

# **Supplemental Financial Information**

For the Third Quarter Ended July 31, 2017

For further information, please contact:
Investor Relations Department
Gillian Manning
416-308-9030

www.td.com/investor

#### **Basis of Presentation**

The supplemental information contained in this package is designed to improve the readers' understanding of the financial performance of TD Bank Group ("TD" or the "Bank"). This information should be used in conjunction with the Bank's third quarter 2017 Report to Shareholders, Earnings News Release (ENR) and Investor Presentation, as well as the Bank's 2016 Annual Report. For Basel-related terms and acronyms used in this package, refer to the "Glossary – Basel" and "Acronyms" pages, respectively.

#### **How the Bank Reports**

The Bank prepares its Consolidated Financial Statements in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), the current generally accepted accounting principles (GAAP), and refers to results prepared in accordance with IFRS as "reported" results. Certain comparative amounts have been reclassified to conform with the presentation adopted in the current period.

The Bank also utilizes non-GAAP financial measures referred to as "adjusted" results to assess each of its businesses and to measure the Bank's overall performance. To arrive at adjusted results, the Bank removes "items of note", from reported results. The items of note relate to items which management does not believe are indicative of underlying business performance. The Bank believes that adjusted results provide the reader with a better understanding of how management views the Bank's performance. The items of note are disclosed on page 3 of this package.

As explained, adjusted results differ from reported results determined in accordance with IFRS. Adjusted results, items of note, and related terms used in this package are not defined terms under IFRS and, therefore, may not be comparable to similar terms used by other issuers. A reconciliation between the Bank's reported and adjusted results is provided in the "How the Bank Reports" section of the Bank's third quarter 2017 Management's Discussion and Analysis (MD&A) and third quarter 2017 FNR.

#### Segmented Information

For management reporting purposes, the Bank reports its results under three key business segments: Canadian Retail, which includes the results of the Canadian personal and commercial banking, wealth, and insurance businesses; U.S. Retail, which includes the results of the U.S. personal and business banking operations, wealth management services, and the Bank's investment in TD Ameritrade; and Wholesale Banking. The Bank's other activities are grouped into the Corporate segment. The appendix page has been included to facilitate comparability with the reportable segments of the Bank's Canadian peers.

Where applicable, the Bank measures and evaluates the performance of each segment based on adjusted results and adjusted return on common equity (ROE). Adjusted ROE is adjusted net income available to common shareholders as a percentage of average common equity. Adjusted ROE is a non-GAAP financial measure as it is not a defined term under IFRS and, therefore, may not be comparable to similar terms used by other issuers. The capital allocated to the business segments was based on 9% Common Equity Tier 1 (CET1) Capital in fiscal 2015, 2016, and 2017.

The Bank determines its segments based on the view taken by the Chief Executive Officer to regularly evaluate performance and make key operating decisions, and is not necessarily comparable with other financial services companies. Results of each business segment reflect revenue, expenses, assets, and liabilities generated by the businesses in that segment. Due to the complexity of the Bank, its management reporting model uses various estimates, assumptions, allocations, and risk-based methodologies for funds transfer pricing, inter-segment revenue, income tax rates, capital, indirect expenses, and cost transfers to measure business segment results. Transfer pricing of funds is generally applied at market rates. Inter-segment revenue is negotiated between each business segment and approximates the value provided by the distributing segment. Income tax provision or recovery is generally applied to each segment based on a statutory tax rate and may be adjusted for items and activities unique to each segment.

Net income for the operating business segments is presented before any items of note not attributed to the operating segments. Net interest income within Wholesale Banking is calculated on a taxable equivalent basis (TEB), which means that the value of the non-taxable or tax-exempt income, including dividends, is adjusted to its equivalent before-tax value. Using TEB allows the Bank to measure income from all securities and loans consistently and makes for a more meaningful comparison of net interest income with similar institutions. The TEB increase to net interest income and provision for income taxes reflected in Wholesale Banking's results are reversed in the Corporate segment.

The presentation of the U.S. strategic cards portfolio revenues, provision for credit losses, and expenses in the U.S. Retail segment include only the Bank's agreed portion of the U.S. strategic cards portfolio, while the Corporate segment includes the retailer program partners' share. There was no impact on the net income of the segments or on the presentation of gross and net results in the Bank's Interim Consolidated Statement of Income.

#### **Basel III Reporting**

The Office of the Superintendent of Financial Institutions Canada (OSFI) has implemented a phased-in approach to the Credit Valuation Adjustment (CVA) component included in credit risk-weighted assets (RWA). The CVA capital charge phase-in is based on a scalar approach whereby a CVA capital charge of 64% applies in 2015 for the CET1 calculation and will increase annually until 100% in 2019. A different scalar applies to the CET1, Tier 1, and Total Capital ratios. Therefore, each capital ratio has its own RWA measure. For fiscal 2015 and 2016, the scalars for inclusion of CVA for CET1, Tier 1, and Total Capital RWA were 64%, 71%, and 77%, respectively. For fiscal 2017, the corresponding scalars are 72%, 77%, and 81%, respectively. All three RWA measures are disclosed as part of the RWA disclosures on page 78, as well as the Capital Position disclosures on page 79 to 80.

Effective the third quarter of 2016, OSFI approved the Bank i) to use the Advanced Measurement Approach (AMA), and ii) to calculate the majority of the retail portfolio credit RWA in the U.S. Retail segment using the Advanced Internal Ratings Based (AIRB) approach.

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### Highlights

(\$ millions, except as noted)	LINE		2017				2016		2015	Year to Date	Full Year
For the period ended	#	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4 Q3	2017 2016	2016 2015
Income Statement											
Net interest income	1	\$ 5,267	\$ 5,109	\$ 5,141	\$ 5,072	\$ 4,924	\$ 4,880	\$ 5,047	\$ 4,887 \$ 4,697	<b>\$ 15,517</b> \$ 14,851	\$ 19,923 \$ 18,724
Non-interest income	2	4.019	3.364	3.979	3,673	3,777	3.379	3,563	3.160 3.309	11.362 10.719	14.392 12.702
Total revenue	3	9.286	8,473	9,120	8,745	8,701	8,259	8,610	8,047 8,006	<b>26,879</b> 25,570	34,315 31,426
Provision for credit losses	4	505	500	633	548	556	584	642	509 437	1.638 1.782	2.330 1.683
Insurance claims and related expenses	5	519	538	574	585	692	530	655	637 600	1,631 1,877	2.462 2.500
Non-interest expenses	6	4,855	4,786	4,897	4,848	4,640	4,736	4,653	4,911 4,292	<b>14,538</b> 14,029	18,877 18,073
Income (loss) before provision for income taxes	7	3,407	2,649	3,016	2,764	2,813	2,409	2,660	1,990 2,677	9,072 7,882	10,646 9,170
Provision for (recovery of) income taxes	8	760	257	596	555	576	466	546	259 502	<b>1,613</b> 1,588	2,143 1,523
Income before equity in net income of an investment											
in TD Ameritrade	9	2,647	2,392	2,420	2,209	2,237	1,943	2,114	1,731 2,175	<b>7,459</b> 6,294	8,503 7,647
Equity in net income of an investment in TD Ameritrade	10	122	111	113	94	121	109	109	108 91	<b>346</b> 339	433 377
Net income – reported	11	2,769	2,503	2,533	2,303	2,358	2,052	2,223	1,839 2,266	<b>7,805</b> 6,633	8,936 8,024
Adjustment for items of note, net of income taxes	12	96	58	25	44	58	230	24	338 19	<b>179</b> 312	356 730
Net income – adjusted	13	2,865	2,561	2,558	2,347	2,416	2,282	2,247	2,177 2,285	<b>7,984</b> 6,945	9,292 8,754
Preferred dividends	14	47	48	48	43	36	37	25	26 25	<b>143</b> 98	141 99
Net income available to common shareholders and											
non-controlling interests in subsidiaries – adjusted	15	\$ 2,818	\$ 2,513	\$ 2,510	\$ 2,304	\$ 2,380	\$ 2,245	\$ 2,222	\$ 2,151 \$ 2,260	<b>\$ 7,841</b> \$ 6,847	\$ 9,151 \$ 8,655
Attributable to:											
Common shareholders – adjusted	16	\$ 2,789	\$ 2,485	\$ 2,481	\$ 2,275	\$ 2,351	\$ 2,217	\$ 2,193	\$ 2,122 \$ 2,232	<b>\$ 7,755</b> \$ 6,761	\$ 9,036 \$ 8,543
Non-controlling interests – adjusted	17	29	28	29	29	29	28	29	29 28	<b>86</b> 86	115 112
Earnings per Share (EPS) (\$) and Weighted-Average Number of Common Shares Outstanding (millions) <sup>1</sup>											
Basic earnings: Reported	18	\$ 1.46	\$ 1.31	\$ 1.32	\$ 1.20	\$ 1.24	\$ 1.07	\$ 1.17	\$ 0.96 \$ 1.20	<b>\$ 4.09</b> \$ 3.48	\$ 4.68 \$ 4.22
Adjusted	19	1.51	1.34	1.34	1.23	1.27	1.20	1.18	1.15 1.21	<b>4.19</b> 3.65	4.88 4.62
Diluted earnings: Reported	20	1.46	1.31	1.32	1.20	1.24	1.07	1.17	0.96 1.19	<b>4.08</b> 3.47	4.67 4.21
Adjusted	21	1.51	1.34	1.33	1.22	1.27	1.20	1.18	1.14 1.20	<b>4.18</b> 3.64	4.87 4.61
Weighted-average number of common shares outstanding											
Basic	22	1,846.5	1,854.4	1,855.8	1,855.4	1,853.4	1,850.9	1,854.1	1,853.1 1,851.1	<b>1,852.2</b> 1,852.8	1,853.4 1,849.2
Diluted	23	1,850.2	1,858.7	1,860.3	1,858.8	1,856.6	1,853.9	1,857.5	1,857.2 1,855.7	<b>1,856.4</b> 1,856.1	1,856.8 1,854.1
Balance Sheet (\$ billions)											
Total assets	24	\$ 1,202.4	\$ 1,251.9	\$ 1,186.9	\$ 1,177.0	\$ 1,182.4	\$ 1,124.8	\$ 1,173.6	\$ 1,104.4 \$ 1,099.2	<b>\$ 1,202.4</b> \$ 1,182.4	\$ 1,177.0 \$ 1,104.4
Total equity	25	73.5	76.2	73.3	74.2	71.2	67.8	71.7	67.0 66.0	<b>73.5</b> 71.2	74.2 67.0
Risk Metrics (\$ billions, except as noted)		-			•						
Common Equity Tier 1 Capital risk-weighted assets <sup>2,3</sup>	26	\$ 408.8	\$ 420.1	\$ 402.2	\$ 405.8	\$ 388.2	\$ 383.6	\$ 399.6	\$ 382.4 \$ 369.5	<b>\$ 408.8</b> \$ 388.2	\$ 405.8 \$ 382.4
Common Equity Tier 1 Capital Tisk-weighted assets	27	45.0	45.4	43.7	42.3	40.4	38.9	39.6	38.0 37.2	<b>45.0</b> \$ 300.2	42.3 38.0
Common Equity Tier 1 Capital ratio <sup>2,3</sup>	28	11.0 %		% 10.9 %				% 9.9 %		11.0 % 10.4 %	10.4 % 9.9 %
Tier 1 Capital <sup>2</sup>	29	\$ 52.2	\$ 52.3	\$ 50.6	\$ 49.4	\$ 46.4	\$ 45.0	\$ 45.7	\$ 43.4 \$ 42.6	<b>\$ 52.2</b> \$ 46.4	\$ 49.4 \$ 43.4
Tier 1 Capital ratio <sup>2,3</sup>	30	12.8 %	12.5	% 12.6 %	12.2	% 11.9	% 11.7	% 11.4 %	11.3 % 11.5 %	<b>12.8 %</b> 11.9 %	12.2 % 11.3 %
Total Capital ratio <sup>2,3</sup>	31	15.6	14.9	15.1	15.2	14.6	14.4	13.7	14.0 13.9	<b>15.6</b> 14.6	15.2 14.0
Leverage ratio <sup>4</sup>	32	4.1	3.9	4.0	4.0	3.8	3.8	3.7	3.7 3.7	4.1 3.8	4.0 3.7
Liquidity coverage ratio (LCR) <sup>5</sup>	33	124	122	124	130	132	128	124	126 123	<b>n/a</b> n/a	n/a n/a
After-tax impact of 1% increase in interest rates on:											11
Economic value of shareholders' equity (\$ millions) <sup>6</sup>	34	\$ (230)	\$ (190)	\$ (183)	\$ (234)	\$ (291)	\$ (64)	\$ (125)	\$ (143) \$ (52)	<b>\$ (230)</b> \$ (291)	\$ (234) \$ (143)
Net interest income (\$ millions) <sup>7</sup>	35	74	67	97	87	72	126	170	240 275	<b>74</b> 72	87 240
Net impaired loans – personal, business, and government									0.000		0.705
(\$ millions) <sup>8</sup>	36	2,330	2,624	2,690	2,785	2,786	2,908	3,143	2,660 2,532	<b>2,330</b> 2,786	2,785 2,660
Net impaired loans – personal, business, and government	37	0.38 %	0.42	0/ 0.45 0	0.40	0.40	0/ 0.54	0/ 0.54 0/	0.48 % 0.47 %	<b>0.38</b> % 0.48 %	0.46 % 0.40 %
as a % of net loans and acceptances <sup>8</sup> Provision for credit losses as a % of net average loans and	31	0.30 %	0.43	% 0.45 %	0.46 9	% 0.48	% 0.51	% 0.54 %	0.48 % 0.47 %	<b>0.38</b> % 0.48 %	0.46 % 0.48 %
acceptances <sup>8</sup>	38	0.33	0.35	0.42	0.37	0.39	0.42	0.45	0.40 0.33	0.37 0.42	0.41 0.34
Rating of senior debt:	50	0.55	0.55	0.72	0.57	0.39	0.42	0.43	0.40	0.42	1 0.41 0.34
Moody's	39	Aa2	Aa1	Aa1	Aa1	Aa1	Aa1	Aa1	Aa1 Aa1	Aa2 Aa1	Aa1 Aa1
Standard and Poor's	40	AA-	AA- AA-	AA- AA-	AA- AA-						

<sup>&</sup>lt;sup>1</sup> Basic EPS is computed by dividing net income attributable to common shareholders by the weighted-average number of common shares outstanding during the period. For the calculation of diluted EPS, adjustments are made to the net income attributable to common shareholders to include the effect of dilutive securities. As a result, the sum of the quarterly basic and diluted EPS figures may not equal the year-to-date EPS.

<sup>2</sup> Amounts are calculated in accordance with the Basel III regulatory framework, and are presented based on the "all-in" methodology.

The leverage ratio is calculated as Tier 1 Capital, based on the "all-in" methodology, divided by leverage exposures. Refer to page 83 for further details.

<sup>7</sup> Amounts represent the 12-month net interest exposure to an instantaneous and sustained shift in interest rates.

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The CVA capital charge is being phased in until the first quarter of 2019. For fiscal 2015 and 2016, the scalars for inclusion of CVA for CET1, Tier 1, and Total Capital RWA were 64%, 71%, and 77%, respectively. For fiscal 2017, the corresponding scalars are 72%, 77%, and 81%, respectively.

Effective the first quarter of 2017, OSFI requires Canadian banks to disclose the LCR based on an average of the daily positions during the quarter. The LCR for the quarters ended July 31, 2017, April 30, 2017, and January 31, 2017, were calculated as an average of the 64, 61, and 62 daily data points, respectively, in the quarter.

This is also referred to as economic value at risk (EVaR), and the amounts represent the difference between the change in present value of the Bank's asset portfolio and the change in present value of the Bank's liability portfolio, including off-balance sheet instruments, resulting from an instantaneous change in interest rates.

<sup>&</sup>lt;sup>8</sup> Excludes acquired credit-impaired (ACI) loans and debt securities classified as loans. For further details on ACI loans, refer to pages 37 to 39.

