## SUPPLEMENTARY REGULATORY CAPITAL DISCLOSURE

## April 30, 2018

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Effective November 1, 2012, Canadian banks are subject to the revised capital adequacy requirements as published by the Basel Committee on Banking Supervision (BCBS) and commonly referred to as Basel III. Basel III builds on the "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" (Basel II). Refer to page 2 "Basel III Implementation" for further details.

The Basel III Framework is comprised of three Pillars:

- Pillar 1 - the actual methodologies that must be applied to calculate the minimum capital requirements.
- Pillar 2 - the requirement that banks have internal processes to assess their capital adequacy in relation to their strategies, risk appetite and actual risk profile. Regulators are expected to review these internal capital adequacy assessments.
- Pillar 3 - reflects the market disclosures required by banks to assist users of the information to better understand the risk profile.

This Appendix reflects the Pillar 3 market disclosures based on information gathered as part of the Pillar 1 process, and should assist users in understanding the changes to the risk-weighted assets and capital requirements.

Basel III classifies risk into three broad categories: credit risk, market risk and operational risk. Under Pillar 1 of the Basel III Framework, minimum capital for these three risks is calculated using one of the following approaches:

- Credit risk capital - Internal Ratings Based Approach (Advanced or Foundation) or Standardized Approach.
- Operational risk capital - Advanced Measurement Approach (AMA), Standardized Approach or Basic Indicator Approach.
- Market risk capital - Internal models or Standardized Approach.


## Credit Risk

The credit risk component consists of on- and off- balance sheet claims. The Basel III rules are not applied to traditional balance sheet categories but to categories of on- and off-balance sheet exposures which represent general classes of assets/exposures (Corporate, Sovereign, Bank, Retail and Equity) based on their different underlying risk characteristics.

Generally, while calculating capital requirements, exposure types such as Corporate, Sovereign, Bank, Retail and Equity are analyzed by the following credit risk exposure sub-types: Drawn, Undrawn, Repo-style Transactions, Over-the-counter (OTC) Derivatives, Exchange Traded Derivatives and Other Off-balance Sheet claims.

The Bank uses the Advanced Internal Ratings Based (AIRB) approach for credit risk in its material Canadian, US and European portfolios and for a significant portion of international corporate and commercial portfolios. The Bank uses internal estimates, based on historical experience, for probability of default (PD), loss given default (LGD) and exposure at default (EAD).

- Under the AIRB approach, credit risk risk-weighted assets (RWA) are calculated by multiplying the capital requirement ( $K$ ) by EAD times 12.5, where $K$ is a function of the PD, LGD, maturity and prescribed correlation factors. This results in the capital calculations being more sensitive to underlying risks.
- Risk weights for exposures which fall under the securitization framework are computed under the Internal Assessments Approach (IAA) or the Ratings-Based Approach (RBA). RBA risk weights depend on the external rating grades given by two of the external credit assessment institutions (ECAI): S\&P, Moody's and DBRS.
- A multiplier of 1.25 is applied to the correlation parameter of all exposures to all unregulated Financial Institutions, and regulated Financial Institutions with assets of at least US\$100 billion.
- Exchange-traded derivatives which previously were excluded from the capital calculation under Basel II are risk-weighted under Basel III.
- An overall scaling factor of $6 \%$ is added to the credit risk RWA for all AIRB portfolios. For the remaining portfolios, the Standardized Approach is used to compute credit risk.
- The Standardized Approach applies regulator prescribed risk weight factors to credit exposures based on the external credit assessments (public ratings), where available, and also considers other additiona factors (e.g. provision levels for defaulted exposures, loan-to-value for retail, eligible collateral, etc.).


## Operational Risk

OSFI has approved Scotiabank's application to use the Advanced Measurement Approach (AMA) for Operational Risk, subject to a capital floor based on the Standardized Approach, in the first quarter o 2017. The Bank also utilizes the Standardized Approach for operational risk for units not covered under AMA. AMA utilizes risk drivers for capital movements (such as internal loss experience, business environment and internal control factors, external loss experience, and scenarios); while the Standardized Approach is based on a fixed percentage ranging from $12 \%$ to $18 \%$ of the average of the previous three years' gross income.

Market Risk
The Bank uses both internal models and standardized approaches to calculate market risk capital. Commencing Q1 2012, the Bank implemented additional market risk measures in accordance with Basel's Revisions of the Basel II market risk framework (July 2009). Additional measures include stressed Value-at-Risk, incremental risk charge and comprehensive risk measure.
International Financial Reporting Standards (IFRS)
Effective Q1 2012, all amounts reflect the adoption of IFRS. Effective Q1 2014, all amounts reflect the adoption of new accounting standards, IFRS10 (Consolidated Financial Statements) and IAS19R (Employee Benefits). Effective Q1 2018, the Bank adopted IFRS 9 (Financial Instruments) and did no restate comparative periods. The full transitional impact on regulatory capital from IFRS 9 was recognized upon adoption. Prior period results are based on International Accounting Standard (IAS) 39 and therefore these amounts and related ratios are not comparable.

This "Supplementary Regulatory Capital Disclosure" has been updated to reflect OSFl's Advisory "Required Public Disclosure Requirements related to Basel III Pillar 3" (issued July 2, 2013), effective Q3 2013 for all D-SIBs. The main features template that sets out a summary of information on the terms and conditions of the main features of all capital instruments is posted on the Bank's website as follows http://www.scotiabank.com/ca/en/0,,3066,00.htm

Canadian banks are subject to the revised capital adequacy requirements as published by the Base Committee on Banking Supervision (BCBS) - commonly referred to as Basel III - effective November 1, 2012. Basel III builds on the "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" (Basel II). The Office of the Superintendent of Financial Institutions (OSFI) has issued guidelines, reporting requirements and disclosure guidance which are consistent with the Basel III reforms (except for implementation dates described below).

As compared to previous standards, Basel III places a greater emphasis on common equity by introducing a new category of capital, Common Equity Tier 1 (CET1), which consists primarily of common shareholders equity net of regulatory adjustments. These regulatory adjustments include goodwill, intangible assets, deferred tax assets, pension assets and investments in financial institutions over certain thresholds. Overall, the Basel III rules increase the level of regulatory deductions relative to Basel II. Basel III also increases the level of risk-weighted assets for significant investments and deferred tax amounts due to temporary timing differences under defined thresholds, exposures to large or unregulated financial institutions meeting specific criteria, exposures to centralized counterparties and exposures that give rise to wrong way risk.

To enable banks to meet the new standards, Basel III contains transitional arrangements commencing January 1, 2013, through January 1, 2019. Transitional requirements result in a phase-in of new deductions to common equity over 5 years. Under the transitional rules, all CET1 deductions are multiplied by a factor during the transitional period, beginning with $0 \%$ in 2013, 20\% in 2014, $40 \%$ in $2015,60 \%$ in $2016,80 \%$ in 2017 and $100 \%$ in 2018 . The portion of the CET1 regulatory adjustments not deducted during the transitional period will continue to be subject to Basel Il treatment. In addition, non-qualifying capital instruments will be phased-out over 10 years and the capital conservation buffer will be phased in over 4 years. As of January 2019, the banks will be required to meet new minimum requirements related to risk-weighted assets of: Common Equity Tier 1 ratio of $4.5 \%$ plus a capital conservation buffer of $2.5 \%$, collectively $7 \%$. Including the capital conservation buffer, the minimum Tier 1 ratio will be $8.5 \%$, and the Total capital ratio will be $10.5 \%$.

OSFI required Canadian deposit-taking institutions to fully implement the 2019 Basel III reforms in 2013 without the transitional phase-in provisions for capital deductions, and achieve a minimum $7 \%$ common equity target, by the first quarter of 2013 along with a minimum Tier 1 ratio of $7 \%$ and Total capital ratio of $10 \%$. Since the first quarter of 2014, the minimum Tier 1 ratio rose to $8.5 \%$ and the Total capital ratio rose to 10.5\%.

The BCBS issued the rules on the assessment methodology for global systemically important banks (G-SIBs) and their additional loss absorbency requirements. In their view, additional policy measures for G-SIBs are required due to negative externalities (i.e., adverse side effects) created by systemically important banks which are not fully addressed by current regulatory policies. The assessment methodology for G-SIBs is based on an indicator-based approach and comprises five broad categories: size, interconnectedness, lack of readily available substitutes, global (cross-jurisdictional) activity and complexity. Additional loss absorbency requirements may range from $1 \%$ to $3.5 \%$ Common Equity Tier 1 depending upon a bank's systemic importance and will be introduced in parallel with the Basel ill capital conservation and countercyclical buffers from 2016 through to 2019. Scotiabank is not designated as a G-SIB.

Since similar externalities can apply at a domestic level, the BCBS extended the G-SIBs framework to domestic systemically important banks (D-SIBs) focusing on the impact that a distress or failure would have on a domestic economy. Given that the D-SIB framework complements the G-SiB framework, the Committee considers that it would be appropriate if banks identified as D-SIBs by their national authorities are required by those authorities to comply with the principles in line with phase-in arrangements for the G-SIB framework, i.e., January 2016. In a March 2013 advisory letter, OSFI designated the 6 largest banks in Canada as domestic systemically important banks (D-SIBs), increasing their minimum capital ratio requirements by $1 \%$ for the identified D-SIBs. This $1 \%$ surcharge is applicable to all minimum capital ratio requirements for CET1 Tier 1 and Total Capital.

As of January 2016, the Scotiabank and other Canadian D-SIB banks are also required to meet new D-SIB minimum requirements; a minimum Common Equity Tier 1 ratio of $8.0 \%$, Tier 1 ratio of $9.5 \%$ and a Total capital ratio of $11.5 \%$.

In December 2013, OSFI announced its decision to implement the phase-in (over 5 years) of the regulatory capital for Credit Valuation Adjustment (CVA) on Bilateral OTC Derivatives effective Q1 2014. In accordance with OSFI's requirements, commencing in Q1, 2018, the CVA risk-weighted assets have been calculated using calars of $0.80,0.83$ and 0.86 , to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively ( $0.72,0.77$ and 0.81 in Fiscal 2017).

OSFI required Canadian deposit-taking institutions to implement the BCBS' countercyclical buffer requirements starting Q1, 2017. The countercyclical buffer is only applicable to private sector credit exposures in jurisdictions with published buffer requirements. At present only three jurisdictions apply a countercyclical buffer and the Bank's exposures within these three jurisdictions are not material.

Risk-weighted assets are computed on an all-in Basel III basis unless otherwise indicated. All-in is defined as capital calculated to include all of the regulatory adjustments that will be required by 2019 but retaining the phase-out rules for non-qualifying capital instruments.

As at January 31, 2013, all of the Bank's preferred shares, capital instruments and subordinated debentures did not meet these additional criteria and are subject to phase-out commencing January 2013. The Bank reserves the right to redeem, call or repurchase any capital instruments within the terms of each offering at any time in the future.

Commencing in 2015, the Bank issued subordinated debentures and preferred shares which contain nonviability contingent capital (NVCC) provisions necessary for the preferred shares and debentures to qualify as Tier 1 or Tier 2 regulatory capital. Under the NVCC provisions, the preferred shares and debentures are convertible into a variable number of common shares upon: (i) the public announcement by OSFI that the Bank has ceased, or is about to cease, to be viable; or (ii) by a federal or provincial government of Canada that the Bank accepted or agreed to accept a capital injection.
In addition to risk-based capital requirements, the Basel III reforms introduced a simpler, non risk-based Leverage ratio requirement to act as a supplementary measure to its risk-based capital requirements. The Leverage ratio is defined as a ratio of Basel III Tier 1 capital to a leverage exposure measure which include n-balance sheet assets and off-balance sheet commitments, derivatives and securities financing transactions, as defined within the requirements. As a member of the BCBS, OSFI has adopted the Basel III Leverage requirements as part of its domestic requirements for banks, bank holding companies, federally regulated trust and loan companies in Canada

October 2014, OSFI released its Leverage Requirements Guideline which outlines the application of the Basel III Leverage ratio in Canada and the replacement of the former Assets-to-Capital Multiple (ACM) effective Q1 2015. Institutions are expected to maintain a material operating buffer above the $3 \%$ minimum. The Bank meets OSFI's authorized leverage ratio. Commencing Q1 2015, disclosure in accordance with OSFI's September 2014 Public Disclosure Requirements related to Basel III Leverage ratio has been made in the Supplementary Regulatory Capital Disclosure on pages 27-29.
Since the introduction of Basel II in 2008, OSFI has prescribed a minimum capital floor requirement for institutions that use the AIRB approach for credit risk. Up to and including Q1 2018, the capital floor add-on was determined by comparing a Basel I capital requirement calculated by reference to Basel I against the Basel III capital requirement, as prescribed by OSFI. A shortfall in the Basel III capital requirement compared with $90 \%$

Effective Q2 2018, OSFI has replaced the Basel I regulatory capital floor with a capital floor based on 70\% of he Basel Il standardized approach for credit risk RWAs (increasing to $725 \%$ in Q3 2018 and to $75 \%$ in Q4 2018). Revised capital floor requirements also include risk-weighted assets for market risk and CVA.

| (\$MM) | Basel III |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IFRS $9^{(1)}$ |  | IAS $39{ }^{(1)}$ |  |  |  |  |  |
|  | Q2 2018 | Q1 2018 | Q4 2017 |  | Q3 2017 |  | Q2 2017 |  |
|  | All-in Approach ${ }^{(2)}$ | All-in Approach ${ }^{(2)}$ | Transitional Approach | All-in Approach ${ }^{(2)}$ | Transitional Approach | All-in Approach ${ }^{(2)}$ | Transitional Approach | All-in Approach ${ }^{(2)}$ |
| Common Equity Tier 1 capital | 45,025 | 42,990 | 46,051 | 43,352 | 44,070 | 41,369 | 45,431 | 42,474 |
| Tier 1 capital | 50,708 | 48,648 | 50,623 | 49,473 | 47,076 | 45,913 | 48,357 | 47,048 |
| Total capital | 57,716 | 55,637 | 57,222 | 56,113 | 55,051 | 53,929 | 56,554 | 55,310 |
| Risk-weighted Assets ${ }^{(3)(4)}$ |  |  |  |  |  |  |  |  |
| CET1 Capital Risk-weighted Assets | 375,901 | 382,248 | 387,292 | 376,379 | 376,358 | 365,411 | 381,977 | 374,876 |
| Tier 1 Capital Risk-weighted Assets | 376,042 | 382,248 | 387,292 | 376,379 | 376,358 | 365,411 | 381,977 | 375,148 |
| Total Capital Risk-weighted Assets | 376,183 | 382,248 | 387,292 | 376,379 | 376,358 | 365,411 | 381,977 | 375,366 |
| Capital Ratios (\%) |  |  |  |  |  |  |  |  |
| Common Equity Tier 1 (as a percentage of risk-weighted assets) | 12.0 | 11.2 | 11.9 | 11.5 | 11.7 | 11.3 | 11.9 | 11.3 |
| Tier 1 (as a percentage of risk-weighted assets) | 13.5 | 12.7 | 13.1 | 13.1 | 12.5 | 12.6 | 12.7 | 12.5 |
| Total capital (as a percentage of risk-weighted assets) | 15.3 | 14.6 | 14.8 | 14.9 | 14.6 | 14.8 | 14.8 | 14.7 |
| Leverage: |  |  |  |  |  |  |  |  |
| Leverage Exposures | 1,060,648 | 1,048,763 | 1,053,928 | 1,052,891 | 1,033,500 | 1,032,443 | 1,063,119 | 1,061,939 |
| Leverage Ratio (\%) | 4.8 | 4.6 | 4.8 | 4.7 | 4.6 | 4.4 | 4.5 | 4.4 |
| OSFI Target: All-in Basis (\%) |  |  |  |  |  |  |  |  |
| Common Equity Tier 1 minimum ratio | 8.0 | 8.0 |  | 8.0 |  | 8.0 |  | 8.0 |
| Tier 1 capital all-in minimum ratio | 9.5 | 9.5 |  | 9.5 |  | 9.5 |  | 9.5 |
| Total capital all-in minimum ratio | 11.5 | 11.5 |  | 11.5 |  | 11.5 |  | 11.5 |
| Leverage all-in minimum ratio | 3.0 | 3.0 |  | 3.0 |  | 3.0 |  | 3.0 |
| Capital instruments subject to phase-out arrangements |  |  |  |  |  |  |  |  |
| Current cap on Additional Tier 1 (AT1) instruments subject to phase-out arrangements (\%) | 40 | 40 | 50 | 50 | 50 | 50 | 50 | 50 |
| Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities) | 110 | 455 | - | - | - | - | - | - |
| Current cap on Tier 2 (T2) instruments subject to phase-out arrangements (\%) | 40 | 40 | 50 | 50 | 50 | 50 | 50 | 50 |
| Amount excluded from T2 due to cap (excess over cap after redemptions and maturities) | - | - | - | - | - | - | - | - |

(1) Effective Q1 2018, the Bank adopted IFRS 9 (Financial Instruments). The full transitional impact on regulatory capital from IFRS 9 was recognized upon adoption. Prior period results and ratios are based on International Accounting Standard (IAS) 39.
(2) 'All-in' approach is defined as capital calculated to include all of the regulatory adjustments that will be required by 2019 but retaining the phase-out rules for non-qualifying capital instruments. The Transitional Approach is no longer applicable effective Q1, 2018.
(3) As per OSFI guideline, effective Q1 2014, Credit Valuation Adjustment (CVA) RWA on derivatives was phased-in using Scalars. Commencing in Q1, 2018, the CVA RWA have been calculated using scalars of $0.80,0.83$ and 0.86 , to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively ( $0.72,0.77$ and 0.81 in Fiscal 2017).
(4) As at April 30, 2018, the Bank does not have a regulatory capital floor add-on for CET1, Tier 1 and Total capital risk-weighted assets (as at January 31, 2018 : $\$ 16.4$ billion, $\$ 16.3$ billion and $\$ 16.2$ billion respectively; as at October 31, 2017: $\$ 12.8$ billion, $\$ 12.6$ billion and $\$ 12.4$ billion, respectively; as at July 31, 2017: $\$ 5.6$ billion, $\$ 5.3$ billion and $\$ 5.1$ billion, respectively).

