to 1 year	50,336	259,940
1month to 3 months	50,086	151,649
4 4	2,080,535	1,864,440
722		
Securities unencumbered	1,946,589	1,652,682
Securities pledged as collateral	133,946	211,758
	2,080,535	1,864,440
17. Trading equities	Year ended	31 October
(US\$ in thousands)	2019	2018
Long positions held - equity	544,378	1,209,819
18. Other assets		
		d 31 October
(US\$ in thousands)	2019	2018
Accounts prepaid	6,672	2,804
Securities lending fees receivable	5,140	2,586
Intercompany receivables	723	=,
Loan fee receivables	55	
Total other assets	-	E 200
Total Other assets	12,590	5,390

19. Property and equipm	ent			
(US\$ in thousands)		Fixtures and fittings	Computers and other equipment	Total
Cost				
As at 1 November 201	7	564	815	1,379
Additions	27	178	699	877
Exchange translation a	_	(17)	(22)	(39)
As at 31 October 2018		725	1,492	2,217
Cost				
As at 1 November 201	8	725	1,492	2,217
Additions		₩2	695	<sup>'</sup> 695
Disposals				=11
Exchange translation a	_	(10)	(23)	(33)_
As at 31 October 20	19	715	2,164	2,879
Accumulated deprecia	tion			
		214	F20	924
As at 1 November 201	/ ==	314 - 49	520 253	834 302
Charge for the year Exchange translation	adjustment	(11)	(25)	(36)
charge for the year	aujustinent	(11)	(23)	(30)
As at 31 October 2018	<u> </u>	352	748	1,100
Accumulated depre	ciation			
As at 1 November 201	8	352	748	1,100
Disposals		_	-	
Charge for the year		48	396	444
Exchange translation a charge for the year	ndjustment	(6)	(12)	(18)
As at 31 October 20	19	394	1,132	1,526
Net Book Value		6		xi
31 October 2018	-	373	744	1,117
Net Book Value			28	
31 October 2019	T .	321	1,032	1,353
20. Securities sold but n	ot yet purcha	sed		
(US\$ in thousands)			Year ended 2019	<b>31 October</b> 2018
			2013	
Short positions held	l - equity		846,736	606,323

Securities sold but not yet purchased represent the Company's obligations to deliver securities that the Company did not own at the time of sale. These obligations are recorded at their fair value. Adjustments to the fair value as at the balance sheet date and gains and losses on the settlement of these obligations are recorded in trading revenues in the Statement of Income.

21. Derivative liabilities	Year ended	31 October
(US\$ in thousands)	2019	2018
Interest rate swaps – fair value hedging	50,766	338
Interest rate swaps	4,443	5,671
Equity swaps	67,116	23,949
Cross currency swaps	15,198	79,759
Foreign exchange forwards	32,592	76,220
Commodity swaps <sup>6</sup>	8,186	-
Total derivative liabilities	178,301	185,937
22. Deposits from banks		
	Year ended	31 October
(US\$ in thousands)	2019	2018
<b>Deposits from other BMO Group Companies</b>	1,563,719	3,655
Deposits from Banks	-	26,063
Remaining contractual maturity		
1 to 5 years	200,024	1 × - 8
3 months to 1 year	1,300,135	2 8
Less than 1 month	63,560	29,718
	1,563,719	29,718
Geographical split		
Ireland	;(=	2,263
Europe other than Ireland	22,458	6,605
Rest of world	1,541,261	20,850
	1,563,719	29,718
23. Deposit from customers	Vonu and a	124 Oakabau
(US\$ in thousands)	2019	1 <b>31 October</b> 2018
Deposits from other BMO Group Companies	152,590	84,840
Deposits from other BMO Group Companies	152,590	04,040
Remaining contractual maturity 1 to 3 months	_	27,227
Less than 1 month	152,590	57,613
Less than I month	152,590	84,840
Coographical calit	152,590	04,040
Geographical split Ireland	15 766	15 646
	15,766	15,616
Europe other than Ireland	136,824	69,224
24. Debt securities in issue	152,590	84,840
3.	Year ended	31 October
(US\$ in thousands)	2019	2018

<sup>&</sup>lt;sup>6</sup> All derivatives with the exception of Interest rate swaps – fair value hedging are used for the purposes of economic hedges.

<sup>47 |</sup> Bank of Montreal Europe plc – Directors' Report and Financial Statements 2019

## 24. Debt securities in issue (continued)

All the above debt securities were issued by the Company under a Canadian Dollar ("CAD") 8 billion programme for the issue of unsecured notes. The program is for a term of 10 years, beginning 31 March 2016. Debt securities in issue comprise eight notes in aggregate, four notes with a one month interest fixing period and four notes with a two month interest fixing period. Notes issued under the programme contain a demand or term feature that allows the BMO Group to elect not to rollover at the end of the interest fixing period, subject to a cure or term period of 60 days which has never been exercised. This program replaced the previous funding instrument, (the "Irish Note"), of CAD 8 billion issued in two tranches in 2005 and 2006.

#### 25. Other liabilities

	Year ended 31 Octobe			
(US\$ in thousands)	2019	2018		
Accounts payable Other	19,684 6,026	5,650 2,025		
Allowance for credit losses on off-balance sheet exposures	195	33_		
Total other liabilities	25,905	7,708		

### 26. Share capital

	Year ended 31 October			
(Number)	2019	2018		
Authorised	* U			
Ordinary shares of €1.25 each	30,000	30,000		
Ordinary shares of US\$1 each	50,000,000	50,000,000		
(US\$ in thousands)				
Issued		1 1		
30,000 fully paid ordinary shares of €1.25 each	42	42		
10,007,040 fully paid ordinary shares of US\$1 each	10,007	10,000		
Total share capital	10,049	10,042		

## 27. Risk management

The Company's Risk Management Framework defines how risks faced by the Company are manged, and where appropriate, leverages off the BMO Group's approach to the identification, measurement, monitoring and management of risks. The Risk and Capital Committee ("the RCC") of the Board of Directors is responsible for assisting the Board in fulfilling its oversight responsibilities for the Company's risk management framework, including the policies and processes used to manage credit, market, capital management, funding and liquidity, operational and other relevant risks; and the Company's management of these risks.

The Risk Management Committee ("RMC") which reports to the RCC supports the Board of Directors and the RCC in fulfilling these duties. The RMC meets at least on a monthly basis and the RCC meets on a regular basis.

The Chief Risk Officer ("CRO") of the Company or delegate is the Chair of the RMC. The participants of the RMC include Senior Management who receive regular reports from the CRO and their risk management colleagues.

Risk Management is sufficiently independent to challenge decisions that affect the Company's exposure to risk. The CRO reports directly to the BMO Group EMEA Chief Risk Officer and the Company's Chief Executive Officer. The CRO has frequent, direct and independent access to the RCC and is a member of all management committees. All Risk Management employees report directly to the CRO.

The main risks are classified as:

- a) Market Risk;
- b) Credit Risk;
- c) Concentration Risk;
- d) Funding & Liquidity Risk;
- e) Currency Risk;
- f) Operational Risk;
- g) Interest Rate Risk in the Banking Book ("IRRBB");
- h) Governance Risk; and
- i) Conduct Risk.

The Company's risk appetite is reviewed at least annually by the RMC and submitted to the RCC who review it and recommend it for approval to the Board of Directors. This is done alongside the strategic planning process through which a 3 year strategy is produced. The Company establishes its own risk appetite. The risk appetite framework consists of the Risk Appetite Statement, as well as key risk metrics, polices, limits and controls through which risk appetite is established, communicated and monitored. The Board of Directors holds the final responsibility for approval of the risk appetite statement. Compliance with the risk appetite statement is monitored by regular reporting to the RCC.

## 27. Risk management (continued)

The Risk Appetite Statement includes:

- Key Strategic Goals;
- Guiding Principles;
- Risk appetite qualitative statement; and
- Risk Metrics and Limits (including mid to long term view).

The Internal Capital Adequacy Assessment Process ("ICAAP") further integrates the evaluation of the Company's capital adequacy with the associated capital targets and capital strategies, while taking into consideration strategic direction and risk appetite.

The ongoing assessment of the Company's liquidity and funding position against regulatory requirements and internal limits through the Internal Liquidity Adequacy Assessment Process ("ILAAP") demonstrates that the Company is able to determine and maintain the level of liquidity required to support its strategic objectives, considering the risks it is exposed to under normal and stressed conditions.

Compliance with the Company's standards is supported by a program of periodic reviews undertaken by the Corporate Audit Division. The results of the Corporate Audit Division reviews are discussed with the Board of Directors, the Audit and Compliance Committee and with Senior Management in the Company and in the BMO Group.

The Board of Directors considers the risk management systems in place to be adequate in regard to the Company's risk profile, tolerances and strategy.

## 27. Risk management (continued)

#### a) Market Risk

Market risk is the potential for on and off balance sheet exposures to cause losses due to adverse changes in the underlying variables of interest, foreign exchange, equity, commodity, and credit market factors.

The Company incurs Market Risk in its trading activities. As part of the Company's risk management framework, comprehensive governance and management processes are employed surrounding Market Risk taking activities. The Board sets the Company's overall Risk Appetite with respect to Market Risk in terms of acceptable levels of 'Value-at-Risk' (VaR) on the Risk Appetite Statement (RAS). The RAS limits cascade down to individual Line-of-Business limits, which are authorised by the CRO.

The Company has a framework within which Market Risk is managed to ensure that all risks associated with all business activities are identified, managed, measured, monitored and reported. Market Risk within the Company is measured on a transaction, portfolio and also on a line of business ("LoB") basis with information provided to Senior Management on a daily, weekly and monthly basis. Key market risks identified for the Company include general interest rate risk, equity specific risk, foreign exchange risk and traded credit risk.

The Company uses Value at Risk ("VaR") as the primary mechanism for monitoring market risk for trading activities that include portfolios that are marked to market daily. VaR is the potential loss in value of the Company's trading positions, which might arise due to adverse movements in markets over a defined time horizon with a certain confidence level.

VaR is measured for specific classes of risk in trading activities: interest rate, foreign exchange rate, equity, commodity and credit, whenever applicable. VaR is computed using the BMO Group Value at Risk model. This is a Monte Carlo scenario simulation model, and its results are used for market risk management and reporting of exposures. The model computes one-day VaR results using a 99% confidence level and reflects the correlations between the different classes of market risk factors. During F2019, the minimum VaR was US\$852,477 (2018: US\$353,739) and the maximum was US\$1,441,617 (2018: US\$965,050). The VaR at 31 October 2019 was US\$1,202,998 (31 October 2018: US\$876,984).

The Company receives Market Risk reports on a daily basis that are internally approved model based results. However, the Company uses the Standardised Approach for the determination and reporting of Pillar 1 Market Risk Capital.

# 27. Risk management (continued)

The following table summarises the interest rate exposure of assets and liabilities of the Company grouped into time buckets.

	<b>Interest Rate S</b>	ensitivity Gap	Analysis as at	31 October 2	019		
(US\$ in					More	No	Carrying
thousands)	0-3 months	3-6 months	6-12 months	1-5 years	than 5 years	exposure to interest	amount
						rate	
Accord						sensitivity	
Assets Cash and							
balances with							
central banks	3,421,219	_	8 6	_		_	3,421,219
Debt securities	275,830	30,403	19,933	1,754,369	_		2,080,535
Derivative assets	27 57 55 5 10 = (=)	50,105		2,70 1,005	_	58,503	58,503
Trading equities	-	2	-	_	_	544,378	544,378
Loans and							•
advances to							
banks	2,126,292	-		-	-		2,126,292
Loans and							
advances to							
customers	1,319,844		71,103	-	-	-	1,390,947
Current tax	8						
assets	-		-	-	-	3,901	3,901
Deferred tax	-	-	-	-	-	224	224
Property and	957					1,353	1,353
equipment Other assets				_	-	1,553 12,590	12,590
Total Assets	7,143,185	30,403	91,036	1,754,369		620,949	9,639,942
Total Assets	7,143,103	30,403	71,030	1,754,505		020,545	3/033/342
Liabilities and							
equity			7/				
Securities sold but	· ·	*	100	3	-	846,736	846,736
not yet purchased			7				•
Derivative	-	_	·	-	-	178,301	178,301
liabilities							
Deposits from	63,560		1,300,135	200,024	<b>=</b> 8	-	1,563,719
banks							
Deposits from	152,590		( <del>)</del>	-		:•:	152,590
customers							
Debt securities in	6,083,809			=			6,083,809
issue						4 476	1 476
Current tax		÷ =	-	-		1,476	1,476
Deferred tax		_	1		-	-	
liabilities	-	-	· ·	-	-	_	
Other liabilities		_	-	_		25,905	25,905
Equity	<u>.</u>	_	I SE	- 41	3	787,406	787,406
Total liabilities							
and equity	6,299,959	-	1,300,135	200,024	**	1,839,824	9,639,942
Off balance	4 744 222	(20.204)	(20.000)	(4 602 040)			
sheet items	1,744,332	(30,384)	(20,000)	(1,693,948)			
Interest rate	2,587,558	19	(1,229,099)	(139,603)		(1,218,875)	
sensitivity gap	2,307,330	19	(1,223,033)	(139,003)		(1,210,073)	
Cumulative	2,587,558	2,587,577	1,358,478	1,218,875	1,218,875	_	
gap	2,307,330	2,301,311	1,330,470	1,210,075	1,210,075		_

# 27. Risk management (continued)

	Interest Rate Sens	sitivity Gap Anal	ysis as at 31 O	ctober 2018			
(US\$ in thousands)	0-3 months	3-6 months	6-12 months	1-5 years	More than 5 years	No exposure to interest rate sensitivity	Carrying amount
Assets						Sensitivity	
Cash and balances with					~		
central banks	3,157,282	( to )	2"	7=0	· ·	X#	3,157,282
Debt securities	541,907	81,075	27,225	1,181,439	32,794	( <del>-</del>	1,864,440
Derivative assets	1) 😇	(E)	8	9.00	5 <b>7</b> 5	175,002	175,002
Trading equities	( <u>#</u>	•	3	-		1,209,819	1,209,819
Loans and		102					
advances to							
banks	550,134	300	i. 4	9 <del>4</del> 51	14	946	550,134
Loans and	×						
advances to	770 205		40.000	27		9	040.070
customers	770,285		40,088	- <b>7</b> 0			810,373
Current tax assets	000					4 120	4.120
Deferred tax		-	-	-		4,130 37	4,130
Property and		-		-	-	3/	37
equipment	_	2	_		-	1,117	1,117
Other assets		-				5,390	5,390
Total Assets	5,019,608	81,075	67,313	1,181,439	32,794	1,395,495	7,777,724
	3/023/000	01/0/0	07,513	1,101,100	32,731	1,000,100	1,111,121
Liabilities and							
equity							
Securities sold but		-	_		(-)	606,323	606,323
not yet purchased						000,525	000,323
Derivative	121	21	2	9		185,937	185,937
liabilities						,-,-	
Deposits from	29,718	\$1		-	-	1.0	29,718
banks	•						
Deposits from	84,840	***	-	~	(#)	~	84,840
customers							•
Debt securities in	6,082,459	*	-	-	∵ *:	(*)	6,082,459
issue							
Current tax	•	-		=	35/	1,869	1,869
liabilities							
Deferred tax		-	19	=	-	408	408
liabilities						7 700	7.700
Other liabilities	i <b>=</b> ).	-	( <del>-</del>	-	-	7,708	7,708
Equity Total liabilities			// <del>-</del>		<u></u>	778,462	778,462
and equity	6,197,017	2.0				1,580,707	7,777,724
Off balance sheet		(00.754)	(27 500)	(1.100.134)	(22.767)	-,,	.,,.
items	1,340,139	(80,751)	(27,500)	(1,199,121)	(32,767)	3.00	¥
Interest rate sensitivity gap	162,730	324	39,813	(17,682)	27	(185,212)	<u></u>
Cumulative gap	162,730	163,054	202,867	185,185	185,212		2

### 27. Risk management (continued)

b) Credit Risk

Credit risk is the potential for loss due to the failure of a borrower, endorser, guarantor, obligor or counterparty to repay a loan or honour another pre-determined financial obligation (also known as counterparty risk). The definition also includes Credit Valuation Adjustment ("CVA") which covers losses from derivatives mark-to market. Sub-categories of Credit Risk include Country Risk, Loan Loss Risk, Replacement Risk and Settlement Risk.

The Company incurs credit risk within its Corporate Banking business via loans (including capital markets products such as derivatives and in its holding of investment securities) and within Trading Products via bonds, derivatives, repos and securities financing. Operating practices include the on-going monitoring of credit risk exposures, regular portfolio reviews and reporting to the Board of Directors and senior management committees. Credit limits are assigned to each entity and connection based on the credit assessment and decision process. Credit Risk assessments and decisions must be undertaken by credit qualified employees within delegated limits, in a manner that is independent and objective and with consideration for the Company's risk appetite and risk return objectives.

As is market standard for financial institutions the Company has entered into a number of collateral agreements (Credit Support Agreement ("CSA")) with derivative counterparties under International Swaps and Derivatives Association ("ISDA") documentation. The Company has also entered into a number of Global Master Securities Lending Agreements ("GMSLA") in relation to securities lending. The Company revalues all collateral, governed under a CSA, Global Master Repurchase Agreement ("GMRA") or Global Master Securities Lending Agreement ("GMSLA") on a daily basis.

Each of the CSA's specifies minimum threshold amounts of collateral to be posted by one entity to the other. Many of the thresholds will vary depending on the entity's external credit rating or ratings. This means that if an entity's credit rating rises some of the thresholds may increase. Conversely if an entity credit rating is downgraded some of the thresholds may decrease. The extent of such an adjustment is explicitly stated in the CSA with the contracted entity. The impact of a rating downgrade would not be material in relation to the financial position of the Company.

Wrong Way Risk ("WWR") is defined as the risk that occurs when exposure to an entity is adversely correlated with the credit quality of that entity. With respect to Replacement Risk, wrong-way risk occurs when the market rate factors underlying the Company's exposure to the entity, results in an increased exposure to the entity at the same time the entity's Probability of Default increases. The Company has mitigated its exposure to WWR through collateral agreements where appropriate.

Credit Risk activities are undertaken in alignment with the Company's Risk Management Framework and operate under the three-lines-of-defence operating model. The Company has a framework within which Credit Risk is managed to ensure that risks associated with its business activities are identified, managed, measured, monitored and reported. The RMC, RCC, along with the Board of Directors, has overall responsibility for the credit process. Credit Risk is measured on an entity/connection/portfolio and country of risk basis. Each entity/connection/country has an approved credit limit and the exposure against this limit is monitored regularly. The Company reviews its limits, at least annually, with each entity/connection, and approves triggers which are monitored on an ongoing basis for credit deterioration. Policy limits are reviewed, at least, annually. Credit risk is also monitored regularly under IFRS 9 for any significant increase in credit risk or impairment of credit exposures.

The assets in the following table are broken down by credit exposure, based on Standard & Poor's rating agency credit ratings:

# 27. Risk management (continued)

Assets         Cash and balances with central banks:       23,072       17,272         Central Bank of Ireland A+       23,072       17,272         European Central Bank AAA       3,398,148       3,140,010         Debt securities:       Government bonds and treasury bills:       21,621       20,499         Public sector entities:       Rated AAA       317,723       194,940         Rated AAA       198,333       327,887         Bonds carrying government guarantee:       Rated AAA       105,937       113,455         Rated AAA       66,529       53,505         Multilateral development bank bonds:       918,082       769,445         Bank bonds:       338,931       263,325         Rated AAA – AA       113,378       121,384         Derivative assets:       2       17,007         Rated AAA – A-       53,776       173,007         Unrated       4,727       1,995         Loans and advances to banks:       2       34,043         Rated BBH – BBB       251,912       84,043         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130		Year En	Year Ended 31 October			
Cash and balances with central banks: Central Bank of Ireland A+ European Central Bank AAA  Debt securities: Government bonds and treasury bills: Rated AAA  Public sector entities: Rated AAA  Rated AAA  Bonds carrying government guarantee: Rated AAA  Bonds carrying government bank bonds: Rated AAA  Rated AAA  Bonds carrying government bank bonds: Rated AAA  Rated AAA  Bonds carrying government bank bonds: Rated AAA  Rated AAA  Bonds carrying government bank bonds: Rated AAA  Rated AAA  Bonds carrying government bank bonds: Rated AAA  Rated AAA  Bonds carrying government bank bonds: Rated BBB+ - BBB  Donds carrying government bank bonds: Rated BBB+ - BBB  Donds carrying government bank bonds: Rated BBB+ - BBB  Donds carrying government bank bonds: Rated BBB+ - BBB  Donds carrying government bank bonds: Rated BBB+ - BBB  Donds carrying carrying carrying banks, and b	(US\$ in thousands)	2019	2018			
Central Bank of Ireland A+       23,072       17,272         European Central Bank AAA       3,398,148       3,140,010         Debt securities:       3,140,010         Government bonds and treasury bills:       21,621       20,499         Public sector entities:       317,723       194,940         Rated AAA       198,333       327,887         Bonds carrying government guarantee:       Rated AAA       105,937       113,455         Rated AAA       66,529       53,505         Multilateral development bank bonds:       8       769,445         Bank bonds:       338,931       263,325         Rated AAA – AA       918,082       769,445         Bank bonds:       338,931       263,325         Rated AAA – AA       918,082       769,445         Derivative assets:       3,25       173,007         Rated AAA – A-       13,376       173,007         Unrated       4,727       1,995         Loans and advances to banks:       1,251,034       466,091         Rated BBB – BBB       251,912       84,043         Urrated       493,734       151,878         Rated BBB + to BBB       159,426       461,382         Urrated       737,787 <td>Assets</td> <td>×</td> <td></td>	Assets	×				
Central Bank of Ireland A+       23,072       17,272         European Central Bank AAA       3,398,148       3,140,010         Debt securities:       3,140,010         Government bonds and treasury bills:       21,621       20,499         Public sector entities:       317,723       194,940         Rated AAA       198,333       327,887         Bonds carrying government guarantee:       Rated AAA       105,937       113,455         Rated AAA       66,529       53,505         Multilateral development bank bonds:       8       769,445         Bank bonds:       338,931       263,325         Rated AAA – AA       918,082       769,445         Bank bonds:       338,931       263,325         Rated AAA – AA       918,082       769,445         Derivative assets:       3,25       173,007         Rated AAA – A-       13,376       173,007         Unrated       4,727       1,995         Loans and advances to banks:       1,251,034       466,091         Rated BBB – BBB       251,912       84,043         Urrated       493,734       151,878         Rated BBB + to BBB       159,426       461,382         Urrated       737,787 <td>Cash and halances with central hanks:</td> <td></td> <td></td>	Cash and halances with central hanks:					
European Central Bank AAA 3,398,148 3,140,010  Debt securities: Government bonds and treasury bills: Rated AAA 21,621 20,499  Public sector entities: Rated AAA 317,723 194,940 Rated AAA 198,333 327,887  Bonds carrying government guarantee: Rated AAA 105,937 113,455 Rated AAA 66,529 53,505  Multilateral development bank bonds: Rated AAA A 918,082 769,445  Bank bonds: Rated AAA A 918,082 769,445  Bank bonds: Rated AAA A 338,931 263,325 Rated AAA A 113,378 121,384  Derivative assets: Rated AAA A 53,776 173,007 Unrated 4,727 1,995  Loans and advances to banks: Rated AA to A 1,251,034 466,091 Rated BBB		23,072	17,272			
Government bonds and treasury bills: Rated AAA  Public sector entities: Rated AAA  Rated BBB+ BBB  Loans and advances to banks: Rated AA to A- Rated BBB+ BBB  Rated AAA  Ra						
Government bonds and treasury bills: Rated AAA  Public sector entities: Rated AAA  Rated BBB+ BBB  Loans and advances to banks: Rated AA to A- Rated BBB+ BBB  Rated AAA  Ra	Debt securities:					
Rated AAA       21,621       20,499         Public sector entities:       Rated AAA       317,723       194,940         Rated AAA to AA-       198,333       327,887         Bonds carrying government guarantee:       Rated AAA       105,937       113,455         Rated AAA to AA       66,529       53,505         Multilateral development bank bonds:       Rated AAA - AA       918,082       769,445         Bank bonds:       Rated AAA - AA       918,082       769,445         Bank bonds:       Rated AAA - AA       918,082       769,445         Derivative assets:       Rated AAA - AA       918,082       769,445         Loans and advances to banks:       Rated AAA - A-       1,357       173,007         Unrated       1,251,034       466,091       466,091         Rated ABB+ to BBB       251,912       84,043       466,091         Unrated       493,734       151,878						
Public sector entities: Rated AAA Rated AAA 198,333 194,940 Rated AAA to AA- 198,333 327,887  Bonds carrying government guarantee: Rated AAA 105,937 113,455 Rated AAA 66,529 53,505  Multilateral development bank bonds: Rated AAA – AA 918,082 769,445  Bank bonds: Rated AAA – AA 338,931 263,325 Rated AAA to A+ 113,378 121,384  Derivative assets: Rated AAA – A- 53,776 173,007 Unrated 4,727 1,995  Loans and advances to banks: Rated AA to A- 1,251,034 466,091 Rated BBB+ – BBB 251,912 84,043 Unrated 623,346 -  Loans and advances to customers: Rated AA to A- 493,734 151,878 Rated BBB+ to BBB 159,426 461,382 Unrated 737,787 197,113  Held for Trading equities 544,378 1,209,819  Current tax assets 3,901 4,130 Deferred tax assets 224 37 Property and equipment 1,353 1,117 Other assets 12,590 5,390		21.621	20 499			
Rated AAA Rated AAA+ to AA- Rated AAA+ to AA-  Bonds carrying government guarantee: Rated AAA AAA Rated AAA AAA Rated AAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	Nacca 7001	21/021	20, 133			
Rated AA+ to AA-  Bonds carrying government guarantee: Rated AAA Rated AAA	Public sector entities:					
Bonds carrying government guarantee: Rated AAA Rated AAA	Rated AAA	317,723	194,940			
Rated AAA to AA 66,529 53,505  Multilateral development bank bonds: Rated AAA – AA 918,082 769,445  Bank bonds: Rated AAA 338,931 263,325 Rated AAA to A+ 113,378 121,384  Derivative assets: Rated AAA – A- 53,776 173,007 Unrated 4,727 1,995  Loans and advances to banks: Rated AA to A- 1,251,034 466,091 Rated BBB+ – BBB 251,912 84,043 Unrated 623,346 - 10,000 Carbon and advances to customers: Rated AA to A- 493,734 151,878 Rated AA to A- 493,734 151,878 Rated BBB+ to BBB 159,426 461,382 Unrated 737,787 197,113  Held for Trading equities 544,378 1,209,819  Current tax assets 3,901 4,130 Deferred tax assets 224 37 Property and equipment 1,353 1,117 Other assets 12,590 5,390	Rated AA+ to AA-	198,333	327,887			
Rated AAA to AA 66,529 53,505  Multilateral development bank bonds: Rated AAA – AA 918,082 769,445  Bank bonds: Rated AAA 338,931 263,325 Rated AAA to A+ 113,378 121,384  Derivative assets: Rated AAA – A- 53,776 173,007 Unrated 4,727 1,995  Loans and advances to banks: Rated AA to A- 1,251,034 466,091 Rated BBB+ – BBB 251,912 84,043 Unrated 623,346 - 10,000 Carbon and advances to customers: Rated AA to A- 493,734 151,878 Rated AA to A- 493,734 151,878 Rated BBB+ to BBB 159,426 461,382 Unrated 737,787 197,113  Held for Trading equities 544,378 1,209,819  Current tax assets 3,901 4,130 Deferred tax assets 224 37 Property and equipment 1,353 1,117 Other assets 12,590 5,390	Books and the second se					
Rated AA+ to AA       66,529       53,505         Multilateral development bank bonds:       769,445         Rated AAA – AA       918,082       769,445         Bank bonds:       338,931       263,325         Rated AAA       113,378       121,384         Derivative assets:       251,034       173,007         Rated AAA – A-       1,251,034       466,091         Unrated       4,727       1,995         Loans and advances to banks:       251,912       84,043         Unrated       623,346       -         Loans and advances to customers:       249,734       151,878         Rated ABB+ to BBB       159,426       461,382         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390		105 027	112 455			
Multilateral development bank bonds: Rated AAA – AA  918,082  769,445  Bank bonds: Rated AAA  Rated AAA  Rated AAA  Berivative assets: Rated AAA – A-  Unrated  1,251,034  Rated AA + To A-  Rated BBB + BBB  Loans and advances to banks: Rated AA to A-  Loans and advances to customers: Rated AA to A-  Loans and advances to customers: Rated BBB + BBB  Loans and advances to customers: Rated AA to A-  Loans and advances to rustomers: Rated AA to A-  Rated BBB + To BBB  Loans and advances to customers: Rated AA to A-  Rated BBB + To BBB  Loans and advances to customers: Rated AA to A-  Rated BBB + To BBB  Loans and advances to customers: Rated AA to A-  Rated BBB + To BBB  Loans and advances to customers: Rated AA to A-  Rated BBB + To BBB  Loans and advances to customers: Rated AA to A-  Rated BBB + To BBB  Loans and advances to customers: Rated AA to A-  Rated BBB + To BBB  Loans and advances to customers: Rated AA to A-  Rated BBB + To BBB  Loans and advances to customers: Rated AA to A-  Rated BBB + To BBB  Loans and advances to customers: Rated AA to A-  Rated BBB + To BBB  Loans and advances to customers: Rated AA to A-  Rated BBB + To BBB  Loans and advances to customers: Rated AA to A-  Rated BBB + To BBB  Loans and advances to customers: Rated AA to A-  Rated BBB + To BBB  Loans and Advances to customers: Rated AA to A-  Rated BBB + To BBB  Loans and Advances to Customers: Rated AA to A-  Rated BBB + To BBB  Rated BBB + To BBB  Rated BBB + To BBB  Rated BBB + To		•				
Rated AAA – AA       918,082       769,445         Bank bonds:       338,931       263,325         Rated AAA       338,931       263,325         Rated AA+ to A+       113,378       121,384         Derivative assets:       253,776       173,007         Unrated       4,727       1,995         Loans and advances to banks:       31,251,034       466,091         Rated AA to A-       1,251,034       466,091         Rated BBB+ – BBB       251,912       84,043         Unrated       623,346       -         Loans and advances to customers:       8493,734       151,878         Rated BBB+ to BBB       159,426       461,382         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390	Rateu AAT to AA	00,525	55,505			
Rated AAA – AA       918,082       769,445         Bank bonds:       338,931       263,325         Rated AAA       338,931       263,325         Rated AA+ to A+       113,378       121,384         Derivative assets:       253,776       173,007         Unrated       4,727       1,995         Loans and advances to banks:       31,251,034       466,091         Rated AA to A-       1,251,034       466,091         Rated BBB+ – BBB       251,912       84,043         Unrated       623,346       -         Loans and advances to customers:       8493,734       151,878         Rated BBB+ to BBB       159,426       461,382         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390	Multilateral development bank bonds:					
Rated AAA       338,931       263,325         Rated AA+ to A+       113,378       121,384         Derivative assets:       3,776       173,007         Rated AAA – A-       53,776       173,007         Unrated       4,727       1,995         Loans and advances to banks:       251,912       84,043         Rated BBB+ – BBB       251,912       84,043         Unrated       623,346       -         Loans and advances to customers:       Rated AA to A-       493,734       151,878         Rated BBB+ to BBB       159,426       461,382         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390		918,082	769,445			
Rated AAA       338,931       263,325         Rated AA+ to A+       113,378       121,384         Derivative assets:       3,776       173,007         Rated AAA – A-       53,776       173,007         Unrated       4,727       1,995         Loans and advances to banks:       3,251,034       466,091         Rated BBB+ – BBB       251,912       84,043         Unrated       623,346       -         Loans and advances to customers:       3,404       151,878         Rated AA to A-       493,734       151,878         Rated BBB+ to BBB       159,426       461,382         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390		19				
Rated AA+ to A+       113,378       121,384         Derivative assets:       3,776       173,007         Unrated       4,727       1,995         Loans and advances to banks:       1,251,034       466,091         Rated BBH - BBB       251,912       84,043         Unrated       623,346       -         Loans and advances to customers:       Rated AA to A-       493,734       151,878         Rated BBB+ to BBB       159,426       461,382         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390		222.224	262.225			
Derivative assets: Rated AAA – A- Unrated						
Rated AAA - A-       53,776       173,007         Unrated       4,727       1,995         Loans and advances to banks:       Rated AA to A-       1,251,034       466,091         Rated BBB+ - BBB       251,912       84,043         Unrated       623,346       -         Loans and advances to customers:       Rated AA to A-       493,734       151,878         Rated BBB+ to BBB       159,426       461,382         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390	Rated AA+ to A+	113,378	121,384			
Rated AAA - A-       53,776       173,007         Unrated       4,727       1,995         Loans and advances to banks:       Rated AA to A-       1,251,034       466,091         Rated BBB+ - BBB       251,912       84,043         Unrated       623,346       -         Loans and advances to customers:       Rated AA to A-       493,734       151,878         Rated BBB+ to BBB       159,426       461,382         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390	Derivative assets:					
Unrated       4,727       1,995         Loans and advances to banks:       1,251,034       466,091         Rated AA to A-       251,912       84,043         Unrated       623,346       -         Loans and advances to customers:       Rated AA to A-       493,734       151,878         Rated BBB+ to BBB       159,426       461,382         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390		53,776	173,007			
Loans and advances to banks:  Rated AA to A- Rated BBB+ - BBB Unrated  Loans and advances to customers:  Rated AA to A- Rated BBB+ to BBB Unrated  Loans and advances to customers:  Rated AA to A- Rated BBB+ to BBB Rated BBB+ to	Unrated		•			
Rated AA to A-       1,251,034       466,091         Rated BBB+ - BBB       251,912       84,043         Unrated       623,346       -         Loans and advances to customers:       493,734       151,878         Rated AA to A-       493,734       151,878         Rated BBB+ to BBB       159,426       461,382         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390		ŕ	ti-			
Rated BBB+ - BBB       251,912       84,043         Unrated       623,346       -         Loans and advances to customers:       Rated AA to A-       493,734       151,878         Rated BBB+ to BBB       159,426       461,382         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390						
Unrated       623,346       -         Loans and advances to customers:       493,734       151,878         Rated AA to A-       493,734       151,878         Rated BBB+ to BBB       159,426       461,382         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390			•			
Loans and advances to customers:         Rated AA to A-       493,734       151,878         Rated BBB+ to BBB       159,426       461,382         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390		-	84,043			
Rated AA to A-       493,734       151,878         Rated BBB+ to BBB       159,426       461,382         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390	Unrated	623,346	<u> </u>			
Rated AA to A-       493,734       151,878         Rated BBB+ to BBB       159,426       461,382         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390	Loans and advances to customers:					
Rated BBB+ to BBB       159,426       461,382         Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390		493.734	151.878			
Unrated       737,787       197,113         Held for Trading equities       544,378       1,209,819         Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390		•				
Current tax assets       3,901       4,130         Deferred tax assets       224       37         Property and equipment       1,353       1,117         Other assets       12,590       5,390	Unrated					
Deferred tax assets 224 37 Property and equipment 1,353 1,117 Other assets 12,590 5,390	Held for Trading equities	544,378	1,209,819			
Deferred tax assets 224 37 Property and equipment 1,353 1,117 Other assets 12,590 5,390		-	_			
Property and equipment         1,353         1,117           Other assets         12,590         5,390	· ·					
Other assets 12,590 5,390						
Total Assets 9,639,942 7,777,724	Other assets	12,590	5,390			
	Total Assets	9,639,942	7,777,724			