### Shareholder Value

(\$ millions, except as noted)	LINE		2017			2	016	<del> </del>	2015		Year	to Date	Full Y	ear
For the period ended	#	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	2017	2016	2016	2015
,											L		L	
Business Performance														
Net income available to common shareholders			1									ĺ		
and non-controlling interests in														
subsidiaries – reported	1	\$ 2,722	\$ 2,455	\$ 2,485	\$ 2,260	\$ 2,322	\$ 2,015	\$ 2,198	\$ 1,813 \$	2,241	\$ 7,662	\$ 6,535	\$ 8,795	\$ 7,925
Average common equity	2	68,777	68,956	67,697	66,769	64,595	64,536	64,641	62,157	58,891	68,424	64,568	65,121	58,178
Return on common equity – reported	3	15.5 %	14.4	% 14.4 %	13.3 %	6 14.1 9	% 12.5	% 13.3 %	11.4 %	14.9 %	14.8 %	6 13.3 %	13.3 %	13.4 %
Return on common equity – adjusted	4	16.1	14.8	14.5	13.6	14.5	14.0	13.5	13.5	15.0	15.2	14.0	13.9	14.7
Return on Common Equity Tier 1 Capital														
risk-weighted assets – reported1	5	2.58	2.42	2.41	2.24	2.36	2.06	2.21	1.88	2.46	2.48	2.22	2.21	2.20
Return on Common Equity Tier 1 Capital														
risk-weighted assets – adjusted <sup>1</sup>	6	2.67	2.48	2.44	2.28	2.42	2.30	2.23	2.24	2.48	2.53	2.32	2.31	2.40
Efficiency ratio – reported	7	52.3	56.5	53.7	55.4	53.3	57.3	54.0	61.0	53.6	54.1	54.9	55.0	57.5
Efficiency ratio – adjusted	8	51.4	55.8	53.2	54.8	52.6	54.8	53.5	55.3	53.4	53.4	53.6	53.9	54.3
Effective tax rate														
Reported	9	22.3	9.7	19.8	20.1	20.5	19.3	20.5	13.0	18.8	17.8	20.1	20.1	16.6
Adjusted (TEB)	10	23.5	23.2	22.9	22.7	22.9	21.0	22.9	20.0	21.6	23.2	22.3	22.4	21.5
Net interest margin as a % of average												-		
earning assets	11	1.94	1.98	1.96	1.96	1.98	2.05	2.06	2.02	2.01	1.96	2.03	2.01	2.05
Average number of full-time equivalent staff	12	83,090	83,481	83,508	82,975	81,978	80,025	79,927		81,352	83,358	80,648	81,233	81,483
			-						•					
Common Share Performance														
Closing market price (\$)	13	\$ 64.27	\$ 64.23	\$ 67.41	\$ 60.86	\$ 56.89	\$ 55.85	\$ 53.15	\$ 53.68 \$	52.77	\$ 64.27	\$ 56.89	\$ 60.86	\$ 53.68
Book value per common share (\$)	14	36.32	38.08	36.25	36.71	35.68	33.89	35.99	33.81	33.25	36.32	35.68	36.71	33.81
Closing market price to book value	15	1.77	1.69	1.86	1.66	1.59	1.65	1.48	1.59	1.59	1.77	1.59	1.66	1.59
Price-earnings ratio														
Reported	16	12.1	12.7	14.0	13.0	12.8	12.7	12.4	12.8	12.7	12.1	12.8	13.0	12.8
Adjusted	17	11.9	12.4	13.4	12.5	11.9	11.8	11.4	11.7	11.9	11.9	11.9	12.5	11.7
Total shareholder return on common														
shareholders' investment <sup>2</sup>	18	17.1 %	19.3	% 31.7 %	17.9 %	6 12.2 %	% 4.3	% 9.2 %	0.4 %	(4.1) %	17.1 %	6 12.2 %	17.9 %	0.4 %
Number of common shares										( )				
outstanding (millions)	19	1.848.6	1,843.4	1,856.4	1,857.2	1,854.8	1,853.5	1,850.3	1,855.1	1,853.6	1,848.6	1,854.8	1,857.2	1,855.1
Total market capitalization (\$ billions)	20	\$ 118.8	\$ 118.4	\$ 125.1	\$ 113.0	\$ 105.5	\$ 103.5	\$ 98.3	\$ 99.6 \$	97.8	\$ 118.8	\$ 105.5	\$ 113.0	\$ 99.6
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Dividend Performance														
Dividend per common share (\$)	21	\$ 0.60	\$ 0.60	\$ 0.55	\$ 0.55	\$ 0.55	\$ 0.55	\$ 0.51	\$ 0.51 \$	0.51	\$ 1.75	\$ 1.61	\$ 2.16	\$ 2.00
Dividend yield <sup>3,4</sup>	22	3.7 %	3.6	% 3.4 %	3.8 %	6 3.9 %	% 4.1	% 3.8 %	3.9 %	3.8 %	3.6 %	6 3.9 %	3.9 %	3.7 %
Common dividend payout ratio									1		1			
Reported	23	41.1	45.9	41.6	45.7	44.5	51.2	43.6	53.0	42.7	42.8	46.3	46.1	47.4
Adjusted	24	39.7	44.8	41.2	44.8	43.4	45.9	43.1	44.5	42.3	41.8	44.1	44.3	43.3

<sup>&</sup>lt;sup>1</sup> Amounts are calculated in accordance with the Basel III regulatory framework, and are presented based on the "all-in" methodology. <sup>2</sup> Return is calculated based on share price movement and dividends reinvested over a trailing one year period.

<sup>&</sup>lt;sup>3</sup> Dividend yield is calculated as the dividend per common share divided by the average daily closing stock price in the relevant period. Dividend per common share is derived as follows: a) for the quarter – by annualizing the dividend per common share paid during the quarter; b) for the year-to-date – by annualizing the year-to-date dividend per common share paid; and c) for the full year – dividend per common share paid during the year.

<sup>&</sup>lt;sup>4</sup> Certain comparative amounts have been recast to conform with the presentation adopted in the current period.

### Adjustments for Items of Note<sup>1</sup>

## (\$ millions, except as noted) For the period ended

#### Pre-Tax Increase (Decrease) in Net Income

Amortization of intangibles (Footnote 2)

Loss on sale of the Direct Investing business in Europe (Footnote 3)

Fair value of derivatives hedging the reclassified available-for-sale securities portfolio (Footnote 4)

Impairment of goodwill, non-financial assets, and other charges (Footnote 5) Restructuring charges (Footnote 6)

Charge related to the acquisition in U.S. strategic cards portfolio and related integration costs (Footnote 7)

Litigation and litigation-related charge(s)/reserve(s) (Footnote 8)

Total

#### Provision for (Recovery of) Income Taxes

Amortization of intangibles

Loss on sale of the Direct Investing business in Europe

Fair value of derivatives hedging the reclassified available-for-sale securities portfolio

Impairment of goodwill, non-financial assets, and other charges Restructuring charges

Charge related to the acquisition in U.S. strategic cards portfolio and related integration costs

Litigation and litigation-related charge(s)/reserve(s)

Total

#### Total After-Tax Increase (Decrease) in Net Income

#### After-Tax Increase (Decrease) in Earnings per Share (\$) (Footnote 9)

Amortization of intangibles

Loss on sale of the Direct Investing business in Europe

Fair value of derivatives hedging the reclassified available-for-sale securities portfolio

Impairment of goodwill, non-financial assets, and other charges Restructuring charges

Charge related to the acquisition in U.S. strategic cards portfolio and related integration costs

Litigation and litigation-related charge(s)/reserve(s)

Total

LINE				2017	•	- 1			016			г		20	015	- 1	_	Year	to Da	ıto.		Full Ye	ar
#		Q3	-	Q2	Q1		Q4	Q3	010	Q2	Q1			Q4	013	Q3		2017		2016		2016	2015
"	L	40						- 40		~~			-			40	L	2011		.0.0	!	2010	20.0
1	\$	74	\$	78	\$ 80	9	80 \$	79	\$	86	\$ 9	0	\$	89	\$	85	\$	232	\$	255	\$	335 \$	350
2	ľ	42		_	_	- 1		_		_		_		_	•	_	1.	42	•	_	l I '	_	_
3		-		_	(41)		(19)	_		58	(4	6)		(24)		(21)		(41)		12		(7)	(62)
4		-		-	_		_	_		111		-		_		-		-		111		111	_
5		-		-	_		_	_		-		-		349		-		-		-		-	686
6		-		-	-		-	-		-		-		82		-		-		-		-	82
7		-		-	_			_		-				_		(39)	Ь.	-			ļ Ļ_	-	13
8	\$	116	\$	78	\$ 39	\$	61 \$	79	\$	255	\$ 4	4	\$	496	\$	25	\$	233	\$	378	\$	439 \$	1,069
							<del> </del>														ı r		- 1
9	\$	18	\$	20	\$ 21	\$	\$ 20 \$	21	\$	23	\$ 2	5	\$	24	\$	23	\$	59	\$	69	\$	89 \$	95
10		2		_	-		-	-		-		-		_		-		2		-		-	-
11		-		_	(7)		(3)	-		7		5)		(3)		(2)		(7)		2		(1)	(7)
12		-		_	-		-	-		(5)		-		-		-		-		(5)		(5)	-
13		-		-	-		_	-		-		-		106		-		-		-		-	215
14		_			_			_				_		31		_		_		_		_	31
15		_		_	_		_	_		_				-		(15)		_		_		_	5
16	\$	20	\$		\$ 14	9			\$	25			\$		\$	6	\$	54	\$	66	\$	83 \$	339
	Ψ		Ψ		Ψ		, 17 <del>V</del>		Ψ	20	Ψ	<u> </u>	Ψ.	100	Ψ.		ΙΨ		Ψ.		Ψ	- σο φ	000
17	\$	96	\$	58	\$ 25	9	§ 44 \$	58	\$	230	\$ 2	4	\$	338	2	19	\$	179	\$	312	\$	356 \$	730
"	Ψ	30	Ψ	30	<u>Ψ 25</u>		ν ++ ψ		Ψ	200	Ψ	- 1	Ψ	550	Ψ	10	Ψ	173	Ψ	312	Ψ	330 ψ	730
18	\$	0.03	\$	0.03	\$ 0.03	9	0.03 \$	0.03	\$	0.04	\$ 0.0	3	\$	0.03	\$	0.03	\$	0.10	\$	0.10	\$	0.14 \$	0.14
19	ľ	0.02	ľ	-	- 0.00	'	- 0.00		•	_		_	Ψ.	-	Ψ.	-	*	0.02	•	_	*	-	_
																		*					
20		_		_	(0.02)		(0.01)	_		0.03	(0.0)	2)		(0.01)		(0.01)		(0.02)		0.01		_	(0.03)
21		_		_	-		-	_		0.06	•			-		-		· · · · ·		0.06		0.06	-
22		_		_	_		_	_		_		-		0.13		-		-		_		_	0.25
23		-		-	_		_	-		-		-		0.03		-		-		-		-	0.03
24		-		_				_		_				_		(0.01)		-		-		_	0.01
25	\$	0.05	\$	0.03	\$ 0.01	9	0.02 \$	0.03	\$	0.13	\$ 0.0	1	\$	0.18	\$	0.01	\$	0.10	\$	0.17	\$	0.20 \$	0.40
	<u> </u>		_						_			-			_								

<sup>&</sup>lt;sup>1</sup> For detailed footnotes to the items of note, refer to page 84.

#### (\$ millions, except as noted) 2017 2016 Year to Date Full Year Q3 Q1 Q3 Q1 Q4 Q3 2017 2016 For the period ended Q4 Q2 2016 2015 Q2 Net Income (loss) - Adjusted Canadian Retail 1,566 1,513 1,496 1,557 5.938 1 1,725 1,570 \$ 1,502 1,509 \$ 1.464 \$ 4,861 \$ 4,486 5,988 \$ U.S. Retail 2 901 800 701 788 719 646 650 2.546 2.258 2.959 2.547 Total Retail 3 2,626 2,415 2,366 2,203 2,297 2,183 2,264 2,142 2,207 7,407 6,744 8,947 8,485 Wholesale Banking 4 293 248 267 238 302 219 161 196 239 808 920 873 (102)(183)(178) (161) (161) Corporate 5 (54) (75)(94)(120)(231)(481)(575)(604)2,561 \$ 2,558 \$ 2,416 \$ 2,282 \$ 2,247 \$ 2,285 \$ 6,945 Total Bank 6 2,865 2,347 2,177 7,984 9,292 \$ 8,754 Return on Common Equity - Adjusted1 Canadian Retail 7 46.9 45.0 % 43.2 % 41.5 % 41.9 % 41.7 % 42.6 % 42.3 % 44.6 % 45.0 % 42.0 % 41.9 % 42.8 % U.S. Retail 8 10.3 10.0 9.1 8.3 9.5 8.7 8.7 7.8 8.3 9.8 9.0 8.8 8.2

14.8

14.0

91 %

9

20.4

14.5

88 %

12

16.1

13.6

90 %

10

17.5

14.5

90 %

10

16.4

14.8

91 %

9

Percentage of Adjusted Net Income Mix <sup>3</sup>
--

Wholesale Banking<sup>2</sup>

Total Bank<sup>2</sup>

Total Retail 11 Wholesale Banking 12 13 **Total Bank** 

Segmented Results Summary

#### Geographic Contribution to Total Revenue<sup>4</sup>

Canada 14 United States 15 Other International 16 Total Bank

3	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 % 100	%	<b>100</b> % 1	00 %	100	% 100 %
		•											
				, · · · · ·				<del>,</del>				r	
1	55 %	60 %	57 %	60 %	61 %	54 %	62 %	65 % 64	%	57 %	59 %	59	% 64 %
5	37	37	36	36	35	36	36	35 33		37	36	36	32
3	8	3	7	4	4	10	2	- 3		6	5	5	4
7	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 % 100	%	<b>100</b> % 1	00 %	100	% 100 %

10.6

13.5

93 %

17.2

15.0

90 %

10

17.8

15.2

90 %

10

15.2

14.0

91 %

9

15.5

13.9

91 %

9

15.2

14.7

91 %

9

13.0

13.5

92 %

8

9

10

19.6

16.1

90

10

<sup>&</sup>lt;sup>1</sup> Capital allocated to the business segments was based on 9% CET1 Capital in fiscal 2015, 2016, and 2017.

<sup>&</sup>lt;sup>2</sup> CVA is included in accordance with the OSFI guidance.

<sup>&</sup>lt;sup>3</sup> Percentages exclude the Corporate segment results.

<sup>&</sup>lt;sup>4</sup> TEB amounts are not included.

## Canadian Retail Segment

(\$ millions, except as noted)	LINE		2017	•		•		2016					2015			Year	r to Da	ate		Fu	II Year	
For the period ended	#	Q3	Q2	Q1	Q	4	Q3		Q2		Q1	Q4		Q3		2017		2016		2016		2015
				•	*						*					•		•				
Net interest income	1	\$ 2,692	\$ 2,533 \$	2,613	\$ 2,5	551	\$ 2,519	\$	2,418	\$	2,491	\$ 2,49	7 \$	2,480	\$	7,838	\$	7,428	\$	9,979	\$	9,781
Non-interest income	2	2,637	2,599	2,590	2,5	599	2,622		2,469		2,540	2,500	)	2,531		7,826		7,631		10,230		9,904
Total revenue	3	5,329	5,132	5,203	5,1	50	5,141		4,887		5,031	4,99	7	5,011		15,664		15,059		20,209		19,685
Provision for credit losses	4	238	235	269	2	263	258		262		228	22	1	237		742		748		1,011		887
Insurance claims and other related expenses	5	519	538	574		85	692		530		655	63	7	600		1,631		1,877		2,462		2,500
Non-interest expenses	6	2,219	2,218	2,225	2,2	250	2,133		2,095		2,079	2,143	3	2,104		6,662		6,307		8,557		8,407
Income (loss) before income taxes	7	2.353	2.141	2,135	2.0	)52	2.058		2.000		2.069	1.99	3	2.070		6.629		6.127		8.179		7.891
Provision for (recovery of) income taxes	8	628	571	569		550	549		536		556	500	)	513		1,768		1,641		2,191		1,953
Net income – reported	9	\$ 1,725	\$ 1,570 \$	1,566	\$ 1,5	502	\$ 1,509	\$	1,464	\$	1,513	\$ 1,49	3 \$	1,557	\$	4,861	\$	4,486	\$	5,988	\$	5,938
		,			1								· · · · ·				<u> </u>		, <u>i</u>			
Average common equity (\$ billions)	10	\$ 14.6	\$ 14.3 \$	14.4	\$ 1	4.4	\$ 14.3	\$	14.3	\$	14.1	\$ 14.0	) \$	13.8	\$	14.4	\$	14.3	\$	14.3	\$	13.9
Return on common equity – reported <sup>1</sup>	11	46.9 %	45.0 %	43.2 %	4	1.5 %	41.9	%		%	42.6 %	42.	3 %	44.6 %	1	45.0	%	42.0 %	*	41.9	%	42.8 %
· · · · · · · · · · · · · · · · · · ·					· · · · · ·										Ь				٠ ــــــ			
Key Performance Indicators (\$ billions, except																						
as noted)																						
Common Equity Tier 1 Capital risk-weighted assets <sup>2</sup>	12	\$ 99	\$ 100 \$	99	\$	99	\$ 99	\$	110	\$	108	\$ 100	s s	107	\$	99	\$	99	\$	99	\$	106
Average loans – personal		* **	, ,,,,	-	Ť			•		•		•			1				*		•	
Residential mortgages	13	188.0	187.5	188.2	18	8.0	185.6		185.3		185.2	182.2	2	177.3		187.9		185.4		186.0		177.5
Consumer instalment and other personal																						
Home Equity Line of Credit (HELOC)	14	69.6	66.5	65.3	6	4.1	62.8		61.2		61.0	60.8	3	60.3		67.2		61.7		62.3		60.0
Indirect auto	15	21.6	20.9	20.8	2	0.6	19.9		19.2		19.0	18.	5	17.7		21.0		19.3		19.7		17.4
Other	16	17.0	16.5	16.2	1	6.0	16.2		15.8		16.2	16.	1	16.7		16.6		16.0		16.0		16.4
Credit card	17	19.2	18.8	19.3	1	9.1	19.1		18.7		19.2	19.0	)	18.7		19.1		19.0		19.0		18.7
Total average loans – personal	18	315.4	310.2	309.8	30	7.8	303.6		300.2		300.6	296.0	3	290.7		311.8		301.4		303.0		290.0
Average loans and acceptances – business	19	66.5	65.4	63.8		2.7	61.6		60.4		58.3	57.0		55.9		65.2		60.1		60.8		55.0
Average deposits		00.0	00.1	00.0	Ĭ		00				00.0	0		00.0						00.0		00.0
Personal	20	185.0	181.6	179.8	17	6.1	172.2		168.9		167.1	165.	1	161.4		182.1		169.4		171.1		160.9
Business	21	105.6	99.2	99.0		5.6	90.6		85.0		85.2	84.4		84.0		101.3		86.9		89.1		83.1
Wealth	22	23.7	24.5	24.2		2.5	21.3		20.5		19.4	18.9		18.5		24.2		20.5		20.9		18.4
Margin on average earning assets including		20	20		_		20		_0.0					10.0				20.0		20.0		
securitized assets	23	2.84 %	2.81 %	2.82 %	. 2	.78 %	2.79	%	2.77	%	2.80 %	2.84	1 %	2.88 %		2.82	%	2.79 %		2.78	%	2.87 %
Assets under administration (AUA)	24	\$ 370	\$ 404 \$				\$ 372	\$	355	\$	342	\$ 34			\$	370	\$	372	\$	379	\$	347
Assets under management (AUM)	25	272	279	266		271	268	•	256	*	248	240		249	1	272	-	268	[	271	-	246
Gross originated insurance premiums (\$ millions)	26	1.104	938	860	1.0		1.091		973		870	1.04		1.104		2.902		2.934		3.965		3.988
Efficiency ratio – reported	27	41.6 %	43.2 %	42.8 %		3.7 %	41.5	%		%	41.3 %	42.9		42.0 %		42.5	%	41.9 %		42.3	%	42.7 %
Number of Canadian retail branches at period end	28	1,138	1,153	1,154	1,		1,152		1,152		1,157	1,16		1,166		1,138		1,152		1,156		1,165
Average number of full-time equivalent staff	29	38,736	39.227	39,347	39,		38,852		7.987	:	38,301	38,78		39,180		39,102		38.383		38,575		39,218
		,	,	,			,		,		,	,,,		,		,		,		,		,

Capital allocated to the business segments was based on 9% CET1 Capital in fiscal 2015, 2016, and 2017.
 Amounts are calculated in accordance with the Basel III regulatory framework, and are presented based on the "all-in" methodology.