|  | MM) | CrossReference ${ }^{(2)}$ | $\begin{gathered} \text { All-in } \\ \text { Q2 } 2018 \end{gathered}$ | $\begin{gathered} \text { All-in } \\ \text { Q1 } 2018 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Common Equity Tier 1 Capital: Instruments and Reserves |  |  |  |  |
| 1 | Directly issued qualifying common share capital plus related stock surplus | $u+y$ | 15,819 | 15,789 |
| 2 | Retained Earnings | v | 39,766 | 38,704 |
| 3 | Accumulated Other Comprehensive Income | w | 1,676 | 588 |
| 5 | Common share capital issued by subsidiaries and held by third parties (amount allowed in group CET1) | bb | 656 | 599 |
| 6 | Common Equity Tier 1 capital before regulatory adjustments |  | 57,917 | 55,680 |
| Common Equity Tier 1 Capital: Regulatory Adjustments |  |  |  |  |
| 8 | Goodwill (net of related tax liability) | 9 | $(7,821)$ | $(7,664)$ |
| 9 | Intangibles other than mortgage-servicing rights (net of related tax liability) | h-q+i-r | $(3,856)$ | $(3,791)$ |
| 10 | Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability) | k | (341) | (382) |
| 11 | Cash flow hedge reserve | x | (94) | (164) |
| 12 | Shortfall of allowances to expected losses | ee |  |  |
| 14 | Gains and losses due to changes in own credit risk on fair value liabilities | p | (112) | (91) |
| 15 | Defined-benefit pension fund net assets (net of related tax liability) | l-s | (198) | (167) |
| 16 | Investments in own shares (if not already netted off paid-in capital on reported balance sheet) | a | (6) | (9) |
| 19 | Significant investments in the common stock of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions (amount above 10\% threshold) | e | (410) | (380) |
| 22 | Amount exceeding the 15\% threshold |  | (50) | (39) |
| 23 | of which: significant investments in the common stock of financials | f | (34) | (26) |
| 25 | of which: deferred tax assets arising from temporary differences | j | (16) | (13) |
| 26 | Other deductions from CET1 as determined by OSFI | - | (4) | (3) |
| 28 | Total regulatory adjustments to Common Equity Tier 1 |  | $(12,892)$ | (12,690) |
| 29 | Common Equity Tier 1 Capital (CET1) |  | 45,025 | 42,990 |
| Additional Tier 1 Capital: Instruments |  |  |  |  |
| 30 | Directly issued qualifying Additional Tier 1 instruments plus related stock surplus | z | 2,911 | 2,911 |
| 31 | of which: classified as equity under applicable accounting standards |  | 2,911 | 2,911 |
| 33 | Directly issued capital instruments subject to phase-out from Additional Tier 1 | aa ${ }^{(3)}$ | 2,613 | 2,613 |
| 34 | Additional Tier 1 instruments (and CET1 instruments not included in row 5 ) issued by subsidiaries and held by third parties (amount allowed in group AT1) | cc | 165 | 134 |
| 36 | Additional Tier 1 capital before regulatory adjustments |  | 5,689 | 5,658 |
| Additional Tier 1 Capital: Regulatory Adjustments |  |  |  |  |
| 39 | Non-significant investments in the capital of banking, financial and insurance entities, net of eligible short positions (amount above 10\% threshold) |  |  | - |
| 40 | Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation (net of eligible short positions) | b | - | - |
| 41 | Other deductions from Tier 1 capital as determined by OSFI |  | (6) | - |
| 43 | Total regulatory adjustments to Additional Tier 1 capital |  | (6) | - |
| 44 | Additional Tier 1 Capital (AT1) |  | 5,683 | 5,658 |
| 45 | Tier 1 Capital (T1=CET1 + AT1) |  | 50,708 | 48,648 |
| Tier 2 Capital: Instruments and Provisions |  |  |  |  |
| 46 | Directly issued qualifying Tier 2 instruments | m | 3,536 | 3,466 |
| 47 | Directly issued capital instruments subject to phase-out from Tier 2 |  | 2,131 | 2,235 |
| 48 | Tier 2 instruments issued by subsidiaries and held by third parties (amount allowed in group Tier 2) | dd | 105 | 104 |
| 50 | Eligible Collective Allowance and Excess of allowance over expected loss | c+d | 1,236 | 1,184 |
| 51 | Tier 2 capital before regulatory adjustments |  | 7,008 | 6,989 |


|  |  | CrossReference ${ }^{(2)}$ | $\begin{gathered} \text { All-in } \\ \text { Q2 } 2018 \end{gathered}$ | $\begin{gathered} \text { All-in } \\ \text { Q1 } 2018 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Tier 2 Capital: Regulatory Adjustments |  |  |  |  |
| 57 | Total regulatory adjustments to Tier 2 capital |  | - |  |
| 58 | Tier 2 Capital (T2) |  | 7,008 | 6,989 |
| 59 | Total Capital ( $\mathrm{TC}=\mathrm{T} 1+\mathrm{T} 2$ ) |  | 57,716 | 55,637 |
| 60 | Total Risk-weighted Assets |  |  |  |
| 60a | Common Equity Tier 1 (CET1) Capital RWA |  | 375,901 | 382,248 |
| 60 b | Tier 1 Capital RWA |  | 376,042 | 382,248 |
| 60c | Total Capital RWA |  | 376,183 | 382,248 |
| Capital Ratios and Buffers |  |  |  |  |
| 61 | Common Equity Tier 1 (as a percentage of risk-weighted assets) |  | 12.0 | 11.2 |
| 62 | Tier 1 (as a percentage of risk-weighted assets) |  | 13.5 | 12.7 |
| 63 | Total capital (as a percentage of risk-weighted assets) |  | 15.3 | 14.6 |
| 64 | Institution specific buffer requirement (minimum CET1 requirement plus capital conservation and countercyclical buffer requirements, expressed as a percentage of risk-weighted assets) |  | 8.0\% | 8.0\% |
| 65 | of which: capital conservation buffer requirement |  | 2.5\% | 2.5\% |
| 66 | of which: bank specific countercyclical buffer requirement |  | 0.0\% | 0.0\% |
| 67 | of which: G-SIB buffer requirement |  | 0.0\% | 0.0\% |
| 68 | Common Equity Tier 1 available to meet buffers (as a percentage of risk weighted assets) |  | 12.0 | 11.2 |
| OSFI all-in target (minimum + capital conservation buffer + DSIB surcharge (if applicable)) |  |  |  |  |
| 69 | Common Equity Tier 1 All-in target ratio |  | 8.0\% | 8.0\% |
| 70 | Tier 1 capital all-in target ratio |  | 9.5\% | 9.5\% |
| 71 | Total capital all-in target ratio |  | 11.5\% | 11.5\% |
| Amounts below the thresholds for the deduction (before risk-weighting) |  |  |  |  |
| 72 | Non-significant investments in the capital of other financial institutions |  | 915 | 669 |
| 73 | Significant investments in the common stock of financial institutions |  | 4,515 | 4,315 |
| 75 | Deferred tax assets arising from temporary differences (net of related tax liability) |  | 2,239 | 2,133 |
| Applicable caps on the inclusion of allowances in Tier 2 |  |  |  |  |
| 76 | Allowances eligible for inclusion in Tier 2 in respect to exposures subject to standardized approach (prior to application of cap) |  | 1,157 | 1,128 |
| 77 | Cap on inclusion of allowances in Tier 2 under standardized approach |  | 1,449 | 1,381 |
| 78 | Allowances eligible for inclusion in Tier 2 in respect to exposures subject to internal ratingsbased approach (prior to application of cap) |  | 79 | 56 |
| 79 | Cap for inclusion of allowances in Tier 2 under internal ratings-based approach |  | 1,262 | 1,230 |

Capital instruments subject to phase-out arrangements (only applicable between Jan 12018 and Jan 1 2022)
80 Current cap on CET1 instruments subject to phase-out arrangements
81 Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities) 82 Current cap on AT1 instruments subject to phase-out arrangements
83 Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)
84 Current cap on 12 instruments subject to phase-out arrangements
85 Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)

|  |  | $40 \%$ |
| :--- | :--- | :--- |
|  |  | - |
|  | $40 \%$ | - |
|  |  | $40 \%$ |
|  |  | $40 \%$ |
|  |  | 455 |

 (2) Cross-referenced to the Consolidated Balance Sheet: Source of Definition of Capital Components on page 5 (refer to column: Under Regulatory Scope of Consolidation).
(3) Line 33 also includes $\$ 1,400$ of capital instruments issued by trusts not consolidated under accounting standard IFRS 10, effective Q1 2014.


[^0]| As at April 30, 2018 (\$MM) | Credit Risk Exposures |  |  |  |  |  | Other Exposures |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Drawn |  | Other Exposures |  |  |  | Market Risk Exposures |  | All Other ${ }^{(2)}$ |  |
|  | Non-retail | Retail | Securitization | Repo-style Transactions | OTC Derivatives | Equity | $\begin{gathered} \text { Also subject } \\ \text { to Credit Risk } \\ \hline \end{gathered}$ |  |  |  |
| Cash and deposits with financial institutions | 59,074 | - | - | - | - |  | - |  | 2,718 | 61,792 |
| Precious metals | - | - | - | - | - | - | - | 4,005 | - | 4,005 |
| Trading assets: |  |  |  |  |  |  |  |  |  |  |
| Securities | 22 | - | - | - | - | - | - | 81,716 | - | 81,738 |
| Loans | 8,243 | 12 | - | - | - | - | 7,649 | 8,144 | - | 16,399 |
| Other | - | - | - | - | - | - | - | 1,518 | - | 1,518 |
| Financial assets designated at fair value through profit or loss | 13 | - | - | $\stackrel{-}{7}$ | - | - | - | - | - | 13 |
| Securities purchased under resale agreements and securities borrowed | - | - | - | 84,167 | - | - | - ${ }^{-}$ | - | 8 | 84,175 |
| Derivative financial instruments | $\stackrel{-}{ }$ | - | - | - | 33,949 | - | 30,000 | - | - | 33,949 |
| Investment securities | 72,087 | - | - | - | - | 1,561 | - | - | 572 | 74,220 |
| Loans: |  |  |  |  |  |  |  |  |  |  |
| Residential mortgages ${ }^{(3)}$ | 92,127 | 150,449 | - | - | - | - | - | - | 184 | 242,760 |
| Personal loans | - | 88,932 | 1,908 | - | - | - | - | - | 15 | 90,855 |
| Credit cards | - | 13,304 | 770 | - | - | - | - | - | 1,035 | 15,109 |
| Business \& government | 164,247 | 3,067 | 6,864 | - | - | - | - | - | (55) | 174,123 |
| Allowances for credit losses ${ }^{(4)}$ | (571) | (769) | - | - | - | - | - | - | $(3,589)$ | $(4,929)$ |
| Customers' liability under acceptances | 17,079 | - | - | - | - | - | - | - | (5) | 17,074 |
| Property and equipment |  | - | - | - | - | - | - | - | 2,390 | 2,390 |
| Investments in associates | - | - | - | - | - | - | - | - | 4,806 | 4,806 |
| Goodwill and other intangible assets | - | - | - | - | - | - | - | - | 12,273 | 12,273 |
| Other (including Deferred tax assets) | 971 | 605 | - | - | - | - | $\bigcirc$ | - | 12,464 | 14,040 |
| Total | 413,292 | 255,600 | 9,542 | 84,167 | 33,949 | 1,561 | 37,649 | 95,383 | 32,816 | 926,310 |


| As at January 31, 2018 (\$MM) | Credit Risk Exposures |  |  |  |  |  | Other Exposures |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Drawn |  | Other Exposures |  |  |  | Market Risk Exposures |  | All Other ${ }^{(2)}$ |  |
|  | Non-retail | Retail | Securitization | Repo-style Transactions | OTC Derivatives | Equity | $\begin{gathered} \text { Also subject } \\ \text { to Credit Risk } \end{gathered}$ |  |  |  |  |
| Cash and deposits with financial institutions | 54,759 |  |  | - | - |  | - |  | 2,606 | 57,365 |
| Precious metals | - | - | - | - | - | - | - | 5,471 | - | 5,471 |
| Trading assets: |  |  |  |  |  |  |  |  |  |  |
| Securities | - | - | - | - | - | - | - | 87,377 | - | 87,377 |
| Loans | 9,175 | 18 | - | - | - | - | 8,592 | 7,533 | - | 16,726 |
| Other | - | - | - | - | - | - | - | 1,561 | - | 1,561 |
| Financial assets designated at fair value through profit or loss | 14 | - | - | - | - | - | - | - |  | 14 |
| Securities purchased under resale agreements and securities borrowed |  | - | - | 88,643 | - | - | - | - | 5 | 88,648 |
| Derivative financial instruments |  | - | - | - | 36,847 | - | 32,227 | - |  | 36,847 |
| Investment securities | 73,087 | - | - | - | - | 1,424 | - | - | 637 | 75,148 |
| Loans: |  |  |  |  |  |  |  |  |  |  |
| Residential mortgages ${ }^{(3)}$ | 94,516 | 144,744 | - | - | - | - | - | - | 159 | 239,419 |
| Personal loans ${ }^{(5)}$ | - | 87,588 | 2,001 | - | - | - | - | - | 16 | 89,605 |
| Credit cards ${ }^{(5)}$ | - | 12,823 | 665 | - | - | - | - | - | 1,089 | 14,577 |
| Business \& government | 155,219 | 2,972 | 6,252 | - | - | - | - | - | (30) | 164,413 |
| Allowances for credit losses ${ }^{(4)}$ | (562) | (702) | - | - | - | - | - | - | $(3,553)$ | $(4,817)$ |
| Customers' liability under acceptances | 16,398 | ) | - | - | - | - | - | - | (18) | 16,380 |
| Property and equipment | - | - | - | - | - | - | - | - | 2,314 | 2,314 |
| Investments in associates |  | - | - | - | - | - | - | - | 4,518 | 4,518 |
| Goodwill and other intangible assets | - | - | - | - | - | - | - | - | 12,049 | 12,049 |
| Other (including Deferred tax assets) | 1,326 | 586 | - | - | - | - | - | - | 13,625 | 15,537 |
| Total | 403,932 | 248,029 | 8,918 | 88,643 | 36,847 | 1,424 | 40,819 | 101,942 | 33,417 | 923,152 |

(1) Based on the Consolidated Statement of Financial Position as reported in the 2018 Quarterly Report - Second Quarter results (page 35). Effective Q1 2018, the Bank fully adopted IFRS 9 (Financial Instruments).
(2) Includes the Bank's insurance subsidiaries' assets and all other assets which are not subject to credit and market risks.
(3) Includes $\$ 89.4$ billion (Q1, 2018 - $\$ 91.9$ billion) in mortgages guaranteed by Canada Mortgage Housing Corporation (CMHC) and portions of privately insured mortgages. CMHC guarantees under the PD substitution are reclassified to sovereign.
(4) Amounts for AIRB exposures are reported gross of IFRS 9 specific allowances and amounts for Standardized exposures are reported net of IFRS 9 specific allowances.
(5) Restated to reflect the current period presentation.

|  | Basel III All-in |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IFRS $9{ }^{(1)}$ |  | IAS $39{ }^{(1)}$ |  |  |  |  |  |  |  |
|  | Q2 2018 | Q1 2018 | Q4 2017 | Q3 2017 | Q2 2017 | Q1 2017 | Q4 2016 | Q3 2016 | Q2 2016 | Q1 2016 |
| (\$MM) <br> Common Equity Tier 1 (CET1) capital |  |  |  |  |  |  |  |  |  |  |
| Net income attributable to equity holders of the Bank | 2,107 | 2,279 | 2,015 | 2,045 | 1,997 | 1,948 | 1,939 | 1,897 | 1,523 | 1,758 |
| Dividends paid to equity holders of the Bank | $(1,047)$ | (979) | (976) | (940) | (947) | (934) | (924) | (904) | (899) | (871) |
| Shares issued | 34 | 62 | 61 | 21 | 93 | 138 | 185 | 114 | 22 | 42 |
| Shared repurchased/redeemed | - | (178) |  | (299) | (572) | (138) |  | - | (15) | (65) |
| Removal of own credit spread (net of tax) | (21) | 35 | 17 | 132 | (4) | 40 | 5 | (8) | 143 | (142) |
| Movements in other comprehensive income ( OCl ), excluding cash flow hedges | 1,158 | (918) | 1,029 | $(2,740)$ | 1,611 | (534) | 894 | 627 | $(2,835)$ | 842 |
| Currency translation differences | 1,222 | $(1,006)$ | 1,007 | $(2,885)$ | 1,835 | $(1,151)$ | 802 | 991 | $(2,826)$ | 1,455 |
| Debt and equity investments fair valued through $\mathrm{OCI}^{(2)}$ | (92) | 27 | (23) | (92) | 103 | (49) | (49) | 33 | 13 | (177) |
| Employee Benefits |  | 58 | 29 | 222 | (338) | 667 | 133 | (386) | (25) | (443) |
| Other | 23 | 3 | 16 | 15 | 11 | (1) | 8 | (11) | 3 | 7 |
| Goodwill and other intangible assets (deduction, net of related tax liability) | (222) | 50 | (159) | 370 | (233) | 106 | (123) | (166) | (121) | (161) |
| Other, including regulatory adjustments and transitional arrangements | 26 | (713) | (4) | 306 | (11) | (75) | 323 | 219 | 448 | (723) |
| Deferred tax assets that rely on future probability | 41 | 35 | 18 | 9 | 23 | 17 | 3 | 11 | 41 |  |
| IFRS 9 impact ${ }^{(3)}$ |  | (564) |  |  |  |  | - | - | - | - |
| Threshold deductions | (41) | (148) | 29 | 284 | (181) | 32 | 373 | 203 | 308 | (655) |
| Other | 26 | (36) | (51) | 13 | 147 | (124) | (53) | 5 | 99 | (68) |
| Closing Amount | 45,025 | 42,990 | 43,352 | 41,369 | 42,474 | 40,540 | 39,989 | 37,690 | 35,911 | 37,645 |
| Other Additional Tier 1 capital |  |  |  |  |  |  |  |  |  |  |
| Opening amount | 5,658 | 6,121 | 4,544 | 4,574 | 4,707 | 5,077 | 4,574 | 4,848 | 4,338 | 4,401 |
| Capital issuances | - |  | 1,560 | - | - | - | 500 | - | 500 | 350 |
| Redeemed capital | (345) | - | - | $\bigcirc$ | (230) | (345) | - | (345) | (345) | - |
| Other, capital including regulatory adjustments and transitional arrangements (NVCC) Closing Amount | 370 | (463) | 17 | (30) | 97 | (25) | 3 | 71 | 355 | (413) |
|  | 5,683 | 5,658 | 6,121 | 4,544 | 4,574 | 4,707 | 5,077 | 4,574 | 4,848 | 4,338 |
| Total Tier 1 capital | 50,708 | 48,648 | 49,473 | 45,913 | 47,048 | 45,247 | 45,066 | 42,264 | 40,759 | 41,983 |
| Tier 2 capital |  |  |  |  |  |  |  |  |  |  |
| Opening amount | 6,989 | 6,640 | 8,016 | 8,262 | 8,153 | 8,264 | 8,207 | 8,080 | 8,430 | 6,864 |
| Capital issuances |  |  | - | - | - | - | - | - | - | 2,537 |
| Redeemed capital | (119) | (113) | $(1,500)$ | - | - | - | - | (16) | (19) | $(1,000)$ |
| Amortization adjustments | ) |  |  | - | - | - | - | - | - |  |
| Other, including regulatory adjustments and transitional adjustments (NVCC) | 138 | 462 | 124 | (246) | 109 | (111) | 57 | 143 | (331) | 29 |
| Closing Amount | 7,008 | 6,989 | 6,640 | 8,016 | 8,262 | 8,153 | 8,264 | 8,207 | 8,080 | 8,430 |
| Total regulatory capital | 57,716 | 55,637 | 56,113 | 53,929 | 55,310 | 53,400 | 53,330 | 50,471 | 48,839 | 50,413 |

## Total regulatory capita

zed upon adoption. Prior period results and ratios are based on
International Accounting Standard (IAS) 39.
(2) Referred to as Available-for-Sale under IAS 39 (prior to Fiscal 2018).
(3) Represents the full transitional impact on retained earnings from the Bank's adoption of IFRS 9 (Financial Instruments) on November 1, 2017

## (\$B)

## RISK-WEIGHTED ASSETS: ${ }^{(2)}$

## On-Balance Sheet Assets

Cash Resources
Securities
Residential Mortgages
Loans

- Personal Loans
- Non-Personal Loans

All Other
Off-Balance Sheet Assets
Indirect Credit Instruments
Derivative Instruments