# 27. Risk management (continued)

Committed lending & undrawn facilities	Year Ended 3	1 October
(US\$ in thousands)	2019	2018
(054 III tilousulus)	2013	2010
Loans and advances to banks:		
Rated AA to A-Undrawn	<u>~</u>	50,000
Loans and advances to customers:		
Unrated Undrawn	386,407	439,921
Total Committed lending & undrawn	206 407	400 021
facilities	386,407	489,921
Geographic breakdown of assets		
9	Year Ended 3	1 October
(US\$ in thousands)	2019	2018
Central Banks	3,421,219	3,157,282
United Kingdom	1,629,862	636,132
Supranational	944,013	769,445
France	934,439	562,175
USA	781,825	756,521
Germany	562,365	394,274
Rest of Europe	562,250	679,535
Ireland	258,328	155,760
Sweden	159,073	239,015
Rest of World	143,544	169,490
Denmark	97,488	93,119
Luxemburg	85, <b>5</b> 95	
Canada	57,027	164,976
Belgium	2,914	-
	9,639,942	7,777,724

# Geographic breakdown of committed lending & undrawn facilities

and the second second	Year Ended 31 October			
(US\$ in thousands)	2019	2018		
France	131,351	41,666		
Rest of Europe	129,000	97,004		
Luxemburg	63,384	74,117		
USA	39,555	97,458		
Germany	23,117	52,677		
Belgium	, ·	100,000		
Sweden	=	27,000		
	386,407	489,921		

### 27. Risk management (continued)

#### **Allowance for Credit Losses**

The allowance for credit losses recorded in the Statement of Financial Position is maintained at a level considered adequate to absorb credit-related losses on financial assets. The allowance for credit losses amounted to US\$4,875,892 as at October 31, 2019, of which US\$4,680,432 was recorded in financial assets and US\$195,460 was recorded in other liabilities represents the risk of loss of value due to the failure of a borrower or counterparty to repay a loan or honour another pre-determined financial obligation.

### Allowance on performing financial assets

The approach to establishing and maintaining the allowance on performing financial assets is based on the requirements of IFRS. Under the IFRS 9 ECL methodology, an allowance is recorded for ECL on financial assets regardless of whether there has been an actual impairment. The Company recognises a loss allowance at an amount equal to 12 month ECL, if the credit risk at the reporting date has not increased significantly since initial recognition (Stage 1). The Company will record ECL over the remaining life of performing financial assets which are considered to have experienced a significant increase in credit risk (Stage 2).

An allowance is maintained in order to cover a significant increase in credit risk and/or impairment of financial assets that have not yet been individually identified. The determination of a significant increase in credit risk takes into account many different factors and varies by product and risk segment. The main factors considered in making this determination are credit judgement, relative changes in probability-weighted probability of default since origination and certain other criteria, such as 30-day past due and watchlist status.

For each exposure, ECL is 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, and is estimated by incorporating forward-looking economic information and through the use of experienced credit judgment to reflect factors not captured in ECL models.

PD represents the likelihood that a loan will not be repaid and will go into default in either a 12 month horizon for Stage 1 or a lifetime horizon for Stage 2. The PD for each individual instrument is modelled based on historical data and is estimated based on current market conditions and reasonable and supportable information about future economic conditions.

EAD is modelled on historical data and represents an estimate of the outstanding amount of credit exposure at the time a default may occur. For off-balance sheet and undrawn amounts, EAD includes an estimate of any further amounts to be drawn at the time of default.

LGD is the amount that may not be recovered in the event of default and is modelled based on historical data and reasonable and supportable information about future economic conditions, where appropriate. LGD takes into consideration the amount and quality of any collateral held.

The Company considers credit judgement past events, current market conditions and reasonable forward-looking supportable information about future economic conditions in calculating the amount of expected losses.

### 27. Risk management (continued)

In assessing information about possible future economic conditions, multiple economic scenarios are utilised including a base case, representing, in the Company's view, the most probable outcome, as well as benign and adverse forecasts, all of which are developed by the BMO Group.

The ECL methodology also requires the use of experienced credit judgment to incorporate the estimated impact of factors that are not captured in the modelled ECL results.

## Allowance on impaired financial assets

At each reporting date, the Company assesses whether financial assets carried at amortised cost and debt securities carried at FVOCI are credit-impaired (Stage 3). A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

The Company considers a borrower to have defaulted where either or both of the following events have taken place:

- the Company considers the borrower is unlikely to pay its credit obligations in full, without recourse by the Company to actions such as realising security, if held;
- the financial assets are generally past due over 90 days.

Evidence that a financial asset is credit-impaired includes the following:

- significant financial difficulty of the borrower or issuer;
- a breach of contract such as a default or past due event;
- the restructuring of a loan or advance by the BMO Group on terms that the Company would not consider otherwise;
- it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation;
- the disappearance of an active market for a security because of financial difficulties.
- the granting of a concession by the lender due to the economic circumstances of the borrower;
- the existence of observable data which might include, for example, indicators of profitability and debt service capacity, assessment of future prospects for the obligor and/or any guarantor, and valuation of stabilised cash flow and country significant deterioration in debt service capacity, financial performance, net worth and future prospects, prospects for support from financially responsible guarantors, country risk and value of underlying collateral;
- material deterioration in relevant macroeconomic or industry circumstances to an extent likely to threaten credit exposure recovery;
- the borrower requests forbearance;
- in the case of an exposure which requires refinancing for repayment, the absence of viable refinancing options or a change in circumstances resulting in high financing risk;
- in the case of an externally rated counterparty, a change in rating B- or lower;
- in the case of an exposure which requires collateral realisation for recovery, a material changes in the value of the collateral such that it is less than the value of the exposure.
   In the case of a default or evidence of impairment, when multiple loans have been advanced to a counterparty all loans to that counterparty will be assessed for objective evidence of impairment;
- the purchase or origination of a financial asset at a deep discount that reflects credit losses;

### 27. Risk management (continued)

- the borrower's and/or guarantor's declared financial statement is false and the true position is unsatisfactory;
- payments are contractually overdue;
- authorization has been obtained by due process to proceed with legal action to recover the loan;
- any step has been taken for the purpose of realizing on security;
- when none of the foregoing criteria apply but management believes there is no longer reasonable assurance of timely collectability of principal or interest.

## **Credit Quality Analysis**

The following table sets out information about the credit quality of financial assets measured at amortised cost and FVOCI debt investments along with committed lending facilities. The amounts in the table represent gross carrying amounts for financial assets and amounts committed for committed lending facilities.

Credit Quality Analysis as at 31 Oc (US\$ in thousands) Assets	ctober 2019 Credit Quality	Stage 1	Stage 2	Stage 3
Cash and balances with central banks	Investment grade	3,421,219	-	*
Debt securities	Investment grade	2,080,535	-	*
Loans and advances to banks	Investment grade	2,126,292	=	= =
Loans and advances to customers	Investment grade	1,299,324	=	=
Loans and advances to customers	Sub Investment			
	grade	46,277	2,353	42,993
		8,973,647	2,353	42,993
	,			
Loan commitments				
Committed lending facilities	Investment grade	248,776		-
Committed lending facilities	Sub Investment			
13	grade	129,984	7,647	**
		378,760	7,647	
Credit Quality Analysis as at 31 October				
(US\$ in thousands)	Credit Quality	Stage 1	Stage 2	Stage 3
Assets				
Cash and balances with central banks	Investment grade	3,157,289	( <del>=</del> )	<del>(2</del> ):
Debt securities	Investment grade	1,864,519	3 <del>4</del> 3.	(#)
Loans and advances to banks	Investment grade		3=3	¥1
Loans and advances to customers	Investment grade	698,494		- <u>\$</u> (
Loans and advances to customers	Sub Investment			
	grade	111,993	<b></b>	
		6,382,452		
Loan commitments				345
Committed lending facilities	Investment grade	317,947	<b>:=</b> 5'	-
Committed lending facilities	Sub Investment			
	grade	50,400		
		368,347		

## 27. Risk management (continued)

## **Loss allowance**

The following tables show reconciliations from the opening to the closing balance of the loss allowance by class of financial instrument.

Balance at November 1, 2017 3	(US\$ in thousands)	Stage 1	Stage 2	Stage 3
Net remeasurement of loss allowance Balance at October 31, 2018 7	Cash and balances with central banks			4
Balance at October 31, 2018 Net remeasurement of loss allowance Balance at October 31, 2019  Debt securities Balance at November 1, 2017 Net remeasurement of loss allowance New financial assets purchased Balance at October 31, 2018 Net remeasurement of loss allowance New financial assets that have been derecognised Balance at October 31, 2018 Net remeasurement of loss allowance New financial assets purchased Inancial assets that have been derecognised Balance at October 31, 2019  Loans and advances to banks Balance at November 1, 2017 Net remeasurement of loss allowance New financial assets purchased Salance at November 1, 2017 Net remeasurement of loss allowance New financial assets purchased Salance at October 31, 2018 Net remeasurement of loss allowance Salance at October 31, 2018 Net remeasurement of loss allowance Salance at October 31, 2019  Loans and advances to banks Balance at October 31, 2018 Salance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loa	Balance at November 1, 2017	3		-
Net remeasurement of loss allowance 2 Balance at October 31, 2019 5	Net remeasurement of loss allowance	4	2,60	
Balance at October 31, 2019  Debt securities Balance at November 1, 2017  Net remeasurement of loss allowance New financial assets purchased Balance at October 31, 2018 Net remeasurement of loss allowance Balance at October 31, 2018 Net remeasurement of loss allowance New financial assets that have been derecognised Balance at October 31, 2018 Net remeasurement of loss allowance New financial assets purchased Balance at October 31, 2019  Loans and advances to banks Balance at November 1, 2017 Net remeasurement of loss allowance New financial assets purchased Financial assets that have been derecognised Balance at October 31, 2018 Net remeasurement of loss allowance Balance at October 31, 2018 Net remeasurement of loss allowance (6) New financial assets purchased Financial assets that have been derecognised Balance at October 31, 2019  Loans and advances to customers Balance at November 1, 2017 Set remeasurement of loss allowance New financial assets that have been derecognised Balance at October 31, 2019  Loans and advances to customers Balance at November 1, 2017 Set remeasurement of loss allowance New financial assets purchased Set location of the properties		7	16	
Balance at November 1, 2017 Net remeasurement of loss allowance New financial assets purchased Balance at October 31, 2018 Net remeasurement of loss allowance Balance at October 31, 2018 Net remeasurement of loss allowance New financial assets purchased Selance at October 31, 2018 Net remeasurement of loss allowance New financial assets purchased Selance at October 31, 2019  Loans and advances to banks Balance at November 1, 2017 Net remeasurement of loss allowance Selance at October 31, 2018 Net remeasurement of loss allowance Sew financial assets purchased Selance at October 31, 2018 Net remeasurement of loss allowance Sew financial assets purchased Selance at October 31, 2018 Net remeasurement of loss allowance Sew financial assets purchased Selance at October 31, 2018 Net remeasurement of loss allowance Selance at October 31, 2019 Selance at October 31, 2019  Loans and advances to customers Balance at October 31, 2017 Selance at November 1, 2017 Selance at October 31, 2018 Selance at October	Net remeasurement of loss allowance	2	1.5E	8
Balance at November 1, 2017  Net remeasurement of loss allowance  New financial assets purchased  Financial assets that have been derecognised  Balance at October 31, 2018  Net remeasurement of loss allowance  New financial assets purchased  Financial assets purchased  Financial assets purchased  Financial assets that have been derecognised  Balance at October 31, 2019  Loans and advances to banks  Balance at November 1, 2017  Net remeasurement of loss allowance  New financial assets purchased  Financial assets that have been derecognised  Balance at October 31, 2018  Net remeasurement of loss allowance  New financial assets that have been derecognised  Balance at October 31, 2018  Net remeasurement of loss allowance  New financial assets purchased  Financial assets purchased  Financial assets that have been derecognised  Balance at October 31, 2019  Loans and advances to customers  Balance at November 1, 2017  Net remeasurement of loss allowance  Financial assets that have been derecognised  Balance at November 1, 2017  Net remeasurement of loss allowance  Financial assets that have been derecognised  Balance at October 31, 2019  Loans and advances to customers  Balance at November 1, 2017  Net remeasurement of loss allowance  Financial assets that have been derecognised  Balance at October 31, 2018  Net remeasurement of loss allowance  Financial assets that have been derecognised  Balance at October 31, 2018  Net remeasurement of loss allowance  Pow financial assets purchased  Financial assets that have been derecognised  Balance at October 31, 2018  Net remeasurement of loss allowance  Pow financial assets purchased  Rew financial	Balance at October 31, 2019	5		
Net remeasurement of loss allowance New financial assets purchased Rew financial assets that have been derecognised Balance at October 31, 2018 Net remeasurement of loss allowance New financial assets purchased New financial assets purchased New financial assets purchased Rew financial assets that have been derecognised Balance at October 31, 2019  Loans and advances to banks Balance at November 1, 2017 Net remeasurement of loss allowance New financial assets purchased Selance at October 31, 2018 Net remeasurement of loss allowance New financial assets purchased Selance at October 31, 2018 Ret remeasurement of loss allowance New financial assets that have been derecognised Balance at October 31, 2018 Selance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at November 1, 2017 Net remeasurement of loss allowance Selance at November 1, 2017 Net remeasurement of loss allowance Selance at November 1, 2017 Net remeasurement of loss allowance Selance at November 1, 2017 Net remeasurement of loss allowance Selance at November 1, 2017 Net remeasurement of loss allowance Selance at November 1, 2017 Net remeasurement of loss allowance Selance at November 1, 2017 Net remeasurement of loss allowance Selance at November 1, 2018 Selance at November 2, 2018 Selance 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3,	Debt securities			
Net remeasurement of loss allowance New financial assets purchased Rew financial assets that have been derecognised Balance at October 31, 2018 Net remeasurement of loss allowance New financial assets purchased New financial assets purchased New financial assets purchased Rew financial assets that have been derecognised Balance at October 31, 2019  Loans and advances to banks Balance at November 1, 2017 Net remeasurement of loss allowance New financial assets purchased Selance at October 31, 2018 Net remeasurement of loss allowance New financial assets purchased Selance at October 31, 2018 Ret remeasurement of loss allowance New financial assets that have been derecognised Balance at October 31, 2018 Selance at October 31, 2019  Loans and advances to customers Balance at October 31, 2019  Loans and advances to customers Balance at November 1, 2017 Net remeasurement of loss allowance Selance at November 1, 2017 Net remeasurement of loss allowance Selance at November 1, 2017 Net remeasurement of loss allowance Selance at November 1, 2017 Net remeasurement of loss allowance Selance at November 1, 2017 Net remeasurement of loss allowance Selance at November 1, 2017 Net remeasurement of loss allowance Selance at November 1, 2017 Net remeasurement of loss allowance Selance at November 1, 2018 Selance at November 2, 2018 Selance 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3,	Balance at November 1, 2017	62	170	-
Financial assets that have been derecognised Balance at October 31, 2018 Net remeasurement of loss allowance New financial assets purchased Balance at October 31, 2019  Loans and advances to banks Balance at November 1, 2017 Net remeasurement of loss allowance New financial assets purchased Financial assets that have been derecognised Balance at November 1, 2017 Net remeasurement of loss allowance New financial assets purchased Financial assets that have been derecognised Balance at October 31, 2018 Net remeasurement of loss allowance New financial assets purchased Financial assets that have been derecognised Balance at October 31, 2018 Net remeasurement of loss allowance (6) - New financial assets purchased Financial assets that have been derecognised Balance at October 31, 2019  Loans and advances to customers Balance at November 1, 2017 Net remeasurement of loss allowance 71 Net remeasurement of loss allowance 72 Net remeasurement of loss allowance 73 Net remeasurement of loss allowance 74 Net remeasurement of loss allowance 75 Net remeasurement of loss allowance 76 Net remeasurement of loss allowance 77 Net remeasurement of los				:#1
Balance at October 31, 2018 79 Net remeasurement of loss allowance 11 New financial assets purchased 11	New financial assets purchased	8		*
Balance at October 31, 2018  Net remeasurement of loss allowance  New financial assets purchased  Balance at October 31, 2019  Loans and advances to banks  Balance at November 1, 2017  Net remeasurement of loss allowance  New financial assets purchased  Financial assets purchased  Selance at October 31, 2018  Net remeasurement of loss allowance  New financial assets purchased  Financial assets that have been derecognised  Balance at October 31, 2018  Net remeasurement of loss allowance  New financial assets purchased  Financial assets purchased  Selance at October 31, 2018  Net remeasurement of loss allowance  New financial assets purchased  Selance at October 31, 2019  Loans and advances to customers  Balance at November 1, 2017  Net remeasurement of loss allowance  New financial assets purchased  Selance at November 1, 2017  Net remeasurement of loss allowance  New financial assets purchased  Selance at October 31, 2018  Net remeasurement of loss allowance  New financial assets that have been derecognised  Ret remeasurement of loss allowance  New financial assets purchased  Net remeasurement of loss allowance  New financial assets that have been derecognised  Ret remeasurement of loss allowance  New financial assets that have been derecognised	Financial assets that have been derecognised	(1)	9	
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Financial assets that have been derecognised Balance at October 31, 2019 101	Net remeasurement of loss allowance	11	-	-
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New financial assets purchased  Financial assets that have been derecognised  Balance at October 31, 2019  Loans and advances to customers  Balance at November 1, 2017  Net remeasurement of loss allowance  New financial assets purchased  Financial assets that have been derecognised  Balance at October 31, 2018  Net remeasurement of loss allowance  Financial assets that have been derecognised  New financial assets that have been derecognised  Net remeasurement of loss allowance  Para de derecognised  (3)  Ret remeasurement of loss allowance  Para derecognised  (3)  Ret remeasurement of loss allowance  Para derecognised  (88)	<u> </u>		(+	<u> </u>
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Financial assets that have been derecognised (88)	New financial assets purchased	34	7	4,398
Balance at October 31, 2019 151 7 4,398	Financial assets that have been derecognised	(88)	, "Œ	
	Balance at October 31, 2019	151	7	4,398

### 27. Risk management (continued)

## Loss allowance (continued)

(US\$ in thousands)		Stage 1	Stage 2	Stag	e 3
Committed lending facilities					
Balance at November 1, 2017		35	(=)	×	-
Net remeasurement of loss allowance		(6)	·		¥
New committed lending facilities		4	-		3
Lending facilities that have been derecognised	W	(1)			*
Balance at October 31, 2018	_	32	*	54 F	= 2
Net remeasurement of loss allowance		41		90	-
New committed lending facilities		123	3. <del>0</del> 5.		#:
Lending facilities that have been derecognised		(1)	:=:		<u>=</u> :
Balance at October 31, 2019	-	195			<u> </u>

## **ECL Sensitivity and Key Economic Variables**

The allowance for credit losses 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 credit loss allowances as a whole are sensitive.

Under the assumption of a 100% benign economic forecast with other assumptions held constant including the application of experienced credit judgment, the allowance for credit losses for performing loans in stages 1 and 2 would be approximately US\$0.2 million as at October 31, 2019 (October 31, 2018 US\$0.2m), compared to the reported allowance for performing loans of US\$0.5 million.

Under the assumption of a 100% adverse economic forecast with other assumptions held constant including the application of experienced credit judgment, the allowance for credit losses for performing loans in stages 1 and 2 would be approximately US\$1.3 million as at October 31, 2019 (October 31, 2018 US\$0.9m), compared to the reported allowance for performing loans of US\$0.5 million.

Actual results in an economic downturn will differ as the portfolio will change over time due to migration, growth, risk mitigation actions and other factors. In addition, the allowance for credit losses will reflect the three economic scenarios used in assessing the allowance with the weightings attached to scenarios changing over time.

## 27. Risk management (continued)

#### c) Concentration Risk

Concentration Risk is the risk arising from a dominant share or overexposure in a Company's risk bearing positions or exposures (assets or liabilities, on or off balance sheet) carrying common risk characteristics and which are sensitive to the same risk drivers. Such positions or exposures, in a risk event, may lead to a material loss jeopardizing the Company's earnings, capital or liquidity position and hence putting the Company at risk.

Concentrations indicate a related sensitivity of the Company's performance to developments affecting a particular counterparty, industry or geographic location. These limits are set in the context of the Company's risk appetite and risk bearing capacity of the Company's capital structure.

Concentration risks can occur as traditional intra-risk concentration, e.g. within a credit risk portfolio, or inter-risk concentration, concentration risk between or across different risk types. The Company has set a broad range of limits to mitigate concentration risk, focusing on single name/connection, settlement, industry and geographic concentration. Adherence to limits, the composition of the portfolios and potential concentrations are reported monthly to the RMC and reported regularly to the RCC.

Breakdown of loans and advances to customers and committed lending and undrawn facilities by maturity and geography are shown in Notes 15 and 27. The following table breaks these down by industrial sector:

Vear Ended 31 October

	Year Ended 31 October			
(US\$ in thousands)	2019	2018		
Loans and advances to customers				
Other financial intermediaries	1,160,045	613,260		
Venture Capital	114,272	85,220		
Manufacturing	77,536	64,437		
Oil and Gas	39,094	28,290		
Mining		19,166		
Total loans and advances to customers by	1,390,947	810,373		
sector				
Committed lending and undrawn facilities				
Venture capital	47,774	121,576		
Manufacturing	143,167	114,396		
Motor vehicle	1000	100,000		
Other financial intermediaries	55,165	50,000		
Electrical	33,434	33,947		
Computer Service	= 2 <del>2</del>	30,000		
Mining	40,000	20,800		
Oil & Gas	66,867	19,202		
Total Committed lending and undrawn	386,407	489,921		
facilities by sector	•	•		

### 27. Risk management (continued)

## d) Funding and Liquidity Risk

Funding and Liquidity Risk is the risk that the Company is unable to meet its cash and collateral obligations as they fall due without incurring unacceptable losses or the sale of assets.