### U.S. Retail Segment – Canadian Dollars

(\$ millions, except as noted)	LINE		2017				2016		2015	1	Y	ear to Date	F	ull Year
For the period ended	#	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	2017	2016	2016	2015
Net interest income	4	\$ 1,924	\$ 1,851	\$ 1,839	\$ 1,832	\$ 1,755	\$ 1,737	\$ 1,769	\$ 1,658 \$	1,527	\$ 5,614	\$ 5,261	\$ 7,093	\$ 6,131
Non-interest income	2	\$ 1,924 715	\$ 1,651 664	\$ 1,639 687	\$ 1,632 592	\$ 1,755 591	\$ 1,737 553	\$ 1,769 630	492	576	2,066		2,366	2,098
Total revenue <sup>1</sup>	3	2,639	2,515	2,526	2,424	2,346	2,290	2,399	2,150	2,103	7,680		9,459	8,229
Provision for credit losses <sup>2</sup>	3	2,639 180	152	2,526 257	193	2,346 168	2,290 162	2,399 221	174	153	589		744	535
	5	1.466	1,449	1,434	1,499	1,372	1,416	1,406	1.442	1.239	4,349		5,693	5,188
Non-interest expenses	-	993	914	835	732	806	712	772	534					
Income (loss) before income taxes	6				_					711	2,742	,	3,022	2,506
Provision for (recovery of) income taxes	/	210	177	146	124	143	101	130	48	129	533		498	394
U.S. Retail Bank net income – reported	8	783	737	689	608	663	611	642	486	582	2,209	1,916	2,524	2,112
Adjustments for items of note, net of income taxes <sup>3</sup>	9	<del>_</del>	I			<del></del>	<del>-</del>	<del></del>	51	(24)		•		59
U.S. Retail Bank net income – adjusted	10	783	737	689	608	663	611	642	537	558	2,209	,	2,524	2,171
Equity in net income of an investment in TD Ameritrade <sup>4</sup>	11	118	108	111	93	125	108	109	109	92	337		435	376
Net income – adjusted	12	901	845	800	701	788	719	751	646	650	2,546		2,959	2,547
Net income – reported	13	\$ 901	\$ 845	\$ 800	\$ 701	\$ 788	\$ 719	\$ 751	\$ 595 \$	674	\$ 2,546	\$ 2,258	\$ 2,959	\$ 2,488
Average common equity (\$ billions)	14	\$ 34.6	\$ 34.6	\$ 34.9	\$ 33.7	\$ 33.0	\$ 33.6	\$ 34.4	\$ 33.1 \$	31.1	\$ 34.7	\$ 33.7	\$ 33.7	\$ 31.1
Return on common equity – reported <sup>5</sup>	15	10.3 %	10.0	% 9.1 %	8.3	% 9.5	% 8.7	% 8.7 %	7.1 %	8.6 %	9.8		8.8	% 8.0 %
Return on common equity – adjusted <sup>5</sup>	16	10.3	10.0	9.1	8.3	9.5	8.7	8.7	7.8	8.3	9.8		8.8	8.2
			-		• • • • • • • • • • • • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		*		<b>.</b>		L .	
Key Performance Indicators (\$ billions, except as noted)	) _													
Common Equity Tier 1 Capital risk-weighted assets <sup>6</sup>	17	\$ 214	\$ 232	\$ 218	\$ 223	\$ 211	\$ 200	\$ 216	\$ 200 \$	190	\$ 214	\$ 211	\$ 223	\$ 200
Average loans – personal														
Residential mortgages	18	27.8	28.0	27.9	27.2	26.8	27.3	28.5	27.6	26.2	27.9	27.5	27.5	26.2
Consumer instalment and other personal														
HELOC	19	12.8	13.0	13.1	13.0	13.0	13.4	14.1	13.5	12.9	13.0	13.5	13.4	12.9
Indirect auto	20	28.3	28.0	28.2	27.5	26.6	26.3	26.7	24.6	22.3	28.2	26.5	26.8	22.0
Other	21	0.8	0.7	0.8	0.7	0.7	0.7	0.8	0.7	0.7	0.8	0.7	0.7	0.7
Credit card	22	14.4	14.1	14.5	13.3	12.7	12.9	13.8	10.6	8.9	14.4	13.2	13.2	9.1
Total average loans – personal	23	84.1	83.8	84.5	81.7	79.8	80.6	83.9	77.0	71.0	84.3	81.4	81.6	70.9
Average loans and acceptances – business	24	105.9	106.2	106.4	101.9	98.8	97.4	99.8	89.6	81.6	106.2	98.6	99.4	80.0
Average debt securities classified as loans	25	0.8	0.8	1.3	1.4	1.5	1.7	1.8	1.9	1.9	1.0	1.7	1.6	2.0
Average deposits														
Personal	26	112.1	112.7	108.6	104.6	102.4	103.2	102.7	96.5	90.8	111.1	102.8	103.2	89.4
Business <sup>7</sup>	27	85.2	87.4	87.3	85.1	80.2	82.2	84.8	80.3	72.0	86.6	82.4	83.1	72.7
TD Ameritrade insured deposit accounts	28	120.4	125.8	126.3	116.8	108.9	111.4	111.9	104.5	94.3	124.2	110.8	112.3	94.8
Margin on average earning assets <sup>1,8</sup>	29	3.14 %	3.05	% 3.03 %	3.13	% 3.14	% 3.11	% 3.11 %	3.08 %	3.05 %	3.07	<b>' %</b> 3.12 %	3.12	% 3.12 %
Assets under administration	30	\$ 23	\$ 25	\$ 23	\$ 23	\$ 22	\$ 21	\$ 23	\$ 21 \$	21	\$ 23	\$ 22	\$ 23	\$ 21
Assets under management	31	76	82	78	89	96	93	103	103	100	76		89	103
Efficiency ratio – reported	32	55.6 %	57.6	% 56.8 %	61.8		% 61.8	<b>%</b> 58.6 <b>%</b>	67.1 %	58.9 %	56.6	<b>5 %</b> 59.6 %	60.2	% 63.0 %
Efficiency ratio – adjusted	33	55.6	57.6	56.8	61.8	58.5	61.8	58.6	64.5	60.8	56.6	59.6	60.2	62.2
Total revenue – adjusted (\$ millions)	34	\$ 2,639	\$ 2,515	\$ 2,526	\$ 2,424	\$ 2,346	\$ 2,290	\$ 2,399	\$ 2,223 \$	2,103	\$ 7,680	\$ 7,035	\$ 9,459	\$ 8,302
Non-interest expenses – adjusted (\$ millions)	35	1,466	1,449	1,434	1,499	1,372	1,416	1,406	1,433	1,278	4,349	4,194	5,693	5,166
Number of U.S. retail stores as at period end <sup>9</sup>	36	1,260	1,260	1,257	1,278	1,267	1,265	1,264	1,298	1,305	1,260	1,267	1,278	1,298
Average number of full-time equivalent staff	37	25,812	25,745	26,037	26,103	25,998	25,599	25,226	25,250	25,546	25,866	25,608	25,732	25,647
		_				_								

- 1 Effective the first quarter of 2017, the impact from certain treasury and balance sheet management activities relating to the U.S. Retail segment is recorded in the Corporate segment.
- Includes all Federal Deposit Insurance Corporation (FDIC) covered loans and other ACI loans.
- Items of note relate to the charge related to the acquisition in U.S. strategic cards portfolio and related integration costs, and litigation-related charge(s)/reserve(s). Refer to footnotes 7 and 8, respectively, on page 84.
- Includes the net impact of internal management adjustments which are reclassified to other reporting lines in the Corporate segment. Capital allocated to the business segments was based on 9% CET1 Capital in fiscal 2015, 2016, and 2017.
- Amounts are calculated in accordance with the Basel III regulatory framework, and are presented based on the "all-in" methodology.
- Effective the first quarter of 2016, excludes the impact of intercompany deposits.
- The margin on average earning assets a) includes the value of tax-exempt interest income, adjusted to its equivalent before-tax value, and b) excludes the impact related to the TD Ameritrade insured deposit accounts (IDA). This ratio a) excludes the impact of cash collateral deposited by affiliates with the U.S. banks, which has been eliminated at the U.S. Retail segment level, and b) the allocation to the IDA has been changed to reflect the Basel III liquidity rules.
- <sup>9</sup> Includes full service retail banking stores.

### U.S. Retail Segment – U.S. Dollars

(US\$ millions, except as noted)	LINE		2017	·		2016			2015			Year to I	Date		Full Ye	ar
For the period ended	#	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3		2017	2016		2016	2015
Net interest income	4	\$ 1,457	\$ 1,391 \$	1,381	\$ 1,396 \$	1,354 \$	1,308 \$	1.288	\$ 1,260 \$	1,224	•	4,229 \$	3,950	\$	5,346 \$	4,925
Non-interest income	2	\$ 1,457 542	498	517	\$ 1,396 \$ 452	1,354 \$ 456	1,306 \$ 417	1,200 459	373	463	\$	4,229 \$ 1,557	1,332	Ф	5,346 წ 1,784	1.689
Total revenue <sup>1</sup>	3	1,999	1,889	1,898	1,848	1,810	1,725	1.747	1,633	1,687		5,786	5,282	-	7,130	6,614
Provision for credit losses <sup>2</sup>	1	1,999	114	193	146	130	123	160	133	1,007		444	413		559	430
Non-interest expenses	5	1,113	1,088	1,077	1,142	1,058	1,067	1,022	1,096	994		3.278	3,147		4.289	4,165
Income (loss) before income taxes	6	749	687	628	560	622	535	565	404	571		2,064	1,722	-	2,282	2,019
Provision for (recovery of) income taxes	7	159	133	110	95	110	76	95	36	102		402	281		376	318
U.S. Retail Bank net income – reported	8	590	554	518	465	512	459	470	368	469		1,662	1,441		1,906	1,701
Adjustments for items of note, net of income taxes <sup>3</sup>	9	550	-	510	-	-	-	470	39	(19)		1,002			1,500	46
U.S. Retail Bank – adjusted	10	590	554	518	465	512	459	470	407	450		1,662	1,441	-	1,906	1,747
Equity in net income of an investment in TD Ameritrade <sup>4</sup>	11	88	82	83	71	97	78	82	84	74		253	257		328	306
Net income – adjusted	12	678	636	601	536	609	537	552	491	524		1,915	1,698		2,234	2,053
Net income – reported	13	\$ 678		601	\$ 536 \$	609 \$	537 \$	552	\$ 452 \$	543	\$	1,915 \$	1,698	\$	2,234 \$	2,007
Net income – reported	13	Ψ 0/0	Ψ 030 Ψ	001	ψ 330 ψ	003 ψ	331 ψ	332	Ψ 432 Ψ	373	Ψ	1,313 ψ	1,000	Ψ	Σ,204 ψ	2,007
Average common equity (US\$ billions)	14	\$ 26.2	\$ 26.0 \$	26.2	\$ 25.7 \$	25.4 \$	25.2 \$	25.1	\$ 25.1 \$	24.9	\$	26.1 \$	25.3	\$	25.4 \$	25.0
3			· · · · · · · · · · · · · · · · · · ·	-	<u> </u>				L'					<u>.                                    </u>		
Key Performance Indicators (US\$ billions, except as noted)																
Common Equity Tier 1 Capital risk-weighted assets <sup>5</sup>	15	\$ 172	\$ 170 \$	167	\$ 166 \$	162 \$	160 \$	154	\$ 153 \$	145	\$	172 \$	162	\$	166 \$	153
Average loans – personal																
Residential mortgages	16	21.1	21.0	20.9	20.7	20.6	20.6	20.7	20.9	21.0		21.0	20.6		20.7	21.0
Consumer instalment and other personal																
HELOC	17	9.7	9.8	9.9	9.9	10.0	10.1	10.3	10.3	10.4		9.8	10.1		10.1	10.4
Indirect auto	18	21.4	21.0	21.2	21.0	20.5	19.8	19.4	18.7	17.9		21.2	19.9		20.2	17.7
Other	19	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.6	0.5		0.6	0.6		0.6	0.6
Credit card	20	10.9	10.6	10.9	10.1	9.8	9.7	10.1	8.0	7.1		10.8	9.9		9.9	7.3
Total average loans – personal	21	63.7	62.9	63.5	62.3	61.5	60.8	61.0	58.5	56.9		63.4	61.1		61.5	57.0
Average loans and acceptances – business	22	80.2	79.7	79.9	77.7	76.2	73.3	72.6	68.1	65.4		80.0	74.0		74.9	64.2
Average debt securities classified as loans	23	0.6	0.6	1.0	1.1	1.2	1.3	1.3	1.4	1.5		0.7	1.3		1.2	1.6
Average deposits																
Personal	24	85.0	84.6	81.5	79.7	79.0	77.8	74.7	73.3	72.8		83.7	77.2		77.8	71.8
Business <sup>6</sup>	25	64.6	65.6	65.6	64.9	61.8	62.0	61.7	61.0	57.7		65.2	61.8		62.6	58.3
TD Ameritrade insured deposit accounts	26	91.3	94.5	94.8	89.1	84.0	83.9	81.4	79.4	75.6		93.5	83.1		84.6	76.1
Assets under administration	27	18	18	18	17	17	17	16	16	16		18	17		17	16
Assets under management	28	61	60	60	66	74	74	73	79	76		61	74	1	66	79
Total revenue – adjusted (US\$ millions)	29	1,999	1,889	1,898	1,848	1,810	1,725	1,747	1,689	1,687		5,786	5,282	1	7,130	6,670
Non-interest expenses – adjusted (US\$ millions)	30	1,113	1,088	1,077	1,142	1,058	1,067	1,022	1,089	1,024		3,278	3,147		4,289	4,146

<sup>1</sup> Effective the first quarter of 2017, the impact from certain treasury and balance sheet management activities relating to the U.S. Retail segment is recorded in the Corporate segment.

<sup>&</sup>lt;sup>2</sup> Includes all FDIC covered loans and other ACI loans.

<sup>3</sup> Items of note relate to the charge related to the acquisition in U.S. strategic cards portfolio and related integration costs, and litigation and litigation-related charge(s)/reserve(s). Refer to footnotes 7 and 8, respectively, on page 84.

Includes the net impact of internal management adjustments which are reclassified to other reporting lines in the Corporate segment.

Amounts are calculated in accordance with the Basel III regulatory framework, and are presented based on the "all-in" methodology.

<sup>&</sup>lt;sup>6</sup> Effective the first quarter of 2016, excludes the impact of intercompany deposits.

### Wholesale Banking Segment

(\$ millions, except as noted)	LINE			2017						2	2016					2	015	, i		Yea	r to D	ate		Fu	II Year	r
For the period ended	#	Q3		Q2		Q1		Q4		Q3		Q2		Q1		Q4		Q3		2017		2016		2016		2015
																			_							
Net interest income (TEB)	1	\$ 32		\$ 805	\$	393	\$	396	\$	390	\$	440	\$	459	\$	550	\$	564	\$	1,527	\$	1,289	\$	1,685	\$	2,295
Non-interest income <sup>1</sup>	2	57	3	13		464		345		469		326		205		116		201		1,050		1,000		1,345		631
Total revenue	3	90	2	818		857		741	,	859		766		664		666		765		2,577		2,289		3,030		2,926
Provision for (recovery of) credit losses <sup>2</sup>	4		-	(4)		(24)		1		11		50		12		14		2		(28)		73		74		18
Non-interest expenses	5	50	1	481		524		432		437		441		429		390		431		1,509		1,307		1,739		1,701
Income (loss) before income taxes	6	39		341		357		308		411		275		223		262		332		1,096		909		1,217		1,207
Provision for (recovery of) income taxes (TEB)	7	10	5	93		90		70		109		56		62		66		93		288		227		297		334
Net income (loss) – reported	8	\$ 29	3	\$ 248	\$	267	\$	238	\$	302	\$	219	\$	161	\$	196	\$	239	\$	808	\$	682	\$	920	\$	873
Average common equity (\$ billions)	9	\$ 5.	•	\$ 6.2	\$	6.0	\$	5.9	\$	5.9	\$	6.0	\$	6.1	\$	6.0	\$	5.5	\$	6.1	\$	6.0	\$	6.0	\$	5.8
Return on common equity <sup>3,4</sup>	10	19.	6 %	16.4	%	17.5 %		16.1	%	20.4	%	14.8	%	10.6 %	ó	13.0 %	6	17.2 %		17.8	%	15.2 %		15.5	%	15.2 %
																										•
Key Performance Indicators																										
(\$ billions, except as noted)							, .												_							
Common Equity Tier 1 Capital risk-weighted assets <sup>5</sup>	11	\$ 6	3	\$ 70	\$	69	\$	67	\$	67	\$	63	\$	65	\$	65	\$	62	\$	63	\$	67	\$	67	\$	65
Gross drawn <sup>6</sup>	12	2	)	20		19		21		21		19		18		16		16		20		21		21		16
Efficiency ratio	13	55.		58.8	%	61.1 %		58.3	%		%		%	64.6 %	ó	58.6 %	6	56.3 %		58.6	%	57.1 %			%	58.1 %
Average number of full-time equivalent staff	14	4,01	1	3,969		3,929	<u> </u>	3,893		3,808		3,649		3,712	<u> </u>	3,741		3,736		3,971		3,724	╵Ĺ	3,766		3,748
Trading-Related Income (Loss) (TEB)							, .																			
Interest rate and credit	15	\$ 20		\$ 85	\$	248	\$	159	\$	239	\$	172	\$	171	\$	112	\$	190	\$	540	\$	582	\$	741	\$	600
Foreign exchange	16	20		136		173		156		149		163		154		109		104		514		466		622		467
Equity and other	17	5		204		94		65		59		94		55		95		131	ΙL	349		208	lШ	273		478
Total trading-related income (loss)	18	\$ 46	3	\$ 425	\$	515	\$	380	\$	447	\$	429	\$	380	\$	316	\$	425	\$	1,403	\$	1,256	\$	1,636	\$	1,545

Effective February 1, 2017, the total gains and losses on derivatives hedging the reclassified available-for-sale securities portfolio are recorded in Wholesale Banking, previously reported in the Corporate segment and treated as an item of note.