Total Credit Risk before AIRB scaling factor
AIRB Scaling factor ${ }^{(3)}$
Total Credit Risk after AIRB scaling factor
Market Risk - Risk Assets Equivalent
Operational Risk - Risk Assets Equivalent
Regulatory Capital Floor Adjustment to CET1 RWA ${ }^{(4)}$
CET1 Risk-weighted Assets ${ }^{(4)(5)}$
Tier 1 Risk-weighted Assets ${ }^{(4)(5)}$
Total Risk-weighted Assets ${ }^{(4)(5)}$
REGULATORY CAPITAL RATIOS (\%):
Common Equity Tier 1
Tier 1

| Basel III - All-in |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IFRS $9{ }^{(1)}$ |  | IAS 39 ${ }^{(1)}$ |  |  |  |  |  |  |  |
| Q2 2018 | Q1 2018 | Q4 2017 | Q3 2017 | Q2 2017 | Q1 2017 | Q4 2016 | Q3 2016 | Q2 2016 | Q1 2016 |
| 3.5 | 3.1 | 3.1 | 3.0 | 4.3 | 3.5 | 3.7 | 3.9 | 4.1 | 3.7 |
| 8.5 | 8.6 | 8.8 | 9.2 | 10.2 | 9.4 | 9.6 | 10.7 | 10.3 | 11.2 |
| 32.0 | 31.6 | 30.0 | 28.8 | 27.9 | 25.7 | 25.0 | 23.2 | 22.5 | 25.9 |
| 54.3 | 53.7 | 53.3 | 52.1 | 51.9 | 50.5 | 52.0 | 49.5 | 49.0 | 48.7 |
| 118.6 | 114.3 | 116.0 | 115.1 | 121.0 | 114.6 | 118.8 | 118.6 | 120.4 | 125.1 |
| 32.2 | 31.6 | 30.0 | 29.5 | 29.8 | 29.2 | 28.8 | 27.6 | 27.0 | 29.0 |
| 249.1 | 242.9 | 241.2 | 237.7 | 245.1 | 232.9 | 237.9 | 233.5 | 233.2 | 243.6 |
| 53.5 | 51.2 | 52.8 | 51.6 | 58.1 | 53.1 | 54.1 | 51.0 | 48.5 | 49.2 |
| 12.1 | 10.1 | 10.7 | 11.2 | 12.0 | 13.4 | 12.1 | 12.9 | 13.2 | 20.0 |
| 65.6 | 61.3 | 63.5 | 62.8 | 70.1 | 66.5 | 66.2 | 63.9 | 61.7 | 69.2 |
| 314.7 | 304.2 | 304.7 | 300.5 | 315.2 | 299.4 | 304.1 | 297.4 | 294.9 | 312.8 |
| 10.7 | 10.5 | 10.5 | 10.3 | 10.9 | 10.4 | 10.7 | 10.5 | 10.6 | 11.1 |
| 325.4 | 314.7 | 315.2 | 310.8 | 326.1 | 309.8 | 314.8 | 307.9 | 305.5 | 323.9 |
| 8.8 | 9.9 | 7.8 | 8.9 | 9.2 | 10.6 | 10.6 | 11.7 | 13.9 | 14.1 |
| 41.7 | 41.2 | 40.6 | 40.1 | 39.6 | 39.2 | 38.6 | 38.1 | 37.5 | 36.5 |
| - | 16.4 | 12.8 | 5.6 | - | - | - | - | - | - |
| 375.9 | 382.2 | 376.4 | 365.4 | 374.9 | 359.6 | 364.0 | 357.7 | 356.9 | 374.5 |
| 376.0 | 382.2 | 376.4 | 365.4 | 375.1 | 359.9 | 364.5 | 358.2 | 357.4 | 375.4 |
| 376.2 | 382.2 | 376.4 | 365.4 | 375.4 | 360.2 | 364.9 | 358.6 | 357.8 | 376.1 |
| 12.0 | 11.2 | 11.5 | 11.3 | 11.3 | 11.3 | 11.0 | 10.5 | 10.1 | 10.1 |
| 13.5 | 12.7 | 13.1 | 12.6 | 12.5 | 12.6 | 12.4 | 11.8 | 11.4 | 11.2 |
| 15.3 | 14.6 | 14.9 | 14.8 | 14.7 | 14.8 | 14.6 | 14.1 | 13.6 | 13.4 |

(1) Effective Q1 2018, the Bank adopted IFRS 9 (Financial Instruments). The full transitional impact on regulatory capital from IFRS 9 was recognized upon adoption. Prior period results and ratios are based on International Accounting Standard (IAS) 39.
(2) For purposes of this presentation only, Risk-weighted Assets (RWA) are shown by balance sheet categories. Details by Basel III exposure type are shown on pages 11-12 entitled, "Exposure at Default and Risk-Weighted Assets for Credit Risk Portfolios".
(3) The Basel Framework requires an additional $6 \%$ scaling factor to AIRB credit risk portfolios (excluding CVA and exposures with a risk-weight of 1250\%).
(4) As at April 30, 2018, the Bank does not have a regulatory capital floor add-on for CET1, Tier 1 and Total risk-weighted assets (as at January 31, 2018: $\$ 16.4$ billion, $\$ 16.3$ billion and $\$ 16.2$ billion respectively; as at October 31, 2017: $\$ 12.8$ billion,
$\$ 12.6$ billion and $\$ 12.4$ billion, respectively).
(5) In accordance with OSFl's requirements, in 2018 scalars for CVA RWA of $0.80,0.83$ and 0.86 were used to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively.

| MOVEMENT OF RISK-WEIGHTED ASSETS BY RISK TYPE (ALL-IN BASIS) | () Scotiabank |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Credit Risk Risk-weighted Assets (RWA) | Q2 2018 |  | Q1 2018 |  |
| (\$MM) | Credit Risk ${ }^{(1)}$ | Of which Counterparty Credit Risk | Credit Risk ${ }^{(1)}$ | $\begin{gathered} \text { Of which } \\ \text { Counterparty } \\ \text { Credit Risk } \end{gathered}$ |
| CET1 Credit risk-weighted assets as at beginning of Quarter | 314,739 | 17,209 | 315,159 | 16,494 |
| Book size ${ }^{(2)}$ | 5,235 | 340 | 5,017 | 1,007 |
| Book quality | $(1,079)$ | (19) | 544 | (46) |
| Model updates ${ }^{(3)}$ | $(1,037)$ | - | - | - |
| Methodology and policy ${ }^{(4)}$ | - | - | 332 | 332 |
| Acquisitions and disposals | - | - | - | - |
| Foreign exchange movements | 7,488 | 570 | $(6,146)$ | (578) |
| Other | - | - | (167) | - |
| CET1 Credit risk-weighted assets as at end of Quarter | 325,346 | 18,100 | 314,739 | 17,209 |
| Tier 1 CVA scalar | 141 | 141 | 104 | 104 |
| Tier 1 Credit risk-weighted assets as at end of Quarter | 325,487 | 18,241 | 314,843 | 17,313 |
| Total CVA scalar | 141 | 141 | 103 | 103 |
| Total Credit risk-weighted assets as at end of Quarter | 325,628 | 18,382 | 314,946 | 17,416 |

(1) In accordance with OSFI's requirements, in 2018 scalars for CVA RWA of $0.80,0.83$ and 0.86 were used to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively.
(2) Book size is defined as organic changes in book size and composition (including new business and maturing loans).
(3) Model updates are defined as model implementation, change in model scope or any change to address model enhancement.
(4) Methodology and policy is defined as methodology changes to the calculations driven by regulatory policy changes, such as new regulation (e.g. Basel III).

| Market Risk RWA (\$MM) | Q2 2018 | Q1 2018 |
| :---: | :---: | :---: |
| Market risk-weighted assets as at beginning of Quarter | 9,905 | 7,839 |
| Movement in risk levels ${ }^{(1)}$ | $(1,070)$ | 1,685 |
| Model updates ${ }^{(2)}$ | - | 381 |
| Methodology and policy ${ }^{(3)}$ | - | - |
| Acquisitions and disposals | - | - |
| Other | - | - |
| Market risk-weighted assets as at end of Quarter | 8,835 | 9,905 |

(1) Movement in risk levels are defined as changes in risk due to position changes and market movements. Foreign exchange movements are embedded within Movement in risk levels.
(2) Model updates are defined as updates to the model to reflect recent experience and change in model scope.
(3) Methodology and policy is defined as methodology changes to the calculations driven by regulatory policy changes (e.g. Basel III).

| Operational Risk RWA (\$MM) | Q2 2018 | Q1 2018 |
| :---: | :---: | :---: |
| Operational risk-weighted assets as at beginning of Quarter | 41,205 | 40,564 |
| Acquisitions and disposals | - | - |
| Higher Revenue | 515 | 641 |
| Operational risk-weighted assets as at end of Quarter | 41,720 | 41,205 |


|  | Q2 2018 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CET1 Risk-weighted Assets (RWA) | Canadian Banking | International Banking | Global Banking \& Markets | Other | All Bank |
| CET1 RWA (\$B) | \$123.3 | \$143.0 | \$100.2 | \$9.4 | \$375.9 |
| Proportion of Bank | 33\% | 38\% | 27\% | 2\% | 100\% |
| Comprised of: |  |  |  |  |  |
| Credit risk | 85\% | 88\% | 86\% | 94\% | 87\% |
| Market risk | - \% | 1\% | 6\% | 11\% | 2\% |
| Operational risk | 15\% | 11\% | 8\% | -5\% | 11\% |
| Other | 0\% | 0\% | 0\% | 0\% | 0\% |


|  | Q1 2018 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CET1 Risk-weighted Assets (RWA) | Canadian Banking | International Banking | Global Banking \& Markets | Other ${ }^{(1)}$ | All Bank ${ }^{(1)}$ |
| CET1 RWA (\$B) | \$121.9 | \$135.7 | \$99.4 | \$25.2 | \$382.2 |
| Proportion of Bank | 32\% | 36\% | 26\% | 6\% | 100\% |
| Comprised of: |  |  |  |  |  |
| Credit risk | 85\% | 88\% | 85\% | 32\% | 82\% |
| Market risk | - \% | 1\% | 7\% | 5\% | 3\% |
| Operational risk | 15\% | 11\% | 8\% | -2\% | 11\% |
| Other | - \% | - \% | - \% | 65\% | 4\% |

(1) Includes Basel I capital floor adjustments for Q1 2018.

| (sMM) |  | Q2 2018 |  |  |  |  |  | Q1 2018 |  | Q4 2017 |  | Q3 2017 |  | Q2 2017 |  | Q1 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | AIRB |  | Standardized |  | Total |  | Total |  | Total |  | Total |  | Total |  | Total |  |
| Exposure Type | Sub-type | $E A D^{(1)}$ | RWA ${ }^{(2)}$ | EAD ${ }^{(1)}$ | RWA ${ }^{(2)}$ | EAD ${ }^{(1)}$ | RWA ${ }^{(2)}$ | EAD ${ }^{(1)}$ | RWA ${ }^{(2)}$ | EAD ${ }^{(1)}$ | RWA ${ }^{(2)}$ | EAD ${ }^{(1)}$ | RWA ${ }^{(2)}$ | EAD ${ }^{(1)}$ | RWA ${ }^{(2)}$ | EAD ${ }^{(1)}$ | RWA ${ }^{(2)}$ |
| Non-Retail |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Corporate | Drawn | 139,072 | 67,350 | 51,078 | 49,110 | 190,150 | 116,460 | 182,052 | 112,280 | 183,262 | 114,622 | 180,278 | 113,458 | 181,498 | 119,608 | 171,433 | 113,535 |
|  | Undrawn | 80,025 | 30,869 | 5,572 | 5,497 | 85,597 | 36,366 | 79,478 | 34,185 | 81,214 | 34,473 | 77,423 | 34,172 | 82,966 | 39,115 | 74,738 | 34,789 |
|  | Other ${ }^{(3) / 4)}$ | 39,870 | 12,186 | 3,063 | 2,984 | 42,933 | 15,170 | 42,633 | 15,696 | 44,190 | 15,431 | 42,369 | 15,098 | 43,339 | 16,227 | 38,657 | 16,060 |
|  | Total | 258,967 | 110,405 | 59,713 | 57,591 | 318,680 | 167,996 | 304,163 | 162,161 | 308,666 | 164,526 | 300,070 | 162,728 | 307,803 | 174,950 | 284,828 | 164,384 |
| Bank | Drawn | 16,938 | 3,531 | 2,874 | 2,553 | 19,812 | 6,084 | 21,021 | 6,459 | 22,223 | 6,115 | 18,494 | 5,974 | 24,561 | 7,125 | 20,462 | 5,670 |
|  | Undrawn | 2,554 | 362 | 51 | 49 | 2,605 | 411 | 2,681 | 452 | 2,656 | 477 | 2,511 | 430 | 3,895 | 732 | 1,953 | 345 |
|  | Other ${ }^{(3) / 4)}$ | 10,268 | 1,028 | 37 | 37 | 10,305 | 1,065 | 10,534 | 1,598 | 9,132 | 1,623 | 9,805 | 1,341 | 11,074 | 1,639 | 9,118 | 1,328 |
|  | Total | 29,760 | 4,921 | 2,962 | 2,639 | 32,722 | 7,560 | 34,236 | 8,509 | 34,011 | 8,215 | 30,810 | 7,745 | 39,530 | 9,496 | 31,533 | 7,343 |
| Sovereign | Drawn | 107,860 | 3,749 | 6,035 | 1,640 | 113,895 | 5,389 | 109,002 | 4,692 | 103,797 | 4,665 | 104,750 | 4,542 | 93,554 | 4,976 | 95,419 | 4,640 |
|  | Undrawn | 775 | 90 | 11 | 5 | 786 | 95 | 752 | 104 | 1,023 | 299 | 743 | 102 | 963 | 134 | 898 | 103 |
|  | Other ${ }^{(3) / 4)}$ | 1,279 | 54 | 7 | 7 | 1,286 | 61 | 943 | 22 | 977 | 26 | 911 | 10 | 769 | 10 | 1,018 | 13 |
|  | Total | 109,914 | 3,893 | 6,053 | 1,652 | 115,967 | 5,545 | 110,697 | 4,818 | 105,797 | 4,990 | 106,404 | 4,654 | 95,286 | 5,120 | 97,335 | 4,756 |
| Total Non-Retail | Drawn | 263,870 | 74,630 | 59,987 | 53,303 | 323,857 | 127,933 | 312,075 | 123,431 | 309,282 | 125,402 | 303,522 | 123,974 | 299,613 | 131,709 | 287,314 | 123,845 |
|  | Undrawn | 83,354 | 31,321 | 5,634 | 5,551 | 88,988 | 36,872 | 82,911 | 34,741 | 84,893 | 35,249 | 80,677 | 34,704 | 87,824 | 39,981 | 77,589 | 35,237 |
|  | Other ${ }^{(3) / 4)}$ | 51,417 | 13,268 | 3,107 | 3,028 | 54,524 | 16,296 | 54,110 | 17,316 | 54,299 | 17,080 | 53,085 | 16,449 | 55,182 | 17,876 | 48,793 | 17,401 |
|  | Total | 398,641 | 119,219 | 68,728 | 61,882 | 467,369 | 181,101 | 449,096 | 175,488 | 448,474 | 177,731 | 437,284 | 175,127 | 442,619 | 189,566 | 413,696 | 176,483 |
| Retail |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential Mortgages | Drawn | 203,876 | 16,426 | 36,139 | 15,572 | 240,015 | 31,998 | 236,753 | 31,567 | 234,620 | 30,024 | 229,568 | 28,751 | 226,173 | 27,857 | 221,928 | 25,739 |
|  | Undrawn |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Total | 203,876 | 16,426 | 36,139 | 15,572 | 240,015 | 31,998 | 236,753 | 31,567 | 234,620 | 30,024 | 229,568 | 28,751 | 226,173 | 27,857 | 221,928 | 25,739 |
| Secured Lines Of Credit | Drawn | 20,648 | 3,384 |  | - | 20,648 | 3,384 | 20,295 | 3,375 | 20,281 | 3,351 | 20,234 | 3,193 | 19,642 | 3,079 | 19,099 | 3,056 |
|  | Undrawn | 17,409 | 1,050 |  | - | 17,409 | 1,050 | 15,795 | 920 | 15,356 | 917 | 15,007 | 857 | 14,648 | 827 | 14,334 | 793 |
|  | Total | 38,057 | 4,434 | - | - | 38,057 | 4,434 | 36,090 | 4,295 | 35,637 | 4,268 | 35,241 | 4,050 | 34,290 | 3,906 | 33,433 | 3,849 |
| Qualifying Revolving Retail Exposures (QRRE) | Drawn | 17,311 | 9,565 |  | - | 17,311 | 9,565 | 17,116 | 9,973 | 16,939 | 9,676 | 16,908 | 9,580 | 16,875 | 9,413 | 16,753 | 9,683 |
|  | Undrawn | 27,240 | 3,235 |  | - | 27,240 | 3,235 | 27,886 | 3,349 | 27,445 | 3,291 | 26,726 | 3,164 | 26,309 | 3,102 | 25,916 | 3,085 |
|  | Total | 44,551 | 12,800 |  | - | 44,551 | 12,800 | 45,002 | 13,322 | 44,384 | 12,967 | 43,634 | 12,744 | 43,184 | 12,515 | 42,669 | 12,768 |
| Other Retail | Drawn | 29,952 | 14,184 | 37,110 | 27,160 | 67,062 | 41,344 | 65,722 | 40,305 | 65,924 | 40,318 | 64,455 | 39,374 | 63,900 | 39,367 | 61,325 | 37,777 |
|  | Undrawn | 1,340 | 353 |  |  | 1,340 | 353 | 1,317 | 319 | 1,300 | 311 | 1,183 | 276 | 1,042 | 233 | 1,009 | 225 |
|  | Total | 31,292 | 14,537 | 37,110 | 27,160 | 68,402 | 41,697 | 67,039 | 40,624 | 67,224 | 40,629 | 65,638 | 39,650 | 64,942 | 39,600 | 62,334 | 38,002 |
| Total Retail | Drawn | 271,787 | 43,559 | 73,249 | 42,732 | 345,036 | 86,291 | 339,886 | 85,220 | 337,764 | 83,369 | 331,165 | 80,898 | 326,590 | 79,716 | 319,105 | 76,255 |
|  | Undrawn | 45,989 | 4,638 |  |  | 45,989 | 4,638 | 44,998 | 4,588 | 44,101 | 4,519 | 42,916 | 4,297 | 41,999 | 4,162 | 41,259 | 4,103 |
|  | Total | 317,776 | 48,197 | 73,249 | 42,732 | 391,025 | 90,929 | 384,884 | 89,808 | 381,865 | 87,888 | 374,081 | 85,195 | 368,589 | 83,878 | 360,364 | 80,358 |
| Securitizations |  | 24,196 | 2,461 |  |  | 24,196 | 2,461 | 23,327 | 2,426 | 23,591 | 2,529 | 23,278 | 2,529 | 24,785 | 2,717 | 23,589 | 2,561 |
| Trading DerivativesDerivatives - credit valuation adjustment ${ }^{(4)}$ |  | 22,495 | 7,733 | - | - | 22,495 | 7,733 | 23,371 | 6,834 | 24,483 | 7,147 | 21,844 | 6,942 | 24,370 | 7,547 | 24,842 | 8,295 |
|  |  | . | 3,757 | - | - | - | 3,757 | - | 2,760 | - | 2,988 | - | 3,733 | - | 3,923 | - | 4,775 |
| Total Credit Risk (Excluding Equities \& Other Assets) |  | 763,108 | 181,367 | 141,977 | 104,614 | 905,085 | 285,981 | 880,678 | 277,316 | 878,413 | 278,283 | 856,487 | 273,526 | 860,363 | 287,631 | 822,491 | 272,472 |
| Equities |  | 1,561 | 1,438 | - | - | 1,561 | 1,438 | 1,424 | 1,298 | 1,281 | 1,188 | 1,880 | 1,811 | 2,333 | 2,276 | 2,386 | 2,426 |
| Other Assets |  | - |  | 52,393 | 27,185 | 52,393 | 27,185 | 53,211 | 25,593 | 50,631 | 25,201 | 49,430 | 25,172 | 51,607 | 25,339 | 46,171 | 24,380 |
| Total Credit Risk (Before Scaling Factor) |  | 764,669 | 182,805 | 194,370 | 131,799 | 959,039 | 314,604 | 935,313 | 304,207 | 930,325 | 304,672 | 907,797 | 300,509 | 914,303 | 315,246 | 871,048 | 299,278 |
| Add-on for 6\% Scaling Factor ${ }^{(5)}$ |  |  | 10,742 |  |  |  | 10,742 |  | 10,532 |  | 10,487 |  | 10,328 |  | 10,864 |  | 10,441 |
| Total Credit Risk |  | 764,669 | 193,547 | 194,370 | 131,799 | 959,039 | 325,346 | 935,313 | 314,739 | 930,325 | 315,159 | 907,797 | 310,837 | 914,303 | 326,110 | 871,048 | 309,719 |