The Company has a framework within which funding and liquidity risk is managed to ensure that all risks associated with all business activities are identified, managed, measured, monitored and reported. Maturity and undiscounted cash flows analysis of interest-bearing and derivative liabilities is detailed in the tables below:

31 October 2019 (US\$ in thousands)	Carrying Amount	Gross notiona inflow/ (outflow)		3 Months to Yea	
Interest bearing non- derivative liabilities:					
Trading equities Deposits from banks Deposits from customers Debt securities in issue	(846,736) (1,563,719) (152,590) (6,083,809) (8,646,854)	(846,736) (1,563,719) (152,590) (6,083,809) (8,646,854)	(846,736) (63,560) (152,590) (6,083,809) <sup>7</sup> (7,146,695)	(1,300,135	<u> </u>
<b>Derivative liabilities</b> Derivative outflows	(178,301) (178,301)	(178,301) (178,301)	(178,301) (178,301)		• •
31 October 2018 (US\$ in thousands) Interest bearing non-derivative liabilities:	Carrying Amount		low/	3 Months	Months to 1 Year
Trading equities Deposits from banks Deposits from customers Debt securities in issue	(606,323) (29,718) (84,840) (6,082,459) (6,803,340)	(29, (84, (6,082,	718) 840) 459) (6	(606,323) (29,718) (84,840) 5,082,459) 5,803,340)	* * * * * * * * * * * * * * * * * * *
Derivative liabilities Derivative outflows	(185,937) (185,937)			(185,937) (185,937)	# (#)

<sup>&</sup>lt;sup>7</sup> The Company recognises funding from debt securities in issue as long term from a strategic perspective as the programme maturity is greater than five years, notwithstanding that debt securities in issue have a demand or term feature that allows the BMO Group to elect not to rollover at the end of term, subject to a cure or term period of 60 days which has never been exercised.

## 27. Risk management (continued)

#### **Pledged Assets**

In the normal course of business, assets are pledged as security for various liabilities that the Company incurs. The following tables summarises pledged assets and collateral, and the activities to which they relate:

	Year Ende	d 31 October
(US\$ in thousands) Financial assets pledged	2019	2018
Trading equities	64,812	179,160
Debt securities	133,946	211,758
	198,758	390,918
Financial assets pledged related to: Deposits from banks - Securities lent or sold under repurchase agreements	-	2,957
Trading equities - Securities sold but not yet purchased	198,758	387,961
	198,758	390,918

#### Collateral

When entering into trading activities, such as purchases under resale agreements, securities borrowing and lending activities or financing for certain derivative transactions, the Company requires counterparties to provide collateral that will protect from losses in the event of their default.

Collateral transactions (received or pledged) are typically conducted under terms that are usual and customary in standard trading activities. If there is no default, the securities or their equivalents must be returned to, or returned by, the counterparty at the end of the contract. The fair value of counterparty collateral that the Company is permitted to sell or repledge (in the absence of default by the owner of the collateral) was US\$2,880 million as at October 31, 2019 (\$980 million as at October 31, 2018). The fair value of collateral sold or repledged was US\$ Nil as at October 31, 2019 (US\$ Nil as at October 31, 2018).

### 27. Risk management (continued)

## e) Currency Risk

The Company does not maintain material non-trading open currency positions. The table below shows the Company's transactional exposures in the non-trading book, in other words, those non-structural exposures that give rise to net currency gains and losses recognised in the Statement of Comprehensive Income. Such exposures comprise the non-trading assets and liabilities that are not denominated in the operating currency of the Company. At year-end, these exposures were as follows:

	Year En	ded 31 Octobei	r <b>2019</b>	
(US\$ in thousands)	Assets	Liabilities	Notional FX / Cross Ccy Swaps	Net Exposure
Euro Pound Sterling Canadian dollar Australian dollar	3,620,995 33,944 1,351,113 30,086	(39,395) (33,875) (7,001,842) (1,491)	(3,584,473) - 5,650,735 (28,249)	(2,873) 69 6 346
(US\$ in thousands)	Year End Assets	ded 31 October 2 Liabilities		Net Exposure
(554 5555	,,,,,,,		Ccy Swaps	net Exposure
Euro	3,547,286	(38,045)	(3,510,269)	(1,028)
Pound Sterling	179,055	(11,318)	(168,644)	(907)
Canadian dollar	729,213	(595,584)	(132,748)	881
Australian dollar	53,602	(19)	(53,485)	98

## Sensitivity analysis - Foreign exchange

At 31 October 2019, had the US\$ strengthened by 5% in relation to all currencies, with all other variables held constant, net assets attributable to holders of redeemable shares and the change in net assets attributable to holders of redeemable shares per the Statement of Comprehensive Income would have changed by the amounts shown below:

#### **Year Ended 31 October**

(US\$ in thousands)	2019	2018
Euro Pound sterling	(144) 3	(49) (43)
Canadian dollar	#	<b>`42</b>
Australian dollar	17	5
Total	(124)	(45)

### 27. Risk management (continued)

#### f) Operational Risk

Operational Risk is the potential for loss resulting from inadequate or failed internal processes or systems, human interactions or external events but excludes business risk, credit risk, market risk, liquidity risk and other financial risks. Operational risk is inherent in all the Company's business and banking activities and can lead to significant impacts on the business and financial results, including financial loss, restatements and damage to reputation.

The Company's objective is to manage Operational Risk within its risk appetite, balancing risk and return within acceptable levels.

The primary responsibility for the development and implementation of controls to address Operational Risk is assigned to Senior Management. This responsibility is supported by the development of the Company's overall standards for the management of Operational Risk within the Company's risk framework.

### g) Interest Rate Risk in the Banking Book

Interest Rate Risk in the Banking Book ("IRRBB") is the current or prospective risk to both the earnings and the economic value of the Company arising from adverse movements in interest rates that affect interest rate sensitive instruments, including gap risk, credit spread risk, basis risk and option risk. IRRBB results mainly from the structural balance sheet duration profile stemming from mismatches in the interest rate repricing dates of assets, liabilities and off-balance sheet items from non-trading activities.

IRRBB is managed under the Market Risk Framework and delegated limit controls. Limits on IRRBB are expressed in terms of Economic Value of Equity ("EVE") and Net Interest Income ("NII") sensitivities. These Limits are defined and set in the Company's Risk Appetite Statement which is reviewed and approved by the Board of Directors on an annual basis.

## 27. Risk management (continued)

#### h) Governance Risk

Governance Risk is the potential for deficiency in the overall oversight and internal control mechanisms which the Company has in place to ensure that it is soundly and prudently managed, referring in particular to processes, structures and information flows which are used to allow the board and senior management to satisfy themselves that effective internal control mechanisms are in place to protect all stakeholders.

The Board of Directors is responsible for the effective, prudent and ethical oversight of the Company. It is responsible for approving the business strategy and its implementation, within the approved risk appetite, and ensuring that the Company has an effective internal control framework. The effectiveness of the Board of Directors in carrying out its oversight function is a critical component of the Company's overall internal governance framework.

The Board of Directors annually reviews and approves the Risk Management, Compliance and Corporate Audit Frameworks. This ensures that the Company has robust second and third lines of defence. The obligation for these lines of defence to report to the Board, or one of its committees, is set out in the relevant framework.

The Company monitors governance risk as part of its risk register, acknowledging it as a key risk.

#### i) Conduct Risk

Conduct risk within the Company is defined as the risk that behavior in the Company falls short of the BMO Groups "Being BMO" values and regulatory expectations, resulting in harm to customers, the Company and/or the financial markets.

A taxonomy of applicable conduct risks has been developed and is updated at least annually. Sources of conduct risk within the Company include breaches of or a failure to report breaches of the Code of Conduct, breaches of relevant policies, procedures and limits, unreported conflicts of interest, internal fraud, failure to adhere to Personal Trading Account requirements, leaking of confidential information, market abuse, mis-selling products to clients outside target markets, unclear or misleading communications with clients and treating clients unfairly.

The Company manages conduct risk through a proactive framework that promotes sound corporate governance and appropriate employee conduct in the execution of its business strategy, the protection of its reputation and maintenance of the trust of its stakeholders and the broader market. The Company's Conduct Risk Framework recognises the link between its strategy, values and behaviours. The Framework outlines the processes by which the Company identifies, assesses, and monitors conduct risk to ensure risks are appropriately managed and mitigated. The Company's approach to conduct risk management is integrated in its Risk Management Framework and Compliance Management Framework and is consistent with its three lines of defence model. The objective of the Framework is to ensure that the Company has an effective approach to:

- Identifying and measuring conduct risk;
- Maintaining a current and accurate inventory of conduct risks inherent in the Company's business model, booking models and activities;
- Providing guidance regarding conduct-related issues consistent with internal policies, directives and procedures;
- Reinforcing adherence to the Company's values and behaviours;
- Conducting conduct risk monitoring and testing;
- Ensuring timely and effective remediation of identified issues;
- Coordinating and delivering conduct-related training; and
- Developing and maintaining conduct related policies, directives and procedures.

## 27. Risk management (continued)

#### Capital management

Regulatory capital and capital adequacy ratios are produced in accordance with the Capital Requirements Directive 2013/36/EU and the Capital Requirements Regulation No 575/2013 (transcribed into Irish law under the European Union (Capital Requirements) Regulations 2014 (Statutory Instruments 158/2014 and 159/2014). These directives and regulations are together referred to as CRD IV.

The Company is regulated by the CBI, which applies a capital/risk framework for measuring capital adequacy based on the CRD IV. The Company uses the CRD IV standardised approach to calculate risk weighted assets ("RWA"). The CBI requires the Company to maintain a prescribed ratio of total capital to risk weighted assets under Pillar 1 of the CRD IV.

In line with Pillar 2 requirements, the Company operates ICAAP. The internal capital buffers calculated are only applicable to own funds and are held in addition to the capital required under Pillar 1. The Company received authorisation from the CBI for an expanded business footprint post Brexit on 29 March 2019. The CBI also imposed revised Pillar 2 supervisory measures in the form of additional capital requirements on the Company, replacing the previously imposed additional capital requirements following the Supervisory Review & Evaluation Process ("SREP") in June 2018. These additional capital requirements are also only applicable to own funds.

The Pillar 1 capital requirements, Pillar 2 capital requirements, own funds and surplus of own funds are set out in the table below. Further detail is provided in the Additional Pillar 3 Disclosure notes on pages 81 to 136.

		Year Ended 31 October			
(US\$ in thousands)	2019	2018			
		142			
Capital requirement – Pillar 1	82,609	68,191			
Capital requirements — Pillar 2		12			
Internal capital buffers		(H)			
Additional capital buffers	332,687	176,187			
Total capital requirement – Pillar 2	332,687	176,187			
Capital buffer <sup>8</sup>	109,392	85,932			
Total capital requirement	524,688	330,310			
Total own funds	784,366	774,432			
Surplus of own funds	259,678	444,122			

<sup>&</sup>lt;sup>8</sup> Capital buffer comprises of the capital conservation buffer, countercyclical capital buffer and additional CBI imposed supervisory Pillar 2 Guidance. The capital conservation buffer was phased in from 1 January 2016 with an initial charge of 0.625% of risk weighted assets as at 31 October 2016, rising to 2.5% by 1 January 2019. Per 31 October 2019 the capital conservation buffer stood at 2.5% of risk weighted assets.

### 27. Risk management (continued)

The Company's regulatory capital and capital ratios are as follows: Capital and capital ratios

Year Ended 31 October 2019

	(US\$ in thousands)	(Ratio %)
Common Equity ("CET1"), Tier 1 and Total Capital	784,366	75.96%
	Year Ended 3:	October 2018
	(US\$ in thousands)	(Ratio %)
Common Equity ("CET1"), Tier 1 and Total Capital	774,432	90.86%

Capital amounts include the audited "profit for the year" as per the Statement of Comprehensive Income on page 23.

There were no breaches by the Company of the capital ratios during the financial year ended 31 October 2019 (financial year ended 31 October 2018: no breaches).

At 31 October 2019 the Company with a CET1 capital ratio, a Tier 1 capital ratio and a Total capital ratio of 75.96% (2018: 90.86%) exceeded the minimum required ratios imposed by the CBI (total SREP capital requirement ("TSCR") of 34.70% and minimum overall capital requirement ("OCR") ratio of 37.2%.

## 28. Committed lending and undrawn facilities

	<b>Year Ended 31 October</b>			
(US\$ in thousands)	2019	2018		
Remaining contractual maturity				
1 to 5 years	338,633	318,345		
3 months to 1 year	· 📜 .	50,000		
Less than 1 month	47,774	121,576		
	386,407	489,921		
Geographical split				
Europe other than Ireland	295,916	392,463		
Rest of world	90,491	97,458		
	386,407	489,921		

The committed lending and undrawn facilities shown represent the total contingent liabilities and commitments.

29.	Derivatives			
		Year Ende	ed 31 October 2	2019
	(US\$ in thousands)	Notional	Derivative	Derivative
		Notional	Assets	Liabilities
	Foreign exchange forwards	4,271,076	6,388	32,592
	Equity derivatives	1,811,977	2,005	67,116
	Interest rate swaps - hedging	1,744,332	681	50,766
	Interest rate Swaps	795,087	5,141	4,443
	Cross currency swaps	6,054,927	35,121	15,198
	Commodity Swaps	260,649	9,167	8,186
	Total derivatives	14,938,048	58,503	178,301
		Year Ended 31 Oc	tober 2018	
	(US\$ in thousands)	Notional	Derivative	Derivative
		at a second	Assets	Liabilities
	Foreign exchange forwards	7,571,436	135,870	76,220
	Equity derivatives	1,796,286	16,710	23,949
	Interest rate swaps - hedging	1,340,140	15,490	338
	Interest rate Swaps	1,084,376	6,808	5,671
	Cross currency swaps Commodity Swaps	6,151,734	124	79,759
	Total derivatives	17,943,972	175,002	185,937
			Year Ended 3	
	(US\$ in thousands)		2019	2018
	Remaining contractual matur derivative (notional)	ity of		
	Greater than 5 years		244,461	243,518
	1 to 5 years		2,458,097	1,872,746
	3 months to 1 year		1,324,956	108,251
	1 to 3 months		3,854,979	5,316,511
	Less than one month		7,055,555	10,402,946
	Lass than one money	· ·	4,938,048	17,943,972
	Geographical split of derivative	res (notional)		
	Europe other than Ireland		1,696,474	5,916,541
	Rest of world		3,241,574	12,027,431
			4,938,048	17,943,972

## 29. Derivatives (continued)

Derivative used in hedge accounting

#### Fair Value Hedges

Fair value hedges modify exposure to changes in a fixed rate instrument's fair value caused by changes in interest rates. These hedges economically convert fixed rate debt securities to floating rate. The Company uses interest rate swaps to hedge interest rate risk, including benchmark interest rates, inherent in fixed rate debt securities. Any fixed rate assets or liabilities that are part of a hedging relationship are adjusted for the change in value of the risk being hedged. To the extent that the change in the fair value of the derivative does not offset changes in the fair value of the hedged item for the risk being hedged, the net amount (hedge ineffectiveness) is recorded directly in non-interest revenue, other, in the Statement of Comprehensive Income.

In the Company's fair value hedge relationships, the main sources of ineffectiveness are the counterparty effect and the Company's own credit risk on the fair value of the swap, and the difference in terms such as fixed interest rate or reset/settlement frequency between the swap and the hedged item. In order to qualify as an accounting hedge, the hedging relationship must be designated and formally documented at its inception, detailing the particular risk management objective and strategy for the hedge and the specific asset as well as how effectiveness is being assessed. Changes in the fair value of the derivative must be highly effective in offsetting changes in the fair value or changes in the amount of future cash flows of the hedged item. The Company evaluates hedge effectiveness at the inception of the hedging relationship and on an ongoing basis, retrospectively and prospectively, primarily using a quantitative statistical regression analysis. The Company considers a hedging relationship highly effective when all of the following criteria are met: correlation between the variables in the regression is at least 0.8; the slope of the regression is within a 0.8 to 1.25 range; and the confidence level of the slope is at least 95%.

At 31 October 2019, the Company held the following interest rate swaps as hedging instruments in fair value hedges of interest risk.

		Remaining term	to maturity		
(US\$ in thousands)	Within 1 year	1-3 years	3-5 years	Over 5 years	Total
Fair value hedges					
Interest rate risk -		, "		40	
interest rate swaps					
Notional amount	50,384	506,408	1,138,167	49,373	1,744,332
Average fixed interest	1.14%	2.46%	2.36%	1.87%	2.34%
rate					

The amounts relating to derivatives designated as fair value hedging instruments, hedged items and hedge ineffectiveness for the year are as follows:

(US\$ in thousands)	Carrying a hedging d						Accumulated amount of fair value hedge (losses) on hedged items	
	Asset	Liability		(Losses) on hedged item used to calculate hedge ineffectiveness	I Ineffectiveness recorded in non-interest revenue – other	Carrying amount of the hedged item	Active hedges	Discontinued hedges
Fair value hedge Interest rate swaps	681	50,766		9				-
FVOCI debt securities	- 2		71,617	(71,300)	317	1,788,297	47,205	-
Total	681	50,766	71,617	(71,300)	317	1,788,297	47,205	::#:

#### 30. Fair value of financial instruments

The Company records securities, derivative financial instruments and financial instruments at fair value through profit or loss and other non-trading assets and liabilities at their original amortised cost less allowances or write-downs for impairment. Where there is no quoted market value, fair value is determined using a variety of valuation techniques and assumptions. The values are based upon the estimated amounts for individual assets and liabilities.

Fair value amounts disclosed represent point-in-time estimates that may change in subsequent reporting periods due to market conditions or other factors. Fair value represents the price at which an orderly transaction to sell an asset or to transfer a liability would take place between market participants at the measurement date. Some of the financial instruments are not typically exchangeable or exchanged and therefore it is difficult to determine their fair value. In those cases, the Directors have estimated fair value taking into account only changes in interest rates and credit risk that have occurred since the Company acquired them or entered into the underlying contracts. These calculations represent management's best estimates based on a range of methodologies and assumptions; since they involve uncertainties, the fair values may not be realised in an actual sale or immediate settlement of the instruments.

#### Governance over the determination of fair value

Senior Management oversight of the Company's valuation processes is provided through the RMC. In order to ensure that all financial instruments carried at fair value are reasonably measured for risk management and financial reporting purposes, the Company has established a governance structure and controls, such as model verification and approval, Independent Price Verification ("IPV") and profit and loss attribution analysis ("PPA"), consistent with industry practice. These controls are applied independently to the relevant LoB's.

The Company establishes and regularly updates valuation methodologies for each financial instrument that is required to be measured at fair value. The application of valuation models for products or portfolios is subject to independent approval to ensure only validated models are used. The impact of known limitations of models and data inputs is also monitored on an ongoing basis. IPV is a process that regularly and independently verifies the accuracy and appropriateness of market prices or model inputs used in the valuation of financial instruments. This process assesses fair values using a variety of different approaches to verify and validate the valuations.

#### Securities

For traded securities, quoted market value is considered to be fair value. Quoted market value is based on bid prices. Securities for which no active market exists are valued using all reasonably available market information. The fair value methodologies are described below.

#### Government securities

The fair value of government issued or guaranteed debt securities in active markets determined by reference to recent transaction prices, broker quotes or third party vendor prices.

### 30. Fair value of financial instruments (continued)

### Held for trading equities

The fair value of equity securities is based on quoted prices in active markets where available. Where quoted prices in active markets are not available fair value is determined based on quoted market prices for similar securities or through valuation techniques such as discounted cash flow analysis.

### Loans

In determining the fair value of its fixed rate and floating rate performing loans, the Company discounts the remaining contractual cash flows, adjusted for estimated prepayment, at market interest rates currently offered for loans with similar terms. Current interest rates are taken to reflect the interest rate on the loan unless there is evidence of a material change in market pricing which is taken as a change of at least 50 basis points. The value of the Company loan balances determined using this approach is further adjusted by a credit mark that represents an estimate of the credit losses in the loan portfolio. The further adjustment is nil. As all the loans are all short term in nature and as there is no evidence of a material change in market pricing, fair value is assumed to equal carrying value.

### Derivative instruments

A number of valuation techniques are employed to estimate fair value, including discounted cash flow analysis, Monte Carlo simulation and other accepted market models. These vetted models incorporate current market measures for interest rates, currency exchange rates, equity prices and indices, credit spreads, recovery rates, corresponding market volatility levels, spot prices, correlation levels and other market-based pricing factors. Option implied volatilities, an input into many valuation models, are either obtained directly from market sources or calculated from market prices. Multi-contributor pricing sources are used wherever possible. The Company calculates a Credit Valuation Adjustment ("CVA") to recognise the risk that any given derivative counterparty may not ultimately be able to fulfil its obligations. The CVA is derived from market-observed credit spreads or proxy credit spreads and the Company's assessment of the net counterparty credit risk exposure.

### **Deposits**

In determining the fair value of its deposits, the Company assumes that changes in interest rates have minimal impact on fair value since deposits are on a short term basis. The maximum reset date on internal deposits is three months. As at 31 October 2019, the Company did not hold any external deposits. On that basis, fair value is assumed to equal carrying value.

### Trading liabilities

The fair value of these obligations is based on the fair value of the underlying securities, which can only include equity or debt securities. As these obligations are fully collateralised, the method used to determine fair value would be the same as that used for the relevant underlying equity or debt securities.

### Financial instruments with a carrying value approximating fair value

Fair value is based on quoted market prices. Fair value of financial assets and financial liabilities not measured at fair value was estimated as described above and it was determined that the carrying amount is a reasonable approximation of fair value. Therefore, tables below do not include further information on fair value of financial assets and financial liabilities not measured at fair value. All financial assets and financial liabilities not measured at fair value are categorised as Level 2 of the hierarchy.

# 30. Fair value of financial instruments (continued)

The Company uses a fair value hierarchy to categorize financial instruments according to the inputs used in valuation techniques to measure fair value. The extent of the use of actively quoted market prices (Level 1), internal models using observable market information as inputs (Level 2) and internal models without observable market information as inputs (Level 3) in the valuation of securities, derivative assets and derivative liabilities was as follows:

# Fair value hierarchy as at 31 October 2019

(US\$ in thousands) Assets	Level 1	Level 2	Level 3	Total
Debt securities	1,061,731	1,018,804	_	2,080,535
Trading equities	544,378	-	-	544,378
Foreign exchange forwards	-	6,388	-	6,388
Equity swaps		2,005		2,005
Interest rate swaps		5,822		5,822
Commodity swaps		9,167		9,167
Cross currency swaps		35,121	/=0	35,121
Total assets	1,606,109	1,077,307	-	2,683,416
		ð		
Liabilities				
Securities sold but not yet purchased	846,736	-	•	846,736
Interest rate swaps		55,209	-	55,209
Equity swaps		67,116		•
Foreign exchange forwards	3 <del>.</del>	32,592		32,592
Cross currency swaps	-	15,198	·	15,198
Commodity swaps		8,186	-	8,186
Total liabilities	846,736	178,301	-	1,025,037

# 30. Fair value of financial instruments (continued)

Fair value hierarchy as at 31 October 2018

(US\$ in thousands) Assets	Level 1	Level 2	Level 3	Total
Debt securities	1,279,503	584,937	·	1,864,440
Trading equities	1,209,819	ш.	·	1,209,819
Foreign exchange forwards	12	135,870	-	135,870
Equity swaps	le le	16,710		16,710
Interest rate swaps		22,298	: <u></u>	22,298
Commodity swaps	· <del>-</del>		5 <del>=</del> 1	(±)
Cross currency swaps	)(#E	124	161	124
Total assets	2,489,322	759,939	·	3,249,261
			-	
Liabilities				
Securities sold but not yet purchased	606,323		7=1	606,323
Interest rate swaps	n=	6,009	-	6,009
Equity swaps	02	23,949		23,949
Foreign exchange forwards		76,220		76,220
Commodity swaps	0.5			
Cross currency swaps		79,759		79,759
Total liabilities	606,323	185,937	_ =_ (=) (	792,260

# Significant Transfers

The Company's policy is to record transfers of assets and liabilities between fair value hierarchy levels at their fair values as at the end of each reporting period, consistent with the date of the determination of fair value. Transfers are made between the various fair value hierarchy levels that result from changes in the availability of quoted market prices or observable market inputs that result from changing market conditions. There were no transfers between Level 1, Level 2 and Level 3 balances for the financial year ended 31 October 2019.

# 31. Offsetting of financial assets and liabilities

The Company does not offset any financial instrument in the Statement of Financial Position. Amounts not offset relate to transactions where a master netting agreement or similar agreement is in place with a right of offset only in the event of default, insolvency or bankruptcy, or where the offset criteria are otherwise not met.

The disclosures set out in the tables below include financial assets and financial liabilities that

- are offset in the Company's statement of financial position; or
- are subject to an enforceable master netting arrangement or similar agreement that covers similar financial instruments, irrespective of whether they are offset in the statement of financial position.

The following tables set out the effect or potential effect of netting arrangements on the Company's financial position. This includes the effect or potential effect of rights of set-off associated with the Company's recognised financial assets and recognised financial liabilities that are subject to an enforceable master netting arrangement, irrespective of whether they are set off in accordance with paragraph 42 of IAS 32.

In the tables below the Derivative values in "Gross amount" represents the carrying value of derivatives positions on the statement of financial position where the derivative is subject to an enforceable master netting agreement and where the overall net position of derivatives included in that netting agreement before collateral is considered and if offset were applied would be positioned. The amounts reported under "Related amounts not set off in statement of financial position" represent the carrying value of non-cash collateral (in "Financial instruments") and cash collateral received which are also part of these master netting agreements.

The "Securities Lending" amount represents the carrying value of amounts lent which are subject to an enforceable master netting agreement. The amounts reported under "Related amounts not set off in statement of financial position" represent the carrying value of non-cash collateral (in "Financial instruments") and cash collateral received. Collateral received is not encumbered.

# 31. Offsetting of financial assets and liabilities (continued)

Amounts not offset in Statement of Financial Position 31 October 2019 (US\$ in thousands)

# Related Amounts not offset in Statement of Financial Position

	Gross amount	Amounts offset in Statement of Financial Position	Net Amount in Statement of Financial Position	Impact of master netting	Financial Instruments	Cash Collateral	Net Amount
Derivative Assets	58,503		58,503	(51,946)			6,557
Securities Lending	3,239,877	-	3,239,877	η.=	(3,208,219)	, =	31,658
Total		4.8					
Assets	3,298,380	-	3,239,380	(51,946)	(3,208,219)		38,215
Derivative Liabilities	178,301	= =	178,301	(51,946)	22 =23	(19,840)	106,515
Total Liabilities	178,301	- 2	178,301	(51,946)	<b>*</b>	(19,840)	106,515

Amounts not offset in Statement of Financial Position 31 October 2018 (US\$ in thousands)

Related Amounts not offset in Statement of Financial Position

J. 1	Gross amount	Amounts offset in Statement of Financial Position	Net Amount in Statement of Financial Position	Impact of master netting	Financial Instruments	Cash Collateral	Net Amount
Derivative Assets	175,002	Ų	175,002	(164,533)		23,800	34,269
Securities Lending	1,152,240	- #	1,152,240	: <b>2</b> )	(1,140,588)		11,652
Total	2	p:					
Assets	1,327,242		1,327,242	(164,533)	(1,140,588)	23,800	45,921
Derivative Liabilities	185,937	*	185,937	(164,533)		(3,710)	17,694
Total Liabilities	185,937	-	185,937	(164,533)	- * *	(3,710)	17,694

# 31. Offsetting of financial assets and liabilities (continued)

Reconciliation to the Net amounts of financial assets and financial liabilities presented in the statement of Financial Position 31 October 2019 (US\$ in thousands)

	Net Amount	Line Item in Statement of Financial Position	Carrying Amount in Statement of Financial Position	Amounts not in scope for offsetting	Note
Securities Lending	3,239,877	Loans and advances to banks	2,126,292	46,460	14
a		Loans and advances to customers	1,390,947	230,902	15

Reconciliation to the Net amounts of financial assets and financial liabilities presented in the statement of Financial Position 31 October 2018 (US\$ in thousands)

	Net Amount	Line Item in Statement of Financial Position	Carrying Amount in Statement of Financial Position	Amounts not in scope for offsetting	Note
Securities Lending	1,152,240	Loans and advances to banks	550,134	11,155	14
7.1		Loans and advances	810,373	197,112	15
		to customers			

### 32. Parent bank

The smallest and largest group into which the Financial Statements of the Bank of Montreal Europe plc are consolidated is that headed by Bank of Montreal. Copies of the Group Financial Statements are available from Corporate Communications, 100 King Street West, Toronto, Ontario, Canada.