Includes the cost of credit protection incurred in economic hedging of the lending portfolio.

Capital allocated to the business segments was based on 9% CET1 Capital in fiscal 2015, 2016, and 2017.

CVA is included in accordance with OSFI guidance.

Amounts are calculated in accordance with OSF guidance.

Amounts are calculated in accordance with the Basel III regulatory framework and are presented based on the "all-in" methodology.

Includes gross loans and bankers' acceptances, excluding letters of credit, cash collateral, credit default swaps (CDS) and reserves for the corporate lending business.

Includes trading-related income reported in net interest income and non-interest income.

### **Corporate Segment**

(\$ millions)	LINE			2017		1	201	6			2015			Year to	Date		Full Ye	ear
For the period ended	#	Q	3	Q2	Q1	Q4	Q3	Q2	Q1		Q4	Q3		2017	2016	20	16	2015
						T				т					· ·			
Net interest income (loss) <sup>1,2</sup>	1	\$ 3	22	\$ (80)		\$ 293		285 \$	328	\$	182 \$	126	\$	538 \$	873		,166 \$	517
Non-interest income (loss) <sup>2,3</sup>	2		94	88	238	137	95	31	188	<u> </u>	52	1		420	314		451	69
Total revenue <sup>4</sup>	3	4	16	8	534	430	355	316	516		234	127		958	1,187		,617	586
Provision for credit losses <sup>2,5</sup>	4		87	117	131	91	119	110	181		100	45		335	410		501	243
Non-interest expenses	5	•	66	638	714	667	698	784	739		936	518		2,018	2,221	2	,888	2,777
Income (loss) before income taxes and equity in net income of an investment																		
in TD Ameritrade	6		37)	(747)	(311)	(328)	(462)	(578)	(404)		(802)	(436)		(1,395)	(1,444)		,772)	(2,434)
Provision for (recovery of) income taxes	7	(1	83)	(584)	(209)	(189)	(225)	(227)	(202)		(355)	(233)		(976)	(654)	(	(843)	(1,158)
Equity in net income of an investment in TD Ameritrade	8		4	3	2	1	(4)	1		╽	(1)	(1)		9	(3)	<u> </u>	(2)	1
Net income (loss) – reported	9	(1	50)	(160)	(100)	(138)	(241)	(350)	(202)		(448)	(204)		(410)	(793)		(931)	(1,275)
Adjustments for items of note, net of income taxes <sup>6</sup>	10		96	58	25	44	58	230	24		287	43		179	312		356	671
Net income (loss) – adjusted	11	\$	54)	\$ (102)	\$ (75)	\$ (94)	\$ (183) \$	(120) \$	(178)	\$	(161) \$	(161)	\$	(231) \$	(481)	\$ (	(575) \$	(604)
Decomposition of Adjustments for Items of Note, Net of Income Taxes <sup>6</sup>																		
• •	40	•			• 50	Ta				Τ.			<b>—</b>			-		
Amortization of intangibles (Footnote 2)	12	\$	56	\$ 58	\$ 59	\$ 60	\$ 58 \$	63 \$	65	\$	65 \$	62	\$	173 \$	186	\$	246 \$	255
Loss on sale of the Direct Investing business in Europe (Footnote 3)	13		40	_	_	_	-	_	-		-	-		40	-		-	-
Fair value of derivatives hedging the reclassified available-for-sale securities	14				(24)	(16)		E4	(44)		(24)	(10)		(0.4)	40		(0)	(55)
portfolio (Footnote 4) Impairment of goodwill, non-financial assets, and other charges (Footnote 5)	15		-	_	(34)	(16)	_	51 116	(41)		(21)	(19)		(34)	10 116		(6) 116	(55)
Restructuring charges (Footnote 6)	16		_	_	_	_	_	110	_		243	-		-	116		110	- 471
								-		-			_					
Total adjustments for items of note	17	\$	96	\$ 58	\$ 25	\$ 44	\$ 58 \$	230 \$	24	\$	287 \$	43	\$	179 \$	312	\$	356 \$	671
Decomposition of Items included in Net Income (Loss) - Adjusted																		
Net corporate expenses	18	\$ (1	66)	\$ (186)	\$ (233)	\$ (215)	\$ (222) \$	(196) \$	(203)	\$	(192) \$	(193)	\$	(585) \$	(621)	\$ (	(836) \$	(734)
Other	19		83	56	129	92	10	48	(4)		2	4		268	54		146	18
Non-controlling interests	20		29	28	29	29	29	28	29		29	28		86	86		115	112
Net income (loss) – adjusted	21	\$	54)	\$ (102)	\$ (75)	\$ (94)	\$ (183) \$	(120) \$	(178)	\$	(161) \$	(161)	\$	(231) \$	(481)	\$ (	(575) \$	(604)
Average number of full-time equivalent staff	22	14,5	28	14,540	14,195	13,830	13,320	12,790	12,688		12,781	12,890		14,419	12,933	13	,160	12,870

 $<sup>^{\</sup>mbox{\tiny 1}}$  Includes the elimination of TEB adjustments reported in Wholesale Banking's results.

<sup>&</sup>lt;sup>2</sup> Business segment results are presented excluding the impact of asset securitization programs, which are reclassified in the Corporate segment.

<sup>&</sup>lt;sup>3</sup> Effective February 1, 2017, the total gains and losses on derivatives hedging the reclassified available-for-sale securities portfolio are recorded in Wholesale Banking, previously reported in the Corporate segment and treated as an item of note.

<sup>&</sup>lt;sup>4</sup> Effective the first quarter of 2017, the impact from certain treasury and balance sheet management activities relating to the U.S. Retail segment is recorded in the Corporate segment.

<sup>&</sup>lt;sup>5</sup> Includes incurred but not identified PCL related to the products in the Canadian Retail and Wholesale Banking segments.

 $<sup>^{\</sup>mbox{\tiny 6}}$  For detailed footnotes to the items of note, refer to page 84.

Net Interest Income and Ma	rgin																										
(\$ millions, except as noted)	LINE	-	· ·		2017			Γ		•		2016				1	2	2015			Yea	r to Da	ate		Fu	ull Yea	ır
For the period ended	#	L	Q3		Q2		Q1	<u>L</u> .	Q4		Q3		Q2		Q1	<u>L</u>	Q4		Q3		2017		2016	╎└	2016		2015
Interest Income																											
Loans	1	\$ (	6,045	\$	5,655	\$	5,705	\$	5,589	\$	5,433	\$	5,297	\$	5,432	\$	5,159	\$	5,144	\$	17,405	\$	16,162	\$	21,751	\$	20,319
Securities	2		1,464		1,425		1,347		1,219		1,100		1,115		1,150		1,136		1,086		4,236		3,365		4,584		4,369
Deposits with banks	3		115		115		75		68		62		58		37		34		36		305		157		225		142
Total interest income	4		7,624		7,195		7,127	<u> </u>	6,876	-	6,595		6,470		6,619		6,329		6,266		21,946		19,684	l L	26,560		24,830
Interest Expense																											
Deposits	5		1,729		1,553		1,475		1,340		1,194		1,126		1,098		1,023		1,069		4,757		3,418		4,758		4,242
Securitization liabilities	6		116		112		111		103		113		112		124		130		143		339		349		452		593
Subordinated notes and debentures	7		97		91		100		107		104		96		88		103		93		288		288		395		390
Other	8		415		330		300		254		260		256		262		186		264		1,045		778		1,032		881
Total interest expense	9		2,357	L.	2,086		1,986	<u> </u>	1,804	_	1,671		1,590		1,572	<u>.</u>	1,442		1,569		6,429		4,833		6,637		6,106
Net Interest Income	10		5,267		5,109		5,141		5,072		4,924		4,880		5,047		4,887		4,697		15,517		14,851		19,923		18,724
TEB adjustment	11		59		457		112		86		79		82		65		95		91		628		226		312		417
Net Interest Income (TEB)	12	\$	5,326	\$	5,566	\$	5,253	\$	5,158	\$	5,003	\$	4,962	\$	5,112	\$	4,982	\$	4,788	\$	16,145	\$	15,077	\$	20,235	\$	19,141
Average total assets (\$ billions)	13	\$	1,239	¢	1,217	\$	1,212	\$	1,196	\$	1.157	•	1.142	\$	1.141	\$	1,113	•	1,069	\$	1,223	\$	1,147	Q.	1,159	\$	1,063
Average earning assets (\$ billions)	14		1,077	Ψ	1,056	Ψ	1,041	Ψ	1,031	Ψ	989	Ψ	969	Ψ	975	φ	958	Ψ	925	Ψ	1,058	Ψ	978	φ	991	Ψ	914
Net interest margin as a % of average earning assets	15		1.94 %		1.98 %	<u>.</u>	1.96 %	5	1.96	%	1.98	%	2.05	%	2.06 %		2.02	%	2.01 %		1.96	%	2.03 %		2.01	%	2.05
Impact on Net Interest Income due to Impaired Loans																											
Net interest income recognized on impaired debt securities classified as loans		\$	(12)	\$	(19)	\$	(17)	\$	(20)	\$	(22)	\$	(27)	\$	(24)	\$	(27)	\$	(24)	\$	(48)	\$	(73)	\$	(93)	\$	(103)
Net interest income foregone on impaired loans	17		29		29		32	1	33		32		32		32		29		27		90		96		129		110
Recoveries	18		-		(3)		(2)	1_	(1)		(1)		(1)		(1)		(2)		-		(5)		(3)	ŀЬ	(4)		(3)

Total

### **Non-Interest Income**

(\$ millions)	LINE			2017			2016		•	2015	•	Year t	Date		ull Year	
For the period ended	#		Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	2017	2016	2016	201	5
			•		*				•					b		
Investment and Securities Services																
Broker dealer fees and commissions	1	\$	118	\$ 129 \$	128	\$ 119 \$	117 \$	117 \$		\$ 107 \$	106	\$ 375	344	\$ 46	3 \$ -	430
Full-service brokerage and other securities services	2		242	235	238	226	216	205	206	189	194	715	627	85	3	760
Underwriting and advisory	3		161	147	155	132	177	138	99	87	122	463	414	54	6 .	443
Investment management fees	4		136	133	130	130	126	123	126	123	126	399	375	50	5 -	481
Mutual fund management	5		445	429	427	420	410	390	403	402	404	1,301	1,203	1,62	3 1,	,569
Trust fees	6		40	36	35	37	40	38	38	36	39	111	116	15	3	150
Total investment and securities services	7		1,142	1,109	1,113	1,064	1,086	1,011	982	944	991	3,364	3,079	4,14	3 3,	,833
Credit fees	8		304	284	264	268	271	258	251	254	238	852	780	1,04	3	925
Net securities gain (loss)	9		37	36	14	28	37	1	(12)	11	14	87	26	5	1	79
Trading income (loss) <sup>1</sup>	10		237	(288)	213	83	174	97	41	(99)	(7)	162	312	39	5 (2	(223)
Service charges	11		682	645	663	656	641	631	643	638	615	1,990	1,915	2,57	1 2,	,376
Card services	12		638	566	624	582	592	543	596	480	432	1,828	1,731	2,31	3 1,	,766
Insurance revenue <sup>2</sup>	13		956	909	952	945	959	924	968	977	970	2,817	2,851	3,79	3,	,758
Other income																
Foreign exchange – non-trading	14		22	44	54	33	28	21	40	59	40	120	89	12	2 :	256
Income (loss) from financial instruments designated																
at fair value through profit or loss																
Trading-related income (loss)	15		(1)	6	(2)	(3)	5	2	(13)	(3)	(4)	3	(6)	(	9)	(12)
Related to insurance subsidiaries <sup>2</sup>	16		(59)	23	(51)	1	36	(12)	8	(21)	2	(87)	32	3	3	45
Securitization liabilities	17		-	-		_	_	_	_		-	_	_		_	4
Loan commitments	18		(77)	(3)	(59)	(14)	_	(33)	(1)	(12)	(11)	(139)	(34)	(4	3)	(54)
Deposits	19		-	_			1	2	1	3	_	_	4		1	1
Other <sup>1</sup>	20	l	138	33	194	30	(53)	(66)	59	(71)	29	365	(60)	(3	))	(52)
Total other income (loss)	21		23	103	136	47	17	(86)	94	(45)	56	262	25	7	2	188
Total non-interest income	22	\$	4,019	\$ 3,364 \$	3,979	\$ 3,673 \$	3,777 \$	3,379 \$	3,563	\$ 3,160 \$	3,309	\$ 11,362	10,719	\$ 14,39	2 \$ 12,	,702

<sup>&</sup>lt;sup>1</sup> Effective the first quarter of 2016, certain amounts relating to foreign exchange trading were reclassified from Other income to Trading income.

<sup>2</sup> The results of the Bank's insurance business within Canadian Retail include both insurance revenue and the changes in fair value from investments that fund policy liabilities which are designated at fair value through profit or loss within the Bank's property and casualty insurance subsidiaries.

Non-	ntoract	<b>Expenses</b>
	mieresi	LAUCHSCS

(\$ millions)	LINE		2017	•		2016		<del>.</del>	2015	-	Year to D	ato	1	Full Year	,
For the period ended	#	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	2017	2016	2016		2015
roi the period ended	#	<b>Q</b> 3	- QL	۷.	Q-T	43	Q2		47	43	2017	2010	2010		2013
Salaries and Employee Benefits															
Salaries	1	\$ 1,473	\$ 1,427 \$	1,472	\$ 1,441 \$	1,399 \$	1,358 \$	1,378	\$ 1,383 \$	1,387	\$ 4,372 \$	4,135	\$ 5,5	76 \$	5,452
Incentive compensation	2	640	610	634	528	546	563	533	479	491	1,884	1,642	2,1	70	2,057
Pension and other employee benefits	3	414	441	480	352	381	402	417	368	383	1,335	1,200	1,5	52	1,534
Total salaries and employee benefits	4	2,527	2,478	2,586	2,321	2,326	2,323	2,328	2,230	2,261	7,591	6,977	9,2	98	9,043
Occupancy															
Rent	5	236	230	227	233	222	228	232	225	236	693	682		15	887
Depreciation and impairment losses	6	115	95	96	117	107	103	100	100	94	306	310		27	376
Other	7	105	120	128	131	103	122	127	122	107	353	352		83	456
Total occupancy	8	456	445	451	481	432	453	459	447	437	1,352	1,344	1,8	25	1,719
Equipment	_												l I .		
Rent	9	47	46	46	48	44	45	45	46	45	139	134		82	172
Depreciation and impairment losses	10	49	50	52	51	49	53	49	49	54	151	151		02	212
Other	11	153	153	144	140	138	150	132	139	126	450	420	l	60	508
Total equipment	12	249	249	242	239	231	248	226	234	225	740	705	9	44	892
Amortization of Other Intangibles															
Software and asset servicing rights	13	115	112	106	118	115	104	101	98	97	333	320	l I	38	373
Other	14	58	63	64	64	63	69	74	73	70	185	206		70	289
Total amortization of other intangibles	15	173	175	170	182	178	173	175	171	167	518	526		08	662
Total amortization of other intangibles	15	1/3	175	170	102	170	173	1/3	171	107	310	320	l  '	06	002
Marketing and Business Development	16	173	184	166	198	190	182	173	198	192	523	545	7	43	728
Restructuring charges (recovery)	17	(6)	17	(5)	1	(3)	(14)	(2)	349	_	6	(19)	11 (	18)	686
Brokerage-Related Fees	18	76	82	82	78	77	80	81	77	79	240	238	3	16	324
Professional and Advisory Services	19	272	280	289	379	300	282	271	305	258	841	853	1,2	32	1,032
Other Expenses															
Capital and business taxes	20	31	34	31	72	39	34	31	61	26	96	104	1	76	139
Postage	21	58	58	52	50	54	64	57	52	56	168	175		25	222
Travel and relocation	22	41	45	44	55	45	49	42	47	43	130	136		91	175
Other	23	805	739	789	792	771	862	812	740	548	2,333	2,445	3,2	37	2,451
Total other expenses	24	935	876	916	969	909	1,009	942	900	673	2,727	2,860	3,8	29	2,987
Total non-interest expenses	25	\$ 4,855	\$ 4,786 \$	4,897	\$ 4,848 \$	4,640 \$	4,736 \$	4,653	\$ 4,911 \$	4,292	\$ 14,538 \$	14,029	\$ 18,8	77 \$	18,073
				-											