[^1](4) In accordance with OSF's requirements, in 2018 scalars for CVA RWA of $0.80,0.83$ and 0.86 were used to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectivel.
5) The Basel Framework requires an additional $6 \%$ scaling factor to ARB credit isk portfolios (excluding CVA and exposures with a risk-weight of $1250 \%$,

| (SMM) |  | Q4 2016 |  | Q3 2016 |  | Q2 $2016{ }^{(6)}$ |  | Q1 2016 |  | Q4 2015 |  | Q3 2015 |  | Q2 2015 |  | Q1 2015 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Exposure Type | Sub-type | EAD ${ }^{(1)}$ | RWA ${ }^{(2)}$ | EAD ${ }^{(1)}$ | RWA ${ }^{(2)}$ | EAD ${ }^{(1)}$ | RWA ${ }^{(2)}$ | EAD ${ }^{(1)}$ | RWA ${ }^{(2)}$ | EAD ${ }^{(1)}$ | RWA ${ }^{(2)}$ | EAD ${ }^{(1)}$ | RWA ${ }^{(2)}$ | EAD ${ }^{(1)}$ | RWA ${ }^{(2)}$ | EAD ${ }^{(1)}$ | RWA ${ }^{(2)}$ |
| Non-Retail |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Corporate | Drawn | 175,784 | 117,178 | 175,250 | 117,309 | 173,987 | 118,625 | 175,672 | 122,318 | 157,514 | 112,836 | 151,360 | 106,697 | 146,075 | 100,609 | 145,012 | 101,339 |
|  | Undrawn | 73,711 | 34,499 | 70,614 | 32,197 | 67,024 | 30,648 | 71,934 | 32,458 | 58,915 | 29,035 | 56,306 | 27,606 | 51,361 | 24,589 | 53,974 | 24,963 |
|  | Other ${ }^{(3)}$ | 39,943 | 16,356 | 40,458 | 16,043 | 42,964 | 15,968 | 45,648 | 16,314 | 40,425 | 15,476 | 43,981 | 16,093 | 37,643 | 14,254 | 35,068 | 12,327 |
|  | Total | 289,438 | 168,033 | 286,322 | 165,549 | 283,975 | 165,241 | 293,254 | 171,090 | 256,854 | 157,347 | 251,647 | 150,396 | 235,079 | 139,452 | 234,054 | 138,629 |
| Bank | Drawn | 26,022 | 6,567 | 26,609 | 6,662 | 24,836 | 6,579 | 25,881 | 7,522 | 27,165 | 8,344 | 27,400 | 7,109 | 25,700 | 6,679 | 32,358 | 8,435 |
|  | Undrawn | 1,982 | 368 | 1,894 | 271 | 1,847 | 315 | 1,784 | 260 | 11,386 | 3,726 | 11,741 | 3,793 | 11,406 | 3,672 | 12,222 | 3,914 |
|  | Other ${ }^{(3)}$ | 13,175 | 2,567 | 12,313 | 1,749 | 10,497 | 1,539 | 12,430 | 2,069 | 14,906 | 3,253 | 12,351 | 2,188 | 10,190 | 1,830 | 9,535 | 1,753 |
|  | Total | 41,179 | 9,502 | 40,816 | 8,682 | 37,180 | 8,433 | 40,095 | 9,851 | 53,457 | 15,323 | 51,492 | 13,090 | 47,296 | 12,181 | 54,115 | 14,102 |
| Sovereign | Drawn | 88,760 | 5,161 | 108,164 | 5,266 | 99,458 | 5,698 | 109,153 | 5,654 | 96,263 | 4,203 | 102,869 | 5,471 | 80,325 | 5,527 | 82,035 | 5,544 |
|  | Undrawn | 1,052 | 119 | 841 | 98 | 872 | 129 | 816 | 46 | 2,133 | 355 | 1,802 | 168 | 1,543 | 161 | 1,465 | 139 |
|  | Other ${ }^{(3)}$ | 497 | 12 | 547 | 3 | 371 | 4 | 508 | 8 | 1,016 | 36 | 694 | 46 | 544 | 15 | 1,137 | 63 |
|  | Total | 90,309 | 5,292 | 109,552 | 5,367 | 100,701 | 5,831 | 110,477 | 5,708 | 99,412 | 4,594 | 105,365 | 5,685 | 82,412 | 5,703 | 84,637 | 5,746 |
| Total Non-retail | Drawn | 290,566 | 128,906 | 310,023 | 129,237 | 298,281 | 130,902 | 310,706 | 135,494 | 280,942 | 125,383 | 281,629 | 119,277 | 252,100 | 112,815 | 259,405 | 115,318 |
|  | Undrawn | 76,745 | 34,986 | 73,349 | 32,566 | 69,743 | 31,092 | 74,534 | 32,764 | 72,434 | 33,116 | 69,849 | 31,567 | 64,310 | 28,422 | 67,661 | 29,016 |
|  | Other ${ }^{(3)}$ | 53,615 | 18,935 | 53,318 | 17,795 | 53,832 | 17,511 | 58,586 | 18,391 | 56,347 | 18,765 | 57,026 | 18,327 | 48,377 | 16,099 | 45,740 | 14,143 |
|  | Total | 420,926 | 182,827 | 436,690 | 179,598 | 421,856 | 179,505 | 443,826 | 186,649 | 409,723 | 177,264 | 408,504 | 169,171 | 364,787 | 157,336 | 372,806 | 158,477 |
| Retail |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential Mortgages | Drawn | 220,917 | 25,028 | 217,538 | 23,207 | 214,633 | 22,467 | 217,345 | 25,942 | 215,590 | 24,967 | 214,183 | 24,854 | 211,805 | 22,196 | 213,185 | 21,893 |
|  | Undrawn |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Total | 220,917 | 25,028 | 217,538 | 23,207 | 214,633 | 22,467 | 217,345 | 25,942 | 215,590 | 24,967 | 214,183 | 24,854 | 211,805 | 22,196 | 213,185 | 21,893 |
| Secured Lines Of Credit | Drawn | 19,233 | 4,497 | 19,200 | 4,412 | 18,918 | 4,390 | 18,550 | 4,310 | 18,804 | 4,197 | 18,992 | 4,207 | 19,047 | 4,293 | 18,952 | 4,435 |
|  | Undrawn | 14,587 | 1,359 | 14,298 | 1,286 | 14,045 | 1,268 | 13,778 | 1,225 | 12,631 | 1,133 | 12,553 | 1,181 | 12,354 | 1,158 | 12,312 | 1,243 |
|  | Total | 33,820 | 5,856 | 33,498 | 5,698 | 32,963 | 5,658 | 32,328 | 5,535 | 31,435 | 5,330 | 31,545 | 5,388 | 31,401 | 5,451 | 31,264 | 5,678 |
| Qualifying Revolving | Drawn | 16,717 | 9,463 | 16,483 | 9,316 | 17,474 | 9,997 | 17,244 | 9,953 | 16,910 | 10,031 | 16,602 | 9,662 | 16,426 | 9,556 | 16,257 | 9,564 |
|  | Undrawn | 21,108 | 2,656 | 20,519 | 2,564 | 20,100 | 2,549 | 19,693 | 2,481 | 17,705 | 2,241 | 17,123 | 2,135 | 16,734 | 2,058 | 16,716 | 2,151 |
|  | Total | 37,825 | 12,119 | 37,002 | 11,880 | 37,574 | 12,546 | 36,937 | 12,434 | 34,615 | 12,272 | 33,725 | 11,797 | 33,160 | 11,614 | 32,973 | 11,715 |
| Other Retail | Drawn | 62,182 | 38,006 | 58,627 | 35,742 | 56,615 | 34,574 | 56,432 | 34,436 | 53,313 | 32,002 | 51,959 | 31,308 | 48,315 | 29,555 | 48,656 | 29,929 |
|  | Undrawn | 799 | 203 | 691 | 165 | 674 | 159 | 669 | 158 | 712 | 178 | 677 | 164 | 660 | 156 | 667 | 165 |
|  | Total | 62,981 | 38,209 | 59,318 | 35,907 | 57,289 | 34,733 | 57,101 | 34,594 | 54,025 | 32,180 | 52,636 | 31,472 | 48,975 | 29,711 | 49,323 | 30,094 |
| Total Retail | Drawn | 319,049 | 76,994 | 311,848 | 72,677 | 307,640 | 71,428 | 309,571 | 74,641 | 304,617 | 71,197 | 301,736 | 70,031 | 295,593 | 65,600 | 297,050 | 65,821 |
|  | Undrawn | 36,494 | 4,218 | 35,508 | 4,015 | 34,819 | 3,976 | 34,140 | 3,864 | 31,048 | 3,552 | 30,353 | 3,480 | 29,748 | 3,372 | 29,695 | 3,559 |
|  | Total | 355,543 | 81,212 | 347,356 | 76,692 | 342,459 | 75,404 | 343,711 | 78,505 | 335,665 | 74,749 | 332,089 | 73,511 | 325,341 | 68,972 | 326,745 | 69,380 |
| Securitizations |  | 25,025 | 2,613 | 25,110 | 2,793 | 23,763 | 2,588 | 23,527 | 2,719 | 21,000 | 2,759 | 20,926 | 3,705 | 20,083 | 3,711 | 21,166 | 4,086 |
| Trading Derivatives <br> Derivatives - credit valuation adjustment ${ }^{(4)}$ |  | 23,421 | 6,599 | 23,633 | 6,758 | 23,144 | 6,924 | 31,216 | 9,042 | 28,234 | 8,232 | 30,013 | 8,485 | 28,854 | 7,971 | 36,673 | 10,178 |
|  |  | - | 4,165 | - | 4,749 | . | 4,778 | - | 8,304 | - | 7,183 | - | 7,282 | . | 6,732 | - | 8,154 |
| Total Credit risk (excl. Equities \& Other Assets) |  | 824,915 | 277,416 | 832,789 | 270,590 | 811,222 | 269,199 | 842,280 | 285,219 | 794,622 | 270,187 | 791,532 | 262,154 | 739,065 | 244,722 | 757,390 | 250,275 |
| Equities |  | 2,042 | 2,042 | 2,331 | 2,331 | 2,393 | 2,393 | 2,703 | 2,703 | 2,985 | 2,985 | 3,427 | 3,427 | 3,636 | 3,636 | 4,132 | 4,132 |
| Other Assets |  | 49,829 | 24,659 | 50,229 | 24,486 | 53,444 | 23,297 | 59,267 | 24,882 | 50,873 | 24,265 | 52,878 | 23,551 | 54,146 | 23,056 | 59,475 | 24,208 |
|  |  | 876,786 | 304,117 | 885,349 | 297,407 | 867,059 | 294,889 | 904,250 | 312,804 | 848,480 | 297,437 | 847,837 | 289,132 | 796,847 | 271,414 | 820,997 | 278,615 |
| Add-on for 6\% scaling factor ${ }^{(5)}$ |  |  | 10,705 |  | 10,513 |  | 10,576 |  | 11,095 |  | 10,597 |  | 10,183 |  | 9,593 |  | 9,801 |
| Total Credit Risk |  | 876,786 | 314,822 | 885,349 | 307,920 | 867,059 | 305,465 | 904,250 | 323,899 | 848,480 | 308,034 | 847,837 | 299,315 | 796,847 | 281,007 | 820,997 | 288,416 |

[^2](2) CET1 Risk-weighted Assets.
(3) Includes lending instruments such as letters of credit and letters of guarantee; banking book derivatives and repo-style exposures, net of related collateral.
(4) In accordance with OSF''s requirements, in 2018 scalars for CVA RWA of $0.80,0.83$ and 0.86 were used to compute the CET1 capital ratio, Tier 1 capital ratio and Total capital ratio, respectively
5) The Basel Framework requires an additional $6 \%$ scaling factor to AIRB credit tisk portfolios (excluding exposure with risk weight of $1250 \%$ ).
(6) As of Q2 2016 , the bank implemented the Internal Modelling Method for determination of Counterparty Credit Risk and Credit Valuation Ad

## Exposure at Default

| (\$MM) | Q2 2018 |  |  |  |  | Q1 2018 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Non-Retail |  |  | Retail | Total | Non-Retail |  |  | Retail | Total |
|  | Drawn | Undrawn | Other ${ }^{(3)}$ |  |  | Drawn | Undrawn | Other ${ }^{(3)}$ |  |  |
| Canada | 98,088 | 38,869 | 37,025 | 333,999 | 507,981 | 96,090 | 37,889 | 39,229 | 330,813 | 504,021 |
| USA | 101,086 | 31,722 | 40,841 | - | 173,649 | 89,709 | 29,296 | 38,370 | - | 157,375 |
| Mexico | 18,844 | 1,379 | 2,506 | 10,322 | 33,051 | 17,963 | 1,038 | 2,983 | 9,669 | 31,653 |
| Peru | 15,570 | 1,510 | 2,924 | 7,956 | 27,960 | 14,910 | 1,486 | 2,873 | 7,565 | 26,834 |
| Chile | 13,479 | 774 | 1,720 | 14,042 | 30,015 | 12,787 | 678 | 1,765 | 13,307 | 28,537 |
| Colombia | 5,491 | 546 | 388 | 6,292 | 12,717 | 5,526 | 405 | 489 | 5,874 | 12,294 |
| Other International |  |  |  |  |  |  |  |  |  |  |
| Europe | 21,244 | 8,394 | 11,401 | - | 41,039 | 26,366 | 6,955 | 10,619 | - | 43,940 |
| Caribbean | 18,093 | 1,640 | 1,254 | 17,678 | 38,665 | 17,483 | 1,625 | 1,275 | 16,972 | 37,355 |
| Latin America (other) | 8,133 | 724 | 942 | 736 | 10,535 | 7,724 | 465 | 458 | 684 | 9,331 |
| All Other | 23,829 | 3,430 | 2,214 | - | 29,473 | 23,517 | 3,074 | 2,747 | - | 29,338 |
| Total | 323,857 | 88,988 | 101,215 | 391,025 | 905,085 | 312,075 | 82,911 | 100,808 | 384,884 | 880,678 |
|  | Q4 2017 |  | Q3 2017 |  | Q2 2017 |  | Q1 2017 |  | Q4 2016 |  |
| Canada | 502,224 |  | 482,840 |  | 481,291 |  | 472,304 |  | 468,923 |  |
| USA | $157,386$ |  | 156,672 |  | 151,257 |  | 141,195 |  | 143,808 |  |
| Mexico | 30,528 |  | 33,202 |  | 30,094 |  | 24,561 |  | 26,873 |  |
| Peru | 28,733 |  | 27,474 |  | 29,973 |  | 27,368 |  | 28,328 |  |
| Chile | 27,190 |  | 26,306 |  | 26,701 |  | 24,367 |  | 23,510 |  |
| Colombia | 10,859 |  | 10,586 |  | 11,399 |  | 10,597 |  | 10,943 |  |
| Other International |  |  |  |  |  |  |  |  |  |  |
| Europe | 43,030 |  | 43,344 |  | 47,129 |  | 41,444 |  | 41,525 |  |
| Caribbean | 39,358 |  | 38,484 |  | 42,217 |  | 40,009 |  | 41,168 |  |
| Latin America (other) | 9,035 |  | 8,225 |  | 9,433 |  | 8,995 |  | 8,908 |  |
| All Other | 30,070 |  | 29,354 |  | 30,869 |  | 31,651 |  | 30,929 |  |
| Total | 878,413 |  | 856,487 |  | 860,363 |  | 822,491 |  | 824,915 |  |

(1) Before credit risk mitigation, excluding equity investment securities and other assets.
(2) Geographic segmentation is based upon the location of the ultimate risk of the credit exposure.
(3) Includes off-balance sheet lending instruments such as letters of credit and letters of guarantee, OTC derivatives, securitization and repo-style transactions net of related collateral.

## AIRB CREDIT RISK EXPOSURES BY MATURITY ${ }^{(1)(2)}$

## NON-RETAIL AND RETAIL PORTFOLIO EXPOSURE AT DEFAULT

| (\$MM) | Q2 2018 |  |  |  | Q1 2018 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Drawn | Undrawn | Other ${ }^{(3)}$ | Total | Drawn | Undrawn | Other ${ }^{(3)}$ | Total |
| Non-Retail |  |  |  |  |  |  |  |  |
| Less than 1 year | 139,609 | 24,410 | 61,385 | 225,404 | 134,997 | 23,619 | 63,476 | 222,092 |
| 1 to 5 years | 112,843 | 56,503 | 30,027 | 199,373 | 107,880 | 52,135 | 27,454 | 187,469 |
| Over 5 Years | 11,418 | 2,441 | 6,696 | 20,555 | 10,222 | 1,803 | 6,771 | 18,796 |
| Total Non-Retail | 263,870 | 83,354 | 98,108 | 445,332 | 253,099 | 77,557 | 97,701 | 428,357 |
| Retail |  |  |  |  |  |  |  |  |
| Less than 1 year | 31,408 | 18,750 |  | 50,158 | 33,071 | 17,111 |  | 50,182 |
| 1 to 5 years | 185,391 | - |  | 185,391 | 182,504 | - |  | 182,504 |
| Over 5 Years | 15,670 | - |  | 15,670 | 15,860 | - |  | 15,860 |
| Revolving Credits ${ }^{(4)}$ | 39,316 | 27,240 |  | 66,556 | 38,771 | 27,886 |  | 66,657 |
| Total Retail | 271,785 | 45,990 |  | 317,775 | 270,206 | 44,997 |  | 315,203 |
| Total | 535,655 | 129,344 | 98,108 | 763,107 | 523,305 | 122,554 | 97,701 | 743,560 |
|  |  |  |  |  |  |  |  |  |
| Non-Retail |  |  |  |  |  |  |  |  |
| Less than 1 year |  |  |  |  |  |  |  |  |
| 1 to 5 years |  |  |  |  |  |  |  |  |
| Over 5 Years |  |  |  |  |  |  |  |  |
| Total Non-Retail |  |  |  |  |  |  |  |  |
| Retail |  |  |  |  |  |  |  |  |
| Less than 1 year |  |  |  |  |  |  |  |  |
| 1 to 5 years |  |  |  |  |  |  |  |  |
| Over 5 Years |  |  |  |  |  |  |  |  |
| Revolving Credits ${ }^{(4)}$ |  |  |  |  |  |  |  |  |
| Total Retail |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |

[^3]
## EXPOSURE AT DEFAULT ${ }^{(1)}$

| (\$MM) <br> Risk-weight | Q2 2018 |  |  |  |  |  |  | Q1 2018 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Non-Retail |  |  |  | Retail |  |  | Non-Retail |  |  |  | Retail |  |  |
|  | Corporate | Bank | Sovereign | Total | Res Mtgs | Other Retail | Total | Corporate | Bank | Sovereign | Total | Res Mtgs | Other Retail | Total |
| 0\% | 2,117 | - | 3,748 | 5,865 | 3,319 | 1,327 | 4,646 | 2,170 | - | 4,094 | 6,264 | 2,961 | 1,307 | 4,268 |
| 20\% | 501 | 356 | - | 857 | 1,338 | - | 1,338 | 771 | 597 | - | 1,368 | 1,320 | - | 1,320 |
| 35\% | - | - | - | - | 21,376 | - | 21,376 | - | - | - | - | 19,140 | - | 19,140 |
| 50\% | 14 | 77 | 1,306 | 1,397 | 6 | 277 | 283 | 924 | 60 | 1,811 | 2,795 | 4 | 127 | 131 |
| 75\% | - | - | - | - | 9,118 | 34,983 | 44,101 | - | - | - | - | 9,570 | 33,709 | 43,279 |
| 100\% | 56,275 | 2,529 | 999 | 59,803 | 982 | - | 982 | 53,638 | 2,420 | 265 | 56,323 | 1,005 | - | 1,005 |
| 150\%+ | 806 | - | - | 806 | - | 523 | 523 | 686 | 1 | - | 687 | - | 537 | 537 |
| Total | 59,713 | 2,962 | 6,053 | 68,728 | 36,139 | 37,110 | 73,249 | 58,189 | 3,078 | 6,170 | 67,437 | 34,000 | 35,680 | 69,680 |


| Risk-weight | Q4 2017 |  | Q3 2017 |  | Q2 2017 |  | Q1 2017 |  | Q4 2016 |  | Q3 2016 |  | Q2 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Non-Retail | Retail | Non-Retail | Retail | Non-Retail | Retail | Non-Retail | Retail | Non-Retail | Retail | Non-Retail | Retail | Non-Retail | Retail |
| 0\% | 6,122 | 3,998 | 6,378 | 3,629 | 7,981 | 3,107 | 6,892 | 2,779 | 7,801 | 2,507 | 7,117 | 2,078 | 6,375 | 1,886 |
| 20\% | 1,154 | 1,593 | 1,367 | 1,587 | 1,400 | 1,780 | 1,259 | 1,737 | 2,326 | 1,823 | 2,037 | 1,821 | 2,306 | 1,985 |
| 35\% | - | 19,771 | - | 19,069 | - | 19,343 | - | 17,715 | - | 17,025 | - | 16,295 | - | 15,819 |
| 50\% | 2,151 | 133 | 2,032 | 277 | 1,808 | 339 | 282 | 331 | 462 | 345 | 634 | 419 | 835 | 203 |
| 75\% | - | 42,006 | - | 40,421 | - | 42,226 | - | 39,257 | - | 41,048 | - | 36,866 | - | 35,648 |
| 100\% | 57,919 | 1,142 | 57,084 | 1,048 | 60,318 | 1,135 | 55,967 | 1,117 | 55,022 | 1,221 | 54,192 | 1,295 | 53,109 | 1,288 |
| 150\%+ | 774 | 911 | 863 | 871 | 1,165 | 912 | 648 | 837 | 761 | 832 | 716 | 998 | 735 | 760 |
| Total | 68,120 | 69,554 | 67,724 | 66,902 | 72,672 | 68,842 | 65,048 | 63,773 | 66,372 | 64,801 | 64,696 | 59,772 | 63,360 | 57,589 |

(1) Effective Q1 2018, net of specific IFRS 9 allowances for credit losses, after credit risk mitigation. Prior period specific allowances are based on IAS 39 .