# 33. Related party disclosures

### Directors and officers loans

As at 31 October 2019 there were no amounts outstanding, under transactions, arrangements and agreements made by the Company from those who were Directors (including connected persons) or key management personnel of the Company.

### **Key Management Compensation**

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the entity, directly or indirectly, including any Director (whether executive or otherwise) of that entity.

	Year End	ed 31 October
(US\$ in thousands)	2019	2018
Short term employment benefits	3,518	4,058
Termination benefits	40	685
Defined pension contribution scheme	163	183
Share based payments	1,004	435
	4,725	5,361

### **Director Compensation**

Key management compensation includes the following Director compensation (whether executive or otherwise) of the Company.

	Year Ende	<b>Ended 31 October</b>	
(US\$ in thousands)	2019	2018	
Short term employment benefits	1,338	1,702	
Termination benefits	:El	488	
Defined pension contribution scheme	44	78	
Share based payments	330	290	
	1,712	2,558	

# 33. Related Party Disclosures (continued)

# Transactions with related parties

All transactions with the related parties are entered into on an arm's length basis. Balances outstanding from BMO Group entities and related income and expense are disclosed in the respective notes and summarised in the table below:

### Year Ended 31 October 2019

(US\$ in thousands)	Parent	Other Related Parties	Total
Assets	52,197	-	52,197
Liabilities	1,700,224	6,236,400	7,936,624
Interest income	181,762	193	181,955
Interest expense	104,183	132,764	236,947
Fee Revenue		236	236
Fee expense	9,609	<b>5</b> 0	9,609

# Year Ended 31 October 2018

(US\$ in thousands)	Parent	Other Related Parties	Total
Assets	165,015		165,015
Liabilities	151,653	6,167,300	6,318,953
Interest income	159,640	586	160,226
Interest expense	93,575	82,214	175,789
Fee expense	7,901	20	7,901

# 34. Post financial year end events

There were no significant post year end events that would require adjustments on disclosures to the Company's Financial Statements as at 31 October 2019.

### 35. Approval of financial statements

The Company's financial statements were authorised for issue by the Board of Directors on 30 January 2020.

# **ADDITIONAL PILLAR 3 DISCLOSURES - UNAUDITED**

# **Purpose of disclosures**

Bank of Montreal Europe plc ("the Company") is incorporated in Ireland and regulated by the Central Bank of Ireland ("CBI").

The purpose of these additional Pillar 3 disclosures is to meet the regulatory disclosure requirements for the Company on capital and risk management at 31 October 2019. (The Company is a wholly owned subsidiary of Bank of Montreal ("the BMO Group")).

The regulatory disclosure requirements are those outlined in the Capital Requirements Directive (the European parliament's Directive 2013/36/EU), the Capital Requirements Regulations (the European parliament's Regulation No 575/2013), and associated EBA Guidelines, which together are referred to throughout these disclosures as "CRD IV".

CRD IV is organised into three complementary elements, or "Pillars", and formalises the framework for prudential supervision of credit institutions and investment firms. Pillar I of CRD IV prescribes minimum regulatory capital standards for the material components of risk that firms face. Pillar 2 of CRD IV requires credit institutions and investment firms to carry out an internal assessment of the amount of capital they consider adequate to cover all of the risks to which they are, or likely to be, exposed. In addition, under Pillar 2 the relevant regulatory authority is empowered to carry out a supervisory review and evaluation process ("SREP"). Pillar 3 of CRD IV requires credit institutions and investment firms to publically disclose key information about their underlying risk models, controls and capital positions.

The Company has adopted a formal policy to comply with the disclosure requirements laid out in CRD IV and has policies for assessing the appropriateness of the disclosures, including their verification and the frequency on which the disclosure are made. The Company's Pillar 3 disclosures detailed in the sections below should be read in conjunction with the preceding Financial Statements which contains some Pillar 3 qualitative and quantitative information. There is no requirement for the Pillar 3 disclosures to be externally audited. However, these additional disclosures have been subject to review and verification in accordance with the internal Company Pillar 3 disclosure policy.

# Frequency

These disclosures are made on an annual basis, with the disclosures based on the financial year-end date of 31 October.

# Pillar 3 table formats

The accompanying disclosures are based on the primary European Banking Authority ("EBA") guidelines on disclosure requirements under part 8 of regulation (EU) No 575/2013 (EBA reference: EBA/GL/2016/11). The Company has included the applicable templates as per the guidelines.

As per paragraph 17 of the above guidelines any rows/columns not applicable to the Company have been deleted without altering the numbering of the rows and columns in the original template.

# Scope of application

These Pillar 3 disclosures are prepared on an unconsolidated / individual basis. The Company is a wholly owned subsidiary of Bank of Montreal.

Template 1: EU LI1 - Differences between the accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories

31 October 2019	Carrying		Carrying va	lues of items:	9
(US\$ in thousands)	values as reported in published financial statements & under scope of regulatory consolidation	Subject to credit risk framework	Subject to CCR framework	Subject to market risk framework	Not subject to capital requirements or subject to deduction from capital
Assets					
Cash and balances with central banks	3,421,219	3,421,219	*		
Debt securities	2,080,535	2,080,535			2 n _n n }
Derivative assets	58,503	-	58,503		
Held for trading equities	544,378		345	544,378	
Loans and advances to banks	2,126,292	46,460	2,079,832		
Loans and advances to customers	1,390,947	230,902	1,160,045	-	-
Current tax assets	3,901	3,901	5 <b>%</b> 5	-	
Deferred tax assets	224	224		$\frac{3}{2}$	3
Property and equipment	1,353	1,353			
Other assets	12,590	12,590	· · · · · · · · · · · · · · · · · · ·	9	-
Total Assets	9,639,942	5,797,184	3,298,380	544,378	(œ
Liabilities Held for trading equities Derivative liabilities Deposits from banks Deposits from customers	846,736 178,301 1,563,719 152,590		- 178,301 - -	846,736 - - -	- - 1,563,719 152,590
Debt securities in issue	6,083,809			•	6,083,809
Current tax liability	1,476		_	<u>_</u>	1,476
Deferred tax liabilities	· -	-	-	-	-
Other liabilities	25,905	_	_	_	25,905
Total Liabilities	8,852,536	-	178,301	846,736	7,827,499
Equity		· ·			¥
Share capital	10,049	1.5	150	-	10,049
Capital contribution	503,994	, (e			503,994
Retained earnings	274,549	S 72	*		274,549
OCI reserve	(1,186)				(1,186)
Total shareholders' equity	787,406	:#:	:=::	*	787,406
Total liabilities and shareholders' equity	9,639,942		178,301	846,736	8,614,905

31 October 2018	Carrying values		Carrying va	lues of items:	
(US\$ in thousands)	as reported in published financial statements & under scope of regulatory consolidation	Subject to credit risk framework	Subject to CCR framework	Subject to market risk framework	Not subject to capital requirements or subject to deduction from capital
Assets					
Cash and balances with central banks	3,157,282	3,157,282		=	
Debt securities	1,864,440	1,864,440		-	
Derivative assets	175,002	-	175,002	2	_
Held for trading equities	1,209,819	-5	2	1,209,819	
Loans and advances to banks	550,134	11,155	538,979		
Loans and advances to customers	810,373	197,112	613,261	. 8	
Current tax assets	4,130	4,130	:1		
Deferred tax assets	37	37	. <del></del>	-	
Property and equipment	1,117	1,117	1-1	5	
Other assets	5,390	5,390	=	₩.	
Total Assets	7,777,724	5,240,663	1,327,242	1,209,819	
Liabilities Held for trading equities	606,323			606,323	
Derivative liabilities	185,937		185,937	=	
Deposits from banks	29,718	2,263	±	±	27,45
Deposits from customers	84,840	-,	<u> </u>	9	84,840
Debt securities in issue	6,082,459				6,082,459
Current tax liability	1,869	-		4	1,869
Deferred tax liabilities	408		Ę.		408
Other liabilities	7,708	( <b>4</b> )	<del>:=</del>	-	7,708
Total Liabilities	6,999,262	2,263	185,937	606,323	6,204,739
Equity					
Share capital	10,042	-	·		10,042
Capital contribution	504,001	2	≅	-	504,00
Retained earnings	261,561		=	=	261,56:
OCI reserve	2,858	( <b>-</b> 1)	-	-	2,858
Total shareholders' equity	778,462	<u> </u>	9	-	778,462
Total liabilities and shareholders' • equity	7,777,724	2,263	185,937	606,323	6,983,20

The table below provides information on the main sources of differences between the financial statements' carrying value amounts and the exposure amounts used for regulatory purposes.

Template 2: EU LI2 – Main sources of differences between regulatory exposure amounts and carrying values in financial statements

	31 October 2019	ctober 2019				
	(US\$ in thousands)	Total	Credit Risk Framework	CCR Framework	Securitisation framework	Market risk framework
1	Assets carrying value amount under the scope of regulatory consolidation (as per template EU LI1)	9,639,942	5,797,184	3,298,380		544,378
2	Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1)	3,033,342	3,737,104	3,290,300		344,376
3	Total net amount under the regulatory scope of consolidation	9,639,942	5,797,184	3,298,380		544,378
4	Off-balance-sheet amounts	495,235	391,005	104,230		3.1,2.6
5	Net potential future exposures	226,333		226,333	11 5#3 <b>5</b>	
6	Exposure amounts considered for regulatory purposes	10,361,510	6,188,189	3,628,943	0 <del>=</del>	544,378

	31 October 2018		Items subject to				
	(US\$ in thousands)	Total	Credit Risk Framework	CCR Framework	Securitisation framework	Market risk framework	
1	Assets carrying value amount under the scope of regulatory consolidation (as per template EU LI1)	7,777,724	5,240,663	1,327,242	2	1,209,819	
2	Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3/2 10/003	1,32,72,12		1,203,013	
3	Total net amount under the regulatory scope of consolidation	7,777,724	5,240,663	1,327,242		1,209,819	
4	Off-balance-sheet amounts	605,072	489,921	115,151	NE.	2/205/025	
5	Net potential future exposures	251,955		251,955	( <b>*</b> .		
6	Exposure amounts considered for regulatory purposes	8,634,751	5,730,584	1,694,348	18	1,209,819	

The differences between the carrying value of assets under the scope of regulatory consolidation and the exposure amounts considered for regulatory purposes can be explained by the inclusion of; the off-balance sheet exposures on Corporate lending facilities and Collateral Swaps; and the

Derivative Add on which is the amount for potential future credit exposure over the remaining life of the derivative contract, calculated by applying an Add-on factor to the notional principal amount of the derivative.

# **Corporate Governance**

The Corporate Governance Framework (the "Framework") sets out the leadership, direction and control of the Company. The Framework reflects best practice standards, regulatory guidelines and statutory obligations and ensures that organisation and control arrangements are appropriate for the governance of the Company's strategy, operations and the mitigation of related material risks.

The Company considers the Board of Directors (the "Board") to be the management body for the purposes of these Pillar 3 additional disclosures. Names of Directors are contained in the Directors' Report and also in Director bios contained herein.

The number of non BMO Group Directorships held by Directors in addition to the Company Directorship at the date of this disclosure is listed below:

Mark Caplan	0
Brian Hayes	2
Michelle Liposky	0
John McCormick	1
Jane Anne Negi	1
Roslyn O'Shea	3
Noel Reynolds	0
William Smith	0

The Company strives to maintain appropriate levels of knowledge, expertise, skill and diversity on the Board. In reviewing the Board's composition, the Nomination Committee will consider the benefits of having a broad range of views, experiences, skills, backgrounds and values represented on the Board. To support this, the Nomination Committee will, when identifying and nominating candidates to recommend for appointment to the Board:

- consider only candidates who are highly qualified based on their experience, functional expertise, and personal skills and other qualities of Directors;
- consider diversity criteria including gender, age, nationality, ethnicity and background; and
- where appropriate, in addition to its own search, engage qualified independent external advisors to conduct a search for candidates that meet the Board skills and diversity criteria to help achieve its diversity aspirations.

The Board Appointment Policy sets out the policy for appointments to the Board. The Board Suitability Policy ensures the suitability of all members of the Board, senior management and other "key function holders". The Board Suitability Policy is aligned with the Company's overall corporate governance framework, corporate culture and risk appetite. The Board Suitability Policy also establishes the process for the ongoing assessment of the individual and collective knowledge, skills and experience of the Board as well as the good repute, honesty and integrity, and independence of mind of its members. It also sets out the expectation that directors commit sufficient time to discharging their duties and that appropriate induction and training regimes are established to ensure the initial and ongoing suitability of Board members. All Board appointments will be made on merit, judged against a set of objective criteria with regard to the requirement for diversity on the Board.

The Board Diversity Policy applies to the recruitment of all directors of the Board. The Board believes that a board made up of highly qualified directors from diverse backgrounds who reflect the changing population demographics of the markets in which the Company operates, the talent available with the required expertise and the Company's evolving customer and employee base, promotes better corporate governance. The Board aspires to have a Board composition in which each gender comprises at least one-third. Currently 38 percent of the Board is female.

The Board is responsible for setting, approving and overseeing the Company's risk strategy and risk appetite, ensuring that it is aligned to the Company's strategic, capital and financial plans and remuneration practices. It is the responsibility of the Board to ensure that the Company's risk management function is properly resourced and carry out their responsibilities independently, objectively and efficiently. The Board met seventeen times in the 2019 fiscal year.

The Governance Structure in place during fiscal 2019 is depicted below:

# **Governance Structure** Executive Board (EMC) Audit and Compliance **Risk and Capital Committee** Nomination Committee (RCC) Committee (ACC) **Asset Liability** Risk Management Compliance Committee Committee Committee (ALCO) (RMC)

In order to ensure all material risks are being appropriately monitored and managed the Board reviews the charters and mandates for the Company's Committees on an annual basis to ensure that the Committees in place remain fit for purpose in line with business environment developments.

The Risk and Capital Committee ("RCC") is responsible for assisting the Board in fulfilling its responsibilities for oversight of the Company's risk management framework, including the policies and processes used to manage credit, market, capital management, funding and liquidity, operational and other relevant risks; and the Company's management of those risks. The RCC also advises the Board on the Company's risk appetite for future strategy (taking account of the Board's overall risk appetite), the Company's current capital position and the Company's capacity to manage and control risks within the agreed strategy. The RCC met seven times in the 2019 fiscal year.

The RCC delegates responsibility for the monitoring and management of specific risks to management committees accountable to it. These management committees are the Risk Management Committee ("RMC") and the Asset and Liability Committee ("ALCO"). The mandates for each of these management committees are reviewed regularly by the RCC.

The RMC is a risk management committee accountable for oversight and governance of risk impacting the Company, including the major risk categories, credit, market, liquidity, operational and business risk. The RMC operates under delegated authority from the RCC and supports the RCC in fulfilling its responsibilities as set out in the RCC charter. The RMC accomplishes this by ensuring that material risks arising from Company's operations are appropriately identified, managed, measured, monitored and reported. The RMC meets monthly.

The ALCO is responsible for assisting the RCC in fulfilling its oversight responsibilities with regard to the Company's balance sheet and financial resources, including the policies and processes used to manage funding and liquidity, capital management, risks impacting those financial resources and controls to mitigate those risks. The ALCO meets monthly.

While the management of risk is the collective responsibility of all employees, the Company, as part of the BMO Group's overarching Risk Management Framework, assigns responsibilities on the basis of the three lines of defence operating model:

- o First Line of Defence: Operating groups, which own the risks arising in their operations.
  - The First Line of Defence is comprised of areas whose operating activities, transactions and initiatives give rise to risk. Such areas are accountable for ensuring that the risks inherent in, or created in pursuit of, their mandate are managed (e.g. identified, measured, controlled, monitored, mitigated and reported) in accordance with the BMO Risk Management Framework and governed in accordance with the Risk Governance Framework. Operating Groups are accountable as the First Line of Defence for managing risks related to their business or affairs. Corporate Services may, when not acting as the Second Line of Defence, be the First Line of Defence for risks inherent in or generated by the pursuit of their mandate.
- Second Line of Defence: BMO Group Enterprise Risk and Portfolio Management ("ERPM") group, Corporate Services including Risk Management.
  - The Second Line of Defence is comprised of the ERPM group and in targeted areas, Corporate Services. The Second Line of Defence provides independent oversight, effective challenge and independent assessment of risks and risk management practices, including transaction, product and portfolio risk management decisions, processes and controls in the First Line of Defence. The Second Line of Defence establishes risk management policies, infrastructure, processes, methodologies and practices that the first and second lines use to identify, assess, and monitor risks across the BMO Group.
- o Third Line of Defence: Corporate Audit Division.
  - Corporate Audit is the Third Line of Defence, and is accountable for independently assessing the effectiveness of internal controls within the Enterprise, including controls that support the risk management and governance processes.

The Audit and Compliance Committee ("ACC") is responsible for assisting the Board in fulfilling its oversight responsibility for the integrity of the Company's financial reporting, the effectiveness of internal controls, the performance of its corporate audit function, the independent auditor's performance, qualifications and independence, the Company's compliance with legal and regulatory requirements, transactions involving related parties, conflicts of interest and confidential information, and standards of business conduct and ethics. The ACC is responsible for the oversight and implementation of the annual internal audit plan and the chair of the ACC shall update the Board periodically on the status of the plan. The ACC is also responsible for assisting the Board in fulfilling its oversight responsibilities with regard to the Company's legal and regulatory compliance, including oversight of the Company's regulatory compliance framework and its anti-money laundering obligations.

The ACC delegates responsibility for the monitoring and management of specific risks to the Compliance Committee ("CC"). The CC is a management committee accountable for oversight and governance of compliance risk impacting the Company. The CC operates under delegated authority from the ACC and supports the ACC in fulfilling its responsibilities as set out in the ACC charter. The CC accomplishes this by ensuring that compliance risks arising from Company's operations are appropriately identified, managed, measured, monitored and reported in line with the Company's Compliance Framework. The CC also ensures that the necessary compliance governance, controls and procedures demanded by the Company's internal governance framework are properly embedded in the business. The ACC met five times in the 2019 fiscal year.

In the event of any perceived overlap between the ACC and the RCC, the respective committee chairs agree the most appropriate committee to consider the matter, or the chairs shall agree to hold a joint meeting of the two committees. The RCC & ACC met jointly two times in the 2019 fiscal year.

The Nomination Committee is responsible for leading the process for appointments to the Board and making recommendations to the Board, ensuring the existence of a formal and transparent policy for the appointment of new Directors. The Nomination Committee is also responsible for reviewing the current structure, size, composition and performance of the Board and each of its committees. The Nomination Committee shall, annually, perform a Board collective suitability assessment to ensure that the Board possesses adequate knowledge, skills and experience to be able to understand the Company's activities, including the main risks to its business. The Nomination Committee is also responsible for performing an annual assessment of the continued independence of the Company's INEDs.

The Executive Management Committee ("EMC") is not a sub-committee of the Board, but supports the Chief Executive Officer in the execution of their responsibilities.

# **Biographies of Board Members**

The Company recognises the importance of a Board with the appropriate balance of skills, experience and diversity, and the composition of the Board is reviewed annually by the Board Nominations Committee. The skills and experience of the current Directors and the relevance for the Board are detailed below.

### **Mark Caplan Executive Director**

Mark Caplan joined the Board on 20 August 2019 as an Executive Director and the Chief Executive Officer of the Company.

Mark has over 30 years of experience in finance, with a breadth of experience in leading wholesale financial services businesses in Canada and internationally.

Most recently, Mark served as President of the Global Risk Institute in Financial Services, a public private not-for-profit aimed at strengthening risk management practices throughout the financial services industry globally. Mark was previously the Regional Head of Scotiabank's European operations. Prior to Scotiabank, he worked in a senior capacity for the Bank of Canada and is a former member of the Monetary Policy Review Committee and the Financial System Review Committee. He was also a longstanding executive at BMO Capital Markets.

Mark has significant European executive experience having spent 6 years at Scotiabank in London as The Bank of Nova Scotia's Managing Director and Head of Europe, Global Banking and Markets, as well as Chief Executive Officer, Scotiabank Europe plc, a PRA and FCA regulated financial services institution in the UK. In that role, Mr. Caplan gained significant experience in European banking regulations, including those issued by the European Banking Authority, the Basel III reforms, CRD IV, EMIR and MiFID II, as well as significant Europe-specific experience in strategy and strategic planning. In his capacity as CEO of Scotiabank Europe plc, he was an approved person by both the PRA and FCA, and subsequently became an SMF under the Senior Managers' Regime.

Mark holds an Honours Bachelor of Arts in Business Administration from the Richard Ivey School of Business. He is a Distinguished Fellow of the Munk School of Public Policy and Global Affairs at University of Toronto. Mark is Vice Chair of the Investment Committee of the Jewish Foundation of Greater Toronto and a member of the Investment Committee of the Perimeter Institute for Theoretical Physics.

Mark's key skills and experience includes Capital Markets, Governance, Strategy, Compliance, Risk Management, Capital, Funding and Liquidity Management, Financial Services Regulation, Operations, Executive Management Oversight.

### **Brian Hayes Independent Non-Executive Director**

Brian Hayes has been an independent Non-Executive Director since 2015. Brian is the current Chair of the Board, appointed on 20 June 2019 and the former Chair of the Risk & Capital Committee. Brian is currently a member of the Risk & Capital Committee and the Nomination Committee. Brian is a former member of the Audit & Compliance Committee.

Brian has significant experience in executive and non-executive functions at senior level over his career in financial services and in business. He was formerly a Managing Director and Board Director of Citibank Europe plc, was on the executive management committee and had a range of senior leadership positions. He was also Chair of an FS Governance, Risk and Compliance Technology Centre, Chair of a University Educational Trust and Chair of a payment technology solutions company. He recently joined the board of a property development and investment company. He is also a mentor to companies in Ireland.

Brian has worked as a Treasury/Capital markets executive originating and distributing debt instruments including CP, MTNs and structured financial engineering/structured products while at Citi, as well as being a lending officer and working on advisory mandates with customers. He has also led a transaction services business and the set-up of an FS innovation lab and its associated governance.

Brian has an M.Sc. in Investment and Treasury (MIT) Hons, from DCU and has also lectured part-time on this program to industry practitioners for 2 years. This academic training covered inter alia Capital markets, Fixed Income and Derivatives and pricing models, Corporate Finance, Portfolio Management / Asset Management and the associated derivative products and well as Real Estate Valuation and Management.

Brian's key skills and experience include Governance, Strategy, Treasury and Capital Markets, Compliance, Funding and Liquidity Management, Risk Management, Operations and Executive Management Oversight.

### **Michelle Liposky Non-Executive Director**

Michelle (Shelly) Liposky joined the Board on 5 April 2019 as a Non-Executive Director of the Company. Shelly is a member of the Risk & Capital Committee and the Audit & Compliance Committee.

Shelly is a Managing Director in BMO Capital Markets where she is leads a global team responsible for the first line of defence including AML, Business Unit Compliance, Operational Risk, Financial Crisis Management and Risk Analytics. The mandate includes preventing loss due to failure in process, people and systems and ensuring the execution of trading and investment banking businesses in compliance with applicable regulations.

In addition, she is focused on integrating data with machine learning and AI to enhance the way we work and make decisions and to focus on real versus perceived risk. She leverages similar technology applied in a different way to design process and organizational efficiencies, influencing across the organization.

Previously, Shelly was the COO for US Trading Products where she was responsible for working across businesses and corporate areas on initiatives including the sale of GKST, US liquidity and funding reporting, funding and balance sheet management operating model, and Fed remediation.

Shelly has 25 years of experience across industries, most recently as a COO at Barclays with global responsibility across Capital Markets and Wealth businesses. She has a unique blend of experience in sell-side M&A, corporate infrastructure, Risk and in leading large scale regulatory, business and M&A transformations, including the integration of Lehman Brothers, sale of Barclays Global Investors, and efficiency initiatives such as offshoring and vendor consolidation.

Shelly earned an MBA from Columbia Business School, an MS from Johns Hopkins University, and a BS from Penn State University. She holds FINRA Series 7 and 63 licenses.

Shelly's key skills and experience includes Capital Markets, Governance, Strategy, Compliance, Risk Management, Financial Services Regulation, Operations and Executive Management Oversight.

### John McCormick Independent Non-Executive Director

John McCormick joined the Board on 4 September 2019 as a Non-Executive Director of the Company. John was appointed Chair of the Risk & Capital Committee on 20 November 2019. John is also a member of the Audit & Compliance Committee and the Nomination Committee.

John was previously an independent non-executive director of National Bank of Greece. He chaired the Remuneration & Human Resources committee and was a member of the Strategy & Transformation committee, and also the Ethics & Culture committee.

John is also the former Chairman of Asia Pacific for Royal Bank of Scotland Group plc, and its former CEO of Global Banking & Markets. During a 35 year global banking career, he led businesses across multiple global and regional banking platforms, including retail, commercial and wholesale banking; investment banking, wealth management & private banking; merchant banking; trust and leasing companies. He has lived and operated on four continents, including Europe, USA, Asia Pacific & Middle East. John possesses very strong Asia Pacific experience (2005 – 2013) in Hong Kong, Singapore, India, Greater China, South East Asia, Japan and Australia.

John has retail banking experience, having led retail banks in 10 countries across Asia Pacific, and having sat on the Executive Committee of Coutts & Co. He also has strong wealth and asset management experience, through Coutts & Co. and RBS, which had multi-billion \$ AUM, and an Asia Pacific banking balance sheet of £160bn (\$230bn).

John is an experienced board director having served as the Senior Independent Director and Chair of the Audit Committee of AIM-listed Lombard Risk Management plc to March 2018. In March 2018, LRM plc was sold to Vermeg (French Private Equity firm) at a 72% premium to the volume weighted average share price when compared to the previous year.

As an Executive Business Coach, John coaches, mentors and facilitates senior executives including high level C Suite executive in financial services, public sector and general industries. He coaches in the UK, Ireland and Middle East. An Irish citizen, he holds a permanent residency permit for Hong Kong.

John's key skills and experience includes Capital Markets, Governance, Strategy, Compliance, Risk Management, Capital, Funding and Liquidity Management, Financial Services Regulation, Operations and Executive Management Oversight.

### Jane Anne Negi Executive Director

Jane Anne Negi joined the Board on 24 May 20189 as an Executive Director and is currently Deputy Chief Executive Officer of the Company.

Jane Anne previously worked as BMO Head of Strategic Initiatives EMEA where she was responsible for providing strategic and operational leadership on key governance and business initiatives. Jane Anne was responsible for the planning and execution of BMO's Brexit strategy.

Jane Anne has provided leadership and coordination for major business, legal and regulatory projects. She has held positions of responsibility on boards and senior management committees where she was responsible for developing and overseeing the execution of the business's local strategy and providing strong leadership and management. Most recently Jane Anne has been a member of the BMO London Management Committee, which has responsibility for the oversight and governance of BMO London Branch.

Jane Anne has 25 years of Financial Services experience as a senior capital markets & banking lawyer at several multinational banking institutions. She has specialist technical knowledge in a variety of capital markets and banking products, including derivatives and collateral, stock lending, repos, bond and warrant issues, loans, trade finance, commodities, fixed income, equities, FX, repackaging and securitisations. She has been a member of the Scotiabank Europe New Business Review Committee and BMO London Product Governance Committee, responsible for providing guidance and oversight of new products and transactions. She has a strong understanding of trading products, corporate lending and investment banking.

Jane Anne was a member of Scotiabank Europe plc's Risk Committee, where she reported on legal and reputation risk matters. She has experience in implementing a legal risk framework and understands the importance of effective risk management. Jane Anne was also a member of Scotiabank Europe plc's Audit Committee, where she developed a strong understanding of the role and importance of internal audit. During her executive career, Jane Anne has provided input into various risk appetite frameworks as well as working with colleagues to draft comprehensive ICAAP and ILAA documents. Jane Anne has also been a member of an executive Operational Risk Committee and was a member of the London Conduct Committee. From these experiences she has developed detailed knowledge of both operational and conduct risk.