Balance Sheet										
(\$ millions) As at	LINE #	Q3	2017 Q2	Q1	Q4	2016 Q3	Q2	Q1	2015 Q4	Q3
ASSETS										·
Cash and due from banks	1	\$ 4,113	5,271 \$	3,748	\$ 3,907 \$	3,593 \$	3,292 \$	3,204	\$ 3,154 \$	3,542
Interest-bearing deposits with banks	2	45,601	54,227	54,438	53,714	54,605	47,778	48,739	42,483	49,081
Trading loans, securities, and other	3	99,819	111,833	110,261	99,257	102,934	93,140	101,360	95,157	108,472
Derivatives	4	63,087	62,674	60,640	72,242	77,858	73,092	85,642	69,438	75,056
Financial assets designated at fair value through profit or loss	5 6	3,833	3,971	4,594	4,283	4,333	4,279	4,525	4,378	4,005
Available-for-sale securities	7	123,273 290,012	121,992 300,470	113,275 288,770	107,571 283,353	99,674 284,799	93,644 264,155	94,372 285,899	88,782 257,755	77,586 265,119
Held-to-maturity securities	8	71,233	82,330	77,981	84,395	81,341	76,881	80,207	74,450	73,661
Securities purchased under reverse repurchase agreements	9	120,400	113,834	96,389	86,052	100,109	93,820	100,941	97,364	102,325
Loans			* * * * * * * * * * * * * * * * * * * *							
Residential mortgages	10	215,505	217,143	215,658	217,336	215,050	211,982	215,456	212,373	208,286
Consumer instalment and other personal: HELOC	11 12	84,295 48,932	81,366	78,729	78,358 48,947	76,977 47,508	74,770 44,888	75,631 46,700	74,766 43,901	74,530
Indirect auto Other	13	18,165	49,693 17,982	47,980 17,656	48,947 17,226	47,508 16,980	44,888 16,661	46,700 16,625	43,901 16,804	42,241 17,398
Credit card	14	32,463	32,463	31,814	31,914	31,099	29,755	31,726	30,215	27,047
Business and government	15	193,505	202,672	195,600	194,074	186,089	177,104	182,399	167,529	160,173
Debt securities classified as loans	16	3,181	1,034	1,036	1,674	1,707	1,820	2,217	2,187	2,297
Allowance for loan losses	17 18	596,046 (3,677)	602,353 (3,892)	588,473 (3,815)	589,529 (3,873)	575,410 (3,773)	556,980 (3,616)	570,754 (3,726)	547,775 (3,434)	531,972 (3,344)
Loans, net of allowance for loan losses	19	592,369	598,461	584,658	585,656	571,637	553,364	567,028	544,341	528,628
Other		,	230,101	1,000	230,000	2,30.		,020		1_3,020
Customers' liability under acceptances	20	16,855	17,002	11,741	15,706	15,756	15,467	16,720	16,646	14,271
Investment in TD Ameritrade	21	6,714	7,281	6,883	7,091	6,859	6,473	7,220	6,683	6,577
Goodwill Other intangibles	22 23	15,630 2,586	16,942 2,716	16,222 2,661	16,662 2,639	16,262 2,542	15,689 2,509	17,386 2,723	16,337 2,671	16,342 2,695
Land, buildings, equipment, and other depreciable assets	24	5,154	5,461	5,355	5,482	5,309	5,160	5,557	5,314	5,304
Deferred tax assets	25	2,472	2,394	2,295	2,084	1,850	1,987	2,131	1,931	2,114
Amounts receivable from brokers, dealers and clients	26	16,818	31,188	22,666	17,436	25,057	26,305	21,934	21,996	16,794
Other assets	27 28	12,424 78,653	14,343 97,327	13,076 80,899	12,790 79,890	12,717 86,352	11,906 85,496	13,895 87,566	13,248 84,826	12,749 76,846
Total assets	29	\$ 1,202,381	\$ 1,251,920 \$	1,186,883	\$ 1,176,967 \$	1,182,436 \$	1,124,786 \$	1,173,584	\$ 1,104,373 \$	1,099,202
LIABILITIES		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,122,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,112,111 +	1,1=1,144 4	.,,	1,121,212	.,,
Trading deposits	30	\$ 81,732	\$ 92,958 \$	91,485	\$ 79,786 \$	73,084 \$	66,402 \$	84,177	\$ 74,759 \$	80,673
Derivatives	31	61,300	57,353	57,936	65,425	69,720	67,283	71,012	57,218	63,120
Securitization liabilities at fair value	32	12,435	12,824	12,537	12,490	12,145	11,335	10,954	10,986	10,567
Other financial liabilities designated at fair value through profit or loss	33	39	6	24	190	413	762	1,024	1,415	1,781
Demoite	34	155,506	163,141	161,982	157,891	155,362	145,782	167,167	144,378	156,141
Deposits Personal: Non-term	35	383,700	409,701	392,377	389,052	372,451	353,194	372,364	345,403	336,924
Term	36	49,543	50,395	50,217	50,180	50,203	50,085	50,744	50,415	51,508
Banks	37	22,729	22,689	20,443	17,201	18,959	14,479	16,231	17,080	20,105
Business and government	38 39	317,895 773,867	324,327	311,497 774,534	317,227 773,660	316,299 757,912	296,773 714,531	297,191	282,678	277,123 685,660
Other	39	773,867	807,112	774,534	773,000	757,912	/14,531	736,530	695,576	000,000
Acceptances	40	16,855	17,002	11,741	15,706	15,756	15,467	16,720	16,646	14,271
Obligations related to securities sold short	41	34,806	32,611	30,532	33,115	44,564	40,726	41,876	38,803	34,336
Obligations related to securities sold under repurchase agreements	42	78,118	74,608	59,338	48,973	58,762	63,828	65,437	67,156	74,027
Securitization liabilities at amortized cost  Amounts payable to brokers, dealers and clients	43 44	16,688 17,694	17,198 29,433	17,183 24,494	17,918 17,857	19,313 24,445	20,479 25,064	21,472 23,161	22,743 22,664	23,275 15,479
Insurance-related liabilities	45	6,727	6,778	6,923	7,046	7,235	6,505	6,586	6,519	6,385
Other liabilities	46	18,942	19,316	18,460	19,696	18,942	15,688	15,266	14,223	15,207
	47	189,830	196,946	168,671	160,311	189,017	187,757	190,518	188,754	182,980
Subordinated notes and debentures	48	9,714	8,482	8,394	10,891	8,941	8,893	7,695	8,637	8,456
Total liabilities	49	1,128,917	1,175,681	1,113,581	1,102,753	1,111,232	1,056,963	1,101,910	1,037,345	1,033,237
EQUITY Shareholders' Equity										
Common shares	50	20,912	20,809	20,836	20,711	20,597	20,499	20,395	20,294	20,180
Preferred shares	51	4,750	4,400	4,400	4,400	3,400	3,400	3,400	2,700	2,700
Treasury shares: Common	52	(22)	(245)	(218)	(31)	(42)	(4)	(51)	(49)	(17)
Preferred Contributed surplus	53 54	(8) 207	(7)	(5) 206	(5) 203	(5) 197	(4) 189	(4) 108	(3)	(4) 226
Contributed surplus Retained earnings	54 55	39,473	200 37,577	37,330	203 35,452	197 34,387	189 33,442	198 32,585	214 32,053	30,764
Accumulated other comprehensive income (loss)	56	6,564	11,853	9,131	11,834	11,037	8,689	13,467	10,209	10,477
	57	71,876	74,587	71,680	72,564	69,571	66,211	69,990	65,418	64,326
Non-controlling interests in subsidiaries	58	1,588	1,652	1,622	1,650	1,633	1,612	1,684	1,610	1,639
Total equity	59	73,464	76,239	73,302	74,214	71,204	67,823	71,674	67,028	65,965
Total liabilities and equity	60	\$ 1,202,381	\$ 1,251,920 \$	1,186,883	\$ 1,176,967 \$	1,182,436 \$	1,124,786 \$	1,173,584	\$ 1,104,373 \$	1,099,202

### Unrealized Gain (Loss) on Banking Book Equities and Assets Under Administration and Management

(\$ millions)	LINE		2017						2016					2	015	
As at	#	Q3	Q2	Q1	,	Q4		Q3		Q2		Q1	1 .	Q4		Q3
Banking Book Equities																
Publicly traded	_															
Balance sheet and fair value	1 9	757	\$ 754	\$	719	\$ 613	\$	526	\$	535	\$	458	\$	438	\$	450
Unrealized gain (loss) <sup>1</sup>	2	73	112		80	45		27		1		(61)		(19)		(3)
Privately held												, ,		, ,		. ,
Balance sheet and fair value	3	1,672	1,780	1	,711	1,723		1,673		1,619		1,788		1,711		1,841
Unrealized gain (loss) <sup>1</sup>	4	121	117		111	93		96		95		90		114		127
Total banking book equities																
Balance sheet and fair value	5	2,429	2,534	2	,430	2,336		2,199		2,154		2,246		2,149		2,291
Unrealized gain (loss) <sup>1</sup>	6	194	229		191	138		123		96		29		95		124
Assets Under Administration <sup>2</sup>	_		_													
	- 6		0.4.070	• •		00.404	_	04.000		00.000		20.050	1.	04.440		00.005
U.S. Retail	7	22,638	\$ 24,679			\$ 23,124	\$	21,828	\$	20,932	\$	22,950	\$	21,449	\$	20,935
Canadian Retail	8	370,218	403,579		,389	378,697		372,197		354,686		342,368		347,221		352,257
Total	9	392,856	\$ 428,258	\$ 413	,466	\$ 401,821	\$	394,025	\$	375,618	\$	365,318	\$	368,670	\$	373,192
Assets Under Management																
U.S. Retail	10	75,825	\$ 82,002	\$ 77	,534	\$ 88,515	\$	96,088	\$	92,690	\$	102,875	\$	103,442	\$	99,674
Canadian Retail	11	271.734	279,421		,721	270,738	~	267,981	Ψ	255,731	~	248,157		246,307	Ψ	249,336
Total	12	347,559	\$ 361,423		,255	\$ 359,253	e	364,069	e	348,421	r	351,032	•	349,749	e	349,010

<sup>&</sup>lt;sup>1</sup> Unrealized gain (loss) on publicly traded and privately held available-for-sale (AFS) securities are included in other comprehensive income (OCI). Unrealized gain (loss) on securities designated at fair value through profit or loss are included in the income statement.

<sup>2</sup> Excludes mortgage-backed securities (MBS) in the Canadian Retail segment, coming back on balance sheet as mortgages due to IFRS implementation, as they no longer meet OSFI's definition of AUA.

Goodwill, Other Intangibles, a	nd R	estructu	rinç	g Charges	5														
(\$ millions)	LINE			2017				2016				2015			Year to D	ate	_	Full Ye	ar
As at	#	Q3		Q2	Q1	<u> </u>	Q4	Q3	Q2	Q1	<u> </u>	Q4	Q3	<u> </u>	2017	2016		2016	2015
Goodwill																			
Balance at beginning of period	1	\$ 16,942	\$	16,222 \$	16,662	\$	16,262 \$	15,689 \$	17,386 \$	16,337	\$	16,342 \$	15,122	\$	16,662 \$	16,337	\$	16,337 \$	14,233
Arising during the period	2	-		_	10		_	-	_	-		-	_		10	_		-	-
Foreign currency translation adjustments and other	3	(1,312)		720	(450)		400	573	(1,697)	1,049		(5)	1,220		(1,042)	(75)		325	2,104
Balance at end of period	4	\$ 15,630	\$	16,942 \$	16,222	\$	16,662 \$	16,262 \$	15,689 \$	17,386	\$	16,337 \$	16,342	\$	15,630 \$	16,262	\$	16,662 \$	16,337
Other Intangibles <sup>1</sup>																			
Balance at beginning of period	5	\$ 954	\$	987 \$	1,008	\$	1,054 \$	1,090 \$	1,264 \$	1,280	\$	1,353 \$	1,353	\$	1,008 \$	1,280	\$	1,280 \$	1,436
Arising during the period	6	-		_	61		_	_	_	_		_	_		61	_		_	_
Amortized in the period	7	(58)		(63)	(64)		(64)	(63)	(69)	(74)		(73)	(70)		(185)	(206)		(270)	(289)
Foreign currency translation adjustments and other	8	(53)		30	(18)		18	27	(105)	58		-	70		(41)	(20)		(2)	133
Balance at end of period	9	\$ 843	\$	954 \$	987	\$	1,008 \$	1,054 \$	1,090 \$	1,264	\$	1,280 \$	1,353	\$	843 \$	1,054	\$	1,008 \$	1,280
Deferred Tax Liability on Other Intangibles																			
Balance at beginning of period	10	\$ (169)	\$	(181) \$	(204)	\$	(217) \$	(226) \$	(273) \$	(275)	\$	(296) \$	(293)	\$	(204) \$	(275)	\$	(275) \$	(313)
Recognized in the period	11	16		17	18		18	18	20	21		21	20		51	59		77	82
Foreign currency translation adjustments and other	12	13		(5)	5		(5)	(9)	27	(19)		-	(23)		13	(1)		(6)	(44)
Balance at end of period	13	\$ (140)	\$	(169) \$	(181)	\$	(204) \$	(217) \$	(226) \$	(273)	\$	(275) \$	(296)	\$	(140) \$	(217)	\$	(204) \$	(275)
Net Other Intangibles Closing Balance	14	\$ 703	\$	785 \$	806	\$	804 \$	837 \$	864 \$	991	\$	1,005 \$	1,057	\$	703 \$	837	\$	804 \$	1,005
														. —		•			
Total Goodwill and Net Other Intangibles Closing Balance	15	\$ 16,333	\$	17,727 \$	17,028	s	17,466 \$	17,099 \$	16,553 \$	18,377	œ.	17,342 \$	17,399	\$	16,333 \$	17,099	s	17,466 \$	17,342
Oloshiy Dalance	13	Ψ 10,333	Ψ	11,121 φ	17,020	Ψ	17,700 ф	17,039 ф	10,000 φ	10,577	Ψ	11,072 \$	17,555	Ι [Ψ	10,555 φ	17,000	LΨ	17,400 ф	17,542
Restructuring Charges									<u> </u>								,		
Balance at beginning of period	16	\$ 152	\$	143 \$	198	\$	213 \$	240 \$	348 \$	486	\$	272 \$	301	\$	198 \$	486	\$	486 \$	55
Additions	17	-	I	18	1		16	-	_	4		396	_		19	4		20	733
Amount used	18	(10)	I	(11)	(47)		(19)	(28)	(80)	(149)		(126)	(46)		(68)	(257)		(276)	(261)
Release of unused amounts	19	(6)	I	(1)	(6)		(15)	(3)	(14)	(6)		(47)	-		(13)	(23)		(38)	(47)
Foreign currency translation adjustments and other	20	(7)		3	(3)		3	4	(14)	13		(9)	17		(7)	3		6	6
Balance at end of period	21	\$ 129	\$	152 \$	143	\$	198 \$	213 \$	240 \$	348	\$	486 \$	272	\$	129 \$	213	\$	198 \$	486

<sup>&</sup>lt;sup>1</sup> Excludes the balance and amortization of software and asset servicing rights, which are otherwise included in other intangibles.

### On- and Off-Balance Sheet Loan Securitizations<sup>1</sup>

(\$ millions)	LINE		2017	•		201	6	*	2015	i		Year to	Date		Full Ye	ar
As at	#	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	2	017	2016		2016	2015
Residential mortgages securitized and sold to third parties <sup>2,3,4</sup>																
		£ 00.400	¢ 00.700 ¢	00.740	07.005 6	00.055 6	00.007 €	00.044	0 04 447 0	04.044		0.740	00.044		20.044	00.504
Balance at beginning of period	1	\$ 26,460	\$ 26,782 \$	26,742	\$ 27,635 \$	28,355 \$	29,207 \$	30,211	\$ 31,147 \$	31,914		6,742 \$		\$	30,211 \$	33,561
Securitized Amortization and maturities <sup>5</sup>	2	2,105	1,977 (2,299)	2,567 (2,527)	2,521	2,754	1,401	1,717 (2,721)	2,380	2,938 (3,705)		6,649	5,872	,	8,393	9,129
	3	(3,131)		, .	(3,414)	(3,474)	(2,253)	,	(3,316)	,		7,957)	(8,448)	_ `	(11,862)	(12,479)
Balance at end of period	4	25,434	26,460	26,782	26,742	27,635	28,355	29,207	30,211	31,147		5,434	27,635		26,742	30,211
Consumer instalment and other personal loans – HELOC and automobile loans <sup>6,7</sup>																
Balance at beginning of period	5	2,462	3,642	3,642	3,642	3,642	3,642	3,642	5,361	5,361		3,642	3,642		3,642	6,081
Securitized	6	-	-	_	-	-	_	-	780	-		-	-		-	1,560
Proceeds reinvested in securitizations <sup>8</sup>	7	399	325	764	648	550	497	477	195	397		1,488	1,524		2,172	1,637
Amortization and maturities	8	(412)	(1,505)	(764)	(648)	(550)	(497)	(477)	(2,694)	(397)	(	2,681)	(1,524)		(2,172)	(5,636)
Balance at end of period	9	2,449	2,462	3,642	3,642	3,642	3,642	3,642	3,642	5,361		2,449	3,642		3,642	3,642
Gross impaired loans <sup>9</sup>	10	11	10	18	16	18	16	17	15	23		11	18		16	15
Write-offs net of recoveries9	11	-	1	_	-	-	_	-	-	-		1	-		-	-
Business and government loans <sup>2</sup>																
Balance at beginning of period	12	1,554	1,636	1,664	1,703	1,743	1,803	1,828	1,865	1,913		1,664	1,828		1,828	2,033
Amortization and maturities	13	(40)	(82)	(28)	(39)	(40)	(60)	(25)	(37)	(48)		(150)	(125)		(164)	(205)
Balance at end of period	14	1,514	1,554	1,636	1,664	1,703	1,743	1,803	1,828	1,865		1,514	1,703		1,664	1,828
Credit card																
Balance at beginning of period	15	2,730	2,602	2,012	1,958	-	_	-	-	-		2,012	-		-	-
Securitized	16	-	-	671	-	1,944	-	_	-	-		671	1,944		1,944	-
Proceeds reinvested in securitizations	17	4,000	3,543	3,905	2,905	2,257	-	_	-	-		1,448	2,257		5,162	-
Amortization and maturities	18	(4,000)	(3,543)	(3,905)	(2,905)	(2,257)	-	_	-	-	(1	1,448)	(2,257)		(5,162)	-
Foreign exchange	19	(237)	128	(81)	54	14	_		-	-		(190)	14		68	-
Balance at end of period	20	2,493	2,730	2,602	2,012	1,958	_	_	-	-		2,493	1,958		2,012	_
Write-offs net of recoveries <sup>9</sup>	21	\$ 12	\$ 15 \$	14	\$ 11 \$	9 \$	- \$		\$ - \$	-	\$	41 \$	9	\$	20 \$	
					г				,	* 1	r					
Total loan securitizations	22	\$ 31,890	\$ 33,206 \$	34,662	\$ 34,060 \$	34,938 \$	33,740 \$	34,652	\$ 35,681 \$	38,373	\$ 3	1,890 \$	34,938	\$	34,060 \$	35,681
Mortgages securitized and retained <sup>2</sup>	_															
Residential mortgages securitized and retained	23	\$ 32,093	\$ 33,427 \$	35,381	\$ 33,859 \$	34,868 \$	36,279 \$	35,852	\$ 38,888 \$	37,871	\$ 3	2,093 \$	34,868	\$	33,859 \$	38,888