NON-RETAIL AIRB PORTFOLIO - CREDIT QUALITY

| (\$MM) |  |  | Q2 2018 |  |  |  |  |  |  |  | Q1 2018 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category external ratings ${ }^{(1)}$ | Internal grades | PD bands ${ }^{(2)}$ | Drawn Exposure at Default ${ }^{[3]}$ | Undrawn Exposure at Default ${ }^{(3)}$ | Other Exposure at Default ${ }^{(3)}$ | Total Exposure at Default ${ }^{(3)}$ | RWA | Weighted Average PD ${ }^{(4)(7)}$ | Weighted Average LGD ${ }^{(5)(7)}$ | Weighted Average $\mathbf{R W}^{(6)(7)}$ | Total Exposure at Default ${ }^{(3)}$ | RWA | Weighted Average PD ${ }^{(4)(7)}$ | Weighted Average LGD ${ }^{(5) / 7}$ | Weighted <br> Average RW ${ }^{(6)}$ |
|  |  |  | \$ | \$ | \$ | \$ | \$ | \% | \% | \% | \$ | \$ | \% | \% | \% |
| Investment Grade |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 99 | 0.00\% - 0.05\% | 381 | 240 | 562 | 1,183 | 102 | 0.03 | 45 | 9 | 758 | 85 | 0.03 | 46 | 11 |
| AAA to AA+ | 98 | 0.00\% - 0.05\% | 337 | 1,852 | 514 | 2,703 | 222 | 0.04 | 32 | 8 | 2,309 | 215 | 0.04 | 29 | 9 |
| AA to $A$ - | 95 | 0.05\% - $0.13 \%$ | 7,251 | 6,474 | 5,592 | 19,317 | 2,948 | 0.05 | 40 | 15 | 19,939 | 3,281 | 0.05 | 40 | 16 |
| $A A$ to $A$ - | 90 | 0.06\% - 0.14\% | 13,866 | 16,043 | 9,151 | 39,060 | 6,679 | 0.06 | 37 | 17 | 36,703 | 6,378 | 0.06 | 37 | 17 |
| BBB+ to BBB | 87 | 0.09\% - 0.22\% | 17,636 | 12,925 | 11,073 | 41,634 | 10,732 | 0.10 | 41 | 26 | 38,648 | 10,531 | 0.09 | 41 | 27 |
| BBB+ to BBB | 85 | 0.13\% - 0.32\% | 18,450 | 13,533 | 5,701 | 37,684 | 13,397 | 0.16 | 45 | 36 | 36,200 | 12,007 | 0.15 | 44 | 33 |
| BBB- | 83 | 0.19\% - 0.46\% | 19,246 | 10,751 | 4,988 | 34,985 | 15,239 | 0.24 | 45 | 44 | 34,159 | 15,348 | 0.24 | 45 | 45 |
| Bank |  |  | 15,091 | 2,452 | 18,765 | 36,308 | 6,455 | 0.10 | 35 | 18 | 36,022 | 6,536 | 0.11 | 35 | 18 |
|  | 99 | 0.00\% - 0.05\% | 16 | 210 |  | 226 | 9 | 0.03 | 31 | 4 | 226 | 10 | 0.03 | 31 | 5 |
| AAA to AA+ | 98 | 0.00\% - 0.05\% | 1,124 | 700 | 176 | 2,000 | 239 | 0.04 | 30 | 12 | 2,224 | 274 | 0.04 | 30 | 12 |
| AA to A - | 95 | 0.05\% - 0.13\% | 5,086 | 322 | 3,821 | 9,229 | 1,383 | 0.05 | 42 | 15 | 10,028 | 1,456 | 0.05 | 41 | 15 |
| $A A$ to $A$ - | 90 | 0.06\% - 0.14\% | 5,624 | 1,025 | 9,926 | 16,575 | 2,772 | 0.08 | 33 | 17 | 13,995 | 1,839 | 0.08 | 33 | 13 |
| BBB+ to BBB | 87 | 0.09\% - 0.22\% | 645 | 72 | 1,484 | 2,201 | 443 | 0.12 | 32 | 20 | 2,131 | 463 | 0.13 | 35 | 22 |
| BBB+ to BBB | 85 | 0.13\%-0.32\% | 1,732 | 44 | 1,940 | 3,716 | 878 | 0.22 | 35 | 24 | 4,392 | 1,518 | 0.22 | 35 | 35 |
| BBB- | 83 | 0.19\% - 0.46\% | 864 | 79 | 1,418 | 2,361 | 731 | 0.29 | 34 | 31 | 3,026 | 976 | 0.28 | 33 | 32 |
| Sovereign |  |  | 103,172 | 753 | 4,960 | 108,885 | 2,509 | 0.03 | 11 | 2 | 104,471 | 2,432 | 0.03 | 11 | 2 |
|  | 99 | 0.00\% - 0.05\% | 78,524 | 149 | 2,835 | 81,508 |  |  | 9 | - | 72,637 |  |  | 10 |  |
| AAA to AA+ | 98 | 0.00\% - 0.05\% | 2,823 | 9 | 604 | 3,436 | 204 | 0.04 | 15 | 6 | 3,328 | 185 | 0.04 | 14 | 5 |
| AA to A - | 95 | 0.05\% - 0.13\% | 14,095 | 350 | 590 | 15,035 | 907 | 0.05 | 18 | ${ }^{6}$ | 18,488 | 1,013 | 0.05 | 15 | 5 |
| $A A$ to $A$ - | 90 | 0.06\% - 0.14\% | 2,014 | 29 | 844 | 2,887 | 193 | 0.10 | 16 | 7 | 3,774 | 257 | 0.10 | 17 | 7 |
| BBB+ to BBB | 87 | 0.09\%-0.22\% | 3,806 | 43 | 9 | 3,858 | 744 | 0.22 | 25 | 19 | 4,068 | 502 | 0.22 | 15 | 12 |
| BBB+ to BBB | 85 | 0.13\% - 0.32\% | 825 | 132 | - | 957 | 139 | 0.32 | 13 | 15 | 995 | 157 | 0.32 | 14 | 16 |
| BBB- | 83 | 0.19\% - 0.46\% | 1,085 | 41 | 78 | 1,204 | 322 | 0.46 | 24 | 27 | 1,181 | 318 | 0.46 | 24 | 27 |
| Sub-Total |  |  | 195,430 | 65,023 | 61,306 | 321,759 | 58,283 | 0.09 | 31 | 18 | 309,209 | 56,813 | 0.09 | 31 | 18 |
| Non-Investment Grade |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Corporate |  |  | 58,559 | 17,531 | 11,744 | 87,834 | 55,639 | 0.61 | 44 | 63 | 84,254 | 51,700 | 0.62 | 43 | 61 |
| BB+ | 80 | 0.29\% - 0.51\% | 24,303 | 10,424 | 4,755 | 39,482 | 22,064 | 0.35 | 45 | 56 | 34,752 | 18,722 | 0.34 | 45 | 54 |
| BB | 77 | 0.47\% - 0.57\% | 16,324 | 2,953 | 2,209 | 21,486 | 13,262 | 0.49 | 43 | 62 | 21,871 | 13,463 | 0.49 | 43 | 62 |
| BB- | 75 | 0.57\% - 0.75\% | 12,082 | 2,718 | 3,522 | 18,322 | 12,973 | 0.75 | 43 | 71 | 19,288 | 12,248 | 0.75 | 42 | 63 |
| B+ | 73 | 0.75\% - 1.44\% | 4,190 | 917 | 934 | 6,041 | 4,899 | 1.44 | 37 | 81 | 6,017 | 4,997 | 1.44 | 38 | 83 |
| B to B- | 70 | 1.44\% - 2.77\% | 1,660 | 519 | 324 | 2,503 | 2,441 | 2.77 | 38 | 98 | 2,326 | 2,270 | 2.77 | 39 | 98 |
| Bank |  |  | 1,799 | 100 | 264 | 2,163 | 1,023 | 0.59 | 36 | 47 | 2,266 | 1,107 | 0.64 | 36 | 49 |
| BB+ | 80 | 0.29\% - 0.51\% | 556 | 13 | 164 | 733 | 318 | 0.48 | 38 | 43 | 608 | 264 | 0.47 | 37 | 43 |
| BB | 77 | 0.47\% - 0.57\% | 1,159 | 62 | 61 | 1,282 | 623 | 0.57 | 35 | 49 | 1,446 | 712 | 0.57 | 35 | 49 |
| BB- | 75 | 0.57\%-0.75\% | 58 | 18 | 23 | 99 | 48 | 0.75 | 36 | 49 | 125 | 69 | 0.75 | 38 | 55 |
| B+ | 73 | 0.75\% - 1.44\% | 4 | 2 | 16 | 22 | 13 | 1.44 | 32 | 60 | 6 | 5 | 1.44 | 40 | 74 |
| B to B- | 70 | 1.44\% - 2.77\% | 22 | 5 | - | 27 | 21 | 2.77 | 34 | 77 | 81 | 57 | 2.77 | 29 | 69 |
| Sovereign |  |  | 4,178 | 21 | 59 | 4,258 | 1,206 | 1.24 | 16 | 28 | 3,465 | 1,037 | 1.08 | 17 | 30 |
| BB+ | 80 | 0.29\% - 0.51\% | 637 | - | 1 | 638 | 156 | 0.51 | 20 | 24 | 566 | 156 | 0.51 | 21 | 28 |
| BB | 77 | 0.47\% - 0.57\% | 965 | 5 | 57 | 1,027 | 274 | 0.57 | 22 | 27 | 941 | 250 | 0.57 | 21 | 27 |
| BB- | 75 | 0.57\%-0.75\% | 525 | 15 | 1 | 541 | 102 | 0.75 | 11 | 19 | 325 | 71 | 0.75 | 14 | 22 |
| B+ | 73 | 0.75\% - $1.44 \%$ | 1,288 | - | - | 1,288 | 536 | 1.44 | 18 | 42 | 1,400 | 503 | 1.44 | 15 | 36 |
| B to B- | 70 | 1.44\% - 2.77\% | 763 | 1 | - | 764 | 138 | 2.77 | 7 | 18 | 233 | 57 | 2.77 | 9 | 24 |
| Sub-Total |  |  | 64,536 | 17,652 | 12,067 | 94,255 | 57,868 | 0.64 | 42 | 61 | 89,985 | 53,844 | 0.64 | 42 | 60 |


(2) PD ranges overlap across IG codes as the Bank utilizes two risk rating systems for its AIRB portfolios and each risk rating system has it own separate IG to PD mapping.
(3) Amounts are before credit risk mitigation (excludes govermment guaranteed residential mortgages). and includes all non-retail exposures except securitization, equity and other assets.
(3) Amounts are before credit risk mitigation (excludes 9 ,
(4) PD - Probability of Default, see glossary for details.
(5) LGD - Loss Given Defautt including certain conservative factors as per Basel accord, see glossary for details.
(6) RW - risk weight.
(7) Exposure at defautl (EAD) used as basis for estimated weightings, see glossary for details.

| RISK ASSESSMENT OF CREDIT RISK EXPOSURES - NON-RETAIL AIRB PORTFOLIO (CONTINUED) |  |  |  |  |  |  |  |  |  |  |  |  |  | Scotio | ank |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NON-RETAIL AIRB PORTFOLIO - CREDIT QUALITY |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| (\$MM) |  |  | Q2 2018 |  |  |  |  |  |  |  | Q1 2018 |  |  |  |  |
| Category external ratings ${ }^{(1)}$ | Internal grades | PD bands ${ }^{(2)}$ | Drawn Exposure at Default ${ }^{(3)}$ \$ | Undrawn Exposure at Default ${ }^{(3)}$ | Other Exposure at Default ${ }^{(3)}$ \$ | Total Exposure at Default ${ }^{(3)}$ \$ | RWA $\$$ | Weighted Average $P^{(4)(7)}$ $\%$ | Weighted Average LGD ${ }^{(5)(7)}$ $\qquad$ | Weighted Average RW ${ }^{(6)}$ | Total Exposure at Default ${ }^{(3)}$ | RWA | Weighted Average PD $\qquad$ | Weighted Average LGD ${ }^{(5)(7)}$ $\qquad$ | Weighted Average $\mathbf{R W}^{(6)(7)}$ $\qquad$ |
| Watch List (CCC+ to CC) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Corporate | 65-30 | 2.77\% - 59.51\% | 2,405 | 299 | 412 | 3,116 | 6,089 | 21.09 | 42 | 196 | 3,263 | 6,132 | 21.28 | 41 | 188 |
| Bank | 65-30 | 2.77\%-59.51\% | 47 | 4 | - | 51 | 89 | 23.53 | 35 | 175 | 76 | 129 | 20.32 | 36 | 169 |
| Sovereign | 65-30 | 2.77\% - 59.51\% | 509 | - | - | 509 | 328 | 19.44 | 13 | 64 | 944 | 436 | 14.93 | 10 | 46 |
| Sub-Total |  |  | 2,961 | 303 | 412 | 3,676 | 6,506 | 20.90 | 38 | 177 | 4,283 | 6,697 | 19.86 | 34 | 156 |
| Default ${ }^{(8)}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Corporate | 27-21 | 100\% | 941 | 376 | 127 | 1,444 | 4,295 | 100.00 | 42 | 297 | 1,551 | 5,943 | 100.00 | 44 | 383 |
| Bank | 27-21 | 100\% | 2 | - | - | 2 | - | 100.00 | 33 | 0 | 2 | - | 100.00 | 33 | 0 |
| Sovereign | 27-21 | 100\% | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Sub-Total |  |  | 943 | 376 | 127 | 1,446 | 4,295 | 100.00 | 42 | 297 | 1,553 | 5,943 | 100.00 | 44 | 383 |
| Total |  |  | 263,870 | 83,354 | 73,912 | 421,136 | 126,952 | 0.74 | 33 | 30 | 405,030 | 123,297 | 0.80 | 33 | 30 |

(1) The cross references of the Bank's internal borrower grades (IG) with equivalent rating categories utilized by external rating agencies are outined on page 203 of the Bank's 2017 Annual Report.
2) PD ranges overlap across IG codes as the Bank utilizes two risk rating systems for its AIRB portfolios and each risk rating system has its own separate IG to PD mapping.

(4) PD - Probability of Default, see glossary for details.

LGD - Loss Given Default including certain conservative factors as per Basel accord, see glossary for details.
k weight.
(8) EAD for defaulted exposures before related specific provisions (based on IFRS 9 as of Q1 2018, based on IAS 39 for prior periods) and write-offs.

NON-RETAIL AIRB PORTFOLIO - CREDIT COMMITMENTS

| (\$MM) | Basel III |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Q2 2018 |  | Q1 2018 |  |
| Exposure Type ${ }^{(1)}$ | Notional Undrawn | Weighted Average EAD | Notional Undrawn | Weighted Average EAD |
|  | \$ | \% | \$ | \% |
| Corporate | 151,866 | 52 | 137,906 | 52 |
| Bank | 4,141 | 58 | 4,249 | 58 |
| Sovereign | 1,233 | 57 | 1,164 | 58 |
| Total | 157,240 | 53 | 143,319 | 53 |

(1) Excludes unconditionally cancellable commitments.