Jane Anne has detailed knowledge of current banking regulation, including EMIR and MiFID II, and has worked on a number of steering committees responsible for the implementation of those regulations. She has also taken full ownership of the preparation and submission of UK Resolution and Recovery Plans. At Scotiabank Europe plc, she was responsible for ensuring that the banking subsidiary was compliant with all applicable regulations. As Associate General Counsel at BMO London, Jane Anne was responsible for advising on regulatory matters relating to UK, Europe and Asia, including in relation to the setting up of the commodities trading business in London. She also advised on the setting up of the stock lending business in US, UK and Australia, which included assessing corporate capital requirements, addressing any regulatory issues and setting up custody arrangements globally.

Jane Anne's key skills and experience includes Capital Markets, Governance, Strategy, Compliance, Risk Management, Financial Services Regulation, Operations and Executive Management Oversight.

### **Roslyn O'Shea Independent Non-Executive Director**

Roslyn ("Ros") O'Shea has been an Independent Non-Executive Director of the Board since 2017.

Ros is the current Chair of the Audit & Compliance Committee, a member of the Risk & Capital Committee and was appointed Chair of the Nomination Committee on 26 March 2019.

Ros joined the Board to enhance the Company's collective cultural development, compliance and governance skills, knowledge and experience. Ros was previously Head of Compliance and Ethics at CRH plc with responsibility for all aspects of Group compliance including the design, delivery and embedding of the Group compliance programme. Ros reported to the Audit Committee Chair and was an advisor to the Board on all aspects of corporate reputation and business ethics. She implemented a change management programme across Europe, the US and Asia, incorporating Business Conduct, Anti-Corruption, Anti-Fraud and Competition Law modules, with related training for over 40,000 employees worldwide.

Ros also lectures on risk, governance and compliance for the Institute of Directors, UCD Smurfit Graduate School of Business and the Institute of Banking. She lectures on the Professional Diploma in Corporate Governance and in particular delivers the modules on the "Role of the Board and Culture and the Board" as well as "Risk Management for Directors". Since joining the Board Ros has been conferred with the Certified Bank Director designation from the IOB. These roles have given her key governance, risk management and compliance skills.

She is a partner in Acorn Governance Solutions, a consulting firm provide advice and leadership training on governance, risk, compliance and business ethics to clients in the private, public and the not-for-profit sectors. Ros also sits on the boards of BlackRock's funds in Ireland, the Food Safety Authority of Ireland and Pieta House. She also chairs the PwC Ireland Alumni Association. Through her not-for-profit and consulting work, Ros has gained significant knowledge of the oversight of Executive Management and reputation management. She is also author of the book "Leading with Integrity – a Practical Guide to Business Ethics". She has developed a strong understanding of regulatory frameworks.

Ros' key skills and experience includes Governance, Internal Audit, Strategy, Compliance, Risk Management, Financial, Culture, Conduct and Executive Management Oversight.

### **Noel Revnolds Executive Director**

Noel Reynolds has been an Executive Director and Chief Financial Officer of the Company since 2015.

Before joining the Company, Noel was Chief Financial Officer and Executive Director with DEPFA BANK plc and prior to that he held a number of senior financial management positions in the DEPFA Group including Chief Operations Officer and Executive Director of DEPFA ACS BANK. He is a qualified accountant with over 20 years of banking experience at Board and Senior Management level. Noel is a Fellow of the Association of Chartered Certified Accountants, a member of the Institute of Banking and the Institute of Directors and is a Chartered Director since September 2014.

Noel has a comprehensive knowledge of financial reporting, management reporting, regulatory reporting, taxation and compliance. Through his positions on various boards he has a strong understanding of governance and ensuring effective frameworks for financial institutions.

As the Company's Chief Financial Officer, Noel is one of the senior executive responsible for developing the Company's strategy. He has a very good understanding of governance, strategic development and the management of financial and reputation risk.

Since being designated as the Board director responsible for cybersecurity, Noel has attended a number of training sessions aimed at deepening his knowledge and understanding of IT Risk (including cybersecurity risk).

Having also previously held the position of Chief Operating Officer for the Company, Noel has significant experience of managing operational and settlement risk within the Company. Noel also had oversight over the Company's Outsourcing Framework and has a good understanding of managing outsourcing risk. He understands the Company's operations and, through his previous role as Chief Operating Officer of DEPFA BANK, has strong operations experience.

Noel's key skills and experience includes Capital Markets, Governance, Internal Audit, Strategy, Compliance, Financial, Capital, Funding and Liquidity Management, Technology and Operations.

### **William Smith Non-Executive Director**

William ("Bill") Smith has been a member of the Board since 2011 and is currently a Non-Executive Director and former Chair of the Board. Bill is also a member and former Chair of the Nomination Committee.

Bill is currently MD & Head of International Capital Markets which includes the EMEA and Asia regions. He is on the BMO CM Executive Committee, is Chair of BMO ChinaCo (subject to regulatory approval) and maintains governance accountability for EMEA.

In his role as Head of International, Bill is responsible for BMO Group's businesses in the EMEA and Asia regions. He has overall responsibility for the delivery of the International Capital Markets strategy and, in his role on the Board, oversight of the execution of the Company's strategy. In the delivery of the EMEA Capital Markets strategy, he has a strong understanding of the various lines of business, including the proposed new business that will be transferring to the Company.

Bill has sat on the boards of BMO's material European subsidiaries since 2011, gaining valuable governance and strategic experience. As Head of EMEA, Bill is responsible for overseeing the European Senior Management. Bill is also the chair of the London Branch Executive Committee, the management committee responsible for the oversight of Bank of Montreal, London Branch (regulated by the FCA and PRA). As chair of the Company he has also been responsible for the oversight of the Company's senior management, including the CEO.

Prior to his appointment as Head of EMEA, Bill was Head of Investment and Corporate Banking in London where he was responsible for a wide range of transactions in the EMEA region including M&A, strategic advisory, credit, equity and debt financing. He oversaw a team of 13 professionals responsible for business origination and execution. He has a detailed knowledge of trading products, corporate lending and investment banking.

Before joining BMO Capital Markets, Bill gained 17 years of investment banking experience working in London, Toronto and Tokyo for Royal Bank of Canada and Bayerische Hypo und Vereinsbank AG. On the trading products side, this work included fixed income, derivatives, foreign exchange and credit. In relation to investment banking and corporate lending, Bill was responsible for the origination and execution of mergers & acquisitions, advisory, equity and debt finance products to corporate and government clients. During this time, he also gained an excellent understanding of financial regulation and capital, funding and liquidity management.

Through his executive roles and his knowledge of BMO's business, Bill has a significant experience of managing strategic, market, credit and reputation risk.

Bill's key skills and experience include Capital Markets, Governance, Strategy, Compliance, Financial, Capital, Funding and Liquidity Management, Financial Services Regulation and Executive Management Oversight.

# **Risk Governance**

### **Risk Management**

The Board ensures that the business strategy is supported by a sound risk strategy and an effective risk management framework that is appropriate to the nature, scale, complexity and risk profile of its activities. It has overall responsibility for governance and corporate culture.

**Risk Management Structure** 



The Company's risk management function is led by the CRO and operates under a clearly defined mandate, approved by the Board's RCC. The CRO has two reporting lines: locally to the Company's General Manager, and functionally to the BMO CRO Europe. The CRO is accountable for the execution of the function's mandate and as such for prudent management of the Company's risks. The CRO is a member of the Company's management team and is the chair of the RMC. The CRO informs and advises the Board periodically and as deemed necessary on risk-related topics and has direct access to the Chair of the Board.

Within the larger organisational governance framework, the RMC forms the most senior decision body prior to the Board committees and has a mandate to review all relevant risk related matters and decide on an appropriate course of action if required/within its remit. The committee is chaired by the CRO or delegate and meets at least monthly. The RCC is the most senior decision body on risk management related matters prior to the Board and is informed by the CRO. The Chair of the RCC provides updates to the Board on a quarterly basis.

Reporting to the CRO are specialist risk managers covering each major risk type — Credit, Market and Liquidity, Operational and Model Risk. The Risk Management team are part of a broader European Risk footprint under the leadership of the BMO CRO Europe.

### **Risk Framework and Culture**

The Board is responsible for setting the risk appetite for the Company and ensuring it is consistent with the business strategy and risk capacity of the Company and also consistent with that of the BMO Group. Each year a Risk Materiality Assessment ("RMA") is performed to identify all relevant and material risks faced by the Company, from which a Company specific Risk Appetite Statement ("RAS") is derived. Limits and Key Risk Indicators ("KRIs") are set to ensure that risks remain within the defined risk appetite tolerance and that the Board and senior management are aware of the risk profile.

Actions to be taken when stated risk limits are breached, including escalation procedures and Board notification, are codified in the Risk Appetite Framework ("RAF"). Communication and education about the risk management framework and the development of skilled, professional risk managers helps to create a strong and appropriate risk culture within the Company. In addition, remuneration systems are designed to promote strong performance, embed acceptable risk-taking behaviour and reinforce the Company's operating and risk culture.

### **Risk Profile and Business Strategy**

The Company's business strategy stems from the following four overarching objectives:

- Grow the client footprint. Increase the proportion of profit attributable to client activity.
- Implement and effectively integrate the identified new post-Brexit business and other opportunities as they arise.
- Improve capital efficiency and availability.
- Effectively deploy our increased human capital while maintaining high standards of conduct and engagement.

The Company's Risk Management Framework is the framework through which the Board and Senior Management help to guide its strategy; articulate and monitor adherence to risk appetite and risk limits; and identify, measure and manage risks. The Framework establishes the principles and standards, control structures and processes for managing and controlling risk to the Company's earnings, capital, liquidity and reputation arising from all activities.

The RAF provides the structure under which the RAS is produced. It enables the Company to better manage all major risk categories identified by facilitating the translation of risk metrics and methods into strategic choices, reporting, and day-to-day business decisions. The RAF consists of the following constituent parts:

- The Risk Register
- The Risk Materiality Assessment
- The Risk Appetite Statement and Dashboard

The RAF is a key component of aligning overall corporate strategy, capital allocation, and risk.

# **Risk Appetite**

The RAS is the articulation of the aggregate level and types of risk that the Company is willing to accept to achieve its business objectives. It includes qualitative statements as well as Key Risk Metrics reported in a Risk Appetite Dashboard. Risk Appetite metrics are quantitative measures expressed relative to earnings, capital, liquidity or other relevant risk measures that are established as part of the RAS.

Risk tolerance thresholds are established for Key Risk Metrics. The Risk Appetite Dashboard provides an easily understood, consistent and efficient way of communicating, monitoring and tracking the risk profile against the approved RAS on an ongoing basis.

Establishing Risk Appetite Statements and Risk Appetite Dashboards is an iterative and evolutionary process that requires integration with, and linkage to, the Company's RMA, strategic planning, capital, liquidity and financial planning processes. The RAS is reviewed and approved at least annually by the Board.

### **Stress Testing**

The Company applies a forward-looking risk management approach utilising stress testing to identify potential vulnerabilities, thus allowing the Company to take pre-emptive steps and adjust its business strategy, risk strategy and risk appetite as necessary. The Stress Testing Program ("STP") comprehensively describes the scope of stress testing and the associated infrastructure, processes and governance.

At the heart of the Company's STP is the Enterprise-wide Stress Test ("EWST") which is a scenario based multi-year stress test. It covers all credit facilities together with the profit and loss statement with a view to -

- determining the stress impact on the Company's capital and liquidity;
- identifying potential vulnerabilities and to allow for timely mitigating actions; and
- assessing if the scenarios continue to be fit for purpose in the longer term.

Results of these stress tests are reviewed quarterly by the RCC. In addition, the results of daily market and liquidity stress tests, including stressed VaR and hypothetical stress scenarios, are managed within the Company risk limit framework.

### **Risk Systems**

The Company leverages BMO Group systems for the provision of risk metrics. All services provided by the BMO Group are managed via Service Level Agreements ("SLAs") which are monitored and assessed on an ongoing basis.

### **Roles & Accountabilities**

All employees, through their individual roles and accountabilities, contribute to maintaining an effective risk management framework and are required to be aware of and adhere to the relevant procedures and controls as set out in the Risk Management Corporate Policy. The Company employs the three lines of defence operating model.

### **Monitoring & Reporting of Risks**

Risk identification, monitoring and reporting requirements are articulated within applicable corporate policies, corporate standards and operating procedures. This ensures risk transparency at multiple levels – individual, aggregate and collective risks – and reporting to multiple stakeholders including management and risk committees, in alignment with first and second line of defence requirements. The Company's monitoring and reporting activities cover all risk types (Market, Credit, Liquidity, and Operational) and include the following:

- Daily risk reporting against approved limits and approved product lists;
- Daily reporting on Large Exposures within regulatory guidelines;
- Monthly reporting to the RMC highlighting any material risk issues;
- Quarterly reports provided to the RCC and the Board detailing key risk updates, emerging risks and trends and key risk metrics against Board approved thresholds;
- Risk and Control Assessments to assess the impact of the business environment and internal control
  effectiveness on risk profile; and
- A new product approval process which includes due diligence and sign off by all relevant functions and businesses in the first and second lines of defence.

### **Overall Risk Profile**

The overall risk profile of the Company is captured through key metrics contained in the Risk Appetite Dashboard which is reviewed quarterly by Board. Red/Amber/Green thresholds are defined for each metric, in line with the Risk Appetite, to allow easy identification of elevated risk and for management actions to be implemented if required.

- The Company is well capitalised. The CET1 capital ratio which provides a measurement of tier 1 capital in relation to total risk weighted assets, remains well above minimum thresholds. The 'economic capital under stress' measure, representing CET1 capital in relation to the aggregated total risk position in times of stress, remains well above minimum thresholds.
- The Company remains well-funded. The Liquidity Coverage Ratio, representing the minimum liquidity requirements as set by the CBI, remains comfortably above minimum thresholds.
- The Company is not exposed to significant market risk. It's Value at Risk (VaR) measure, quantifying the loss that will not be exceeded based on a defined confidence level (99%) and a specific time period (1 day), remains low.
- The Company is not exposed to significant levels of credit risk. Daily monitoring of exposures against approved limits, combined with daily collateral margin calls significantly mitigate counterparty credit risk. The pillar 2 assessment of credit risk, represented through the holding of risk capital, remains well within thresholds.
- The Company is not exposed to significant levels of Operational risk. Operational risk is measured
  using various inputs that include the ongoing consideration of the business environment and internal
  control framework, that includes examination of significant operational risk events and related root
  causes.

# Declaration by the management body on the adequacy of risk management arrangements

The Board is satisfied that the Company's risk management arrangements are adequate and aligned to the Company's objectives, the risk management strategy and commensurate with the Company's risk appetite and current risk profile.

# **Capital Management**

### Supervision

The Company is supervised by the CBI and holds a full banking licence.

### Capital – Key ratios

The Company's capital management policy ensures that the Company has sufficient capital to cover the risks of its business and support its strategy and complies with regulatory capital requirements. The Company's capital and key ratios are set out in the Financial Statements Note 27 Risk Management.

### **ICAAP**

The Company's Internal Capital Adequacy Assessment Process ("ICAAP") is an on-going assessment of the risk and capital position of the Company. An understanding of the Company's risk profile and capital needs facilitates the articulation of the Company's risk appetite and tolerances and thereby informs the Company's capital and business strategy. The intent of the ICAAP is to ensure and demonstrate that the Company is adequately capitalised to support the strategic objectives and material risks under business as usual and stressed conditions.

The guiding principles of the Company's ICAAP are:

- **Proportionality:** It is proportionate to the risk level, complexity and scale of the Company's activities;
- **Forward-Looking:** It considers not only the existing risks faced but also the potential risks including those arising from Brexit and future business strategies;
- **Ongoing exercise:** It is not a static one-time process but rather a dynamic and continuous exercise to ensure that the Company has robust risk management systems and possesses sufficient internal capital at all times; and
- **Evolving-nature:** It is continuously monitored for its efficacy and need for improvement given changes in the risk profile and business plans.

As part of the ICAAP processes, the Company seeks to ensure that:

- All material risks faced by the Company are identified and have sufficient risk management and controls around them;
- Regulatory Capital and Internal Capital are adequate for the material risks faced by the Company;
- All Regulatory Capital and Internal Capital demands are considered and compared to Available Capital, including under stress tests, when setting target capital ratios;
- The Company has sufficient Available Capital and identified practical management actions to assist it in withstanding severe but plausible stresses;
- The Company exceeds Regulatory Capital requirements and meets or exceeds target capital ratios;
   and
- The outputs of the ICAAP process feed back into business strategy and capital planning.

The capital requirements for Pillar 1 and Pillar 2 are set out in the Capital Requirements Assessment section. Further detail on the Pillar 1 and Pillar 2 requirements are discussed in the following sections.

### **Regulatory Capital**

The Company's own funds consist as at 31 October 2019 solely of CET1, which comprised equity share capital, audited profit and loss and other reserves which has been externally verified by the Company's auditors. The Company has not at this time issued any innovative tier 1 instruments or tier 2 capital instruments. Further details with regard to ordinary shares are provided in Note 26 of the audited financial statements. The table below outlines the component parts of regulatory capital with further details of capital instruments, adjustments, deductions and filters in line with the prescribed template provided in Article 4 of commission regulation (EU) No.1423/2013.:-

Reg	ulatory own funds disclosure. CRD IV, Annex IV - Reference	2019	2018
		US\$000's	US\$000's
Com	mon equity tier 1 (CET1) capital: Instruments and reserves		
1	Capital instruments and the related share premium accounts	10,049	10,042
	of which:	20/2.12	
	Ordinary stock	10,049	10,042
	Deferred stock	*	
	Treasury stock		-
	Share premium	120	-
2	Retained earnings	274,549	261,561
3	Accumulated other comprehensive income (and other reserves)	502,808	506,859
3a	Funds for general banking risk	144	
4	Amount of qualifying items per Article 484 (3) and related share premium accounts subject to	<u> </u>	
5	Minority interest (amounts allowed in consolidated CET 1)		
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	20	
6	Common equity tier 1 (CET 1) capital before regulatory adjustments	787,406	778,462
Com	mon equity tier 1 (CET1) capital regulatory adjustments		
Colli	mon equity tier 1 (CE11) capital regulatory adjustments	K.	
7	Additional value adjustments /other	(3,040)	(4,030)
8	Intangible assets (net of related tax liability)	(0/0.107	(1/000)
9	Empty set in the EU	:-:	-
10	Deferred tax asset that rely on future profitability excluding those arising from temporary	-	
11	Fair value reserves related to gains or losses on cash flow hedges	-	-
12	Negative amounts resulting from the calculation of expected loss amounts		
13	Any increase in equity that results from securitised assets (negative amount)		-
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing		
15	Defined-benefit pension fund assets	-	
16	Direct and indirect holdings by an institution of own CET1 instruments		-
17	Direct, Indirect and synthetic holdings of the CET1 instruments of financial sector entities where		
	those entities have reciprocal cross holdings with the institution designed to inflate artificially the		
	own funds of the institution	-	
18	Direct, Indirect and synthetic holdings by the institution of the CET1 instruments of financial		
	sector entities where the institution does not have a significant investment in those entities		
	(amount above the 10% threshold and net of eligible short positions)		
19	Direct, Indirect and synthetic holdings by the institution of the CET1 Instruments of financial		
	sector entities where the institution has a significant investment in those entities (amount above		
	the 10% threshold and net of eligible short positions)	X =	11:
20	Empty set in the EU		-
20a	Exposure amount of the following items which qualify for a RW of 1250%, where the institution		
Lou	opts for the deduction alternative		<u></u>
20b	of which: qualifying holdings outside the financial sector		
20c	of which: securitisation positions		
20d	of which: free deliveries		
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of		
	related tax liability where the conditions of 38 (3) have been met.		-
22	Amount exceeding the 15% threshold		
23	of which: direct and indirect holdings by the institution of the CET 1 instruments of financial		
	sector entities where the institution has a significant investment in those entities		Ε.
24	Empty set in the EU		
25	of which: deferred tax assets arising from temporary differences		
25a	Losses for the current financial year		

	ulatory own funds disclosure. CRD IV, Annex IV - Reference	2019	2018
		US\$000's	US\$000's
25b	Foreseeable tax charges relating to CET1 items		
26	Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subjects to pre CRR-treatment		
26b	Amount to be deducted from or added to Common Equity Tier 1 capital with regard to additional filters and deductions required pre CRR	-	
27	Qualifying T2 deductions that exceed the T2 capital of the institution  Adjustments under IFRS 9 Transitional arrangements		
28	Total regulatory adjustments to Common equity tier 1 (CET1)	(3,040)	(4,030
29	Common equity tier 1 (CET1) capital	784,366	774,432
Addi	tional Tier 1 (AT1) Capital: instruments		
30	Capital instruments and the relates share premium accounts		
31	of which; classified as equity under applicable accounting standards		
32	of which; classified as liabilities under applicable accounting standards	- 1	
33	Amount of qualifying items referred to in Articles 484 (4) and the related share premium accounts subject to phase out of the AT1		
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interest not included in row 5) issued by subsidiaries and held by third parties	:51	
35	of which; instruments issued by subsidiaries subject to phase out	2.1	
36	Additional Tier 1 (AT1) Capital before regulatory adjustments		
	tional Tier 1 (AT1) Capital: regulatory adjustments		
37	Direct and indirect holdings by an institution of own AT1 instruments (negative amount)	-	
38	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	8	
39	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above the 10%		
40	threshold and net of eligible short positions) (negative amount)  Direct, indirect and synthetic holdings by the institution of the AT1 instruments of financial sector		
	entities where the institution has a significant investment in those entities (amount above the 10% threshold net of eligible short positions) negative (negative amount)	5)	
41	Empty set in the EU	-	
42	Qualifying T2 deductions that exceed the T2 capital of the institution	×	
43	Total regulatory adjustments to Additional tier 1 (AT1) Capital	-	
44	Additional tier 1(AT1) capital		
45	Tier 1 capital (T1 = CET 1 +AT1)	784,366	774,432
Tier	2 (T2) Capitaly inchwise and avariations		
	2 (T2) Capital: instruments and provisions  Capital instruments and the related share premium accounts	7.0	
47	Amount of qualifying items referred to in article 484 (5) and the related share premium accounts		
48	subject to phase out from T2  Qualifying own funds instruments included in consolidated T2 capital (including minority interest		
70	and AT1 instruments not included in rows 5 or 34 issued by subsidiaries and held by third parties		
40	l of which, instruments issued by subsidiaries subject to phase out		
49	of which; instruments issued by subsidiaries subject to phase out		
49 50 <b>51</b>	of which; instruments issued by subsidiaries subject to phase out Credit Risk adjustments Tier 2 (T2) capital before regulatory adjustments	-	
50 <b>51</b>	Credit Risk adjustments  Tier 2 (T2) capital before regulatory adjustments	=	
50 <b>51</b> Tier	Credit Risk adjustments	=	
50 <b>51</b> <b>Tier</b> 52	Credit Risk adjustments  Tier 2 (T2) capital before regulatory adjustments  2 (T2) capital: regulatory adjustments  Direct and indirect holdings by an institution of own T2 instruments and subordinated loans	=	
50 <b>51</b> <b>Tier</b> 52	Credit Risk adjustments  Tier 2 (T2) capital before regulatory adjustments  2 (T2) capital: regulatory adjustments  Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)  Holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own	=	
50 <b>51</b>	Credit Risk adjustments  Tier 2 (T2) capital before regulatory adjustments  2 (T2) capital: regulatory adjustments  Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)  Holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)  Direct and indirect holdings of the T2 instruments and subordinated loans of the financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net eligible short positions) (negative amount)  Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of	=	
50 <b>51</b> <b>Tier</b> 52 53	Credit Risk adjustments  Tier 2 (T2) capital before regulatory adjustments  2 (T2) capital: regulatory adjustments  Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)  Holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)  Direct and indirect holdings of the T2 instruments and subordinated loans of the financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net eligible short positions) (negative amount)  Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of	=	

Reg	ulatory own funds disclosure. CRD IV, Annex IV - Reference	2019	2018
	N. C.	US\$000's	US\$000's
Tier	2 (T2) capital: regulatory adjustments		
52	Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	2	2
53	Holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	2	
54			
55	Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eliqible short positions)		
56	Empty set in the EU		10
57	Total regulatory adjustments to Tier 2 (T2) capital	-	5.9
58	Tier 2 (T2) Capital	-	72
59	Total Capital (TC = T1+T2)	784,366	774,432
60	Total risk weighted assets	1,032,612	852,380
Capi	tal Ratios and buffers		
61	Common equity tier 1 (as a percentage of total risk exposure amount)	75.96%	90.86%
62	Tier 1 (as a percentage of total risk exposure amount)	75.96%	90.86%
63	Total capital (as a percentage of total risk exposure amount)	75.96%	90.86%
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus	.,**	
	systemically important institution buffer expressed as a percentage of risk exposure amount)	2.67%	2.06%
65	of which; capital conservation buffer requirement	2.50%	1.88%
66	of which; countercyclical buffer requirement	0.17%	0.28%
67	of which; systemic risk buffer requirement	0.00%	0.00%
67a	of which; Global Systemically Important institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	0.00%	0.00%
68	Common equity tier 1 available to meet buffers (as a percentage of risk exposure amount)	71.46%	86.36%
69	Non Relevant in EU regulation	-	
70	Non Relevant in EU regulation		
71	Non Relevant in EU regulation	-	8-
Amo	unts below the threshold for deduction (before risk weighting)		
72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net eligible short positions).		72
73	Direct and indirect holdings by the institution of the CET 1 instruments of financials sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)		13
74	Empty set in the EU		
75	Deferred tax assets arising from temporary difference (amount below 10% threshold, net of related tax liability where the conditions on Article 38(3) are met)		
Anni			
Appi 76	cable cap on the inclusion of provisions in Tier 2  Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap)		
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach		
78	Credit Risk adjustments included in T2 in respect of exposures subject to internal ratings-based		
79	approach (prior to the application of the cap) Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	1 6	
Cani	al Instruments subject to phase-out arrangements (and applicable between 1.3cc 2014	and 1 Ion 2022	
с <b>ар</b> і 80	cal Instruments subject to phase-out arrangements (only applicable between 1 Jan 2014	BIN T JAU 5055	-
	Current Cap on CET 1 Instruments subject to phase out arrangements  Amounts excluded from CET1 due to cap (excess over cap after redemptions and maturities)	•	
Ω1	Current cap on AT1 instruments subject to phase out arrangements		-
81 82 83		2 1	:2
	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)  Current cap on T2 instruments subject to phase out arrangements		

# **Regulatory Capital (continued)**

# Own Funds - reconciliation of IFRS equity to own funds

	Year Ended 31 Octo			
(US\$ in thousands)	2019	2018		
IFRS equity	787,406	778,462		
Prudential valuation adjustment	(3,040)	(4,030)		
Total own funds	784,366	774,432		

The prudential valuation adjustment ("PVA") is applied to insure that the prudent valuation of the Company's positions achieves an appropriate degree of certainty having regard to the dynamic nature of the positions, the demands of prudential soundness and the mode of operation and purpose of capital requirement in respect of positions.

A detailed breakdown of the Company's Equity is provided in the Statement of Changes in Shareholders' Equity on page 25.

### Capital Requirements: Overview of RWA's

Template 4: EU OV1 - The following table summarises RWAs and minimum capital requirements<sup>(1)</sup> ("MCRs") by risk type:

	(US\$ in thousands)			RWA	MCR	
			2019	2018	2019	2018
1	Credit risk (excluding CCR)	5	582,169	446,647	46,574	35,732
2	Of which the standardised approach	-	582,169	446,647	46,574	35,732
6	CCR		320,989	253,605	25,678	20,289
7	Of which mark to market		104,327	88,289	8,345	7,063
9	Of which the standardised approach		107,779	78,532	8,622	6,283
12	Of which CVA		108,883	86,784	8,711	6,943
19	Market risk		363	37,116	29	2,969
20	Of which the standardised approach		363	37,116	29	2,969
22	Large exposures		15,606	13,698	1,249	1,096
23	Operational risk	10.7	113,485	101,314	9,079	8,105
25	Of which standardised approach		113,485	101,314	9,079	8,105
29	Total		1,032,612	852,380	82,609	68,191

<sup>(1)</sup> Minimum capital requirements are calculated as 8% of risk weighted assets.