- Disclosure relates to securitization activity undertaken by the Bank from a capital perspective and does not contemplate accounting treatment under IFRS.
- <sup>2</sup> Balances are comprised of National Housing Act (NHA) MBS which do not qualify as securitization exposures as defined by the Basel III regulatory framework.
- All securitized residential mortgages are insured by Canada Mortgage and Housing Corporation (CMHC) or third-party insurance providers.
- <sup>4</sup> Exposures are considered sold where legal sale has occurred. Classification is not based on accounting treatment under IFRS.
- <sup>5</sup> Mark-to-market adjustments recorded during the period are included in amortization.
- <sup>6</sup> Certain HELOC and credit card structures are subject to early amortization provisions which, if triggered, would result in the repayment of the related asset backed securities from the collections of the securitized HELOC or credit card portfolio prior to the expected principal payment dates.
- Since inception, no capital has been assessed for the Bank's early amortization provisions associated with the sellers' interest of the Bank's sponsored HELOC securitization vehicles because the early amortization triggers have not been breached.
- <sup>8</sup> Includes restricted cash reinvested to support the securitization structure.
- Disclosure relates to loans qualifying as exposures securitized under the Basel III regulatory framework. The amount disclosed here is a subset of total loans included on the "Loans Managed" page. For further details, refer to page 21.

### Standardized Charges for Securitization Exposures in the Trading Book

(\$ millions) As at	LINE #	· · · · · · · · · · · · · · · · · · ·	2017 Q3	· ·		2017 Q2			2017 Q1	
Market Risk Capital Approach and Risk		Gross securitization exposures		Risk- weighted assets	Gross securitization exposures		Risk- weighted assets	Gross securitization exposures	ı	Risk- weighted assets
Weighting Internal Ratings Based <sup>1</sup> AA- and above A+ to A- BBB+ to BBB- Below BB- <sup>2</sup>	1 2 3 4	\$ 593 3 - 1	\$	42 - - 2	\$ 854 53 1 1	\$	61 4 1 2	\$ 585 3 6	\$	41 - 4 2
Unrated <sup>3</sup> <b>Total</b>	5 6	<b>597</b>	\$	44	\$ 909	\$	68	\$ 595	\$	47

	Q3		2016 Q4	
Gross	Risk-	Gross	Risk-	Gross
securitization	weighted	securitization	weighted	securitization
exposures	assets	exposures	assets	exposures
		Risk- Gross weighted securitization	Gross Risk- Gross securitization weighted securitization	Risk- Gross Risk- Gross weighted securitization weighted securitization

#### Market Risk Capital Approach and Risk Weighting Internal Ratings Based<sup>1</sup> AA- and above A+ to A-BBB+ to BBB-Below BB-2 Unrated<sup>3</sup> Total

	Gross securitization exposures	Risk- weighted assets	Gross curitization exposures	Risk- weighted assets	Gross securitization exposures	Risk- weighted assets
7 8 9	\$ 612 8 2	\$ 43 1 2	\$ 525 19 3	\$ 37 3 2	\$ 424 17 3	\$ 30 3 2
10 11	1 -	2 -	1 -	2 -	1 –	2 –
12	\$ 623	\$ 48	\$ 548	\$ 44	\$ 445	\$ 37

2016	2015	2015
Q1	Q4	Q3

Market Risk Capital Approach and Risk
Weighting Internal Ratings Based <sup>1</sup>
AA- and above
A+ to A-
BBB+ to BBB-
Below BB- <sup>2</sup>
Unrated <sup>3</sup>
Total

	Gross securitization	Risk- weighted	Gross securitization	Risk- weighted	Gross securitization	Risk- weighted
	exposures	assets	exposures	assets	exposures	assets
	,		· · ·			 ·
13	\$ 472	\$ 33	\$ 737	\$ 52	\$ 708	\$ 50
14	17	3	19	3	19	3
15	3	2	3	1	5	3
16	1	2	1	2	1	2
17	-	-	_			_
18	\$ 493	\$ 40	\$ 760	\$ 58	\$ 733	\$ 58

Securitization exposures subject to the market risk capital approach are comprised of securities held in the Bank's trading book with no resecuritization exposures.
 Securitization exposures are not deducted from capital and are included in the calculation of RWA, in accordance with the Basel III regulatory framework, and are presented based on the "all-in" methodology.

<sup>&</sup>lt;sup>3</sup> Unrated gross securitization exposures include the notional value of collateralized debt obligations held by the Bank.

# Securitization Exposures in the Trading Book

(\$ millions)	LINE		2017			•	2017	•		2017	
As at	#		Q3		<u> </u>		Q2		<u> </u>	Q1	
Exposure Type	ſ	Aggregate on-balance sheet exposures <sup>1</sup>		Aggregate off-balance sheet exposures <sup>2</sup>		Aggregate on-balance sheet exposures <sup>1</sup>		Aggregate off-balance sheet exposures <sup>2</sup>	Aggregate on-balance sheet exposures <sup>1</sup>	· · ·	Aggregate off-balance sheet exposures <sup>2</sup>
Collateralized debt obligations Asset backed securities	1	· · · · · · · · · · · · · · · · · · ·	,	· · · · · · · · · · · · · · · · · · ·	\$	-	\$		\$ -	\$	-
Residential mortgage loans	2	_		_		_		_	_		_
Commercial mortgage loans	3	7		_		24		_	31		_
Credit card loans	4	242		-		293		_	274		-
Automobile loans and leases	5	277		-		316		-	251		-
Other	6	71				276		_	39		-
Total	7	597	,	-	\$	909		-	\$ 595	\$	-
	_		2016 Q4				2016 Q3			2016 Q2	
		Aggregate on-balance sheet		Aggregate off-balance sheet		Aggregate on-balance sheet		Aggregate off-balance sheet	Aggregate on-balance sheet		Aggregat
Exposure Type	_	exposures <sup>1</sup>	*,	exposures <sup>2</sup>	<del>-  </del> -	exposures <sup>1</sup>		exposures <sup>2</sup>	exposures <sup>1</sup>		exposures
Collateralized debt obligations Asset backed securities	8	-	\$	-	\$	_	\$	-	-	\$	
Residential mortgage loans	9	_		_		99		_	115		
Commercial mortgage loans Credit card loans	10 11	63 238		-		250		-	217		
Automobile loans and leases	12	292		_		189		_	110		·
Other	13	30		_		10		_	3		
Total	14		(	-	\$	548	\$	-	\$ 445	\$	
	<u>.                                    </u>										
			2016 Q1				2015 Q4			2015 Q3	
	Γ	Aggregate		Aggregate		Aggregate		Aggregate	Aggregate		Aggrega
		on-balance sheet		off-balance sheet		on-balance sheet		off-balance sheet	on-balance sheet		off-balance she
xposure Type		exposures <sup>1</sup>		exposures <sup>2</sup>		exposures <sup>1</sup>		exposures <sup>2</sup>	exposures <sup>1</sup>		exposure
Collateralized debt obligations	15						9			\$	

Exposure Type
Collateralized debt obligations
Asset backed securities
Residential mortgage loans
Commercial mortgage loans
Credit card loans
Automobile loans and leases
Other

Total

	Aggregate on-balance sheet exposures <sup>1</sup>	Aggregate alance sheet or exposures <sup>2</sup>	Aggregate n-balance sheet exposures <sup>1</sup>	off-l	Aggregate balance sheet exposures <sup>2</sup>	Aggregate on-balance shee exposures	t	Aggregate off-balance sheet exposures <sup>2</sup>
15	\$ -	\$ - \$	-	\$	-	\$ -	- \$	-
16	-	-	_		_	_	-	_
17	138	-	192		_	203	1	_
18	188	-	385		_	365	i	_
19	162	-	167		_	148	}	_
20	5	-	16		-	17		-
21	\$ 493	\$ - \$	760	\$		\$ 733	\$	-

Primarily comprised of trading securities held by the Bank.
 Primarily comprised of the notional value of collateralized debt obligations held by the Bank.

Securitization Exposures in	the Banki	ng Book										
		r							, .			
(\$ millions)	LINE		2017				2017				2017	
As at	#		Q3		<u>Ļ</u> ,	-	Q2		۱.		Q1	
		Aggregate	)	Aggregate	Т	Aggregate		Aggregate	T	Aggregate		Aggregate
		on-balance sheet	t	off-balance sheet		on-balance sheet		off-balance sheet		on-balance sheet		off-balance sheet
Exposure Type		exposures <sup>1</sup>		exposures <sup>2</sup>		exposures <sup>1</sup>		exposures <sup>2</sup>		exposures <sup>1</sup>		exposures <sup>2</sup>
Collateralized mortgage obligations	1	\$ 12,098	\$	-	\$	12,241	\$	-	\$	11,284	\$	-
Collateralized loan obligations	2	532		-		-		-		-		-
Asset backed securities												
Residential mortgage loans	3	831		9,022		231		9,380		-		9,761
Personal loans	4	10,565		1,071		10,592		857		10,495		1,071
Credit card loans	5	14,785		-		18,853		-		16,284		-
Automobile loans and leases	6	11,131		3,791		10,386		4,592		8,711		4,364
Equipment loans and leases	7	1,374		71		1,503		49		1,094		25
Trade receivables	8	865		1,275	<u>.</u>	939		1,275		838		918
Total	9	\$ 52,181	\$	15,230	\$	54,745	\$	16,153	\$	48,706	\$	16,139
			2016 Q4				2016 Q3				2016 Q2	
		L	Q4	<del>.</del>	<u>.</u>	<del></del>	ųз		<u> </u>		Q2	
		Aggregate	;	Aggregate		Aggregate		Aggregate		Aggregate		Aggregate
		on-balance shee	t	off-balance sheet		on-balance sheet		off-balance sheet		on-balance sheet		off-balance sheet
Exposure Type		exposures <sup>1</sup>		exposures <sup>2</sup>		exposures <sup>1</sup>		exposures <sup>2</sup>		exposures <sup>1</sup>		exposures <sup>2</sup>
Collateralized mortgage obligations	10	\$ 11,430	\$	-	\$	10,575	\$	-	\$	9,864	\$	-
Collateralized loan obligations Asset backed securities	11	-		-		-		_		-		-
Residential mortgage loans	12	-		9,826		_		9,087		_		7,939
Personal loans	13	11,615		1,071		11,472		1,071		11,334		1,071
Credit card loans	14	18,191		_		17,635		_		17,263		_
Automobile loans and leases	15	7,644		3,945		6,158		4,308		5,374		2,996
Equipment loans and leases	16	1,316		_		1,269		-		1,292		-
Trade receivables	17	686		918		1,085		1,229		903		1,229
Total	18	\$ 50,882	\$	15,760	\$	48,194	\$	15,695	\$	46,030	\$	13,235
			2016 Q1				2015 Q4				2015 Q3	
		Aggregate		Aggragata	T -	Aggragata		Aggragets	T -	Aggroacts		Aggroacts
		Aggregate on-balance shee		Aggregate off-balance sheet		Aggregate on-balance sheet		Aggregate off-balance sheet		Aggregate on-balance sheet		Aggregate off-balance sheet
Evneques Type			L									
Exposure Type	40	exposures <sup>1</sup>	•	exposures <sup>2</sup>	\$	exposures <sup>1</sup>	•	exposures <sup>2</sup>	\$	exposures <sup>1</sup> 8,463	•	exposures <sup>2</sup>
Collateralized mortgage obligations Collateralized loan obligations Asset backed securities	19 20	\$ 10,366 -	\$	-	ф	8,734 -	\$	-	\$	8,463 -	\$	-
Residential mortgage loans	21			7.591				6.962				6,742
Personal loans	21	13,133		1,071		13,313		6,962 874		13,866		2,550
Credit card loans	22	13,133		1,071		13,313		0/4		17,759		∠,550
Automobile loans and leases	23 24	19,129		3,247		3,831		2.501		3.887		2,674
Equipment loans and leases	2 <del>4</del> 25	1,475		3,247		3,831 709		∠,501		3,887 888		2,074
Equipment loans and leases Trade receivables	25 26	930		1,229		709 1,376		918		888 776		2,497
Total	26 27	\$ 49.440	\$	13,138	\$	46.021	\$	11,255	\$	45.639	\$	14.463
	21	10,440	Ψ	10,100	ΙΨ.	70,021	Ψ	11,200	ΙΨ.	70,000	Ψ.	17,700

<sup>&</sup>lt;sup>1</sup> On-balance sheet for capital purposes, in accordance with the Basel III regulatory framework.
<sup>2</sup> Off-balance sheet exposures are primarily comprised of liquidity facilities, credit enhancements, and letters of credit provided to the Bank's sponsored trusts, as well as Bank-funded cash collateral accounts.

(\$ millions) As at	LINE #					2017 Q3			<del>.</del>		,			2017 Q2	<del>,</del>		
					,	Outs	tanding exposures		Gross assets	1	·			Ou	tstanding exposures		Gross assets
Exposure Type			Beginning balance		Activity		Ending balance		past due, but not impaired <sup>1,2</sup>		Beginning balance		Activity		Ending balance		past due, but not impaired <sup>1,2</sup>
Residential mortgage loans	1	\$	9,380	\$	(691)	\$	8,689	\$	25	\$	9,761	\$	(381)	\$	9,380	\$	26
Automobile loans and leases Equipment leases	2		3,261 49		(218) 22		3,043 71		17 -		3,096 25		165 24		3,261 49		21
Trade receivables	4		2,132		214		2,346		178		1,989		143		2,132		188
Total	5	\$	14,822	\$	(673)	\$	14,149	\$	220	\$	14,871	\$	(49)	\$	14,822	\$	235
			<del>,</del>		:	2017 Q1	<del>.</del>		<u>.                                    </u>		<del>.</del>			2016 Q4	<del>,</del>		
										1							
			Beginning			Ou	tstanding exposures Ending		Gross assets past due, but	-	Beginning			Ou	tstanding exposures Ending		Gross assets past due, but
Exposure Type			balance		Activity		balance		not impaired <sup>1,2</sup>		balance		Activity		balance		not impaired <sup>1,2</sup>
Residential mortgage loans	6	\$	9,826	\$	(65)	\$	9,761	\$	25	\$	9,088	\$	738	\$	9,826	\$	26
Automobile loans and leases Equipment leases	7 8		2,637		459 25		3,096 25		18		2,872		(235)		2,637		21
Trade receivables	9		1,989		_		1,989		131		2,300		(311)		1,989		188
Total	10	\$	14,452	\$	419	\$	14,871	\$	174	\$	14,260	\$	192	\$	14,452	\$	235
			<del> </del>		:	2016 Q3	<del>.</del>		<del>.</del>		<del>.</del>			2016 Q2	<del>,</del>		
			Designing			Ou	tstanding exposures Ending		Gross assets	<b>.</b>	Doginaina			Ou	tstanding exposures Ending		Gross assets
Exposure Type			Beginning balance		Activity		balance		past due, but not impaired <sup>1,2</sup>		Beginning balance		Activity		balance		past due, but not impaired <sup>1,2</sup>
Residential mortgage loans	11	\$	7,939	\$	1,149	\$	9,088	\$	25	\$	7,591	\$	348	\$	7,939	\$	23
Automobile loans and leases Equipment leases	12 13		1,616		1,256		2,872		17		1,707		(91)		1,616		8
Trade receivables	14		2,300		_		2,300		195		2,300		_		2,300		184
Total	15	\$	11,855	\$	2,405	\$	14,260	\$	237	\$	11,598	\$	257	\$	11,855	\$	215
		,				2016				Ι.				2015			
						Q1								Q4			
						Ou	tstanding exposures		Gross assets					Ou	tstanding exposures		Gross assets
Funcausa Tuna			Beginning		A _40.00		Ending		past due, but		Beginning		A _45. **	•	Ending		past due, but
Exposure Type Residential mortgage loans	16	\$	balance 6,962	\$	Activity 629	\$	balance 7,591	\$	not impaired <sup>1,2</sup>	\$	balance 6,742	\$	Activity 220	\$	balance 6,962	\$	not impaired <sup>1,2</sup> 21
Automobile loans and leases	17	*	1,847	Ψ	(140)	Ψ	1,707	Ψ	8		2,020	Ψ	(173)	Ψ	1,847	Ψ	5
Equipment leases Trade receivables	18 19		- 1.792		- 508		2.300		– 148		– 2,497		(705)		- 1,792		- 145

<sup>&</sup>lt;sup>1</sup> Gross assets past due, but not impaired, are those assets held by the trust which have not received a payment in a specified number of days, as defined in the legal agreements governing each specific transaction between the Bank and its service providers. None of the Bank's sponsored trusts held impaired assets at any time during the period disclosed. The Bank retains no direct exposure to the assets of the trust. In addition, a significant portion of the Bank's exposures are subject to credit risk mitigation, including credit enhancements which reduce the Bank's exposure to loss due to impaired assets held by the sponsored trusts.