RETAIL AIRB PORTFOLIO EXPOSURES - CREDIT QUALITY ${ }^{(1)}$

| (\$MM)Category of PD Grades | PD Range | Q2 2018 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | EAD ${ }^{(2)}$ | $\begin{aligned} & \text { Notional of } \\ & \text { undrawn } \\ & \text { commitments } \end{aligned}$ | $\begin{gathered} \text { Exposure } \\ \text { weighted- } \\ \text { average EAD }{ }^{(3)} \end{gathered}$ | Exposure weightedaverage PD | Exposure weighted- average LGD ${ }^{(4)}$ | Exposure weightedaverage RW | RWA | EL | EL adjusted average risk weight ${ }^{(5)}$ |
|  |  | \$ | \$ | \% | \% | \% | \% | \$ | \$ | \% |
| Residential Real Estate Secured ${ }^{(6)}$ |  |  |  |  |  |  |  |  |  |  |
| Insured Drawn and Undrawn ${ }^{(7)}$ |  |  |  |  |  |  |  |  |  |  |
| Exceptionally Low | 0.01\% to 0.04\% | 89,435 | - | 100.00 | - | 22.9 | - | - | - | - |
| Very Low | 0.05\% to 0.19\% | 1,869 | 1 | 99.94 | 0.05 | 21.4 | 3.0 | 59 | - | 3 |
| Low | 0.20\% to 0.99\% | 2,255 | - | 100.00 | 0.38 | 22.6 | 13.0 | 299 | 2 | 14 |
| Medium Low | 1.00\% to $2.99 \%$ | 1 | - | 95.37 | 2.00 | 31.1 | 61.0 | . | - | 69 |
| Medium | 3.00\% to 9.99\% | - | - | . | . | - | - |  |  | . |
| High | 10.00\% to 19.99\% | - | - | $\checkmark$ | $\cdot$ | - | $\cdot$ | - |  | - |
| Extremely High | 20.00\% to 99.99\% | 1 | - | 102.77 | 28.39 | 21.3 | 124.0 | 1 | - | 200 |
| Default Sub-total | 100\% | 17 | - | 100.00 | 100.00 | 85.7 | . |  | 15 | 1,071 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Very Low | 0.05\% to 0.19\% | 16,680 | 39,724 | 20.99 | 0.07 | 24 | 5 | 764 | 3 | 5 |
| Low | 0.20\% to 0.99\% | 582 | 1,087 | 26.77 | 0.61 | 32 | 29 | 170 | 1 | 32 |
| Medium Low | 1.00\% to 2.99\% | 111 | 195 | 28.59 | 2.00 | 35 | 68 | 75 | 1 | 76 |
| Medium | 3.00\% to 9.99\% | 23 | 40 | 28.17 | 4.94 | 29 | 99 | 22 | - | 117 |
| High | 10.00\% to 19.99\% | 11 | 15 | 34.74 | 13.64 | 28 | 144 | 15 | - | 192 |
| Extremely High | 20.00\% to 99.99\% | 2 | 1 | 117.29 | 38.10 | 28 | 153 | 3 | - | 287 |
| Default Sub-total | 100\% | . | 800 | 100.00 | . | . | . |  | . |  |
|  |  | 17,409 | 41,862 | 21.27 | 0.12 | 24 | 6 | 1,049 | 5 | 6 |
| Uninsured Drawn |  |  |  |  |  |  |  |  |  |  |
| Exceptionally Low | 0.00\% to 0.04\% | $\cdot$ | - | $\cdot$ | $\cdot$ | - | - | - | - | - |
| Very Low | 0.05\% to 0.19\% | 52,806 | - | 100.00 | 0.07 | 21 | 4 | 2,232 | 9 | 4 |
| Low | 0.20\% to 0.99\% | 69,228 | - | 100.00 | 0.52 | 22 | 17 | 11,821 | 81 | 19 |
| Medium Low | 1.00\% to $2.99 \%$ | 6,821 | - | 100.00 | 2.54 | 24 | 53 | 3,596 | 40 | 60 |
| Medium | 3.00\% to 9.99\% | 950 | - | 100.00 | 6.51 | 23 | 83 | 792 | 14 | 101 |
| High | 10.00\% to 19.99\% | 479 | - | 100.00 | 13.84 | 22 | 112 | 538 | 15 | 150 |
| Extremely High | 20.00\% to 99.99\% | 435 | - | 100.00 | 36.00 | 20 | 109 | 473 | 31 | 198 |
| Default Sub-total | 100\% | 227 | - | 100.00 | 100.00 | 71 | . |  | 162 | 893 |
|  |  | 130,946 | $\cdot$ | 100.00 | 0.83 | 22 | 15 | 19,452 | 352 | 18 |
| Qualifying Revolving Retail Exposures (QRRE) |  |  |  |  |  |  |  |  |  |  |
| Exceptionally Low | 0.00\% to 0.04\% | 11,466 | 17,536 | 31.72 | 0.05 | 73 | 2 | 261 | 4 | 3 |
| Very Low | 0.05\% to 0.19\% | 9,043 | 12,043 | 36.20 | 0.17 | 67 | 6 | 577 | 11 | 8 |
| Low | 0.20\% to 0.99\% | 11,721 | 9,004 | 50.92 | 0.54 | 76 | 17 | 1,996 | 46 | 22 |
| Medium Low | 1.00\% to 2.99\% | 7,630 | 1,933 | 77.90 | 1.76 | 84 | 49 | 3,705 | 114 | 67 |
| Medium | 3.00\% to 9.99\% | 3,474 | 246 | 93.97 | 6.41 | 86 | 121 | 4,188 | 191 | 189 |
| High | 10.00\% to 19.99\% | 358 | 21 | 99.78 | 11.18 | 84 | 166 | 595 | 34 | 283 |
| Extremely High | 20.00\% to 99.99\% | 705 | 16 | 101.11 | 35.65 | 80 | 210 | 1,478 | 200 | 564 |
| Default Sub-total | 100\% | 154 | 5,195 | 100.00 | 100.00 | 88 | . |  | 134 | 1,095 |
|  |  | 44,551 | 45,994 | 52.32 | 1.99 | 76 | 29 | 12,800 | 734 | 49 |
| Other Retail |  |  |  |  |  |  |  |  |  |  |
| Exceptionally Low | 0.00\% to 0.04\% | 529 | 779 | 32.43 | 0.05 | 70 | 10 | 51 | - | 10 |
| Very Low | 0.05\% to 0.19\% | 6,971 | 3 | 99.95 | 0.10 | 53 | 13 | 907 | 4 | 14 |
| Low | 0.20\% to 0.99\% | 15,536 | 855 | 94.89 | 0.51 | 58 | 40 | 6,210 | 45 | 44 |
| Medium Low | 1.00\% to $2.99 \%$ | 4,831 | 12 | 99.72 | 1.70 | 66 | 81 | 3,930 | 55 | 95 |
| Medium | 3.00\% to 9.99\% | 2,458 | 1 | 99.96 | 5.24 | 64 | 96 | 2,349 | 82 | 137 |
| High | 10.00\% to 19.99\% | 478 | . | 100.00 | 18.15 | 60 | 128 | 610 | 52 | 263 |
| Extremely High | 20.00\% to 99.99\% | 307 | - | 99.68 | 43.96 | 60 | 157 | 480 | 81 | 486 |
| Default Sub-total | 100\% | 182 | 124 | 100.00 | 100.00 | 89 | . | - | 162 | 1,117 |
|  |  | 31,292 | 1,774 | 96.26 | 2.24 | 59 | 46 | 14,537 | 481 | 66 |
| Total Retail |  |  |  |  |  |  |  |  |  |  |
| Exceptionally Low | 0.01\% to 0.04\% | 101,430 | 18,315 | 91.93 | 0.01 | 29 | 0 | 312 | 4 | 0 |
| Very Low | 0.05\% to 0.19\% | 87,369 | 51,771 | 78.31 | 0.09 | 29 | 5 | 4,539 | 27 | 6 |
| Low | 0.20\% to 0.99\% | 99,322 | 10,946 | 92.98 | 0.52 | 34 | 21 | 20,496 | 175 | 23 |
| Medium Low | 1.00\% to 2.99\% | 19,394 | 2,140 | 90.82 | 2.02 | 58 | 58 | 11,306 | 210 | 72 |
| Medium | 3.00\% to 9.99\% | 6,905 | 287 | 96.72 | 6.00 | 69 | 106 | 7,351 | 287 | 158 |
| High | 10.00\% to 19.99\% | 1,326 | 36 | 99.42 | 14.67 | 52 | 133 | 1,758 | 101 | 227 |
| Extremely High | 20.00\% to 99.99\% | 1,450 | 17 | 100.50 | 37.51 | 58 | 168 | 2,435 | 312 | 437 |
| Default | 100\% | 580 | 6,119 | 100.00 | 100.00 | 82 | - |  | 473 | 1,022 |
| Total |  | 317,776 | 89,631 | 88.63 | 0.86 | 34 | 15 | 48,197 | 1,589 | 21 |

(1) Represents retail exposures under the AIRB Approach which are domiciled in Canada.
(2) Amounts are before any allowances for credit losses and before credit risk mitigation.
(3) EAD rate represents combined drawn and undrawn exposure for a facility.
(4) Effective November 1, 2016, new exposures secured by residential real estate located in Canada are subject to a downturn LGD (DLGD) floor equivalent to the sum of the segment's long-run default-weighted average LGD and an add-on. The Bank 5) ELented DLGD floor in Q1, 2017.
(6) Includes Canadian residential mortgages and hs (RWA +12.5 X EL) / EAD
(7) The Bank uses the PD Substitution approach to reflect default insurance.
(7)

RETAIL AIRB PORTFOLIO EXPOSURES - CREDIT QUALITY ${ }^{(1)}$

| (\$MM)Category of PD Grades | PD Range | Q12018 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | EAD ${ }^{(2)}$ | $\begin{aligned} & \text { Notional of } \\ & \text { undrawn } \\ & \text { commitments } \end{aligned}$ | $\begin{gathered} \text { Exposure } \\ \text { weighted- } \\ \text { average EAD }{ }^{(3)} \end{gathered}$ | Exposure weightedaverage PD | Exposure weightedaverage LGD ${ }^{4}$ | Exposure weightedaverage RW | RWA | EL | EL adjusted average risk weight ${ }^{(5)}$ |
|  |  | \$ | \$ | \% | \% | \% | \% | \$ | \$ | \% |
| Residential Real Estate Secured ${ }^{(6)}$ |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Very Low | 0.05\% to 0.19\% | 1,840 | 1 | 99.94 | 0.05 | 21 | 3 | 53 | - | 3 |
| Low | 0.20\% to 0.99\% | 2,412 | - | 99.96 | 0.39 | 21 | 13 | 320 | 2 | 14 |
| Medium Low | 1.00\% to $2.99 \%$ | - | - | 98.52 | 2.02 | 21 | 41 | . | - | 47 |
| Medium | 3.00\% to 9.99\% | - | - | 102.83 | 4.96 | 21 | 69 | - | - | 82 |
| High | 10.00\% to 19.99\% | - | - | - | - | - | - | - | - | - |
| Extremely High | 20.00\% to 99.99\% | 1 | - | 102.83 | 52.22 | 21 | 103 | 1 | - | 240 |
| Default Sub-total | 100\% | 19 | - | 100.00 | 100.00 | 73 | - | - | 14 | 910 |
|  |  | 96,155 | 1 | 100.00 | 0.03 | 22 | 0 | 375 | 16 | 1 |
| Uninsured Undrawn |  |  |  |  |  |  |  |  |  |  |
| Very Low | 0.05\% to 0.19\% | 15,211 | 38,997 | 19.50 | 0.08 | 23 | 5 | 696 | 3 | 5 |
| Low | 0.20\% to 0.99\% | 456 | 1,073 | 21.25 | 0.62 | 31 | 28 | 127 | 1 | 30 |
| Medium Low | 1.00\% to 2.99\% | 94 | 194 | 24.14 | 2.02 | 34 | 66 | 62 | 1 | 75 |
| Medium | 3.00\% to 9.99\% | 20 | 40 | 24.48 | 4.96 | 27 | 87 | 17 | - | 104 |
| High | 10.00\% to 19.99\% | 11 | 17 | 31.05 | 13.70 | 28 | 144 | 15 | - | 192 |
| Extremely High | 20.00\% to 99.99\% | 2 | 1 | 154.51 | 39.64 | 29 | 155 | 3 | - | 298 |
| Default <br> Sub-total | 20.0\%\% $100 \%$ | - | 762 | 100.00 |  | - | - | - | $\cdot$ | - |
|  |  | 15,794 | 41,084 | 19.61 | 0.12 | 24 | 6 | 920 | 5 | 6 |
| Uninsured Drawn |  |  |  |  |  |  |  |  |  |  |
| Very Low | 0.05\% to 0.19\% | 47,668 | - | 100.00 | 0.07 | 20 | 4 | 1,898 | 8 | 4 |
| Low | 0.20\% to 0.99\% | 67,456 | - | 100.00 | 0.54 | 23 | 18 | 12,335 | 85 | 20 |
| Medium Low | 1.00\% to 2.99\% | 6,148 | - | 100.00 | 2.51 | 24 | 53 | 3,286 | 37 | 61 |
| Medium | 3.00\% to 9.99\% | 945 | - | 100.00 | 6.35 | 22 | 82 | 771 | 13 | 99 |
| High | 10.00\% to 19.99\% | 475 | - | 100.00 | 13.75 | 21 | 109 | 518 | 14 | 146 |
| Extremely High | 20.00\% to 99.99\% | 454 | - | 100.00 | 36.27 | 20 | 107 | 486 | 32 | 196 |
| Default Sub-total | 100\% | 228 | - | 100.00 | 100.00 | 63 | - | - | 144 | 793 |
|  |  | 126,894 | - | 100.00 | 0.84 | 22 | 15 | 19,421 | 333 | 19 |
| Qualifying Revolving Retail Exposures (QRRE) |  |  |  |  |  |  |  |  |  |  |
| Exceptionally Low | 0.00\% to 0.04\% | 11,946 | 17,068 | 34.01 | 0.05 | 77 | 2 | 289 | 4 | 3 |
| Very Low | 0.05\% to 0.19\% | 8,842 | 11,685 | 36.53 | 0.17 | 69 | 7 | 578 | 11 | 8 |
| Low | 0.20\% to 0.99\% | 11,684 | 8,911 | 51.56 | 0.50 | 79 | 17 | 1,953 | 45 | 22 |
| Medium Low | 1.00\% to $2.99 \%$ | 5,874 | 1,249 | 80.91 | 1.39 | 87 | 43 | 2,517 | 73 | 58 |
| Medium | 3.00\% to 9.99\% | 5,686 | 1,008 | 84.72 | 5.58 | 86 | 110 | 6,235 | 276 | 170 |
| High | 10.00\% to 19.99\% | - | - | - | - | - | - | . | . | . |
| Extremely High | 20.00\% to 99.99\% | 807 | 19 | 100.66 | 35.26 | 83 | 217 | 1,750 | 233 | 578 |
| Default <br> Sub-total | 100\% | 163 | 5,074 | 100.00 | 100.00 | 90 |  |  | 146 | 1,119 |
|  |  | 45,002 | 45,014 | 53.02 | 2.06 | 78 | 30 | 13,322 | 788 | 51 |
| Other Retail |  |  |  |  |  |  |  |  |  |  |
| Exceptionally Low | 0.00\% to 0.04\% | 562 | 773 | 34.76 | 0.05 | 74 | 10 | 58 | - | 11 |
| Very Low | 0.05\% to 0.19\% | 6,970 | 3 | 99.95 | 0.10 | 50 | 13 | 876 | 4 | 13 |
| Low | 0.20\% to 0.99\% | 15,268 | 828 | 94.78 | 0.51 | 56 | 39 | 5,968 | 44 | 43 |
| Medium Low | 1.00\% to 2.99\% | 4,873 | 12 | 99.72 | 1.74 | 65 | 80 | 3,908 | 55 | 94 |
| Medium | 3.00\% to 9.99\% | 2,590 | 1 | 99.96 | 5.36 | 63 | 94 | 2,439 | 87 | 136 |
| High | 10.00\% to 19.99\% | 523 | - | 100.00 | 19.74 | 57 | 127 | 666 | 59 | 269 |
| Extremely High | 20.00\% to 99.99\% | 370 | - | 99.92 | 41.46 | 58 | 151 | 558 | 89 | 451 |
| Default <br> Sub-total | 100\% | 203 | 121 | 100.00 | 100.00 | 92 | - | - | 187 | 1,151 |
|  |  | 31,359 | 1,738 | 96.23 | 2.45 | 57 | 46 | 14,473 | 525 | 67 |
| Total Retail |  |  |  |  |  |  |  |  |  |  |
| Exceptionally Low | 0.01\% to 0.04\% | 107,911 | 17,841 | 92.36 | 0.01 | 29 | 0 | 475 | 4 | 0 |
| Very Low | 0.05\% to 0.19\% | 80,531 | 50,686 | 77.82 | 0.09 | 29 | 5 | 4,101 | 26 | 5 |
| Low | 0.20\% to 0.99\% | 97,276 | 10,812 | 92.99 | 0.52 | 35 | 21 | 20,703 | 177 | 24 |
| Medium Low | 1.00\% to 2.99\% | 16,989 | 1,455 | 92.90 | 1.90 | 58 | 58 | 9,773 | 166 | 70 |
| Medium | 3.00\% to 9.99\% | 9,241 | 1,049 | 90.43 | 5.60 | 73 | 102 | 9,462 | 376 | 153 |
| High | 10.00\% to 19.99\% | 1,009 | 17 | 99.28 | 16.85 | 40 | 119 | 1,199 | 73 | 210 |
| Extremely High | 20.00\% to 99.99\% | 1,634 | 20 | 100.37 | 36.96 | 59 | 171 | 2,798 | 354 | 443 |
| Default | 100\% | 613 | 5,957 | 100.00 | 100.00 | 80 | - | - | 491 | 1,002 |
| Total |  | 315,204 | 87,837 | 88.89 | 0.89 | 34 | 15 | 48,511 | 1,667 | 22 |

(1) Represents retail exposures under the AIRB Approach which are domiciled in Canada.
(2) Amounts are before any allowances for credit losses and before credit risk mitigation.
(3) EAD rate represents combined drawn and undrawn exposure for a facility.
(4) Effective November 1, 2016, new exposures secured by residential real estate located in Canada are subject to a downturn LGD (DLGD) floor equivalent to the sum of the segment's long-run default-weighted average LGD and an add-on. The Bank implemented DLGD floor in Q1, 2017.
(5) EL adjusted average risk weight is calculated as (RWA $+12.5 \times$ EL) / EAD
(7) The Bank uses the PD Substitution approach to reflect default insurance

| Exposure Type | Q2 2018 |  | Q1 2018 |  | Q4 2017 |  | Q3 2017 |  | Q2 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \hline \text { Actual Loss } \\ \text { Rate } \end{array}$ | Expected Loss Rate | Actual Loss Rate | Expected Loss Rate | Actual Loss Rate | Expected Loss Rate | Actual Loss Rate | Expected Loss Rate | Actual Loss Rate | Expected Loss Rate |
|  | \% | \% | \% | \% | \% | \% | \% | \% | \% | \% |
| Non-Retail ${ }^{(1)}$ |  |  |  |  |  |  |  |  |  |  |
| Corporate | 0.08 | 0.68 | 0.06 | 0.76 | 0.07 | 0.80 | 0.11 | 0.81 | 0.14 | 0.78 |
| Sovereign | - | 0.02 | - | 0.02 | - | 0.02 | - | 0.02 | - | 0.02 |
| Bank | - | 0.09 | - | 0.09 | - | 0.08 | - | 0.09 | - | 0.10 |
| Retail ${ }^{(2)}$ |  |  |  |  |  |  |  |  |  |  |
| Real Estate Secured | 0.01 | 0.12 | 0.01 | 0.12 | 0.01 | 0.12 | 0.01 | 0.11 | 0.01 | 0.11 |
| QRRE | 2.87 | 3.94 | 3.04 | 4.38 | 3.18 | 4.22 | 2.77 | 4.16 | 2.62 | 4.23 |
| Other Retail | 0.67 | 1.85 | 0.69 | 2.01 | 0.69 | 1.85 | 0.66 | 1.91 | 0.62 | 1.86 |

(1) Non-retail actual loss rates represent the credit losses net of recoveries for the current and prior three quarters divided by the 5-point average of outstanding loan balances for the same fourquarter period beginning 12 months ago. Expected loss rates represent the expected losses that were predicted at the beginning of the four-quarter period divided by outstanding loan balances at the beginning of the four-quarter period.
(2) Retail actual loss rates represent write-offs net of recoveries for the current and prior three quarters divided by the 5 -point average of outstanding loan balances for the same four-quarter period beginning 12 months ago. Expected loss rates represent the expected losses that were predicted at the beginning of the four-quarter period divided by outstanding loan balances at the beginning of the four-quarter period.

|  | Q2 $2018{ }^{(1)}$ |  |  |  |  |  | Q1 $2018{ }^{(1)}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average estimated PD \% | Actual default rate \% | Average estimated LGD \% | Actual LGD \% | Average estimated $\mathrm{CCF}^{(2)}$ \% | Actual $\mathbf{C C F}^{(2)}$ | Average estimated PD \% | Actual default rate \% | Average estimated LGD \% | Actual LGD $\%$ | Average estimated $\mathrm{CCF}^{\left({ }^{(2)}\right.}$ \% | Actual $\mathrm{CCF}^{(2)} \%$ |
| Non-Retail | 0.99 | 0.29 | 41.24 | 26.50 | 48.48 | 17.22 | 0.92 | 0.33 | 41.62 | 26.14 | 48.42 | 13.94 |

${ }^{(1)}$ Reporting is on a one quarter lag basis. For reporting as of Q2/18, estimated parameters are based on portfolio averages at Q1/17 whereas actual parameters are based on averages of realized parameters during the subsequent
four quarters (Q2/17-Q1/18).
${ }^{(2)}$ EAD back-testing is performed through Credit Conversion Factor (CCF) back-testing, as EAD is computed using the sum of the drawn exposure and undrawn exposure multiplied by the estimated CCF.

| (\$MM) | Four-quarter period ending Q2 $2018{ }^{(1)}$ |  |  |  |  |  | Four-quarter period ending Q1 $2018{ }^{(1)}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average estimated PD ${ }^{(2)(7)}$ | Actual default rate ${ }^{(2)(5)}$ | Average estimated LGD ${ }^{(3)(7)}$ | $\begin{array}{r} \text { Actual } \\ \operatorname{LGD}^{(3)(6)} \\ \% \end{array}$ | Estimated | Actual EAD ${ }^{(4)(5)}$ | Average estimated PD ${ }^{(2)(7)}$ | Actual default rate ${ }^{(2)(5)}$ | Average estimated $\mathrm{LGD}^{(3)(7)}$ | $\begin{aligned} & \text { Actual } \\ & \operatorname{LGD}^{(3)(6)} \end{aligned}$ | $\begin{aligned} & \text { Estimated } \\ & \text { EAD }^{(4)(7)} \end{aligned}$ | Actual EAD ${ }^{(4)(5)}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential mortgages |  |  |  |  |  |  |  |  |  |  |  |  |
| Insured mortgages ${ }^{(8)}$ | 0.76 | 0.49 | - | - | - | - | 0.71 | 0.52 | - | - | - | - |
| Uninsured mortgages | 0.52 | 0.36 | 16.74 | 11.67 | - | - | 0.47 | 0.38 | 18.11 | 10.92 | - | - |
| Secured lines of credit | 0.43 | 0.28 | 29.50 | 15.21 | 94 | 85 | 0.78 | 0.32 | 28.65 | 13.67 | 105 | 90 |
| Qualifying revolving retail exposures | 2.15 | 1.73 | 79.55 | 67.68 | 704 | 617 | 2.15 | 1.85 | 77.69 | 65.07 | 733 | 641 |
| Other retail | 2.04 | 1.21 | 60.39 | 49.01 | 5 | 5 | 2.1 | 1.28 | 58.80 | 48.36 | 6 | 5 |

(1) Estimates and Actual Values are recalculated to align with new models implemented during the period.
(2) Account weighted aggregation.
(3) Default weighted aggregation.
(4) EAD is estimated for revolving products only.
(5) Actual based on accounts not at default as at four quarters prior to reporting date.
(6) Actual LGD calculated based on 24 month recovery period after default and therefore excludes any recoveries received after the 24 month period.
(7) Estimates are based on the four quarters prior to the reporting date.
(8) Actual and Estimated LGD for insured mortgages are not shown. Actual LGD includes the insurance benefit, whereas estimated LGD may not.