# Leverage

The CRD IV requires credit institutions to calculate report and monitor their leverage ratios. The leverage ratio is a supplementary non-risk based measure to contain the build-up of leverage (i.e. create a backstop on the degree to which a banking firm can leverage its capital base). It is calculated as a percentage of Tier 1 capital versus the total on and off balance sheet exposure (not risk weighted). A risk appetite target for the Leverage Ratio is approved each year by the Board. The actual leverage ratio is reported quarterly to the RCC so that they can monitor actuals to the risk appetite and take any necessary actions. The Leverage ratio has remained relatively constant throughout the year, 7.68% at 31 October 2019 compared to 9.22% at 31 October 2018, fluctuations in the leverage ratio in the period were driven by variations in the exposure treated as sovereigns.

In accordance with Articles 429 and 499 of the CRR, the tables below outline the leverage ratio calculated.

# LRSum: Summary reconciliation of accounting assets and leverage ratio exposures

	(US\$ in thousands)	Applicable Amount 2019	Applicable Amount 2018
1	Total assets as per published financial statements	9,639,942	7,777,724
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	() <u>2</u> (	9
3	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio total exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013)	8	ž.
4	Adjustments for derivative financial instruments	226,334	251,955
5	Adjustment for securities financing transactions (SFTs)	76,584	73,831
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	176,562	297,491
EU- 6a	(Adjustment for intragroup exposures excluded from the leverage ratio total exposure measure in accordance with Article 429(7) of Regulation (EU) No 575/2013)	:*:	
EU- 6b	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with Article 429(14) of Regulation (EU) No 575/2013)		e , ,
7	Other adjustments	(3,040)	(4,030)
8	Leverage ratio total exposure measure	10,116,382	8,396,971

# LRCom: Leverage ratio common disclosure

	(US\$ in thousands)	CRR leverage rati 2019	o exposures 2018
	On-balance sheet exposures (excluding derivatives and SFTs)		10-17-10-17
1 2	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral) (Asset amounts deducted in determining Tier 1 capital)	6,341,563 (3,040)	6,450,482 (4,030)
3	Total on-balance sheet exposures (excl derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	6,338,523	6,446,452
	Derivative Exposures		
4 5 EU-5a	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation marg Add-on amounts for PFE associated with all derivatives transactions (mark- to- market method) Exposure determined under Original Exposure Method	226,334	175,002 251,955
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant the applicable accounting framework	to	
7 8 9	(Deductions of receivables assets for cash variation margin provided in derivatives transactions) (Exempted CCP leg of client-cleared trade exposures)  Adjusted effective notional amount of written credit derivatives	5	-
10	(Adjusted effective notional afformation whitein credit derivatives)	- A	
11	Total derivatives exposures (sum of lines 4 to 10)	284,837	426,957
COLL, III	SFT exposures	201,037	120,537
12 13	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions (Netted amounts of cash payables and cash receivables of gross SFT assets)	3,239,876	1,152,240
14 EU-14a	Counterparty credit risk exposure for SFT assets  Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429b(4) and	76,584	73,831
15	222 of Regulation (EU) No 575/2013 Agent transaction exposures	9	
EU-15a	(Exempted CCP leg of client-cleared SFT exposure)		
16	Total securities financing transaction exposures (sum of lines 12 to 15a)	3,316,460	1,226,071
June Cont	Other off-balance sheet exposures	3,310,400	1,220,071
17	Off-balance sheet exposures at gross notional amount	495,235	605,072
18	(Adjustments for conversion to credit equivalent amounts)	(318,673)	(307,581)
19	Other off-balance sheet exposures (sum of lines 17 and 18)	176,562	297,491
Exen	npted exposures in accordance with Article 429(7) & (14) of Regulation (EU) No 575/201 balance sheet)		NAME OF THE OWNER, OWNE
EU-19a	(Intragroup exposures (solo basis) exempted in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet))	<b>4</b> (	
EU-19b	(Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet))	=	-
	Capital and total exposure measure		
20	Tier 1 capital	784,366	774,431
21	Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)  Leverage ratio	10,116,382	8,396,971
22	Leverage ratio	7.75%	9.22%
	Choice on transitional arrangements and amount of derecognised fiduciary items		
EU-23 EU-24	Choice on transitional arrangements for the definition of the capital measure Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) No 575/2013		

# LRSpl: Split-up of on balance sheet exposures (excl derivatives, SFTs and exempted exposures)

	(US\$ in thousands)	o exposures 2019	2018
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	6,341,563	6,450,482
EU-2	Trading book exposures	544,378	1,209,819
EU-3	Banking book exposures, of which:	5,797,185	5,240,663
EU-4	Covered bonds	· ·	
EU-5	Exposures treated as sovereigns	4,876,976	4,469,840
EU-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	*	*
EU-7	Institutions	671,239	563,037
EU-8	Secured by mortgages of immovable properties		- 3
EU-9	Retail exposures	30	
EU-10	Corporate	187,909	197,112
EU-11	Exposures in default	42,993	
EU-12	Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	18,068	10,674

# **Credit Risk**

Credit risk is the potential for loss due to the failure of a borrower, endorser, guarantor, obligor or counterparty to repay a loan or honour another pre-determined financial obligation (also known as counterparty risk). The definition also includes Credit Valuation Adjustment ("CVA") which covers losses from derivatives mark-to market. Sub-categories of Credit Risk include Country Risk, Loan Loss Risk, Replacement Risk and Settlement risk.

The Company's Credit Risk Management Framework together with the Impairment of Credit Exposures Management Framework operates under the three lines of defence operating model approach to manage credit risk:

- As the 1LOD, lines of business under delegated limits, are accountable for a) recommending credit
  decisions based on the completion of appropriate due diligence on an entity/connection and they
  assume ownership of the risk and b) assessing whether credit assets are impaired or where there has
  been a significant increase in credit risk.
- As the 2LOD, Risk Management under delegated limits, approve credit decisions and are a)
  accountable for providing independent oversight of the risks assumed by the operating groups and b)
  assessing the identification of the indicators for impairment or where there has been a significant
  increase in credit risk.
- As the 3LOD, Internal Audit reviews and tests management processes and controls and samples credit transactions for adherence to credit terms and conditions, as well as to governing policies, standards and procedures.

Compliance is another 2LOD function and part of its responsibilities is to ensure identification of and compliance with regulatory requirements.

All credit risks to which the Company is exposed are assessed, approved, monitored, managed and reported, including resulting country risk profile (for Trading Products this is performed daily, for Corporate Banking this is performed monthly). The most significant credit risk in the Company arises from its "on-demand" and syndicate lending activities to Corporates. Credit risk is mitigated via security arrangements, loan covenants and triggers, etc associated with each lending facility. Credit risk also arises through the use of cash placements and through the Company's debt security portfolio.

The Company manages and reports its credit risk exposures under frameworks outlined in local policies as well as BMO Group Corporate Policies and Corporate Standards. Policies include limits, by counterparty/connection/country, to which the relevant lines of business must adhere. Any excesses or violations of limits are dealt with in line with the local policy and may lead to disciplinary action. Exposures are monitored against limit and reported daily.

The Company takes a prudent approach in granting credit to its customers and uses an effective grading system which is a) consistently applied; b) identifies differing risk characteristics; c) quantifies credit risk issues reliably and in a timely manner and d) prompts appropriate action.

Counterparty credit risk exposure ("CCR") arises from the Company's direct activity in derivatives and securities financing transactions ("SFT"). It is calculated in both the trading and non-trading books and is the risk that the counterparty to a transaction may default before completing the satisfactory settlement of the transaction. The Company includes CCR and CVA losses in its Credit Risk Stress Testing methodology. CCR arises from the Securities Financing business where the counterparty exposure is derived from the net unsecured position of cash advances and the potential future market value of the securities received as collateral. The Company uses its concept of replacement risk to determine counterparty exposure, which is based conservatively on stressed 'potential future exposure' (i.e. replacement risk) rather than point-in-time valuations.

The Company applies the same expected loss methodology for CCR stress testing as for borrower/issuer default credit risk stress testing, where counterparty PDs increase in line with the rating migration commensurate with the stress scenario. Additionally, the potential future exposure is reevaluated based on the development of relevant risk factors in the stress scenario i.e. replacement risk is also subject to stress.

Capital measurement approaches and capital standards for credit risk are stated within CRD IV. CRD IV details two approaches for the calculation of minimum regulatory capital requirements for credit risk:

- · Standardised approach; and
- Internal Ratings Based ("IRB") approach.

The Standardised approach involves the application of prescribed regulatory risk weights to credit exposures to calculate the capital requirements. The IRB approach allows banks, subject to the approval of their regulator, to use their internal credit risk measurement models combined, where appropriate, with regulatory rules (including regulatory floors or minimum values for certain model outputs), to calculate their regulatory capital requirements. The Company use the standardised approach for regulatory credit risk capital calculation purposes. Under the Standardised Approach, risk weightings for rated counterparties are determined on the basis of the external credit rating assigned to the counterparty. For non-rated counterparties and certain other types of exposure, regulatory-determined standardised risk weightings are used.

# **Exposure to Credit Risk**

Template 7: EU CRB-B - The table below provides the total year-end and the average (1) net exposures over the period by exposure class

(US\$ in thousands)	Net value of exposures at the end of the period 2019	Average net exposures over the period 2019	Net value of exposures at the end of the period 2018	Average net exposures over the period 2018
Total IRB approach		(a).		· · · · · · · · · · · · · · · · · · ·
Central governments or central banks	3,442,840	5,916,428	3,177,773	5,441,925
Public sector entities	516,056	600,871	522,430	306,049
Multilateral development banks	918,080	811,665	769,637	594,419
Institutions	4,254,954	4,178,271	2,255,498	3,422,368
Corporates	516,788	792,754	688,920	1,023,263
Exposures in default	65,350	65,350		
Items associated with particularly high risk	84,996	84,996		U.S.
Equity exposures	544,378	1,549,200	1,209,819	1,758,460
Other exposures	18,068	5,279	10,674	3,354
Total standardised approach	10,361,510	14,004,814	8,634,751	12,549,838
Total	10,361,510	14,004,814	8,634,751	12,549,838
	Total IRB approach  Central governments or central banks Public sector entities Multilateral development banks Institutions Corporates Exposures in default Items associated with particularly high risk Equity exposures Other exposures Total standardised approach	Total IRB approach  Central governments or central banks Public sector entities Multilateral development banks Institutions Corporates Exposures in default Equity exposures Other exposures Total standardised approach  Exposures at the end of the period 2019  Control IRB approach  Sample of the period 2019  A,42,840  A,42,840  A,42,840  A,254,956  A,254,954  Corporates Sample of the period 2019  S	(US\$ in thousands)         exposures at the end of the period 2019         exposures over the period 2019           Total IRB approach         -         -           Central governments or central banks         3,442,840         5,916,428           Public sector entities         516,056         600,871           Multilateral development banks         918,080         811,665           Institutions         4,254,954         4,178,271           Corporates         516,788         792,754           Exposures in default         65,350         65,350           Items associated with particularly high risk         84,996         84,996           Equity exposures         544,378         1,549,200           Other exposures         18,068         5,279           Total standardised approach         10,361,510         14,004,814	Central governments or central banks         3,442,840         5,916,428         3,177,773           Public sector entities         516,056         600,871         522,430           Multilateral development banks         918,080         811,665         769,637           Institutions         4,254,954         4,178,271         2,255,498           Corporates         516,788         792,754         688,920           Exposures in default         65,350         65,350         -           Items associated with particularly high risk         84,996         84,996         -           Equity exposures         544,378         1,549,200         1,209,819           Other exposures         18,068         5,279         10,674           Total standardised approach         10,361,510         14,004,814         8,634,751

Average net exposures are calculated based on quarterly averages.

Template 10: EU CRB-E – The table below provides a breakdown of net exposures by contractual residual maturity and exposure classes

	w 2			Net exp	osure value		
	(US\$ in thousands)	On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
31 (	October 2019						
6	Total IRB approach				<u> </u>	*	
7	Central governments or central banks		3,421,219	21,621		1 02	3,442,840
9	Public sector entities		5,721,215	516,056		-4	516,056
10	Multilateral development banks		100,421	782,493	35,166	27	918,080
12	Institutions		1,613,688	626,481	22,868	1,991,917	4,254,954
13	Corporates	2	17,438	380,196	42,536	76,618	516,788
16	Exposures in default	-	17,150	65,350	12,550	70,010	65,350
17	Items associated with particularly high risk			33,330		04.000	9
21	Equity exposures	-	544,378	1	-	84,996	84,996 544,378
22	Other exposures	2	344,376		9	18,068	18,068
23	Total standardised approach		5,697,144	2 202 107	100 E70		
25	rotai standardised approach		3,097,144	2,392,197	100,570	2,171,599	10,361,510
24	Total		5,697,144	2,392,197	100,570	2,171,599	10,361,510
31 0	ctober 2018				, "		
6	Total IRB approach	, z	2	· ·	2	1 727	<u> </u>
7	Central governments or central banks	2	3,157,283	20,490	2		3,177,773
9	Public sector entities	-	146,119	346,130	30,181		522,430
10	Multilateral development banks	-	99,975	669,662	7:	250	769,637
12	Institutions	₩.	1,452,892	410,826	694	391,086	2,255,498
13	Corporates		1,001	387,411	49,438	251,070	688,920
21	Equity exposures		1,209,819	14	-	(2)	1,209,819
22	Other exposures					10,674	10,674
23	Total standardised approach		6,067,089	1,834,519	80,313	652,830	8,634,751
24	Total	_	6,067,089	1,834,519	80,313	652,830	8,634,751

Template 8: EU CRB-C – The table below provides a breakdown of exposures by geographical areas and exposure classes

	31 October 2019						Net value						
	(US\$ in thousands)	Canada	France	Germany	Ireland	Luxemburg	Netherlands	Denmark	Sweden	United Kingdom	United States	Other	Total
9	Total IRB approach	*	*	*	*		•		ř	*	•	*	•
7	Central governments or central banks	45			3,421,219	4	3	31	21,621	. W	3	3	3,442,840
6	Public sector entities	y.	42,919	220,249	0.		84,212	97,479	i	9	*	71,197	516,056
10	Multilateral development banks	*	9	Ţ	*	Ī	,t	*	Ĩ		1	918,080	918,080
12	Institutions	299,655	834,723	251,695	158,624	ř	283,836		137,455	1,631,189	433,396	224,381	4,254,954
13	Corporates	17,438	164,696	33,091	39,094	92,264	36,674			1	39,531	94,000	516,788
16	Exposures in default	90	65,350	1	*	ì	*	76	ř	<u>(f)</u>		1	65,350
17	Items associated with particularly high									6			5
7	risk	rain	Tare.		(1)	56,320	((*))	1911 R	21612	¥i	28,676	•	84,996
21	Equity exposures		d.	i	39,639	ï		e <sup>r</sup>	ř	150,418	354,321		544,378
22	Other exposures	¥	ě	£	5,478	ř	*	×	ř		ž.	12,590	18,068
23	Total standardised approach	317,093	1,107,688	502,035	3,664,054	148,584	404,722	97,479	159,076	1,781,607	855,924	1,320,248	10,361,510
24	Total	317,093	1,107,688	505,035	3,664,054	148,584	404,722	97,479	159,076	1,781,607	855,924	1,320,248	10,361,510
	24 October 2040		18				40						
	31 October 2018						Net value						
	(US\$ in thousands)	Canada	France	Germany	Ireland	Luxemburg	Netherlands	Spain	Sweden	United Kingdom	United States	Other	Total
	Total IRB approach	,	×	ž.	ac.	×	**	(8)	w.	¥	×	*	
7	Central governments or central banks		988		3,157,283	ne.		100	20,490	17 <u>0</u> 5	748	**	3,177,773
6	Public sector entities	186	125,829	194,803	1300	100	30,036		10411		2919	171,762	522,430
10	Multilateral development banks	NCS	r#11	(0)	((♥))	(0)	200		2067	(9)	291	769,637	769,637
12	Institutions	471,426	407,268	107,825	113,119	20,000	204,466	50,000	216,743	494,704		139,947	2,255,498
13	Corporates	-2	105,053	58,157	3)	88,895	31,500	27,000	27,000	45,965	117,211	188,139	688,920
21	Equity exposures	9	9	84,211		<b>₩</b>	73,495	i	9	195,042	787,475	963'69	1,209,819
22	Other exposures	•		Šį.	5,247	78			<i>(</i> *	St.	37	5,427	10,674
23	Total standardised approach	471,426	638,150	444,996	3,275,649	138,895	339,497	000'22	264,233	735,711	904,686	1,344,508	8,634,751
24	Total	471,426	638,150	444,996	3,275,649	138,895	339,497	77,000	264,233	735,711	904,686	1,344,508	8,634,751

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Template 9: EU CRB-D - The table below provides a breakdown of exposures by industry or counterparty types and exposure classes

							Net value	- Fe					
	31 October 2019	Mining and quarrying	Mining and Manufacturing quarrying		Whol		Financial and Insurance	Real estate activities	Central governments	Central Public governments Administration	Extra-Territorial Organisations	Other services	Total
	(US\$ in thousands)			conditioning supply	/ trade	communication	activities		or central banks	and Defence	and Bodies		
9	Total IRB approach	•	∃ <b>:</b> ■	•	307	•			) <u>ē</u>	1			•
7	Central governments or central banks	6	e.	10		Ĭ.	2	*	3,442,840		*	041	3.442.840
6	Public sector entities	•	(10)		•()	1	ĵ.		10	516,056	•	GE.	516,056
10	Multilateral development banks	7	0.00	*	•	Ü	9)	9	Ŕ		918,080	(4)	918,080
12	Institutions	•	13.07	TAG	E	8	4,254,954	ij	*	•		v	4.754.954
13	Corporates	147,635	182,727	3,758	38,413	T.	144,255	٠		6		10	516,788
16	Exposures in default	ā	65,350	961	2000	(1)							65,350
17	Items associated with particularly												
ì	high risk	Ť	R2	1	56,320	*	28,676						84,996
21	Equity exposures	8,033	72,361	2,676	229,521	112,278	39,639	7,893	10	•	Ŷ.	226,99	544,378
22	Other exposures	ā	1951		((*))	( ig	- (	Ė	•)	E)	¥.	18,068	18,068
23	Total standardised approach	155,668	320,438	11,434	324,254	112,278	4,467,524	7,893	3,442,840	516,056	918,080	85,045	10,361,510
24	Total	155,668	320,438	11,434	324,254	112.278	4.467.524	7.893	3.442.840	516.056	918.080	85.045	10.361.510
							onley Jan	a					
		Minima Andrews	Manyfraturing	The setting in the setting of the se	- 1	7-6-	i			-	- 11		
	31 October 2018 (US\$ in thousands)	quarrying	Manufacturing	Electricity, gas, steam and air conditioning supply	wholesale and retail trade	Information and communication	rinancial and Insurance activities	keal estate activities	central governments or central banks	Public Administration and Defence	Extra-Territorial Organisations and Bodies	Other services	I ota
9	Total IRB approach	·		i i	*	i	*	i	9	3	16	34	1
7	Central governments or central banks		( ( ·	9					2 177 773		9		2 177 773
. o	Public sector entities	ī	(r = 57 <b>0</b>	( ja		à		E 14	21111111	522 430		d •	522 430
10	Multilateral development banks	9		jų.	. 20	100		(3)		0	769,637		769,637
12	Institutions	3	3.	4	//0	+	2,255,498	30	•	•	1	51457	2,255,498
13	Corporates	64,452	282,065	3,873	46,259	30,000	212,271	9	9	•	300	20,000	688,920
21	Equity exposures	57,034	457,573	15,777	11,315	88,680	460,659	55,396	100	9	100 -	63,385	1,209,819
22	Other exposures				34		<b>(</b> ₩	( <b>d</b>	1777	2003	e e	10,674	10,674
23	Total standardised approach	121,486	739,638	19,650	57,574	118,680	2,928,428	25,396	3,177,773	522,430	769,637	124,059	8,634,751
24	Total	121,486	739,638	19,650	57,574	118,680	2,928,428	55,396	3,177,773	522,430	769,637	124,059	8,634,751

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Template 11: EU CR1-A - The table below presents an overview of the credit quality of on-balance sheet and off-balance sheet exposures by exposure class

	31 October 2019	Gross carrying value of	ng value of					
	(US\$ in thousands)	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
15	Total IRB approach		-		48	<u> </u>	<b>₹</b> 0	34
16	Central governments or central banks		3,442,845		5	***	*	3,442,840
18	Public sector entities		516,071	1	15		ng	516,056
19	Multilateral development banks	*	918,126		46	8	X	918,080
21	Institutions	***	4,255,023	9	69	•		4,254,954
22	Corporates	8	517,069	9	281	ij.	ű	516,788
58	Exposures in default	69,748	*	4,398	' 13		ř.	65,350
53	Items associated with particularly high risk	•	82,058	il.	62	0	ġ.	84,996
33	Equity exposures	<b>X</b> (	544,378	<b>X</b> 9	1		2	544,378
35	Outel exposures  Total standardised approach	69,748	10,296,638	4,398	478	C. a	<b>(</b>	10,361,510
36	Total	69,748	10,296,638	4,398	478		•	10.361.510
, ,	0h.i	47.00	7 7 7 7 7	0000	1			100000
ر م م	OI WIICH: LOANS Of which: Debt cocurities	1,391	3,517,415	4,398	17/		i 9	3,560,231
8 %	Of which: Off- halance-sheet exposures	22 357	699,030		195			721 374
3	כן אווינון כן ספופוני פוניין כאלסספיני	100133	277/275		661			1,51,51
				3				
	31 October 2018	Gross carry	Gross carrying value of			: :		
	(US\$ in thousands)	Defaulted exposures	Non-defaulted exposures	Specific credit	General credit risk	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
			(i)	adjustment	adjustment	,		
15	Total IRB approach	**	NESS.	*))	ю	1)	100	
16	Central governments or central banks		3,177,780	( <b>*</b> )	7	1900		3,177,773
18	Public sector entities	3.	522,444	*	14	9	i	522,430
19	Multilateral development banks	*	769,681	Ė	4	200	Ç	769,637
21	Institutions	1	2,255,565	9	29	<u>**</u>	•	2,255,498
22	Corporates	ŗ	689,043	***	123	÷	E.	688,920
33	Equity exposures	706	1,209,819	<u> </u>	ň	( <u>j</u>	iğ.	1,209,819
34	Other exposures	ï	10,674	*	10		ř	10,674
35	Total standardised approach	•	8,635,006	ė:	255	Ĭ.	XS.	8,634,751
36	Total		8,635,066	3	255		A.	8,634,751
37	Of which: Loans Of which: Debt securities		1,360,643	1 1	137	1 1		1,360,506
39	Of which: Off- balance-sheet exposures	1	857,059	ı	32	e		857,027

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Template 12: EU CR1-B - The table below presents an overview of the credit quality of on-balance sheet and off-balance sheet exposures by industry

31 October 2019	Gross carrying valu	ing value of				3	
(US\$ in thousands)	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
Total IRB approach		i.	4	) T	80	(0.€)	l T
Mining and quarrying	2.0	155.825	7.	157			155 669
Manufacturing	69,748	255,165	4,398	77	0.00	0 94	320,438
Electricity, gas, steam and air conditioning supply	(40)	11,434	X		•	. (*)	11.434
Wholesale and retail trade		324,265	9	11	(30)	( • j	324,254
Information and communication	E	112,278	×	•		5. S.	112,278
Financial and Insurance activities	(III	4,467,737	A) C	213	c	t	4,467,524
Real estate activities	•	7,893	3.	•	:1	y#	7,893
Central governments or central banks	0(**)	3,442,845	E.	2	AE	912	3,442,840
Public Administration and Defence	*	516,071		15	0	5.01	516,056
Extra-lerritorial Organisations and Bodies Other convices	DE 7	918,080	E .	<b>16</b>	10. 0	30 (	918,080
		62,045			•	(#0)	85,045
lotal standardised approach	69,748	10,296,638	4,398	478	a l		10,361,510
Total	69,748	10,296,638	4,398	478	e e	=	10,361,510
31 October 2018	Gross carrying value of	ng value of				-	-
(US\$ in thousands)	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
Total IRB approach		i			ı	٠	
Migration bac painting		177 177		2			
Manifactiving	e n	730 675		81	<b>a</b> C (6	• 5	121,486
Flectricity has steam and air conditioning supply	•	10,650	•	8	<b>■</b> 00 S	ie i	739,638
Wholesale and retail trade	5 Tol	57,578		o 4	27		57,574
Information and communication		118,680		0	3	(OF	118,680
Financial and Insurance activities	10(1)	2,928,495		29	•8	•	2,928,428
Real estate activities	7.0	55,396		0	3)	( • • ):	55,396
Central governments or central banks		3,177,780		7	(40)		3,177,773
Public Administration and Defence	5.	522,444	9	14	5000	•	522,430
Other services	10 A	124,050	) (9	44	•	in the second	769,637
Total standardical approach		124,039			1	10)	124,059
Total standardised approach		8,635,006		552	•		8,634,751
Total	•	8,635,006		255	*	E.O.	8,634,751

Template 13: EU CR1-C – The table below presents an overview of the credit quality of on-balance sheet and off-balance sheet exposures by geography

31 October 2019	Gross carrying value of	ng value of					
(US\$ in thousands)	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
Total IRB approach	i			c	ä	9.	x
Canada	*	317,127	٠	34		160	317,093
France	69,748	1,042,504	4,398	166	9	2900	1,107,688
Germany	*	505,046		11	į		502,035
Ireland	70	3,664,072		18	10	740	3,664,054
Luxemburg	*	148,664	))(	80	,	3	148,584
Netherlands	•	404,745	•))	25	Ē	•2	404,720
Denmark		97,485	9	9	i	ā	97,479
Sweden	X:	159,078		2	•	*2	159,076
United Kingdom	91	1,781,607	9	i	9	ar	1,781,607
United States	*	855,951	*	25		×	855,926
Other	nio.	1,320,359		111	500	(1425)	1,320,248
Total standardised approach	69,748	10,296,638	4,398	478		( <b>1</b> €)	10,361,510
	071.00	900 900	4 300	410	12	28	10 261 510
lotal	09,748	10,295,038	4,398	4/8			10,361,510
31 October 2018	Gross carr	Gross carrying value of					27.
(US\$ in thousands)	Defaulted exposures	Non- defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
Total IRB approach		)( <b>1</b> 0)		000		3140	(1 <b>*</b> )
Canada	ù k	471.426	(6	d	i k	Fi4	471.426
France	*	638,185	- (1)	35	90	**	638,150
Germany	9"	445,005	8	6		a	444,996
Ireland	×	3,275,650	×	1	ě	¥	3,275,649
Luxemburg	57 <b>4</b> 07	138,911	•	16	•	2542	138,895
Netherlands	*	339,512	*	15	*	*	339,497
Spain	•2.	000//		<b>O</b> •	0 3	45 7	000///
Sweden Trifted Kingdom		264,237		4- C			264,233
United States	65 04	904 707	K (3*	2.5	i i	63 - 15 <b>i</b>	904 686
Other		1,344,662		154		30	1,344,508
Total standardised approach		8,635,006	£	255	*	¥S	8,634,751
Total	30	8,635,006	30	255	K		8,634,751

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Template 15: EU CR1-E- The table below presents an overview of non-performing and forborne exposures

31 October 2019 (IIS\$ in thousands)

(US\$ IN thousands)		(F) (F)	Debt securities	Loans and advances	Off-balance-sheet exposures
			2,080,636	3,521,819	391,200
	Of which performing but past due > 30 days	due > 30 days and <= 90 days	•		
Gross carrying values of	Of which performing but past due > 30 days				
performing and non-	Of which non-performing				
performing exposures		Of which defaulted		47,391	*:
	***	Of which impaired	•	1	
		Of which forborne	•		
Accumulated impairment	On performing exposures		101	182	195
and provisions and negative		Of which forborne	•		
fair value adjustments due	On non-performing		<b>a</b> ■	4,398	
to credit risk	exposures	Of which forborne	•	-	
Collaterals and financial	On non- performing exposures	S			1
guarantees received	Of which forborne exposures			1	