<sup>&</sup>lt;sup>2</sup> Gross assets past due, but not impaired, are reported to the Bank by its service providers on a one-month lag.

# Loans Managed 1,2,3,4

Business and government

Total loans securitized and sold to third parties

Total loans managed, net of loans securitized

(\$ millions)

As at

					 	 •				 
				Year-to-date			Year-to-date			Year-to-date
			Gross	write-offs,		Gross	write-offs,		Gross	write-offs,
		Gross	impaired	net of	Gross	impaired	net of	Gross	impaired	net of
Type of Loan		loans	loans	recoveries	loans	loans	recoveries	loans	loans	recoveries
Residential mortgages	1	\$ 218,920	\$ 737	\$ 26	\$ 220,725	\$ 845	\$ 15	\$ 218,972	\$ 843	\$ 6
Consumer instalment and other personal	2	151,329	1,263	592	148,958	1,353	406	144,277	1,405	214
Credit card	3	32,463	368	843	32,463	391	569	31,814	398	277
Business and government <sup>5</sup>	4	194,690	617	45	203,820	701	28	196,802	753	7
Total loans managed	5	597,402	2,985	1,506	605,966	3,290	1,018	591,865	3,399	504
Less: Loans securitized and sold to third parties										
Residential mortgages <sup>6</sup>	6	3,711	_	_	3,932	_	_	3,664	_	-

1,506

			016 Q4			:	2016 Q3				:	2016 Q2	
	,								l				
				Year-to-date				Year-to-date					Year-to-date
			Gross	write-offs,			Gross	write-offs,				Gross	write-offs,
		Gross	impaired	net of	Gross		impaired	net of		Gross		impaired	net of
Type of Loan		loans	loans	recoveries	loans		loans	recoveries		loans		loans	recoveries
Residential mortgages	10	\$ 220,575	\$ 852	\$ 30	\$ 217,975	\$	841	\$ 20	\$	214,634	\$	839	\$ 15
Consumer instalment and other personal	11	144,432	1,392	698	141,358		1,366	511		136,204		1,485	339
Credit card	12	31,914	374	1,005	31,099		331	748		29,758		334	487
Business and government <sup>5</sup>	13	195,238	891	102	187,260		929	56		178,266		909	38
Total loans managed	14	592,159	3,509	1,835	577,692		3,467	1,335		558,862		3,567	879
Less: Loans securitized and sold to third parties		 •	•	 			•	•		•			
Residential mortgages <sup>6</sup>	15	3,614	_	_	3,308		_	_		3,037		_	_
Business and government	16	1,664	_	_	1,703		_	_		1,743		_	_
Total loans securitized and sold to third parties	17	5,278		 -	5,011		- '			4,780			 - '
Total loans managed, net of loans securitized	18	\$ 586,881	\$ 3,509	\$ 1,835	\$ 572,681	\$	3,467	\$ 1,335	\$	554,082	\$	3,567	\$ 879

1,554

5,486

600,480

	2016 Q1			2015 Q4			2015 Q3	
	Gross	Year-to-date write-offs,		Gross	Year-to-date write-offs,		Gross	Year-to-date write-offs,
Gross	impaired	net of	Gross	impaired	net of	Gross	impaired	net of

2017

Q2

3,290

1,018

2017

Q1

3,399

loans

802

269

886

3,077

3,077

1,120

504

recoveries

21

87

\_

1,170

1,170

407 655

1,636

5,300

586,565

				i cai-to-date			i cai-lo-dalc	
			Gross	write-offs,		Gross	write-offs,	
		Gross	impaired	net of	Gross	impaired	net of	Gross
Type of Loan		loans	loans	recoveries	loans	loans	recoveries	loans
Residential mortgages	19	\$ 218,281	\$ 879	\$ 7	\$ 214,875	\$ 786	\$ 27	\$ 210,641
Consumer instalment and other personal	20	138,814	1,704	172	135,324	1,278	560	134,006
Credit card	21	31,728	365	226	30,215	306	858	27,047
Business and government <sup>5</sup>	22	183,417	851	12	168,532	874	114	161,143
Total loans managed	23	572,240	3,799	417	548,946	3,244	1,559	532,837
Less: Loans securitized and sold to third parties			 <u>-</u>	•	<del>-</del> -			
Residential mortgages <sup>6</sup>	24	3,272	_	_	2,944	_	_	2,817
Business and government	25	1,803	_	-	1,828	_	_	1,865
Total loans securitized and sold to third parties	26	5,075	 -	 - '	4,772	 -	 - '	4,682
Total loans managed, net of loans securitized	27	\$ 567,165	\$ 3,799	\$ 417	\$ 544,174	\$ 3,244	\$ 1,559	\$ 528,155

1 Excludes loans classified as trading as the Bank intends to sell the loans immediately or in the near term, and loans designated at fair value through profit or loss for which no allowance is recorded.

2017

Q3

2,985

1,514

5,225

592,177

<sup>2</sup> Excludes ACI loans and debt securities classified as loans. For further details on ACI loans, refer to pages 37 to 39.

LINE

8

- <sup>3</sup> Amounts include securitized mortgages that remain on balance sheet under IFRS.
- The year-to-date write-offs, net of recoveries, include write-offs of purchased credit card balances against credit related fair value adjustments, established upon acquisition.
- <sup>5</sup> Includes additional securitized commercial loans.
- Residential mortgages are primarily comprised of loans securitized into mortgage-backed securities through U.S. government-sponsored entities.

### Gross Loans and Acceptances by Industry Sector and Geographic Location<sup>1</sup>

(\$ millions, except as noted) As at	lions, except as noted) LINE 2017 # Q3								017 Q2				)17 Q1	<u> </u>
By Industry Sector			United				1	United	<del></del>	<del></del>	<u> </u>	United		<del></del>
Personal		Canada	States	Int'l		Total	Canada	States	Int'l	Total	Canada	States	Int'l	Total
Residential mortgages <sup>2</sup>	1	\$ 189,148	\$ 26,061	\$ -	\$	215,209	\$ 188,293	\$ 28,500	\$ -	\$ 216,793	\$ 188.308	\$ 27,000	\$ -	\$ 215,308
Consumer instalment and other personal	'	φ 105,140	φ 20,001	φ –	φ	213,203	φ 100,293	φ 20,300	Ψ –	φ 210,793	φ 100,300	φ 21,000	Ψ –	φ 215,500
HELOC	2	72.206	12,036	_		84.242	68,104	13,194	_	81,298	65.934	12.722	_	78.656
Indirect auto	3	21,633	27,299	_		48,932	20,858	28,835	_	49,693	20,484	27,496	_	47,980
Other	4	17,394	754	7		18,155	17,197	763	7	17,967	16,910	721	10	17,641
Credit card	5	18,211	14,244	8		32,463	17,137	14,530	7	32,463	17,712	14,095	7	31,814
	6	318,592	80,394	15		399,001	312,378	85,822	14	398,214	309,348	82,034	17	391,399
Total personal	О	310,392	60,394	15		399,001	312,376	00,022	14	390,214	309,346	62,034	17	391,399
Business and Government <sup>2</sup>														
Real estate	7	40 500	7.740			04.000	40.000	7.500		00.500	40.400	0.740		00.070
Residential	•	16,528	7,710			24,238	16,060	7,503	-	23,563	16,168	6,710	_	22,878
Non-residential	8	12,771	21,064	14		33,849	13,215	22,745	12	35,972	13,187	21,223		34,410
Total real estate	9	29,299	28,774	14		58,087	29,275	30,248	12	59,535	29,355	27,933	_	57,288
Agriculture	10	6,595	786	-		7,381	6,417	879	_	7,296	6,295	796	-	7,091
Automotive	11	6,441	7,499	247		14,187	6,621	7,261	227	14,109	5,861	5,988	219	12,068
Financial	12	14,556	4,012	482		19,050	14,781	4,211	447	19,439	12,150	3,965	76	16,191
Food, beverage, and tobacco	13	1,994	2,674	52		4,720	1,986	3,036	27	5,049	1,990	3,689	26	5,705
Forestry	14	481	752	-		1,233	479	659	-	1,138	454	614	_	1,068
Government, public sector entities, and education	15	4,024	11,876	-		15,900	4,883	12,364	-	17,247	5,349	11,456	_	16,805
Health and social services	16	5,760	10,478	-		16,238	5,577	11,723	-	17,300	5,563	10,844	_	16,407
Industrial construction and trade contractors	17	2,927	1,847	-		4,774	2,797	2,003	-	4,800	2,629	1,769	13	4,411
Metals and mining	18	1,332	1,507	-		2,839	1,341	1,700	-	3,041	1,359	1,465	140	2,964
Pipelines, oil, and gas	19	3,906	2,130	56		6,092	3,312	2,932	67	6,311	3,303	2,858	46	6,207
Power and utilities	20	2,043	3,104	154		5,301	2,316	2,888	166	5,370	1,902	2,515	-	4,417
Professional and other services	21	3,901	9,782	98		13,781	3,968	11,341	150	15,459	3,941	11,023	201	15,165
Retail sector	22	2,713	4,717	-		7,430	2,670	5,050	-	7,720	2,507	4,310	25	6,842
Sundry manufacturing and wholesale	23	2,678	7,004	54		9,736	2,535	7,527	111	10,173	2,395	7,370	99	9,864
Telecommunications, cable, and media	24	1,590	3,962	186		5,738	1,528	4,359	194	6,081	1,719	4,533	189	6,441
Transportation	25	1,719	9,923	6		11,648	1,722	11,143	23	12,888	1,698	10,908	25	12,631
Other	26	3,643	2,195	58		5,896	3,713	2,561	38	6,312	3,395	1,947	_	5,342
Total business and government	27	95,602	113,022	1,407		210,031	95,921	121,885	1,462	219,268	91,865	113,983	1,059	206,907
Other Loans			· · · · · · · · · · · · · · · · · · ·	<del></del>				•		· · · · · · · · · · · · · · · · · · ·				
Debt securities classified as loans	28	2,252	713	216		3,181	_	814	220	1,034	_	820	216	1,036
Acquired credit-impaired loans <sup>3</sup>	29		688			688	_	839		839	_	872		872
Total other loans	30	2,252	1,401	216		3.869	_	1,653	220	1,873	†	1.692	216	1,908
Total Gross Loans and Acceptances	31	\$ 416,446	\$ 194,817	\$ 1,638	\$	612,901	\$ 408,299	\$ 209,360	\$ 1,696	\$ 619,355	\$ 401,213	\$ 197,709	\$ 1,292	\$ 600,214

#### Portfolio as a % of Total Gross Loans and Acceptances

Pers	^	٠.	ъI	

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Residential mortgages <sup>2</sup>
Consumer instalment and other personal
HELOC
Indirect auto
Other
Credit card
Total personal
Business and Government <sup>2</sup>
Other Loans
Debt securities classified as loans
Acquired credit-impaired loans <sup>3</sup>
Total other loans
Total Gross Loans and Acceptances

_												
2	30.9 %	4.3 %	- %	35.2 %	30.4	% 4.6	% -	% 35.0	% 31.4	% 4.5	% –	% 35.9 %
3	11.8	2.0	-	13.8	11.0	2.1	_	13.1	11.0	2.1	_	13.1
4	3.5	4.5	-	8.0	3.4	4.7	_	8.1	3.4	4.6	_	8.0
5	2.8	0.1	-	2.9	2.8	0.1	_	2.9	2.8	0.1	_	2.9
6	3.0	2.3	-	5.3	2.8	2.4	_	5.2	2.9	2.4	_	5.3
7	52.0	13.2	-	65.2	50.4	13.9	-	64.3	51.5	13.7	-	65.2
8	15.6	18.4	0.2	34.2	15.5	19.7	0.2	35.4	15.3	19.0	0.2	34.5
9	0.4	0.1	-	0.5	_	0.1	0.1	0.2	-	0.1	0.1	0.2
0	-	0.1	-	0.1	-	0.1	_	0.1	-	0.1	_	0.1
1	0.4	0.2	-	0.6	-	0.2	0.1	0.3	_	0.2	0.1	0.3
2	68.0 %	31.8 %	0.2 %	100.0 %	65.9	% 33.8	% 0.3	% 100.0	% 66.8	% 32.9	% 0.3	% 100.0 %

<sup>1</sup> Primarily based on the geographic location of the customer's address.
2 Excludes loans classified as trading as the Bank intends to sell the loans immediately or in the near term, and loans designated at fair value through profit or loss for which no allowance is recorded.

Includes all FDIC covered loans and other ACI loans.

## Gross Loans and Acceptances by Industry Sector and Geographic Location (Continued)<sup>1</sup>

(\$ millions, except as noted) As at	ns, except as noted) LINE 2016 2016 2016 # Q4 Q3							<del>.</del>	<u> </u>		)16 Q2	· · ·	
By Industry Sector			United	<del> </del>		<del> </del>	United	· · ·		<del> </del>	United	<del> </del>	
Personal		Canada	States	Int'l	Total	Canada	States	Int'l	Total	Canada	States	Int'l	Total
Residential mortgages <sup>2</sup>	1	\$ 189,299	\$ 27,662	\$ -	\$ 216,961	\$ 188,046	\$ 26,621	\$ -	\$ 214,667	\$ 186,086	\$ 25,511	\$ -	\$ 211,597
Consumer instalment and other personal		φ 103,233	Ψ 21,002	Ψ —	Ψ 210,301	Ψ 100,040	Ψ 20,021	Ψ –	Ψ 214,007	Ψ 100,000	φ 25,511	Ψ –	φ 211,557
HELOC	2	65.068	13,208	_	78.276	63.952	12.937	_	76.889	62.086	12.591	_	74.677
Indirect auto	3	20,577	28,370	_	48,947	20,388	27,120	_	47,508	19,553	25,334	_	44,887
Other	4	16.456	745	8	17.209	16.254	706	1	16.961	15,946	692	2	16.640
Credit card	5	18.226	13,680	8	31,914	17,934	13,165		31,099	17,801	11,957	_	29,758
Total personal	6	309,626	83,665	16	393,307	306,574	80,549	1	387,124	301,472	76,085	2	377,559
Business and Government <sup>2</sup>	U	309,020	65,005	10	393,307	300,374	00,549	'	307,124	301,472	70,003		377,339
Real estate													
Residential	7	16.001	6.852	_	22.853	15.916	6.719	_	22.635	15.812	6.164	_	21.976
Non-residential	8	12,780	21,675	18	34,473	12,660	20,822	_	33,482	12,214	19,304	_	31,518
	9	28.781	28,527	18	57.326	28,576	27,541	<del></del>	56.117	28.026	25,468		53,494
Total real estate	10	6,017	28,527 570		6.587	28,576 5,968	27,541 547		6,515	5,750	25,468 516		53,494 6,266
Agriculture	11	5,483	5,757	- 272	11,512	5,966	5,611	- 74		4,993	4,739	70	9,804
Automotive Financial	12	10,198	5,757 4.719	496	15,413	9,571	3,564	74 544	10,847 13,679	4,993 9.942	4,739 2.898	72 994	13,834
	13	2,076	4,719 3,741		5,843	2,198	3,564 2,772		4,970	1,580	2,696 2,617		4,197
Food, beverage, and tobacco	14	523	5,741 594	26		584	2,772 540	_		638	2,617 576	- 7	4,197 1,221
Forestry	15	6.589	11.388	_	1,117 17.977	6.445	10.709	_	1,124 17.154	6.279	9.736	•	16.015
Government, public sector entities, and education Health and social services	16	5,480	10,792	_	16,272	5,469	10,709	_	17,154	5,236	9,736	_	15,020
Industrial construction and trade contractors	17	2,486	10,792	- 69	4,389	2.390	1.880		4,270	2,301	9,764 1.439	_	3,740
Metals and mining	18	1,379	1,490	85	4,369 2,954	1,375	1,513	- 193	4,270 3,081	2,301 1,414	1,439	186	3,740
Pipelines, oil, and gas	19	3,871	3,006	92	2,954 6,969	4,149	3,125	193	7,274	3,673	1,433 2,886	100	6,559
Power and utilities	20	1,792	2.643	92	4.435	1.907	2.458	_	4.365	2.062	2,443	_	4,505
Professional and other services	21	4,065	11,215	38	15,318	3,819	9,990	_ 17	13,826	3.605	9,266	_ 18	12,889
Retail sector	22	2,517	4,553	-	7,070	2,418	4,222	-	6,640	2,474	3,908	-	6,382
Sundry manufacturing and wholesale	23	2,305	7.395	111	9.811	2,416	7.578	36	10,050	2,474	7.532	- 37	10,122
Telecommunications, cable, and media	23	2,083	4,819	200	7.102	2,308	4,765	141	7,214	2,246	4,778	125	7,149
Transportation	25	1,634	11,648	13	13,295	1,568	11,028	3	12,599	1,512	10,600	123	12,125
Other	26	3,775	2,022	93	5,890	3,699	2,183	-	5,882	3,404	2,189	42	5,635
	27	91,054	116,713	1,513	209,280	90,042	110,263	1,008	201,313	87,688	102,808	1.494	191,990
Total business and government	21	91,054	110,713	1,513	209,260	90,042	110,203	1,006	201,313	07,000	102,000	1,494	191,990
Other Loans	00		4 400	074	4.07.1		4 400	000	4 707		4 5 4 5	205	4 000
Debt securities classified as loans	28	_	1,403	271	1,674	_	1,438	269	1,707	_	1,515	305	1,820
Acquired credit-impaired loans <sup>3</sup>	29		974	-	974	_	1,022	-	1,022	_	1,078	-	1,078
Total other loans	30		2,377	271	2,648	<del>-</del> .	2,460	269	2,729		2,593	305	2,898
Total Gross Loans and Acceptances	31	\$ 400,680	\$ 202,755	\$ 1,800	\$ 605,235	\$ 396,616	\$ 193,272	\$ 1,278	\$ 591,166	\$ 389,160	\$ 181,486	\$ 1,801	\$ 572,447

#### Accentances

Acceptances	
Personal	
Residential mortgages <sup>2</sup>	32
Consumer instalment and other personal	
HELOC	33
Indirect auto	34
Other	35
Credit card	36
Total personal	37
Business and Government <sup>2</sup>	38
Other Loans	
Debt securities classified as loans	39
Acquired credit-impaired loans <sup>3</sup>	40
Total other loans	41
Total Gross Loans and Acceptances	42

31.3 %	4.6 %	- %	35.9 %	31.8 %	4.5 %	- %	36.3 %	32.5 %	4.5 %	- %	37.0 %
10.8	2.1	_	12.9	10.8	2.2	_	13.0	10.9	2.2	-	13.1
3.4	4.7	_	8.1	3.4	4.6	_	8.0	3.4	4.4	-	7.8
2.7	0.1	_	2.8	2.8	0.1	_	2.9	2.8	0.1	_	2.9
3.0	2.3	-	5.3	3.1	2.2	-	5.3	3.1	2.1	_	5.2
51.2	13.8		65.0	51.9	13.6	-	65.5	52.7	13.3	-	66.0
15.0	19.4	0.2	34.6	15.2	18.7	0.1	34.0	15.3	17.9	0.2	33.4
_	0.2	_	0.2	_	0.2	0.1	0.3	_	0.3	0.1	0.4
_	0.2	_	0.2	_	0.2	_	0.2	_	0.2	_	0.2
_	0.4	_	0.4	_	0.4	0.1	0.5	_	0.5	0.1	0.6
66.2 %	33.6 %	0.2 %	100.0 %	67.1 %	32.7 %	0.2 %	100.0 %	68.0 %	31.7 %	0.3 %	100.0 %

Primarily based on the geographic location of the customer's address.