## EXPOSURE AT DEFAULT ${ }^{(1)}$

(\$MM)

Exposure type

Non-Retail
Corporate
Bank
Sovereign
Total Non-Retail
Retail
Residential Mortgages ${ }^{(2)}$
Secured Lines of Credit
Qualifying Revolving Retail Exposures (QRRE)
Other Retail
Total Retail
Total

| Q2 2018 |  |  | Q1 2018 |  |  | Q4 2017 |  |  | Q3 2017 |  |  | Q2 2017 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Financial Collateral | Guarantees / Credit Derivatives |  | Financial Collateral | Guarantees / Credit Derivatives |  | Financial Collateral | Guarantees / Credit Derivatives |  | Financial Collateral | Guarantees / Credit Derivatives |  | Financial Collateral | Guarantees / Credit Derivatives |  |
| Standardized Approach | Standardized Approach | AIRB Approach | Standardized Approach | Standardized Approach | AIRB Approach | Standardized Approach | Standardized Approach | AIRB Approach | Standardized Approach | Standardized Approach | AIRB Approach | Standardized Approach | Standardized Approach | AIRB Approach |
| 585 | $\begin{array}{r} 2,015 \\ 67 \end{array}$ | $\begin{array}{r} 14,886 \\ 8,742 \\ 2,774 \end{array}$ | 633 | $\begin{array}{r}2,010 \\ \hline 9\end{array}$ | $\begin{array}{r} 16,304 \\ 9,046 \\ 3,899 \\ \hline \end{array}$ | 635 | 1,974 - 73 | $\begin{array}{r} 16,341 \\ 9,273 \\ 6,109 \\ \hline \end{array}$ | 628 - 2 | 1,866 <br>  <br> 76 | $\begin{array}{r} 15,745 \\ 8,436 \\ 6,288 \\ \hline \end{array}$ | 580 | 1,840 | $\begin{array}{r} 19,210 \\ 8,703 \\ 6,124 \end{array}$ |
| 585 | 2,082 | 26,402 | 633 | 2,079 | 29,249 | 635 | 2,047 | 31,723 | 630 | 1,942 | 30,469 | 580 | 1,840 | 34,037 |
| 6 | 4,657 | 89,435 | 4 | 4,281 | 91,857 | 4 | 4,243 | 93,095 | - | 3,746 | 96,794 | - | 3,522 | 98,354 |
| 526 | 1,079 | - | 362 | 1,074 | - | 373 | 1,104 | - | 547 | 1,199 | - | 637 | 1,067 | - |
| 532 | 5,736 | 89,435 | 366 | 5,355 | 91,857 | 377 | 5,347 | 93,095 | 547 | 4,945 | 96,794 | 637 | 4,589 | 98,354 |
| 1,117 | 7,818 | 115,837 | 999 | 7,434 | 121,106 | 1,012 | 7,394 | 124,818 | 1,177 | 6,887 | 127,263 | 1,217 | 6,429 | 132,391 |

(1) Includes drawn, undrawn and other off-balance sheet exposures (e.g., letters of credit and letters of guarantee) covered by eligible collateral and guarantees.
(2) Primarily includes insured drawn Canadian residential mortgages (e.g. CMHC insured mortgages).
Swaps
Options Purchased
Options Written
Options Written
Total
Foreign Exchange Contracts:
Futures and Forwards
Futures and Forwa
Swaps
Options Purchased
Options Written
Options
Total
Other Derivatives Contracts:
Equity
Credit
Other

Credit Valuation Adjustment ${ }^{(2(3) 3}$
Total Derivatives after Netting and Collateral

| Q2 2018 |  |  |  | Q12018 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Notional Amount | Credit Risk Amount | Credit Risk Equivalent Amount | Risk-weighted Amount ${ }^{(3)}$ | Notional Amount | Credit Risk Amount | Credit Risk Equivalent Amount | $\begin{aligned} & \text { Risk-weighted } \\ & \text { Amount }^{(3)} \end{aligned}$ | Notio |
| 522,515 | 72 | 295 | 80 | 475,328 | 9 | 204 | 40 |  |
| 3,605,918 | 253 | 4,870 | 1,142 | 3,106,659 | 561 | 4,560 | 854 |  |
| 44,468 | 3 | 1,122 | 351 | 44,681 | 1 | 89 | 41 |  |
| 35,392 |  | 3 | 1 | 39,851 |  | 1 |  |  |
| 4,208,293 | 328 | 6,290 | 1,574 | 3,666,519 | 571 | 4,854 | 935 |  |
| 497,076 | 1,419 | 4,900 | 1,665 | 540,034 | 2,889 | 5,423 | 1,569 |  |
| 379,532 | 3,668 | 5,950 | 1,982 | 379,457 | 3,674 | 6,404 | 1,980 |  |
| 40,694 | 482 | 614 | 190 | 34,873 | 458 | 407 | 121 |  |
| 39,683 |  | 98 | 29 | 35,032 |  | 46 | 7 |  |
| 956,985 | 5,569 | 11,562 | 3,866 | 989,396 | 7,021 | 12,280 | 3,677 |  |
| 112,499 | 13 | 5,307 | 1,670 | 108,887 | 5 | 4,674 | 1,425 |  |
| 33,586 | 46 | 950 | 164 | 34,372 | 1 | 1,295 | 182 |  |
| 110,229 | 1,555 | 8,240 | 1,033 | 113,275 | 856 | 8,770 | 1,082 |  |
| 256,314 | 1,614 | 14,497 | 2,867 | 256,534 | 862 | 14,739 | 2,689 |  |
|  |  |  | 3,757 |  |  |  | 2,760 |  |
| 5,421,592 | 7,511 | 32,349 | 12,064 | 4,912,449 | 8,454 | 31,873 | 10,061 |  |


| Q2 2017 |  | Q1 2017 |  | Q4 2016 |  | Q3 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Notional Amount | Risk-weighted Amount ${ }^{3}$ ) | Notional Amount | Risk-weighted Amount ${ }^{3}$ | Notional Amount | Risk-weighted Amount ${ }^{(3)}$ | Notional Amount | $\underset{\substack{\left.\text { Risk-weighted } \\ \text { Amount } t^{3}\right)}}{ }$ |
| 476,404 | 14 | 422,104 | 17 | 422,104 | 17 | 517,818 | 19 |
| 2,343,203 | 1,626 | 2,294,534 | 2,125 | 2,294,534 | 2,125 | 2,404,362 | 2,321 |
| 40,690 | 77 | 50,830 | 52 | 50,830 | 52 | 58,697 | 59 |
| 43,454 |  | 40,147 |  | 40,147 |  | 50,236 |  |
| 2,903,751 | 1,720 | 2,807,615 | 2,194 | 2,807,615 | 2,194 | 3,031,113 | 2,399 |
| 461,815 | 1,375 | 485,153 | 1,342 | 485,153 | 1,342 | 484,425 | 1,564 |
| 377,982 | 1,881 | 354,604 | 1,594 | 354,604 | 1,594 | 341,829 | 1,359 |
| 26,363 | 226 | 16,616 | 129 | 16,616 | 129 | 20,451 | 134 |
| 26,732 | 38 | 16,245 | 19 | 16,245 | 19 | 20,173 | 16 |
| 892,892 | 3,520 | 872,618 | 3,084 | 872,618 | 3,084 | 866,878 | 3,073 |
| 100,502 | 1,740 | 87,908 | 1,677 | 87,908 | 1,677 | 77,185 | 1,556 |
| 42,705 | 196 | 49,058 | 340 | 49,058 | 340 | 46,779 | 388 |
| 118,764 | 905 | 78,753 | 645 | 78,753 | 645 | 76,838 | 739 |
| 261,971 | 2,841 | 215,719 | 2,662 | 215,719 | 2,662 | 200,802 | 2,683 |
| 4,058,614 | 8,081 | 3,895,952 | 7,940 | 3,895,952 | 7,940 | 4,098,793 | 8,155 |
|  | 3,923 |  | 4,165 |  | 4,165 |  | 4,749 |
|  | 12,004 |  | 12,105 |  | 12,105 |  | 12,904 |

Credit Valuation Adjustment ${ }^{(2(3)}$
Risk-weighted Amount

## Contract Types

Interest Rate Contracts:
Futures and Forward Rate Agre
Swaps
Otions Purchased
Options Written
Total
Foreign Exchange Contracts:
Futures and Forwards
Swaps
Options Purchased
Otions Written
Total
Other Derivatives Contracts:
Equity
Credit
Other
Total
Total Derivatives
Credit Valuation Adjustment ${ }^{\text {(2)3) }}$
Risk-weighted Amount
(1) The impact of Master Netting Agreements and Collateral has been incorporated within the various contracts. As a result, risk-weighted amounts are reported net of impact of collateral and master netting arrangements.
(2) As per OSFI guideline, Credit Valuation Adjustment RWA on derivatives was phased-in in 2014. Effective Q1, 2018 the CVA risk-weighted assets have been calculated using scalars
3) As 2010
(3) As of Q2 2016, the bank implemented the Internal Modelling Method for determination of Counterparty Credit Risk and Credit Valuation Adjustment RWA.

| (\$MM) |  |  | Q2 2018 |  |  |  | Q1 2018 |  |  |  | Q4 2017 |  |  |  | Q3 2017 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | External Rating (S\&P) | $\begin{gathered} \text { Risk-Weight } \\ \% \end{gathered}$ | Exposure at Default ${ }^{(2)}$ |  |  | RiskWeighted Assets | Exposure at Default ${ }^{(2)}$ |  |  | RiskWeighted Assets | Exposure at Default ${ }^{(2)}$ |  |  | RiskWeighted Assets | Exposure at Default ${ }^{(2)}$ |  |  | RiskWeighted Assets |
| Risk Category |  |  | On- Balance Sheet | Off- <br> Balance Sheet | Total |  | On- Balance Sheet | $\begin{aligned} & \text { Off- } \\ & \text { Balance } \\ & \text { Sheet } \end{aligned}$ | Total |  | On- Balance Sheet | OffBalance Sheet | Total |  | On- Balance Sheet Sheet | OffBalance Sheet | Total |  |
| Securitization |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Investment Grade | AAA to A | 7-25 | 9,265 | 14,308 | 23,573 | 1,982 | 8,709 | 14,069 | 22,778 | 2,006 | 8,850 | 14,184 | 23,034 | 2,097 | 10,157 | 12,567 | 22,724 | 2,070 |
|  | A- to BBB- ${ }^{(3)}$ | 35-100 | 194 | 342 | 536 | 278 | 130 | 338 | 468 | 227 | 135 | 336 | 471 | 230 | 130 | 335 | 465 | 223 |
| Non-Investment Grade | $\mathrm{BB}+$ to BB Below BB- | $\begin{gathered} 150-650 \\ 1250 \end{gathered}$ | 11 | 2 | 13 | 54 | 11 | 1 | 12 | 52 | 12 | 1 | 13 | 54 | 18 | 1 | 19 | 95 |
|  |  |  | 9,470 | 14,652 | 24,122 | 2,314 | 8,850 | 14,408 | 23,258 | 2,285 | 8,997 | 14,521 | 23,518 | 2,381 | 10,305 | 12,903 | 23,208 | 2,388 |
| Resecuritization |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Investment Grade | AAA to A $A$ - to BBB- | $\begin{gathered} 20-65 \\ 100-350 \end{gathered}$ | 72 | 2 | 74 | 147 | 69 | 1 |  | 141 | 73 |  |  | - |  |  | $70^{-}$ |  |
|  |  |  |  |  |  |  |  |  | 70 |  |  |  | 73 | 148 | 70 |  | 70 | 141 |
| Non-Investment Grade | BB+ to BB -Below BB - | $500-850$1250 | - - - |  |  | - | - - |  |  | - |  |  |  | - | - |  | - | - |
|  |  |  | 72 | 2 | 74 | 147 | 69 | 1 | 70 | 141 | 73 | - | 73 | 148 | 70 | - | 70 | 141 |
| Total |  |  | 9,542 | 14,654 | 24,196 | 2,461 | 8,919 | 14,409 | 23,328 | 2,426 | 9,070 | 14,521 | 23,591 | 2,529 | 10,375 | 12,903 | 23,278 | 2,529 |
| (\$MM) |  |  | Q2 2018 |  |  |  | Q1 2018 |  |  |  | Q4 2017 |  |  |  | Q3 2017 |  |  |  |
| Underlying Asset |  |  | Exposure at Default ${ }^{(2)}$ |  |  | Exposures at Default (RW=1250\%) | Exposure at Default ${ }^{(2)}$ |  |  | Exposures at Default (RW=1250\%) | Exposure at Default ${ }^{(2)}$ |  |  | Exposures at Default (RW=1250\%) | Exposure at Default ${ }^{(2)}$ |  |  | Exposures at Default (RW= $1250 \%$ ) |
|  |  |  | On- Balance Sheet | Off- <br> Balance Sheet | Total |  | On- Balance Sheet | Off- <br> Balance Sheet | Total |  | On- Balance Sheet | Off- <br> Balance Sheet | Total |  | On- Balance Sheet | Off- <br> Balance Sheet | Total |  |
|  |  |  | 3 | 1,608 | 1,611 | - | 4 | 1,608 | 1,612 | - | 5 | 1,608 | 1,613 | - | 6 | 1,608 | 1,614 | - |
| Commercial Mortgages |  |  | - |  |  | - | - |  |  | - | - |  |  | - |  |  |  | - |
| Credit cards/Consumer receivables |  |  | 1,020 | 3,114 | 4,134 | - | 695 | 2,653 | 3,348 | - | 724 | 2,652 | 3,376 | - | 642 | 2,665 | 3,307 | - |
| Auto loans/Leases |  |  | 4,652 | 6,027 | 10,679 | - | 4,252 | 6,892 | 11,144 | - | 4,032 | 6,907 | 10,939 | - | 5,107 | 5,915 | 11,022 | - |
| Diversified asset-backed | d securities |  | 107 | 12 | 119 | - | 107 | 8 | 115 | - | 115 | 5 | 120 | - | 189 | 2 | 191 |  |
| Business Loans |  |  | - |  |  | - | - | - |  | - | - | - |  | - |  | - | - | - |
| Trade receivables |  |  | 3,285 | 3,380 | 6,665 | - | 3,486 | 3,241 | 6,727 | - | 3,681 | 3,339 | 7,020 | - | 3,935 | 2,703 | 6,638 | - |
| Other <br> Total |  |  | 475 | 513 | 988 | - | 374 | 7 | 381 | - | 513 | 10 | 523 | - | 496 | 10 | 506 | - |
|  |  |  | 9,542 | 14,654 | 24,196 | - | 8,918 | 14,409 | 23,327 | - | 9,070 | 14,521 | 23,591 | - | 10,375 | 12,903 | 23,278 | - |

(1) Capital charges related to trading book securitization exposures are based upon the Bank's internal market risk models including its comprehensive risk measure.
 $A B C P$ conduits.
(3) Included in on-balance sheet exposures effective Q3 2016 are investment grade subordinated notes retained by the Bank, issued by Trillium Credit Card Trust II, and backed by bank originated credit card receivables. OSFI's Securitization Framework is applied.