31 October 2018 (IIS\$ in thousands)

(US\$ in thousands)			Debt securities	Loans and	Off-balance-sheet
				advances	exposures
		+	1,864,519	1,360,643	489,953
	Of which performing but past due > 30 days	t due > 30 days and <= 90 days	ı		
Gross carrying values of	Of which performing but pas	Of which performing but past due > 30 days and <= 90 days	t		*
performing and non-performing	Of which non-performing		t;	8	P.
exposures		Of which defaulted	r <sub>2</sub>		1
		Of which impaired	ta e	£	1:
		Of which forborne	t)	i	£1
Accumulated impairment and	On performing exposures		79	137	32
provisions and negative fair		Of which forborne	1746	15	V.
value adjustments due to credit	On non-performing		72.8.0		06
risk	exposures	Of which forborne			3,403
Collaterals and financial	On non- performing exposures	es	500	1	28 <b>4</b> n
guarantees received	Of which forborne exposures				3

## Template 16: EU CR2-A — The table below presents changes in the stock of general and specific credit risk adjustments

	31 October 2019 (US\$ in thousands)	Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
1	Opening balance	<u> </u>	255
2	Increases due to amounts set aside for estimated loan losses during the period	4,398	316
3	Decreases due to amounts reversed for estimated loan losses during the period	<u>.</u>	(93)
4	Decreases due to amounts taken against accumulated credit risk adjustments	1 1, 1 .	
5	Transfers between credit risk adjustments	£ = 1	**
6	Impact of exchange rate differences Business combinations, including acquisitions and disposals	` <u>*</u>	-
7	of subsidiaries	9	
8	Other adjustments	·	<u> </u>
9	Closing balance	4,398	478
10	Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	v.e	ं स्ट
11	Specific credit risk adjustments directly recorded to the statement of profit or loss	-	( <del>*</del> )
	31 October 2018 (US\$ in thousands)	Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
1	Opening balance		146
2	Increases due to amounts set aside for estimated loan losses during the period		117
3	Decreases due to amounts reversed for estimated loan losses during the period	. 8	(8)
4	Decreases due to amounts taken against accumulated	7	340
5	credit risk adjustments Transfers between credit risk adjustments		i i
6	Impact of exchange rate differences		*
7	Business combinations, including acquisitions and disposals	-	
8	of subsidiaries Other adjustments	<u> </u>	3 <del>4</del> 5
9	Closing balance	=	255
10	Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	72	(#)
11	Specific credit risk adjustments directly recorded to the statement of profit or loss		~

## Template 17: EU CR2-B - Changes in the stock of defaulted and impaired loans and debt securities

	(US\$ in thousands)	Gross carrying value defaulted exposures 2019	Gross carrying value defaulted exposures 2018
1	Opening balance		
2	Loans and debt securities that have defaulted or impaired since the last reporting period	47,391	8
3	Returned to non-defaulted status	2	Y - 2
4	Amounts written off	≘	2 0
5	Other changes		<u>19</u>
6	Closing balance	47,391	_

## Template 18: EU CR3 - CRM techniques - Overview

	October 2019 (S\$ in thousands)	Exposures unsecured – Carrying amount	Exposures secured — Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1	Total loans	277,363	3,239,876	2,700,982	2	**
2	Total debt securities	2,080,534	= 5,	ě š	π	. <del></del>
3	Total exposures	2,357,897	3,239,876	2,700,982		; <b>#</b> 1
4	Of which defaulted	42,993			<del></del>	
		* 5	ν ε			P
31	October 2018				Exposures	Exposures
(US	\$ in thousands)	Exposures unsecured – Carrying amount		Exposures secured by collateral	secured by financial guarantees	secured by credit derivatives
1	Total loans	208,26	1,152,240	998,392	95	
2	Total debt securities	1,864,44	10	- *		25
3	Total exposures	2,072,70	1,152,240	998,392	a.	8
4	Of which defaulted		* *	*		

Template 19: EU CR4 - Standardised approach - Credit risk exposure and CRM effects

	31 October 2019 (US\$ in thousands)	Exposure and CRI	ures before CCF CRM	Exposures pos	Exposures post CCF and CRM	RWAs and F	RWAs and RWA density
	Exposure classes	On-balance- sheet amount	Off-balance- sheet amount	On-balance- sheet amount	Off-balance- sheet amount	RWAs	RWA density
	Central governments or central banks	3,442,840		3,442,840		•	0.00%
က	Public sector entities	516,056		516,056			%00·0
4	Multilateral development banks	918,082		918,082	2 - 80 <b>8</b> 00	10,993	1.20%
9	Institutions	671,234		671,234	(I	99,743	14.86%
7	Corporates	102,915	346,495	102,915	171,828	274,753	100.00%
10	Exposures in default	42,993	•	42,993	i.	64,490	150.00%
-	Exposures associated with particularly high				۰		
1	risk	84,996	44,510	84,996		127,495	150.00%
16	Other items	18,068		18,068	*	4,696	25.99%
17	Total	5,797,184	391,005	5,797,184	171,828	582,170	9.75%
		-		ď		17	
	31 October 2018 (US\$ in thousands)		Exposures before CCF and CRM	Exposur	Exposures post CCF and CRM	RWAs	RWAs and RWA density
	Exposure classes	On-balance- sheet amount	Off-balance- sheet amount	On-balance- sheet amount	Off-balance- sheet amount	RWAs	RWA density
-	Central governments or central banks	3,177,773	6	3,177,773	Ē	E;	0.00%
m	Public sector entities	522,430	(C)	522,430	18	Ja	0.00%
4	Multilateral development banks	769,637	100	769,637	Herri	7,010	0.91%
9	Institutions	263,037	20,000	563,037	10,000	986,386	14.03%
7	_	196,476	439,921	196,476	160,433	326,909	100.00%
16	Other items	10,674	(2)	10,674	35	2,342	21.94%
17	Total	5,240,027	489,921	5,240,027	170,433	446,647	8.26%

Template 20: EU CR5 - Standardised approach - The table below analyses exposures at default under the Standardised Approach by risk weight, split by exposure class

31 October 2019	23							Rist	Risk weight									Of which
Exposure classes	<b>%0</b>	2%	4%	10%	20%	35%		<b>%0</b> ′	50% 70% 75%	100%	150%	250%	370%1	250%	150% 250% 370% 1250% Others Deducted	educted	Total	unrated
Central governments or central banks	3,442,840	(10)	90	8	×	3	*	je.	78	X		i di	.*	•	ä	9	3,442,840	**
3 Public sector entities	516,056	31			(*)		4	(15)	(10)	•	(5)		DK	*	Ė	<u>.</u>	516,056	. 0
4 Multilateral development banks	863,114	12	E	Ě	54,966	<u>.</u>	*	*	r	ř.	*		00	,	,	,	918,080	
6 Institutions	172,466	29	эх	ij	1,277,214	ij.	.54	39	31	119	ÿ.	ji.	э	į.	9	9	1,449,680	•
7 Corporates		ж	×	3	(0	•	5	9		297,624		9	:	31	į	9	297,624	297,624
10 Exposures in default	9 5 1	90		į	9	8	74	72	_01	0	65,350		30	•	•	100	65,350	65,350
11 Exposures associated with particularly high risk	*	×		*		8	C K		¥	×	84,996	*		1 1	*	ű.	84,996	84,996
16 Other items	10 21	£.	e te	`£	16,715	•	E	9		1,353	ŧ.	ì	v	1	ŧ.	×	18,068	ì
17 Total	4,994,476		1	•	1,348,895	٠				298,977	150,346		a	¥.	(1)	•	6,792,694	447,970
				-	3			٧									e e	
		. 4																
31 October 2018 (US\$ in thousands)								Ris	Risk weight								1	Of which
Exposure classes	%0	2%	4%	10%	20%	35%	20%	%02	75%	100%	150% 2	250%	370%	1250%	Others Deducted	educted	local	unrated
Central governments or central banks	3,177,773	55	((0))	9	( <b>(</b> )		84	11117	(( <b>a</b> ))	-(K)	- (9)	II (( <b>0</b> ))	Ň		(6)	(0)	3,177,773	. 10
3 Public sector entities	522,430	ž.	ĸ	*	**	Ĭ.	¥ :	*	*		¥.	×	Ė	•	*	*	522,430	• .
4 Multilateral development banks	734,588	3.5	))	1	35,049	i.	5 3	.78	- (a - (.)	()	Ą	10	d	0	Q.	(O	769,637	ä
6 Institutions	164,522	5	•()	ě.	1,059,944	į	6	•0	e:	22,901	ij	Æ	ĸ	E.	ij,	ž ĸ	1,247,367	8
7 Corporates	I de	20	e	4	•	į.	c	£2	65	368,547		10	r	E.	, #3 ×	•6	368,547	368,547
16 Other items	((*))	8	116	ij	9,557	ğ	45	10	<b>6</b> 5	1,117	r,	0.775	Ē	ř.	ě	<b>8</b> 99	10,674	•
17 Total	4,599,313	×.	κ	i	1,104,550	*	٠	'n	*	392,565	ï	ä	i e	ž	÷		6,096,428	368,547

## Use of ECAIS

Under CRD IV, institutions are permitted to determine the risk weight of an exposure with reference to the credit assessments of External Credit Assessment Institutions ("ECAIs"). The Company uses a combination of the credit weightings assigned by the ECAIs and mapping guidelines issued by the Central Bank of Ireland to map the exposures to the appropriate credit quality assessment step. Where there are no available credit assessments to map to a credit quality assessment step, the Company assigns risk weights to these exposures in accordance with the CRD IV requirements for unrated exposures.

## Total exposures split by external rating and credit quality assessment step

31 October 2019 (US\$ in thousands) Exposure classes	Standard and Poor's (ECAI 1)	Moody's (ECAI 2)	Fitch (ECAI 3)	Credit quality assessment step	Total rated	Total unrated	Total
Central governments or central banks Public sector entities Multilateral development banks Institutions Corporates	3,442,840 483,773 897,454 2,977,384	21,621 120,387 918,082 1,749,910	347,380 786,254 1,945,383	3,442,840 516,056 918,082 2,977,384	3,442,840 516,056 918,082 2,977,384	1,277,566	3,442,840 516,056 918,082 4,254,950 667,136
Equity Other items <b>Total</b>	7,801,451	2,810,000	3,079,017	7,854,362	7,854,362	544,378 18,068 <b>2,507,148</b>	544,378 18,068 <b>10,361,510</b>
31 October 2018 (US\$ in thousands) Exposure classes	Standard and Poor's (ECAI 1)	Moody's (ECAI 2)	Fitch (ECAI 3)	Credit quality assessment step	Total rated	Total unrated	Total
Central governments or central banks Public sector entities Multilateral development banks Institutions Corporates Equity Other items	3,157,282 769,637 396,601 1,992,790 6,316,310	769,637 429,380 1,419,361 2,618,378	588,186 350,668 1,284,073	3,177,773 769,637 522,430 2,003,945 6,473,785	3,177,773 769,637 522,430 2,003,945	251,553 688,920 1,209,819 10,674 2,160,966	3,177,773 769,637 522,430 2,255,498 688,920 1,209,819 10,674 8,634,751

## Total exposures split by credit quality assessment step" - Standardised Approach

31 October 2019

(US\$ in thousands)									
Exposure classes	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Total rated	Total unrated	Total
Central governments or central banks	3,442,840	*	î		)*	8 <b>4</b> I	3,442,840	<b>:</b> €	3,442,840
Public sector entities	516,056	3	į	).	•	1	516,056		516,056
Multilateral development banks	918,082	3		Ţ.	**	314	918,082	•	918,082
Institutions	2,932,241	45,143	×	•		1	2,977,384	1,277,566	4,254,950
Corporates		•	i		į	1	9	667,136	667,136
Equity	•	)	•	9		ä	•	544,378	544,378
Other items		<b>E</b>	¥	*	į	*		18,068	18,068
Total	7,809,219	45,143				10	7,854,362	2,507,148	10,361,510

31 October 2018

(US\$ in thousands)

Exposure classes	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Total rated	Total unrated	Total
Central governments or central banks	3,177,773	5.65	10	e.	Ci		3,177,773		3,177,773
Public sector entities	769,637	1961	•	14	e,	10	769,637		769,637
Multilateral development banks	522,430	290		(96)	740	19	522,430		522,430
Institutions	1,036,921	858,612	108,412		ne?	(0)	2,003,945	251,553	2,255,498
Corporates	o <b>•</b>	80	0	9	963	:00	(10)	688,920	688,920
Equity		30	<b>(</b> €	ğ	9	90	i.	1,209,819	1,209,819
Other items	3.	9	0	à	9	(a 	9	10,674	10,674
Total	5,506,761	858,612	108,412		ж.		6,473,785	2,160,966	8,634,751

The following ratings apply to the credit quality assessment steps:

Credit quality assessment step 1: AAA to AA (S&P/ Fitch / DBRS); Aaa to Aa3 (Moody's) Credit quality assessment step 2: A+ to A- (S&P/ Fitch / DBRS); A1 to A3 (Moody's) Credit quality assessment step 3: BB+ to BB- (S&P/ Fitch / DBRS); Baa1 to Baa3 (Moody's) Credit quality assessment step 4: BB+ to BB- (S&P/ Fitch / DBRS); Ba1 to Ba3 (Moody's) Credit quality assessment step 5: B+ to B- (S&P/ Fitch / DBRS); B1 to B3 (Moody's) Credit quality assessment step 5: B+ to B- (S&P/ Fitch / DBRS); B1 to B3 (Moody's) Credit quality assessment step 6: CCC+ and below (S&P/ Fitch / DBRS); Caa1 and below (Moody's)

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## **Counterparty Credit Risk**

Template 25: EU CCR1 – Analysis of CCR exposure by approach – The table below sets out the methods used to calculate CCR regulatory requirements and the resultant RWAs

	31 October 2019 (US\$ in thousands)	Notional	Replacement cost/current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
1	Mark to market	Jan Barry	58,503				58,503	15,644
2	Original exposure	14,938,048				Harry Allenger	-	
3	Standardised approach		226,334		5 + 15 + SY		226,334	88,683
4	IMM (for derivatives and			IS NOT THE	-	ш		2
5	Of which securities financing transactions					5.	3.	
6	Of which derivatives and long settlement transactions					<u></u>		7
7	Of which from contractual cross- product netting				- 3	g <u>=</u>		2
8	Financial collateral simple method (for SFTs)						-	=
9	Financial collateral comprehensive method (for						538,590	76,584
	SFTs)					1 1 1 1 1 1 1 1 1		
10	VaR for SFTs						-	-
11	Total	Si - Const						180,911

	31 October 2018 (US\$ in thousands)	Notional	Replacement cost/current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
1	Mark to market		175,002					36,548
2	Original exposure	17,943,972			41		2 =	
3	Standardised approach		251,955		200	· · · · · · · · · · · · · · · · · · ·		51,741
4	IMM (for derivatives and SFTs)				20	:=::	7 m	
5	Of which securities financing transactions				12.7	[編]	16	돸
6	Of which derivatives and long settlement transactions				12	<b>12</b> (		4
7	Of which from contractual cross- product netting				-	*	:(-:	
8	Financial collateral simple method (for SFTs)			array only				=
9	Financial collateral comprehensive method (for SFTs)						268,999	78,533
10	VaR for SFTs						:	
11	Total				Maria			166,822

## Template 26: EU CCR2 – CVA capital charge – The table below presents the CVA charge broken down by approach

	(US\$ in thousands)	Exposure value	RWA	As Exposure value	RWAs
		2019	201	9 2018	2018
1	Total portfolios subject to the advanced		/E: *	7.E3	e : :
2	(i) VaR component (including the 3×				
3	(ii) SVaR component (including the 3×			18 THE RESERVE	
4	All portfolios subject to the standardised	823,73	0 108	3,883 481,180	86,784
EU4	Based on the original exposure method		8		
5	Total subject to the CVA capital charge	823,73	0 108,	<b>.833</b> 481,180	86,784

## Template 28: EU CCR3 - Standardised approach - CCR exposures by regulatory portfolio and risk

## 31 October 2019

	(US\$ in thousands	)					Risk v	veight						Of which
	Exposure classes	0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Others	Total	unrated
6	Institutions	75	( <del>19)</del>		853	882,733		-		7.0		*	882,733	=
7	Corporates		275	-		5		-	( <u>*</u>	22,871	22,357	5	45,228	45,228
17	Total	:=	9 <b>34</b>	•	: ¥:	882,733	2	100	-	22,871	22,357	#	927,961	45,228
	31 October 2018 (US\$ in thousands)						Risk w	eight					Total	Of which
	Exposure classes	0%	2%	4%	10%	20%	50%	70%	75%	100%	150% O	thers	TOTAL	unrated
6	Institutions	(E)		-	*	661,418		-	*	22,901	*	· ·	684,319	36
7	Corporates	30	-70	5	5			*	•	11,637			11,637	:#0
17	Total	-		-	2	661,418	-	2		34,538	2	•	695,956	8

## Template 31: EU CCR5-A - Impact of netting and collateral held on exposure values

	31 October 2019 (US\$ in thousands)	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
1	Derivatives	284,837	-	284,837	-	284,837
2	SFTs	3,344,106	2	3,344,106	2,700,982	643,124
3	Cross-product netting	世	Ų,	•	2	7 = =
4	Total	3,628,943	€	3,628,943	2,700,982	927,961

31 October 2018	Gross positive fair	Netting	Netted current credit	Colleteral hold	Net credit
(US\$ in thousands)	amount	benefits	exposure	Collater at Field	exposure
Derivatives	426,957		426,957	.5	426,957
SFTs	1,267,391	4.5	1,267,391	998,392	268,999
Cross-product netting		3.50			
Total	1,694,348		1,694,348	998,392	695,956
	(US\$ in thousands)  Derivatives SFTs Cross-product netting	(US\$ in thousands)value or net carrying amountDerivatives426,957SFTs1,267,391Cross-product netting-	(US\$ in thousands)value or net carrying amountNetting benefitsDerivatives426,957-SFTs1,267,391-Cross-product netting	(US\$ in thousands)value or net carrying amountNetting benefitsNetted current credit exposureDerivatives426,957426,957SFTs1,267,3911,267,391Cross-product netting	(US\$ in thousands)value or net carrying amountNetting benefitsNetted current credit exposureCollateral heldDerivatives426,957- 426,957-SFTs1,267,391- 1,267,391998,392Cross-product netting

## Template 32: EU CCR5-B — Composition of collateral for exposures to CCR - The table below provides a breakdown of all types of collateral posted or received to support or reduce CCR exposures related to derivative transactions and to SFTs.

31 October 2019	C	ollateral used in de	rivative transact	tions	Collateral u	sed in SFTs
(US\$ in thousands)	Fair value of c	collateral received	Fair value of	posted collateral	Fair value of collateral	Fair value of posted
	Segregated	Unsegregated	Segregated	Unsegregated	received	collateral
Equity	100	25			2,700,982	
Total		= (5)	= =	#	2,700,982	
31 October 2018		Collateral used in de	rivative transaction	ns	Collateral us	sed in SFTs
(US\$ in thousands)	Fair value of	collateral received	Fair value of	posted collateral	Fair value of collateral	Fair value of
	Segregated	Unsegregated	Segregated	Unsegregated	received	collateral
Equity	141			-	998,392	Ę
Total	N 8	. S		¥	998,392	

## **Funding and Liquidity Risk**

The Company's Liquidity and Funding Risk Management Framework is defined and managed under Board-approved policies and management-approved standards. Funding and Liquidity Risk is managed as part of the management of the overall risk profile of the Company. These policies and standards outline key management principles, liquidity and funding management metrics and related limits and guidelines, as well as roles and responsibilities for the management of liquidity and funding risk. The Company is integrated into the BMO Groups limits and guidelines, which are in place to manage liquidity and funding risk. The Company has a contingency funding plan that will facilitate effective management through a disruption in place. Early warning indicators identified in the contingency funding plan are regularly monitored to identify early signs of liquidity risk in the market or specific to the Company.

With the Capital Requirements Regulation (EU) No 575 /2013 and the Delegated Act 2015, the European Commission introduced the Liquidity Coverage Ratio ("LCR") which financial institutions were obliged to calculate, monitor and report from 2015. During 2018 the Company maintained an LCR ratio in excess of 100%. The LCR is designed to promote short term resilience ensuring that a financial institution has sufficient high quality liquid assets to survive a significant stress scenario lasting one month.

	Yea	r Ended 31 October
and the second second	20	<b>2018</b>
Liquidity buffer	5,253,1	4,765,709
Total net cash outflows	1,831,1	1,452,953
Liquidity Coverage Ratio (%)	286.87	<b>7%</b> 328.00%

The Company's Internal Liquidity Adequacy Assessment Process ("ILAAP") comprises an ongoing assessment of the liquidity and funding position against regulatory requirements and the Company's internal limits. The intent of the ILAAP is to demonstrate that the Company is able to determine and maintain the level of liquidity required to support the strategic objectives, considering the risks it is exposed to under normal and stressed conditions. The Board has oversight of, and confidence in, the ILAAP process as a means of assessing the adequacy of and the management of liquidity.

The guiding principles of Liquidity Risk Management and by extension the Company's ILAAP are:

- Proportionality: It is proportionate to the risk level, complexity and scale of the Company's activities;
- Forward-Looking: It considers not only the existing risks faced but also the potential risks and future business strategies;
- Ongoing: It is not a static one-time process but rather a dynamic and continuous exercise to ensure
  that the Company has robust liquidity and funding risk management systems and possesses sufficient
  liquidity at all times; and
- **Evolving-nature:** It is continuously reviewed for its efficacy and need to improve, especially against the backdrop of changes in the risk profile and business plans.

As part of the ILAAP processes, The Company seeks to ensure that:

- The Board of Directors is informed about ongoing identification, assessment and management of the Company's funding and liquidity risks;
- All material funding and liquidity risks faced by the Company are identified and have sufficient risk management and controls around them;
- The overall liquidity of the Company is adequate under stressed conditions, taking into account both severe but plausible idiosyncratic and market-wide stress scenarios;
- The Company has a detailed understanding of the relevant mitigation actions and the available contingent funding sources as set out in the Liquidity and Contingency Funding Plan;
- · The outputs of the ILAAP feed back into business strategy and liquidity planning; and
- The ILAAP process is closely aligned to the ICAAP process.

## **Asset Encumbrance**

An asset is considered encumbered if it has been pledged or it is subject to any forms of arrangement to secure collateralise or credit enhance any on or off balance sheet transaction from which it cannot be freely withdrawn.

Encumbered and unencumbered assets as at 31 October 2018 are based on the requirement in Part 8 of the CRR, Commission Delegated Regulated (EU) 2017/2295 and in the related guidelines issued by the EBA.

## Encumbered and unencumbered assets held by the Company

	31 October 2019		Encumbere	ed assets			Unencumb	ered assets	
			amount of red assets		value of ered assets		amount of pered assets		alue of ered assets
	(US\$ in thousands)		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
010	Assets of the reporting institution	320,585	304,310	320,585	133,946	9,639,942	5,480,755	9,639,942	5,480,755
030	Equity instruments	186,639	170,364	186,639	-	357,739	112,947	357,739	112,947
040	Debt securities	133,946	133,946	133,946	133,946	1,946,589	1,946,589	1,946,589	1,946,589
070	of which: issued by general governments	71,519	71,519	71,519	71,519	466,159	466,159	466,159	466,159
080	of which: issued by financial corporations	62,427	62,427	62,427	62,427	1,480,430	1,480,430	1,480,430	1,480,430
120	Other assets		; <b>-</b> ;	: = /	-	7,335,614	3,421,219	7,335,614	3,421,219

	31 October 2018		Encumbered	dassets			Unencumb	ered assets	
		, ,	amount of ered assets		nir value of mbered assets		ing amount of incumbered assets		value of pered assets
2.5	(US\$ in thousands)		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA
010	Assets of the reporting institution	390,918	240,828	390,918	211,758	7,704,350	4,809,964	7,704,350	4,809,964
030	Equity instruments	179,160	29,070	179,160		103,0659	-	1,030,659	
040	Debt securities	211,758	211,758	211,758	211,758	1,652,682	1,652,682	1,652,682	1,652,682
070	of which: issued by general governments	13,499	13,499	13,499	13,499	352,166	352,166	352,166	352,166
080	of which: issued by financial corporations	190,755	190,755	190,755	190,755	1,130,765	1,130,765	1,130,765	1,130,765
120	Other assets	()	- 1	- 3		5,021,009	3,157,282	5,021,009	3,157,282

## Encumbered and unencumbered collateral received

	31 October 2019	collateral recei	f encumbered ived or own debt es issued	own debt s	ollateral received or securities issued or encumbrance
	(US\$ in thousands)		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA
130	Collateral received by the reporting institution	782,096		2,332,808	-
220	Loans and advances other than loans on demand	782,096	-	2,332,808	
250	Total assets, collateral received and debt securities issued	782,096	-	2,332,808	-

	31 October 2018	received or ow	umbered collateral n debt securities sued	debt securities	ateral received or own sissued available for umbrance
	(US\$ in thousands)		of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA
130	Collateral received by the reporting institution	553,511	-	1,152,240	
220	Loans and advances other than loans on demand	553,511	12	1,152,240	-
	Total assets, collateral received and debt securities issued	553,511	3	1,152,240	

## Encumbered assets/collateral received and associated liabilities

	31 October 2019 (US\$ in thousands)	Matching liabilities, contingent liabilities, or securities lent	Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
010	Carrying amount of selected financial liabilities		

31 October 2018
(US\$ in thousands)

Matching liabilities, contingent liabilities, or securities lent

Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered

010 Carrying amount of selected financial liabilities

The Company engages in activities that result in certain assets being encumbered.

The majority of encumbrance arises from assets being pledged as collateral under capital market transactions including securities borrowing/lending and Over the Counter (OTC) derivatives.

The Company primarily collateralises based on industry standard contractual agreements including ISDA CSAs, GMSLAs and GMRAs.

## **Market Risk**

Market risk is the potential for on and off balance sheet exposures to cause losses due to adverse changes in the underlying variables of interest, foreign exchange, equity, commodity, and credit market factors.

Market risk applies mainly to risk exposures in the Trading Book portfolios, namely interest rate risk and equity risk from the Linear Equity line of business. Market risk also arises in the form of Foreign Exchange Risk from structural balance sheet positions.

- Equity Risk: The Linear Equity business line makes a market in equity total return swaps where the
  Company pays/receives the return on a stock or basket of stocks against the payment of a fixed or
  floating interest rate. The Trading Desk hedges the equity risk from the equity leg of the swap
  tightly by taking an offsetting long or short position in the underlying equities in the basket. Residual
  equity risk is subject to market risk limits as outlined in the specific limit letter for this Trading Desk.
- Interest Rate Risk: The interest rate leg in equity total return swap transaction combined with the funding required/received for hedging the equity leg results in interest rate risk, which is subject to market risk limits as outlined in the specific limit letter for this Trading Desk.
- Foreign Exchange Risk: This arises largely from transactions denominated in currencies other than the entity's reporting currency, resulting in a number of net balance sheet FX positions.

Market risk is subject to local policies as well as to BMO Group Corporate Policies and Corporate Standards. This includes the allocation of limit letters specifying primary and secondary limits for key risk metrics (e.g. Value at Risk ("VaR"), Stress) to which relevant Trading Desks must adhere.

Template 34: EU MR1 - Market risk under the standardised approach

(US\$ in thousands) RWAs	requirements
Outright products	St. 1 St. 1 1
1 Interest rate risk (general and specific)	
2 Equity risk (general and specific) 363	29
3 Foreign exchange risk -	=
4 Commodity risk	-
Options	
5 Simplified approach	- <del>-</del>
6 Delta-plus method	pt <u>#</u>
7 Scenario approach	_
8 Securitisation (specific risk)	
9 Total 363	29

Interest Rate Risk in the Banking Book ("IRRBB") is defined as the current or prospective risk to the Company's capital and earnings arising from movements in interest rates. IRRBB results mainly from the structural balance sheet duration profile stemming from mismatches in the interest rate repricing dates of assets, liabilities and off-balance sheet items from non-trading activities. The Company's non-complex balance-sheet structure results in an IRRBB exposure which is very amenable to standardisation. The Company does not have any non-maturity deposits. IRRBB exposure from corporate lending is predominantly based on floating interest rates, which results in very limited prepayment risk.

IRRBB is managed under the Market Risk Framework and delegated limit controls. Limits for IRRBB are expressed in terms of Economic Value of Equity ("EVE") and Net Interest Income ("NII") sensitivities and are measured monthly. These Limits are defined and detailed in the Company's Risk Appetite Statement which is reviewed and approved by the Board of Directors on an annual basis. The Company measures, monitors and reports IRRBB on a monthly basis and does not apply any behavioural assumptions.

## **Concentration risk**

Concentration Risk is identified, managed, monitored and reported by the Company in accordance with regulatory guidelines and in accordance with the Company's Concentration Risk Management Policy.

Risk Management identifies all material concentrations, defined as concentrations which have the potential to adversely impact the Company's ability to operate or which could materially impact the its risk profile. Each month the RMC considers a report which identifies material concentrations and the limit framework governing those concentrations, whether the Company has operated in accordance with relevant limits and whether concentrations are being effectively managed. The limits relevant to Concentration Risk include limits covering on and off Balance Sheet exposures, committed and uncommitted exposures, and trading and banking books. Concentration Limits include limits for counterparty/customer and connection, collateral, country, product, portfolio, duration, credit, liquidity, settlement, overall Balance Sheet and capital.

The RMC's assessment includes the potential impact on the Company arising from earnings, capital, liquidity and operational capacity and Anti Money laundering, regulatory and compliance. This assessment where relevant, takes account of the impact of systemic risk on material concentrations including the interaction between markets and the economy.

## Operational risk

A risk based methodology has been adopted by the Company to conduct its own assessment of operational economic risk capital. The Company uses a 99.95% confidence interval for internal capital calculations which corresponds to a '1-in-2000 year' loss event within operational risk. In order to calculate the appropriate level of internal capital to be held for such an operational risk event, the Company uses an expert-led, scenario-based approach that leverages input from experts across the Company.

The Company recognizes the benefits of using scenario analysis to assess and manage the exposure to high severity, low frequency events in order to determine the nature of operational risk losses which could potentially arise in the Company's future, and then to also determine the appropriate capital requirements. In order to determine the appropriate level of operational risk capital to be held, analysis and discussions along the seven Basel event-type categories are performed by experts across the Company.

This analysis is then used to define operational risk loss scenarios for each Basel risk type that are then extrapolated to calculate the internal capital requirement at a 99.95% confidence interval.

In addition to the holding of capital to mitigate the impact of operational risk issues, the Company applies a risk management framework to manage and mitigate risk, including internal controls, limits and governance processes. This framework incorporates the regular review of top and emerging risks to ensure they are managed appropriately within the Company's risk appetite. A three-lines-of-defence approach to managing operational risk is applied, where operational risk is managed by the business and corporate functions as the first line of defence, and overseen by the second-line-of-defence risk management function. Governance comprises a robust committee structure and a comprehensive risk management framework. Key programs in the ongoing review of the Company's risk profile include the Risk & Control Self-Assessment (RCSA), an established process used by our business function to identify the key risks associate with their business activities and the controls required for risk mitigation. The RCSA process provides a forward-looking view on the Company's risk profile, enabling proactive prevention, mitigation and management of risk.

## **Currency risk**

The Company does not maintain material non-trading open currency positions. The table in section e) of Note 27 to the Financial Statements shows the Company's transactional exposures in the non-trading book, in other words, those non-structural exposures that give rise to net currency gains and losses recognised in the Statement of Comprehensive Income.

## **Governance risk**

Governance Risk is the potential for deficiency in the overall oversight and internal control mechanisms which the Company has in place to ensure that it is soundly and prudently managed, referring in particular to processes, structures and information flows which are used to allow the board and senior management to satisfy themselves that effective internal control mechanisms are in place to protect all stakeholders.

The Board of Directors is responsible for the effective, prudent and ethical oversight of the Company. It is responsible for approving the business strategy and its implementation, within the approved risk appetite, and ensuring that the Company has an effective internal control framework. The effectiveness of the Board of Directors in carrying out its oversight function is a critical component of the Company's overall internal governance framework.

The Board of Directors annually reviews and approves the Risk Management, Compliance and Corporate Audit Frameworks. This ensures that the Company has robust second and third lines of defence. The obligation for these lines of defence to report to the Board, or one of its committees, is set out in the relevant framework.

The Company monitors governance risk as part of its risk register, acknowledging it as a key risk.

## **Conduct risk**

Conduct risk within the Company is defined as the risk that behavior in the Company falls short of the BMO Groups "Being BMO" values and regulatory expectations, resulting in harm to customers, the Company and/or the financial markets.

A taxonomy of applicable conduct risks has been developed and is updated at least annually. Sources of conduct risk within the Company include breaches of or a failure to report breaches of the Code of Conduct, breaches of relevant policies, procedures and limits, unreported conflicts of interest, internal fraud, failure to adhere to Personal Trading Account requirements, leaking of confidential information, market abuse, misselling products to clients outside target markets, unclear or misleading communications with clients and treating clients unfairly.

The Company manages conduct risk through a proactive framework that promotes sound corporate governance and appropriate employee conduct in the execution of its business strategy, the protection of its reputation and maintenance of the trust of its stakeholders and the broader market. The Company's Conduct Risk Framework recognises the link between its strategy, values and behaviours. The Framework outlines the processes by which the Company identifies, assesses, and monitors conduct risk to ensure risks are appropriately managed and mitigated. The Company's approach to conduct risk management is integrated in its Risk Management Framework and Compliance Management Framework and is consistent with its three lines of defence model. The objective of the Framework is to ensure that the Company has an effective approach to:

- Identifying and measuring conduct risk;
- Maintaining a current and accurate inventory of conduct risks inherent in the Company's business model, booking models and activities;
- Providing guidance regarding conduct-related issues consistent with internal policies, directives and procedures;
- Reinforcing adherence to the Company's values and behaviours;
- Conducting conduct risk monitoring and testing;
- Ensuring timely and effective remediation of identified issues;
- Coordinating and delivering conduct-related training; and
- Developing and maintaining conduct related policies, directives and procedures.

## **Return on assets**

The return on assets of the Company for 2019 was 0.13% (2018: 0.32%).

## Countercyclical Capital Buffer

The Company is required to maintain an institution specific countercyclical buffer ("CCyB"). The CCyB was introduced under CRD IV. The CCyB could require institutions to hold up to 2.5% additional CET 1 capital and is effective from 1 January 2016. National designated authorities will deploy CCyB rates when excessive credit growth is determined to be connected with a build-up of system-wide risk.

# The table below shows the Geographical distribution of credit exposures relevant for the calculation of the CCyB.

31 October 2019	General credit exposures	credit ures	Trading book	ok exposure	Securitisati	Securitisation exposure	Омп	Own funds requirements	quiremen	ts	style	
(US\$ in thousands)	Exposure value for SA	Exposure value	Sum of long and short poortion of sood gnibert	Value of trading book exposure for internal slabom	Exposure value for SA	Exposure value for IRB	Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitisation exposures	Total	sbnu† nwO giew Jnemeriuper	Countercyclica
	010	020	030	040	020	090	070	080	060	100	110	120
Breakdown by country												
France	165,712	3	,	34			13,258	4	0.0	13,258	0.00000087	0.25%
Germany	21,528	100	18	W.		*3	1,722	ĸ	•	1,722		
Ireland	39,006	ida.	9	Si I		•	3,120	13612	::00	3,120	0.00000082	1.00%
Luxembourg	113,099	٠	*	ĸ		*	11,302		a.	11,302		
Netherlands	19,174						1,534			1,534		
Poland	20,000						1,600			1,600		
Spain	27,000						2,160			2,160		
USA	28,624	Sac	10		9		3,435	E.	c	3,435		
Overall total	434,143	•		•		*	38,131			38,131	0.0000017	•

## Amount of institution-specific countercyclical capital buffer

Total Risk Exposure amount Institution specific countercyclical capital buffer

Institution specific countercyclical capital buffer requirement

US\$'000 1,032,612 0.1688% 1,743

## Countercyclical Capital Buffer (continued)

## Geographical distribution of credit exposures relevant for the calculation of the CCyB

31 October 2018	General crec	General credit exposures	Trading book	ok exposure	Securitisati	Securitisation exposure	MO	Own funds requirements	quirement			sti
(US\$ in thousands)	AZ noî	Exposure value IRB	Sum of long and short position of trading book	Value of trading book exposure for internal models	Exposure value	Exposure value for IRB	Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitisation exposures	11.14	letoT	I otal  Own funds requirement weigh
	010	020	030	040	020	090	070	080	060	1001	L	110
Breakdown by country											T	
Norway	33,485	7		*		79	2,679		•	2,67	6	9 0.0020631
Sweden	11,928	10	<b>4</b> 0	•5	•3	*	954			954		
United Kingdom	1,056	31	10%	57	я	(10)	84	(10)	(0)	84	-	
Other countries with a zero or no rate	278,131		K	•		50	22,251	ж	) i	22,251	-	0.0000000
Overall total	324,600	34	134	9	E2#		25,968	). <b>*</b> /i	(0)	25,968	_	0.0028143

## **Remuneration Disclosures**

## **Decision making process for remuneration policy**

BMO Group remuneration is governed by Bank of Montreal's ("the BMO Group") Human Resources Committee ("HR Committee"). The HR Committee, on behalf of the BMO Group Board of Directors, establishes and oversees human resources strategies, including compensation and talent management, which support the BMO Group's vision to be the bank that defines great customer experience. BMO Group aims to deliver top-tier total shareholder return as it balances its commitments to its customers and employees, the environment and the communities where it lives and works. Its vision and brand inspire what it does every day. The HR Committee's oversight responsibilities include Bank of Montreal Europe plc.

The Board is accountable for adopting a remuneration policy that is in line with Irish statutory requirements and with the supervisory requirements of the Central Bank of Ireland. The BMO Group's Overarching Compensation Framework ("Framework") describes the remuneration practices operating within the BMO Group. The Board has approved the Framework along with Company specific Implementing Procedures; these Implementing Procedures supplement the Framework in order to comply with local requirements.

The HR Committee met seven times during 2019. The HR Committee's mandate is contained in the HR Committee's charter at:

http://www.bmo.com/home/about/banking/corporate-governance/board-committees/human-resources.

Updates to the Framework and related practices set by the HR Committee are communicated to the Board by Human Resources on an annual basis.

The HR Committee works with an outside advisor to help it carry out its mandate. The HR Committee has retained Pay Governance LLC as its advisor on compensation issues. Pay Governance is an independent and unaffiliated executive compensation advisory firm that works exclusively under the direction of the HR Committee and does not do any work for Senior Management.

The BMO Group also retained Global Governance Advisors ("GGA") to complete an extensive independent review of the BMO Group's material compensation plans, which includes the Bank of Montreal Europe plc incentive plans, to ensure the soundness of the BMO Group's compensation policies and decision-making processes. The GGA review included:

- assessing compensation design;
- ii. assessing plan changes against the Financial Stability Board's ("FSB"") Principles and the applicable regulatory requirements; and
- iii. performing stress testing and back-testing, pay out curve analysis, extensive scenario analysis, and volatility analysis of the BMO Group corporate and business unit results.

GGA noted that the BMO Group has maintained its leadership position with respect to compliance with FSB Principles and applicable regulatory requirements.

In addition to the external consultants, the HR Committee has a formal process for overseeing risks associated with the BMO Group compensation policies and practices. Key to risk oversight is the BMO Group Compensation Oversight Committee, which is comprised of the BMO Group Chief Risk Officer, the BMO Group Chief Financial Officer, the BMO Group Chief Compliance Officer, the BMO Group General Counsel and senior leaders from the BMO Group Human Resources area, along with the BMO Group Chief Auditor as an observer. The BMO Group Compensation Oversight Committee met six times throughout 2019. At a minimum it will meet before every relevant meeting of the HR Committee, and it is actively involved in the annual compensation decision-making process and providing advice to the HR Committee on material compensation plans including plans applicable to the employees of the Company. No individual is involved in decisions relating to his or her own compensation.

The HR Committee fully considers the BMO Group strategic priorities in setting compensation policy and it is mindful of its duties to shareholders and other stakeholders.

The HR Committee oversees the BMO Group compensation plans making sure they align pay with performance, operate within the BMO Group risk appetite, help the BMO Group achieve its goals and are in the best interest of shareholders, while not encouraging excessive or inappropriate risk-taking.

The Board undertakes annual reviews of the implementation of their compensation policies to ensure that they comply with the CBI's Statutory Instruments No. 158 of 2014 pertaining to the CRD IV Regulations.

The Board can propose adjustments to either current year incentive funding or request malus or clawback sanctions to be applied to historically awarded, deferred remuneration. The implementation of adjustments to remuneration would be facilitated by the BMO Group Compensation Oversight Committee and the HR Committee.

## **Identified Staff Criteria**

The BMO Group and the Company incorporates the European Banking Authority regulatory technical standards on its identification framework to identify categories of staff whose professional activities have a material impact on the risk profile of the firm under Article 94(2) of Directive 2013/36/EU.

The identification criteria are a combination of qualitative and quantitative criteria. The qualitative criteria identify staff within the management body, senior management and other staff with key functions or managerial responsibilities over other identified staff within the Company whose impact on the Company's risk profile is material. Other criteria are based on the authority of staff to commit to credit risk exposures and market risk transactions.

In addition, a set of quantitative criteria are used, which are based on compensation ranges. Employees whose compensation falls within a certain range may also be identified as Identified Staff.

## Design and structure of compensation and link to performance for Identified Staff

The BMO Group approach to compensation is based on a "pay for performance" philosophy. The practices are designed to effectively balance the core compensation principles:

- Link compensation to the BMO Group performance: Remuneration design and implementation, as implemented by the Company, aligns with the BMO Group strategy and links to both the BMO Group and operating group performance;
- Attract and retain talent: Compensation helps attract and retain talented people and motivates them to excel to achieve objectives;
- Align with prudent risk-taking: Compensation structure does not encourage excessive risk- taking and rewards appropriate use of capital; and
- Encourage a long-term view to increase shareholder value.

The alignment of compensation with risk is an important consideration in compensation plans. For this reason, mechanisms in compensation design are included to ensure risk is appropriately considered before incentive pools are finalised. These mechanisms include:

- Using risk performance metrics when determining funding for variable compensation;
- Establishing the incentive pool using business results which reflect provisions for credit, market liquidity and other risks;
- Depending on role and function, a significant portion of variable compensation is equity-based and there are share ownership requirements, and
- Having leadership and professionals in human resources, risk, compliance, and finance review variable incentive pools throughout the year and before finalising.

Direct compensation is a combination of fixed pay elements and performance-related pay elements (short-term and mid-term incentives). The performance-related pay is designed to reward the achievement of the Company, business and individual performance targets while managing risk.

## **Identified Staff**

### **Front Office Identified Staff**

Front Office staff are eligible to participate in the BMO Group Capital Markets incentive-based compensation plan which has two components: 1) upfront compensation, and 2) deferred compensation, both equally split in cash and share-linked awards. The incentive plan funding is based on actual BMO Group Capital Markets business performance including risk management considerations. The pool also includes a modifier for BMO Group Capital Markets Return on Equity and Total BMO Group performance.

Individual award allocations are based on achieving business and individual performance goals that are designed to reinforce the Company and operating group's strategic priorities and values, qualitative measures used to assess how results were achieved, and adherence to risk management, compliance requirements and to the BMO Code of Conduct.

A minimum portion of 40% or 60% of an employee's incentive award is deferred over a period of between three to seven years. The minimum deferral level is based on the employee's total incentive compensation. Share-linked awards are designed to promote a greater alignment of interest between employees and shareholders of the BMO Group.

Front Office Identified Staff are subject to the Capital Requirements Directive IV bonus cap, whereby variable compensation cannot exceed 200% of fixed compensation.

## **Control Functions**

Compensation for Identified Staff in control functions is tied to overall BMO Group and Company performance and performance against individual goals. These employees do not report into the business they support, nor does the success or final performance of business areas they support or monitor directly impact the assessment of their performance or compensation. This independence mitigates risk and encourages these employees to maintain their focus on the BMO Group and the Company's overall success.

Identified Staff in control functions are eligible to participate in the incentive-based compensation plan which has two components: 1) upfront compensation, and 2) deferred compensation, both equally split in cash and share-linked awards. Funding of the upfront compensation incentive pool is based on the BMO Group and Company performance against annual targets set on business measures aligned to the BMO Group and Company strategic priorities. Funding also takes into account a risk review.

Individual award allocations are based on achieving individual performance goals that are designed to reinforce the BMO Group, Company and operating group's strategic priorities and values, qualitative measures used to assess how results were achieved, and adherence to risk management, compliance requirements and to the BMO Group Code of Conduct.

A minimum portion of 40% or 60% of an employee's incentive award is deferred over a period of between three years to seven years. Share-linked awards are designed to promote a greater alignment of interest between employees and shareholders of the BMO Group.

Control Functions Identified Staff are subject to the Capital Requirements Directive IV bonus cap, whereby variable compensation cannot exceed 200% of fixed compensation.

### **Clawback and forfeitures**

Clawback and forfeiture policies have been adopted in the BMO Group compensation programs to help mitigate current and future risks.

For all Identified Staff, the HR Committee may, in its sole discretion, reduce or forfeit unvested deferred incentive awards depending on the severity of a risk event's impact to the BMO Group, the Company, operating group or line of business financial performance or reputation, and individual accountability. The HR Committee evaluates risk events (for example, audit findings, credit losses, financial losses and key indicators of operational, market compliance, poor conduct behaviors and reputational risk) when determining whether to use its discretion to reduce payouts from the awarded compensation.

For Identified Staff, the HR Committee may also, in their sole discretion have the ability to clawback all or a portion of variable compensation paid.

## **Remuneration Tables for Identified Staff**

The following tables show the remuneration awards made in respect of the 2019 performance year. The disclosures are made in accordance with Article 450 of the Capital Requirements Regulation, the Basel Committee on Banking Supervision (BCBS) Pillar 3 disclosure requirements standard and the EBA Guidelines on sound remuneration policies (EBA/GL/2015/22) to the extent applicable to the 2019 performance year for the Company as a business area of the Capital Markets Operating Group of the BMO Group.

## Remuneration for the financial year

(US\$ in thousands)	Senior	Other	Senior	Other
	<b>Management</b>	Identified	Management	Identified
		Staff		Staff
	2019	2019	2018	2018
Number of individuals	8	18	7	11
Fixed remuneration	1,005	3,382	1,187	1,635
Variable remuneration	462	1,255	407	573
Total remuneration	1,467	4,637	1,594	2,208

<sup>&</sup>lt;sup>1</sup>"Senior management" mean members of the Board in accordance with Article 3(1)(9) of the Capital Requirements Directive 2013/36/EU. 
"Other Identified Staff" includes all other identified staff in business areas, internal control functions and corporate functions.

## Remuneration for the financial year

Remuneration for the financial year				
(US\$ in thousands)	Senior Management	Other Identified Staff	Senior Management	Other Identified Staff
	2019	2019	2018	2018
Fixed remuneration				
Total fixed remuneration	1,005	3,382	1,187	1,635
Fixed cash remuneration	1,005	3,382	1,187	1,635
Fixed remuneration in equity	~ =	-		-
of which subject to holding period	-	•	7.5	
Variable remuneration				
Total variable remuneration	462	1,255	407	573
Total cash bonus	241	612	230	341
of which deferred	115	235	76	57
Total equity bonus	221	643	177	232
of which deferred or subject to holding period	221	643		-
Long-term incentive award			: <del>-</del>	
Total remuneration	1,467	4,637	1,594	2,208
Deferred remuneration				
Outstanding deferred remuneration	ñ.			-
Vested at performance year end	741	1,610	212	102
Unvested at performance year end	284	802	750	445
Awarded deferred remuneration at performance year end	239	526	190	217
Cash remuneration	115	235	76	57
Equity remuneration	125	291	114	161
Adjusted/Reduced deferred remuneration from prior Years		, .	:=	
Joining and severance payments and awards			- */	
Sign-on awards				
Number of beneficiaries	0	0	0	0
Made during the year	<u></u>		<u> </u>	
Buy-out awards				
Number of beneficiaries	0	0	. 0	0
Made during the year	-			-
Severance awards	14		,	
Number of beneficiaries	0	1	0	0
Made during the year	-	40	:=:	-
of which paid during the year	2 4	40	-	-
of which deferred	-	: <b>-</b> :0		-
Highest individual award	=	40	~	-

CRR reference	High Level Summary	Compliance Reference		
	Return or	n Assets		
90 (CRD)	Public disclosure of return on assets	Yes	12	
421(1)	Scope of disclosur	re requirements		
431(1) 431(2)	Institutions shall publish Pillar 3 disclosures.  "Firms with permission to use specific operational		_	
	risk methodologies must disclose operational risk information.			
431(3)	"Institutions shall have a <b>policy to comply with disclosure requirements</b> and have policies for assessing the appropriateness of their disclosures, including their verification and frequency. Institutions shall also have policies for assessing whether their disclosures convey their risk profile comprehensively to market participants.	Reference to Disclosures Policy is made in <b>Purpose of Disclosures</b>	8	
	Means of di	sclosures	_	
434(1)	Disclosures should be provided in one medium or location with clear cross references if necessary.	Published Annually in conjunction with financial statements.		
434(2)	Disclosure made for accounting requirements can be used for Pillar 3 Disclosure purposed if appropriate.	Index prepared		
	Diele management als	 		
435(1)(a)	Risk management obj The strategies and processes to manage risks.	Risk Governance / Risk Framework and Culture	95	
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455(1)(b)	function.	Structure. Additional detail for each risk type in Pillar III  Disclosure	9.	
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435(2)(c)	Policy on diversity of Board membership and results against targets.	Corporate Governance Section	85	
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435(2)(e)	Description of information flow on risk to Board.	Corporate Governance Section	86	
	Scope of ap	plication		
436(a)	Name of institution	Scope of Application	82	
5 1				
427(4)	Own fu	ınds		
437(1)	Institutions shall disclose the following information;			
437(1)(a)	A full reconciliation of Common equity tier 1 items, Additional tier 1 items, Tier 2 items and filters and deductions applied pursuant to Articles 32 to 35, 36, 56, 66 and 79 to own funds of the institution and	Scope of Application Template 1: EU LI1 Template 2 EU LI2 Regulatory own funds disclosure. CRD IV, Annex IV	82 84 99	
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438(c)	Capital requirements for each Standardised approach credit risk exposure class.	Capital Requirements: Overview of RWAs Template 4: EU OV1	103	

CRR reference	High Level Summary	Compliance Reference	Page	
438(e)	Capital requirements for market risk or settlement risk.	Capital Requirements : Overview of RWAs Capital requirements / RWA Template 4 : EU OV1	103	
438(f)	Capital requirements for operational risk	Capital Requirements : Overview of RWAs Capital requirements / RWA Template 4 : EU OV1	103	
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439(b)	Discussion of policies for securing collateral and establishing credit reserves.	Addressed in Notes to Financial Statements. No 27 'Collateral' 'Allowance for Credit Losses'	64 54	
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439(d)	Disclosure of collateral to be provided (outflows) in the event of a ratings downgrade.	Addressed in Notes to Financial Statements. No 27 (b) Credit Risk Management	54	
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	exposure, Standardised and Internal model methods.		je.	
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442(b)	Approaches for calculating specific and general credit risk adjustments.	Notes to financial statement.  Note 27 Risk Management Allowance for Credit Losses Template 18: EU CR3 – CRM Techniques overview	57 115	
442(c)	Disclosure of pre-CRM EAD by exposure class.	Credit Risk Section / Exposure to Credit Risk.  Template 7: EU CRB-B — Total and average net amount of exposures		
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## INDEPENDENT AUDITOR'S REPORT COUNTRY BY COUNTRY REPORTING

## **Opinion**

We have audited the accompanying Country-by-Country (or "CBC") financial information of Bank of Montreal Europe plc (or the "Company"), for the financial year ended 31 October 2019 pursuant to Regulation 77 of Statutory Instrument 158 of 2014, the European Union (Capital Requirements) Regulations 2014 (or the "Regulations").

The financial reporting framework that has been applied in the preparation of the financial statement the CBC financial information is Irish law and International Financial Reporting Standards as adopted by the European Union (or "IFRS").

In our opinion, the Company's CBC financial information:

- Is prepared in all material respects in accordance with the basis of preparation set out on page 141 in line with the requirements of the Regulations; and
- Discloses the items of CBC financial information required to be published by Article 77 of the European Union (Capital Requirements) Regulations 2014.

## **Basis for opinion**

We conducted our audit in accordance with International Standards on Auditing (Ireland) (or "ISAs (Ireland)") including ISA (Ireland) 800 and ISA (Ireland) 805. Our responsibilities under those standards are further described in the 'Responsibilities of the auditor for the audit of the CBC Report' section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the CBC Report in Ireland, namely the Irish Auditing and Accounting Supervisory Authority (or "IAASA") Ethical Standard concerning the integrity, objectivity and independence of the auditor, and the ethical pronouncements established by Chartered Accountants Ireland, applied as determined to be appropriate in the circumstances for the entity. We have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

## Emphasis of matter - Basis of preparation

In forming our opinion on the CBC financial information, which is not modified, we draw attention to the Basis of preparation included on page 141. Regulation 77 of the European Union (Capital Requirements) Regulations 2014 does not set out definitions of the items of CBC financial information to be disclosed. The company has applied definitions to the items of CBC financial information which, other than as set out in the basis of preparation, are consistent with the definitions of those items in accordance with IFRS and of those items in the company's annual statutory financial statements. The CBC Report is prepared to assist the company in meeting the requirements of the Regulations. As a result, the CBC Report may not be suitable for another purpose.

## Responsibilities of management and those charged with governance for the financial statement

Management is responsible for the preparation and fair presentation of the CBC Report, in accordance with the Basis of Preparation as disclosed on page 141, for determining the appropriateness of the Basis of preparation and for such internal control as they determine necessary to enable the preparation of the CBC financial information that is free from material misstatement, whether due to fraud or error.

## **INDEPENDENT AUDITOR'S REPORT COUNTRY BY COUNTRY REPORTING (CONTINUED)**

## Responsibilities of the auditor for the audit of the CBC Report

The auditor's objectives are to obtain reasonable assurance about whether the CBC Report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes their opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (Ireland) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this CBC Report.

As part of an audit in accordance with ISAs (Ireland), the auditor will exercise professional judgment and maintain professional scepticism throughout the audit. The auditor will also:

- Identify and assess the risks of material misstatement of the CBC Report, whether due to fraud or
  error, design and perform audit procedures responsive to those risks, and obtain audit evidence that
  is sufficient and appropriate to provide a basis for their opinion. The risk of not detecting a material
  misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve
  collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Evaluate the overall presentation, structure and content of the CBC Report, including the disclosures, and whether the CBC Report represent the underlying transactions and events in a matter that achieves a fair presentation.

## The purpose of our audit work and to whom we owe our responsibilities

This report is made solely to the Company's Directors, in accordance with our engagement letter to provide a report pursuant to the requirements of Regulation 77(4) of SI 158 of 2014, the European Union (Capital Requirements) Regulations 2014.

Our audit work has been undertaken so that we might state to the Company's Directors those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's Directors as a body, for our audit work, for this report, or for the opinions we have formed.

Colin Feely

For and on behalf of

**Grant Thornton** 

Chartered Accountants, Statutory Audit Firm

13-18 City Quay

Dublin 2

D02 ED70

Ireland

30 January 2020

## BANK OF MONTREAL EUROPE PLC COUNTRY BY COUNTRY REPORTING

## Introduction

In accordance with **S.I. No. 158 of 2014,** EUROPEAN UNION (CAPITAL REQUIREMENTS) REGULATIONS 2014, Bank of Montreal Europe plc presents the required information in respect of Country-by-country reporting.

## **Required information**

The reference date for this information is the year ended 31 October 2019, the date of the most recently available audited financial statements. Comparatives are for the year ended 31 October 2018.

## Country - Ireland

a) Name, nature of activities and geographical location

Bank of Montreal Europe p.l.c., is engaged in the business of banking including the provision of financial services. The Company is incorporated in the Republic of Ireland, Registered Number 255687.

b) Turnover (US\$ in thousands)

		2019	2018
c) d)	Operating income from the Statement of Comprehensive Income Number of employees on a full time equivalent basis Profit /loss before tax (US\$ in thousands)	\$45,227 48	\$46,525 35
e)	Profit before income tax from the Statement of Comprehensive Income  Tax on profit or loss (US\$ in thousands)	\$13,629	\$25,849
f)	Income tax expense from the Statement of Comprehensive Income Public subsidies received (US\$ in thousands)	\$641 Nil	\$973 Nil

## **Basis of preparation**

The amounts presented above have been, where relevant, extracted from the Directors' Report and Financial Statements Year Ended 31 October 2019. The Financial Statements have been prepared in accordance with International Financial Reporting Standards (IFRSs) as issued by the International Accounting Standards Board (IASB) and adopted by the European Union (EU) and in accordance with the provisions of the Companies Act 2014.

## **Audit**

The required information presented above has been audited in accordance with Directive 2006/43/EC.

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