| (\$MM) |  |  | Q2 2017 |  |  |  | Q1 2017 |  |  |  | Q4 2016 |  |  |  | Q3 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Risk Category | External Rating (S\&P) | Risk-Weight$\%$ | Exposure at Default ${ }^{(2)}$ |  |  | RiskWeighted Assets | Exposure at Default ${ }^{(2)}$ |  |  | RiskWeighted Assets | Exposure at Default ${ }^{(2)}$ |  |  | RiskWeighted Assets | Exposure at Default ${ }^{(2)}$ |  |  | RiskWeighted Assets |
|  |  |  | On- Balance Sheet Sheet | OffBalance Sheet | Total |  | On- Balance Sheet | OffBalance Sheet | Total |  | On- Balance Sheet | OffBalance Sheet | Total |  | OnBalance Sheet | OffBalance Sheet | Total |  |
| Securitization |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Investment Grade | AAA to A | 7-25 | 10,423 | 14,132 | 24,555 | 2,225 | 9,999 | 13,363 | 23,362 | 2,074 | 10,176 | 14,602 | 24,778 | 2,081 | 10,183 | 14,600 | 24,783 | 2,090 |
|  | A- to BBB- ${ }^{(3)}$ | 35-100 | 134 | 4 | 138 | 114 | 142 | 4 | 146 | 117 | 136 | 12 | 148 | 119 | 169 | 10 | 179 | 151 |
| Non-Investment Grade | $\mathrm{BB}+\text { to } \mathrm{BB}-$ <br> Below BB- | $\begin{gathered} 150-650 \\ 1250 \end{gathered}$ | 13 | - | 13 | 57 | - |  | - | - | - | - | - | - | 3 |  | 3 | 8 |
|  |  |  | 10,570 | 14,136 | 24,706 | 2,396 | 10,141 | 13,367 | 23,508 | 2,191 | 10,312 | 14,614 | 24,926 | 2,200 | 10,355 | 14,610 | 24,965 | 2,249 |
| Resecuritization |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Investment Grade | AAA to A $A$ - to BBB- | $\begin{gathered} 20-65 \\ 100-350 \end{gathered}$ | 62 | 2 | 64 | 128 | 61 |  |  | 122 | 79 | - | 79 | 158 | 69 | 38 | 38 69 | 25 151 |
| Non-Investment Grade | $\mathrm{BB}+\text { to } \mathrm{BB}-$ <br> Below BB- | $\begin{gathered} 500-850 \\ 1250 \end{gathered}$ | - | - | - | - | - |  | - | - | - | - | - | - | 18 |  | 18 | 119 |
|  |  |  | 15 | - | 15 | 193 | 20 | - | 20 | 248 | 20 | - | 20 | 255 | 20 | - | 20 | 249 |
|  |  |  | 77 | 2 | 79 | 321 | 81 | - | 81 | 370 | 99 | - | 99 | 413 | 107 | 38 | 145 | 544 |
| Total |  |  | 10,647 | 14,138 | 24,785 | 2,717 | 10,222 | 13,367 | 23,589 | 2,561 | 10,411 | 14,614 | 25,025 | 2,613 | 10,462 | 14,648 | 25,110 | 2,793 |
| (\$MM) |  |  | Q2 2017 |  |  |  | Q1 2017 |  |  |  | Q4 2016 |  |  |  | Q3 2016 |  |  |  |
| Underlying Asset |  |  | Exposure at Default ${ }^{(2)}$ |  |  |  | Exposure at Default ${ }^{(2)}$ |  |  | Exposures at Default (RW=1250\%) | Exposure at Default ${ }^{(2)}$ |  |  | Exposures at Default (RW=1250\%) | Exposure at Default ${ }^{(2)}$ |  |  | Exposures at Default (RW=1250\%) |
|  |  |  | On- Balance Sheet | Balance Sheet | Total | Exposures at Default (RW=1250\%) | On- Balance Sheet Sheet | Bat <br> Balance Sheet | Total |  | On- Balance Sheet | Balance Sheet | Total |  | On- Balance Sheet | Bat <br> Balance Sheet | Total |  |
| Residential Mortgages |  |  | - | 1,275 | 1,275 | - | 468 | 1,275 | 1,743 | - | 510 | 1,275 | 1,785 | - | 461 | 1,275 | 1,736 | - |
| Commercial Mortgages |  |  | - |  |  | - |  | - |  | - | - | - |  | - | 3 | - | 3 | - |
| Credit cards/Consumer receivables |  |  | 703 | 2,720 | 3,423 | - | 614 | 2,213 | 2,827 | - | 623 | 2,304 | 2,927 | - | 765 | 2,491 | 3,256 | - |
| Auto loans/Leases |  |  | 5,461 | 6,355 | 11,816 | - | 4,180 | 6,440 | 10,620 | - | 4,295 | 6,889 | 11,184 | - | 4,242 | 6,824 | 11,066 | - |
| Diversified asset-backed securities |  |  | 125 | 38 | 163 | 15 | 54 | 61 | 115 | 20 | 136 | 34 | 170 | 20 | 169 | 14 | 183 | 20 |
| Business Loans |  |  |  | - |  | - | - | 12 | 12 | - | - | 22 | 22 | - | - | 32 | 32 | - |
| Trade receivables |  |  | 3,604 | 3,714 | 7,318 | - | 4,176 | 3,342 | 7,518 | - | 3,963 | 4,070 | 8,033 | - | 4,093 | 3,850 | 7,943 | - |
| Other |  |  | 754 | 36 | 790 | - | 730 | 24 | 754 | - | 884 | 20 | 904 | - | 729 | 162 | 891 | - |
| Total |  |  | 10,647 | 14,138 | 24,785 | 15 | 10,222 | 13,367 | 23,589 | 20 | 10,411 | 14,614 | 25,025 | 20 | 10,462 | 14,648 | 25,110 | 20 |

(1) Capital charges related to trading book securitization exposures are based upon the Bank's internal market risk models including its comprehensive risk measure. Prior periods have been restated to conform with current presentation.
(2) Includes banking book on-balance sheet investments in asset backed securities (ABS), collateralized loan obligations (CLOs), collateralized debt obligations (CDOs), and off-balance sheet liquidity lines and credit enhancements to bank sponsored and non-bank sponsored

ABCP conduits.


## TOTAL MARKET RISK-WEIGHTED ASSETS

| (\$MM) | Q2 2018 | Q1 2018 | Q4 2017 | Q3 2017 | Q2 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| All Bank VaR | 1,814 | 1,646 | 1,380 | 1,398 | 1,390 |
| All Bank stressed VaR | 4,882 | 5,080 | 3,745 | 3,368 | 3,201 |
| Incremental risk charge | 1,672 | 2,500 | 2,181 | 3,383 | 3,557 |
| Comprehensive risk measure ${ }^{(1)}$ | - | - |  | 264 | 602 |
| Standardized approach | 468 | 679 | 533 | 491 | 402 |
| Market risk-weighted assets as at end of Quarter | 8,836 | 9,905 | 7,839 | 8,904 | 9,152 |

(1) Comprehensive risk measure charges are no longer applicable as of Q4 2017.

## SUMMARY COMPARISON OF ACCOUNTING BASIS vs LEVERAGE RATIO EXPOSURE MEASURE - for D-SIBs

| (\$MM) | Item | Q2 2018 | Q1 2018 |
| :---: | :---: | :---: | :---: |
| 1 | Total consolidated assets as per published financial statements | 926,310 | 923,152 |
| 2 | Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation | $(1,162)$ | (531) |
| 3 | Adjustment for fiduciary assets recognized on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio exposure measure | - |  |
| 4 | Adjustments for derivative financial instruments | 4,062 | 371 |
| 5 | Adjustment for securities financing transactions (i.e., repo assets and similar secured lending) | 11,811 | 11,504 |
| 6 | Adjustment for off balance-sheet items (i.e., credit equivalent amounts of off-balance sheet exposures) | 132,413 | 126,866 |
| 7 | Other adjustments | $(12,786)$ | $(12,599)$ |
| 8 | Leverage Ratio Exposure | 1,060,648 | 1,048,763 |


| (\$MM) | Item | Q2 2018 | Q1 2018 |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ | On-balance sheet exposures ${ }^{(1)}$ <br> On-balance sheet items (excluding derivatives, SFTs and grandfathered securitization exposures but including collateral) (Asset amounts deducted in determining Basel III Tier 1 capital) <br> Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of lines 1 and 2) | $\begin{gathered} 807,025 \\ (12,786) \\ \hline \end{gathered}$ 794,239 | $\begin{gathered} 797,126 \\ (12,599) \\ \hline 784,527 \end{gathered}$ |
| $\begin{gathered} 4 \\ 5 \\ 6 \\ 7 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \end{gathered}$ | Derivative exposures <br> Replacement cost associated with all derivative transactions (i.e. net of eligible cash variation margin) <br> Add-on amounts for PFE associated with all derivative transactions <br> Gross up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the operative accounting framework <br> (Deductions of receivables assets for cash variation margin provided in derivative transactions) <br> (Exempted CCP-leg of client cleared trade exposures) <br> Adjusted effective notional amount of written credit derivatives <br> (Adjusted effective notional offsets and add-on deductions for written credit derivatives) <br> Total derivative exposures (sum of lines 4 to 10) | $\begin{array}{r} 4,798 \\ 33,904 \\ - \\ (3,429) \\ - \\ 7,939 \\ (5,201) \\ \hline \end{array}$ | $\begin{array}{r} 5,100 \\ 33,370 \\ - \\ (3,927) \\ - \\ 7,760 \\ (5,085) \\ \hline 37,218 \end{array}$ |
| $\begin{aligned} & 12 \\ & 13 \\ & 14 \\ & 15 \\ & 16 \end{aligned}$ | Securities financing transaction exposures <br> Gross SFT assets recognized for accounting purposes (with no recognition of netting), after adjusting for sale accounting transactions (Netted amounts of cash payables and cash receivables of gross SFT assets) <br> Counterparty credit risk (CCR) exposure for SFT assets <br> Agent transaction exposures <br> Total securities financing transaction exposures (sum of lines 12 to 15) | $\begin{array}{r} 99,187 \\ (15,013) \\ 11,811 \\ - \\ \hline 95,985 \end{array}$ | $\begin{array}{r} 101,411 \\ (12,763) \\ 11,504 \\ - \\ \hline 100,152 \end{array}$ |
| $\begin{aligned} & 17 \\ & 18 \\ & 19 \end{aligned}$ | Other off-balance sheet exposures <br> Off-balance sheet exposure at gross notional amount (Adjustments for conversion to credit equivalent amounts) Off-balance sheet items (sum of lines 17 and 18) | $\begin{array}{r} 413,186 \\ (280,773) \\ \hline 132,413 \end{array}$ | $\begin{array}{r} 391,302 \\ (264,436) \\ \hline 126,866 \end{array}$ |
| $\begin{aligned} & 20 \\ & 21 \end{aligned}$ | Capital and Total Exposures <br> Tier 1 capital <br> Total Exposures (sum of lines 3, 11, 16 and 19) | $\begin{array}{r} 50,708 \\ 1,060,648 \end{array}$ | $\begin{array}{r} 48,648 \\ 1,048,763 \\ \hline \end{array}$ |
| 22 | Leverage Ratios <br> Basel III leverage ratio | 4.8\% | 4.6\% |

(1) On-balance sheet items exclude securities purchased under resale agreements and securities borrowed (\$84,174MM), derivative financial instruments (\$33,949MM), assets outside the regulatory scope of consolidation (\$1,162MM).

## LEVERAGE RATIO FRAMEWORK - DESCRIPTION OF LINE ITEMS

|  | Explanation |
| :---: | :---: |
| 1 | On-balance sheet assets (excluding derivatives, Securities Financing Transactions (SFTs) and grandfathered securitization exposures but including collateral) according to paragraphs 14 and 17 to 20 of the Leverage Requirements Guideline. |
| 2 | Deductions from Basel III Tier 1 capital determined by paragraphs 4,15 and 16 of the Leverage Requirements Guideline and excluded from the leverage ratio exposure measure, reported as negative amounts. |
| 3 | Sum of lines 1 and 2. |
| 4 | Replacement cost ( RC ) associated with all derivative transactions (including exposure resulting from transactions described in paragraph 42 of the Leverage Requirements Guideline), net of cash variation margin received and with, where applicable, bilateral netting according to paragraphs 22 to 35 and 40 of the Leverage Requirements Guideline. |
| 5 | Add-on amount for all derivatives exposure according to paragraphs 22 to 35 of the Leverage Requirements Guideline. |
| 6 | Grossed-up amount for collateral provided according to paragraph 38 of the Leverage Requirements Guideline. |
| 7 | Deductions of receivables assets from cash variation margin provided in derivative transactions according to paragraph 40 of the Leverage Requirements Guideline, reported as negative amounts. |
| 8 | Exempted trade exposures associated with the CCP-leg of derivative transactions resulting from client cleared transactions according to paragraph 41 of the Leverage Requirements Guideline, reported as negative amounts. |
| 9 | Adjusted effective notional amount (i.e. the effective notional amount reduced by any negative change in fair value) for written credit derivatives according to paragraphs 45 to 47 of the Leverage Requirements Guideline. |
| 10 | Adjusted effective notional offsets of written credit derivatives according to paragraphs 45 to 47 of the Leverage Requirements Guideline and deducted add-on amounts relating to written credit derivatives according to paragraph 48 of the Leverage Requirements Guideline, reported as negative amounts. |
| 11 | Sum of lines 4 to 10. |
| 12 | Gross SFT assets recognized for accounting purposes with no recognition of any netting other than novation with QCCPs as set out in footnote 30 of the Leverage Requirements Guideline, removing certain securities received as determined by paragraph 50 (i) of the Leverage Requirements Guideline and adjusting for any sales accounting transactions as determined by paragraph 53 of the Leverage Requirements Guideline. |
| 13 | Cash payables and cash receivables of Gross SFT assets netted according to paragraph 50 (i) of the Leverage Requirements Guideline, reported as negative amounts. |
| 14 | Measure of counterparty credit risk for SFTs as determined by paragraph 50 (ii) of the Leverage Requirements Guideline. |
| 15 | Agent transaction exposure amount determined according to paragraphs 54 to 56 of the Leverage Requirements Guideline. |
| 16 | Sum of lines 12 to 15. |
| 17 | Total off-balance sheet exposure amounts on a gross notional basis, before any adjustment for credit conversion factors according to paragraphs 57 to 65 of the Leverage Requirements Guideline. |
| 18 | Reduction in gross amount of off-balance sheet exposures due to the application of credit conversion factors in paragraphs 57 to 65 of the Leverage Requirements Guideline. |
| 19 | Sum of lines 17 and 18. |
| 20 | Tier 1 capital as determined by paragraph 10 of the Leverage Requirements Guideline. |
| 21 | Sum of lines 3, 11, 16 and 19. |
| 22 | Basel III leverage ratio according to paragraph 5 of the Leverage Requirements Guideline. (Line 20/21) |
| 23 | Tier 1 capital measured on an all-in basis as specified in Chapter 2 of OSFl's Capital Adequacy Requirements Guideline. |
| 24 | Regulatory adjustments to Tier 1 capital measured on an all-in basis as specified in Chapter 2 of OSFl's Capital Adequacy Requirements Guideline, reported as negative amounts. |
| 25 | Sum of lines 21 and 24, less the amount reported in line 2. |
| 26 | Leverage ratio measured on all-in basis; the ratio of the Tier 1 capital amount reported in line 23 to the Total Exposure amount reported in line 25. |


| Credit Risk Parameters |  |
| :---: | :---: |
| Exposure at Default (EAD) | Generally represents the expected gross exposures at default and includes outstanding amounts for on-balance sheet exposures and loan equivalent amounts for offbalance sheet exposures. |
| Probability of Default (PD) | Measures the likelihood that a borrower will default within a 1-year time horizon, expressed as a percentage. |
| Loss Given Default (LGD) | Measures the severity of loss on a facility in the event of a borrower's default, expressed as a percentage of exposure at default. |
| Exposure Types |  |
| Non-retail |  |
| Corporate | Debt obligation of a corporation, partnership, or proprietorship. |
| Bank | Debt obligation of a bank or bank equivalent (including certain public sector entities (PSEs) treated as Bank equivalent exposures). |
| Sovereign | Debt obligation of a sovereign, central bank, certain Multi Development Banks (MDBs) and certain PSEs treated as Sovereign. |
| Securitization | On-balance sheet investments in asset backed securities (ABS), mortgage backed securities (MBS), collateralized loan obligations (CLOs) and collateralized debt obligations (CDOs). Off-balance sheet liquidity lines including credit enhancements to Bank's sponsored ABCP conduits and liquidity lines to non-bank sponsored ABCP conduits. |
| Retail |  |
| Real Estate Secured |  |
| Residential Mortgages | Loans to individuals against residential property (four units or less). |
| Secured Lines Of Credit | Revolving personal lines of credit secured by first charge on residential real estate. |
| Qualifying Revolving Retail Exposures (QRRE) | Credit cards and unsecured line of credit for individuals. |
| Other Retail | All other personal loans. |
| Exposure Sub-types |  |
| Drawn | Outstanding amounts for loans, leases, acceptances, deposits with banks and available-for-sale debt securities. |
| Undrawn | Unutilized portion of an authorized credit line. |
| Repo-Style Transactions | Reverse repurchase agreements (reverse repos) and repurchase agreements (repos), securities lending and borrowing. |
| Over-the-counter (OTC) Derivatives | Over-the-counter derivatives contracts. |
| Exchange-traded derivatives (ETD) | Derivative contracts (e.g. futures contracts and options) that are transacted on an organized futures exchange. These include Futures contracts (both Long and Short positions), Purchased Options and Written Options. |
| Other Off-Balance Sheet | Direct credit substitutes such as standby letters of credits and guarantees, trade letters of credits, and performance letters of credits and guarantees. |
| Qualifying central counterparty (QCCP) | A qualifying central counterparty (QCCP) is licensed as a central counterparty and is also considered as "qualifying" when it is compliant with CPSS-IOSCO standards and is able to assist clearing member banks in properly capitalizing for CCP exposures by either undertaking the calculations and/or making available sufficient information to its clearing members, or others, to enable the completion of capital calculations. |
| Non-qualifying central counterparties (NQCCP) | Defined as those central counterparties which are not compliant with CPSS-IOSCO standards as outlined under qualifying CCP's. The exposures to NQCCP will follow standardized treatment under the Basel accord. |
| Other |  |
| Asset Value Correlation Multiplier (AVC) | Basel III has increased the risk-weights on exposures to certain Financial Institutions (FIs) relative to the non-financial corporate sector by introducing an Asset Value Correlation multiplier (AVC). The correlation factor in the risk-weight formula is multiplied by this AVC factor of 1.25 for all exposures to regulated Fls whose total assets are greater than or equal to US $\$ 100$ billion and all exposures to unregulated FIs. |
| Regulatory Capital Floor | A minimum capital floor requirement is prescribed for institutions that use the AIRB approach for credit risk. Up to and including Q1 2018, the capital floor add-on was determined by comparing a capital requirement calculated by reference to Basel I against the Basel III calculation, as prescribed by OSFI. A shortfall in the Basel III capital requirement compared with the Basel I capital floor was added to RWAs. Effective Q2 2018, OSFI has replaced the Basel I regulatory capital floor with a capital floor based on the Basel II standardized approach for credit risk. Revised capital floor requirements also include risk-weighted assets for market risk and CVA. |
| Specific Wrong-Way Risk (WWR) | Specific Wrong-Way Risk arises when the exposure to a particular counterparty is positively correlated with the probability of default of the counterparty due to the nature of the transactions with the counterparty. |
| Credit Valuation Adjustment (CVA) | Credit Valuation Adjustment (CVA) is the difference between the risk free value of a portfolio and the true value of that portfolio, accounting for the possible default of a counterparty. CVA adjustment aims to identify the impact of Counterparty Risk. |
| Advanced Measurement Approaches (AMA) | Under the AMA, the regulatory capital requirement for Operational Risk will equal the risk measure generated by the bank's internal operational risk measurement system using the quantitative and qualitative criteria. AMA utilizes risk drivers for capital movements (such as internal loss experience, business environment and internal control factors, external loss experience, and scenarios). |


[^0]:    (1) Consolidated Statement of Financial Position as reported in the 2018 Quarterly Report - Second Quarter results (page 35). Effective Q1 2018, the Bank fully adopted IFRS 9 (Financial Instruments).
    (2) Legal Entities that are within the accounting scope of consolidation but excluded from the regulatory scope of consolidation represent the Bank's insurance subsidiaries whose principle activities include insurance, reinsurance, property and casuaty insurance. Key subsidiaries are Scotia Insurance Barbados Ltd (assets: $\$ 465 M M$, equity: $\$ 221 \mathrm{MM}$ ), Scotia Life Insurance Company (assets: $\$ 149 \mathrm{MM}$, equity:
    Scotia Life Trinidad and Tobago Ltd (assets: $\$ 407 \mathrm{MM}$, equity: $\$ 67 \mathrm{MM}$ ) and Scotia Seguros (assets: $\$ 32 \mathrm{MM}$, equity: $\$ 11 \mathrm{MM}$ )
    (3) Effective Q3 2016, securitized credit card exposures are excluded from the regulatory scope of consolidation under OSFI's Securitization Framework.

[^1]:    

[^2]:    (1) Exposure at default, before credit risk mitigation for AIRB exposures, after related allowances for credit losses for Standardized exposures

[^3]:    (1) Before credit risk mitigation, excluding equity investment securities and other assets
    (2) Remaining term to maturity of the credit exposure.
    (3) Off-balance sheet lending instruments such as letters of credit and letters of guarantee, securitization, derivatives and repo-style transactions net of related collateral
    (4) Credit cards and lines of credit with unspecified maturity.