Excludes loans classified as trading as the Bank intends to sell the loans immediately or in the near term, and loans designated at fair value through profit or loss for which no allowance is recorded.

<sup>&</sup>lt;sup>3</sup> Includes all FDIC covered loans and other ACI loans.

## Gross Loans and Acceptances by Industry Sector and Geographic Location (Continued)<sup>1</sup>

(\$ millions, except as noted) As at	LINE #			)16 Q1	<del> </del>			015 Q4		2015 Q3				
By Industry Sector		<u> </u>	United	<del> </del>	<del> </del>	<del></del>	United	<del> </del>	<del></del>	<del></del>	United	<del></del>		
Personal		Canada	States	Int'l	Total	Canada	States	Int'l	Total	Canada	States	Int'l	Tota	
Residential mortgages <sup>2</sup>	1	\$ 186,435	\$ 28,574	\$ -	\$ 215,009	\$ 185,009	\$ 26,922	\$ -	\$ 211,931	\$ 180,707	\$ 27,117	\$ -	\$ 207,824	
Consumer instalment and other personal		Ψ 100,400	Ψ 20,014	Ψ	Ψ 210,000	Ψ 100,000	Ψ 20,022	Ψ	Ψ 211,001	Ψ 100,707	Ψ 27,117	Ψ	Ψ 201,024	
HELOC	2	61.306	14,212	_	75,518	61.317	13,334	_	74.651	61.037	13,368	_	74.405	
Indirect auto	3	19.193	27,507	_	46.700	19.038	24,862	_	43.900	18.313	23,927	_	42.240	
Other	4	15,839	752	5	16,596	16,075	693	5	16,773	16,653	702	6	17,361	
Credit card	5	17.836	13,892	_	31,728	17,941	12.274	_	30,215	17,748	9.299	_	27,047	
Total personal	6	300.609	84,937	5	385,551	299,380	78,085	5	377,470	294,458	74,413	6	368.877	
Business and Government <sup>2</sup>	Ū	000,000	0.,00.	<u>_</u>	000,00	200,000	7.0,000		0,	,	,			
Real estate														
Residential	7	15,721	6,462	_	22.183	14.862	5,691	_	20,553	14.944	5,396	_	20,340	
Non-residential	8	11,826	20,743	_	32,569	11,330	18,317	_	29,647	11,134	17,636	_	28,770	
Fotal real estate	9	27,547	27,205	_	54,752	26,192	24,008	_	50,200	26,078	23,032		49,110	
Agriculture	10	5,831	514	_	6.345	5.411	467	_	5.878	5,304	434	_	5,738	
Automotive	11	4,846	4,094	91	9,031	4,049	3,027	70	7,146	4,142	2,911	72	7,125	
Financial	12	9.919	3,280	1.446	14,645	10,590	5,881	1,367	17,838	8.715	3,378	1.314	13,407	
Food, beverage, and tobacco	13	1.509	2.742	1,440	4.251	1.463	2,536	-	3.999	1,467	2,423	23	3,913	
Forestry	14	544	594	8	1,146	492	563	9	1,064	455	594	8	1.057	
Government, public sector entities, and education	15	7.180	10,117	_	17,297	5,853	9,089	_	14,942	5,616	8,753	96	14,465	
Health and social services	16	5,067	10,797	_	15,864	4,928	9,719	_	14,647	4,771	9.223	_	13,994	
ndustrial construction and trade contractors	17	2,120	1,526	_	3.646	2,141	1,497	_	3,638	2,109	1,540	_	3,649	
Metals and mining	18	1,531	1,545	207	3,283	1,252	1,162	192	2,606	1,186	1,341	193	2,720	
Pipelines, oil, and gas	19	3.665	2,452		6.117	3,409	1.485		4,894	3,641	1,200	_	4.841	
Power and utilities	20	1,943	2,336	_	4,279	1,549	1,797	_	3,346	1,672	2,041	_	3,713	
Professional and other services	21	3,730	10,198	83	14,011	3,734	8,674	75	12,483	3,777	8,480	77	12,334	
Retail sector	22	2,272	4,104	_	6,376	2,225	4,219	_	6,444	2,204	3,818	_	6,022	
Sundry manufacturing and wholesale	23	2,415	8,400	1	10,816	2,303	7,014	41	9,358	2,202	5,922	39	8,163	
Felecommunications, cable, and media	24	2,088	5,034	140	7,262	2,427	4,069	157	6,653	2,095	3,594	160	5,849	
Fransportation	25	1,489	12,050	20	13,559	1,388	11,117	27	12,532	1,382	10,029	16	11,427	
Other .	26	4,398	1,213	43	5,654	4,749	893	40	5,682	4,713	1,271	38	6,022	
otal business and government	27	88,094	108,201	2,039	198,334	84,155	97,217	1,978	183,350	81,529	89,984	2,036	173,549	
Other Loans					*						* * * * * * * * * * * * * * * * * * * *	* **	,	
Debt securities classified as loans	28	_	1,813	404	2,217	_	1,807	380	2,187	_	1,920	377	2,297	
Acquired credit-impaired loans <sup>3</sup>	29	_	1,372	_	1,372	_	1,414	_	1,414	_	1,520	_	1,520	
Total other loans	30	_	3,185	404	3,589		3,221	380	3,601		3,440	377	3,817	
Total Gross Loans and Acceptances	31	\$ 388,703	\$ 196,323	\$ 2,448	\$ 587,474	\$ 383,535	\$ 178,523	\$ 2,363	\$ 564,421	\$ 375,987	\$ 167,837	\$ 2,419	\$ 546,243	

### Portfolio as a % of Total Gross Loans and

Acceptances	
Personal	
Residential mortgages <sup>2</sup>	32
Consumer instalment and other personal	
HELOC	33
Indirect auto	34
Other	35
Credit card	36
Total personal	37
Business and Government <sup>2</sup>	38
Other Loans	
Debt securities classified as loans	39
Acquired credit-impaired loans <sup>3</sup>	40
Total other loans	41
Total Gross Loans and Acceptances	42

!	31.7 %	4.9 %	- %	36.6 %	32.8 %	4.7 %	- %	37.5 %	33.1 %	5.0 %	- %	38.1 %
3	10.4	2.4	_	12.8	10.9	2.4	_	13.3	11.2	2.4	_	13.6
ļ.	3.3	4.7	_	8.0	3.4	4.4	_	7.8	3.3	4.4	-	7.7
,	2.7	0.1	_	2.8	2.8	0.1	-	2.9	3.1	0.1	_	3.2
;	3.0	2.4	-	5.4	3.1	2.2	-	5.3	3.2	1.7	-	4.9
•	51.1	14.5		65.6	53.0	13.8	- '	66.8	53.9	13.6	- ' '	67.5
;	15.1	18.4	0.3	33.8	15.0	17.2	0.3	32.5	15.0	16.5	0.3	31.8
		•						· 1				Ÿ
1	-	0.3	0.1	0.4	-	0.3	0.1	0.4	-	0.3	0.1	0.4
)	-	0.2	-	0.2	-	0.3	_	0.3	-	0.3	-	0.3
	-	0.5	0.1	0.6	-	0.6	0.1	0.7	-	0.6	0.1	0.7
!	66.2 %	33.4 %	0.4 %	100.0 %	68.0 %	31.6 %	0.4 %	100.0 %	68.9 %	30.7 %	0.4 %	100.0 %

Primarily based on the geographic location of the customer's address.

Excludes loans classified as trading as the Bank intends to sell the loans immediately or in the near term, and loans designated at fair value through profit or loss for which no allowance is recorded.

<sup>&</sup>lt;sup>3</sup> Includes all FDIC covered loans and other ACI loans.

GROSS IMPAIRED LOANS BY SEGMENT Personal, Business, and Government Loans  Canadian Retail 17	2015 Q4 Q3		1 F
CHANGE IN GROSS IMPAIRED LOANS BY SEGMENT	U4 U.S	Year to Date	Full Year
SEGMENT   Personal, Business, and Government Loans   Impaired loans at beginning of period   1		2017 2016	2016 2015
Impaired loans at beginning of period   1			
Classified as impaired during the period Canadian Retail 2 U.S. Retail - in USD 3 - foreign exchange 3 14 15 1601 1620 1620 1650 1620 1650 1679 1611 140 119 151 277 1611 140 119 1611 17 17 17 17 17 17 17 17 17 17 17 17 1			
U.S. Retail – in U.S. <sup>3</sup>	ψ 0,011 ψ 2,000	<b>\$ 3,509</b> \$ 3,244	\$ 3,244 \$ 2,73
- foreign exchange <sup>3</sup>	664 657	<b>1,664</b> 2,034	2,682 2,678
Wholesale Banking Wholesale Banking Wholesale Banking Wholesale Banking Wholesale Banking Wholesale Banking  Total classified as impaired during the period Total clas	486 421	1,414 1,623	2,062 1,662
Wholesale Banking 6	155 114	<b>457</b> 547	687 43
1,100	641 535 33 14	<b>1,871</b> 2,170 <b>-</b> 190	2,749 2,099 190 69
ransferred to not impaired during the period et repayments 9 (362) (340) (220) (274) (463) (414) (370) (399) (399) (390) (390) (392) (474) (354) (379) (391) (399) (399) (390)	1,338 1,206	<b>3,535</b> 4,394	5,621 4,83
Second   S	(270) (329)	(782) (1,247)	(1,521) (1,179
Disposals of loans   10	(377) (334)	(1,228) (1,169)	(1,521) (1,77)
Commounts written off   12   (615)   (648)   (623)   (620)   (579)   (592)   (559)   (1599)		- (3)	(4) (1,20)
Recoveries of loans and advances previously written off	691 543	<b>1,525</b> 1,975	2,573 2,39
written off xchange and other movements 14 xchange during the period 15 xchange during the period 15 xchange and price period 15 xchange and other movements 16 xchange 16 xchange 16 xchange 17 xchange	(522) (527)	<b>(1,886)</b> (1,730)	(2,350) (2,14
Canadian Retail   Canadian R			
Schange during the period   15   (305)   (109)   (110)   42   (100)   (232)   555   (104)   (232)   555   (104)   (104)   (105)   (1		<b>-</b> -	-
State   Content of Period   16   \$ 2,985   \$ 3,290   \$ 3,399   \$ 3,509   \$ 3,467   \$ 3,567   \$ 3,799   \$	(2) 156	(163) (22)	42 26
End of Period	167 172	<b>(524)</b> 223	265 513
### SROSS IMPAIRED LOANS BY SEGMENT  **Personal, Business, and Government Loans**  Canadian Retail			
Canadian Retail	\$ 3,244 \$ 3,077	<b>\$ 2,985</b> \$ 3,467	\$ 3,509 \$ 3,244
Canadian Retail			
State   Canadian Retail   17			
U.S. Retail – in USD 18 1,688 1,681 1,779 1,754 1,724 1,878 1,934 417 614 536 598 527 478 775 20 2,105 2,295 2,315 2,352 2,251 2,356 2,709 2,105 2,985 \$3,290 \$3,399 \$3,509 \$3,467 \$3,567 \$3,799 \$\$  NET IMPAIRED LOANS BY SEGMENT Personal, Business, and Government Loans  Canadian Retail 23 1,397 \$661 \$715 \$705 \$732 \$757 \$766 \$1.05		<b>A</b> 040 0 4005	7 [2 224 2 22
- foreign exchange	\$ 998 \$ 990 1,676 1,568	\$ <b>843</b> \$ 1,005 <b>1,688</b> 1,724	\$ 994 \$ 998 1,754 1,670
20   2,105   2,295   2,315   2,352   2,251   2,356   2,709	515 483	1,688 1,724 417 527	1,754 1,670
Vholesale Banking   21   37   59   73   163   211   178   39	2,191 2,051	<b>2,105</b> 2,251	2,352 2,19
State   Contain Cont	55 36	37 211	163 55
Personal, Business, and Government Loans  Canadian Retail U.S. Retail – in USD	\$ 3.244 \$ 3.077	\$ 2.985 \$ 3.467	\$ 3.509 \$ 3.24
Personal, Business, and Government Loans  Canadian Retail U.S. Retail – in USD	, , , , , , , , , , , , , , , , , , , ,	, , , , , ,	J   · · · · · · · · · · · · · · · · · ·
Canadian Retail     23     \$ 571     \$ 661     \$ 715     \$ 705     \$ 732     \$ 757     \$ 766     \$       U.S. Retail – in USD – foreign exchange     24     1,397     1,411     1,482     1,469     1,473     1,629     1,688       345     515     446     501     450     415     676       26     1,742     1,926     1,928     1,970     1,923     2,044     2,364			
U.S. Retail – in USD     24     1,397     1,411     1,482     1,469     1,473     1,629     1,688       – foreign exchange     25     345     515     446     501     450     415     676       26     1,742     1,926     1,928     1,970     1,923     2,044     2,364			
U.S. Retail – in USD – foreign exchange     24   1,397   1,411   1,482   1,469   1,473   1,629   1,688   1,473   1,629   1,473   1,629   1,688   1,473   1,629   1,473   1,473   1,629   1,473   1,629   1,473   1,629   1,473   1,629   1,473   1,473   1,629   1,473   1,473   1,629   1,473   1,473   1,629   1,473   1,473   1,629   1,473   1,473   1,473   1,629   1,473   1,473   1,629   1,473   1,473   1,473   1,629   1,473   1,473   1,473   1,473   1,473   1,473   1,473   1,629   1,473   1,4	\$ 715 \$ 706	<b>\$ 571</b> \$ 732	\$ 705 \$ 71
- foreign exchange         25         345         515         446         501         450         415         676           26         1,742         1,926         1,928         1,970         1,923         2,044         2,364	1,459 1,373	<b>1,397</b> 1,473	1,469 1,45
	448 423	<b>345</b> 450	501 44
	1,907 1,796	<b>1,742</b> 1,923	1,970 1,90
Vholesale Banking 27 <b>17</b> 37 47 110 131 107 13	38 30	<b>17</b> 131	110 3
otal Net Impaired Loans 28 <b>\$ 2,330 \$ 2,624 \$ 2,690 \$ 2,785 \$ 2,786 \$ 2,908 \$ 3,143 \$</b>	\$ 2,660 \$ 2,532	<b>\$ 2,330</b> \$ 2,786	\$ 2,785 \$ 2,66
let Impaired Loans as a % of Net Loans  and Acceptances 29 0.38 % 0.43 % 0.45 % 0.46 % 0.48 % 0.51 % 0.54 %	0.48 % 0.47 %		0.46 % 0.4

Includes customers' liability under acceptances.
 Excludes ACI loans and debt securities classified as loans. For further details on ACI loans, refer to pages 37 to 39.
 Retail product loans, including Canadian government-insured real estate personal loans, are generally considered impaired when contractual payments are 90 days or greater past due.

#### Impaired Loans and Acceptances by Industry Sector and Geographic Location<sup>1</sup> (\$ millions, except as noted) LINE Q3 As at Q2 Q1 By Industry Sector United United United Personal Canada States Int'l Total Canada States Int'l Total Canada States Int'l Total Residential mortgages \$ \$ \$ \$ \$ \$ Consumer instalment and other personal 1,024 1,078 Indirect auto Other Credit card Total personal 1,721 2,368 1,858 2,589 1,847 2,646 **Business and Government** Real estate Residential Non-residential Total real estate Agriculture Automotive Financial Food, beverage, and tobacco Government, public sector entities, and education Health and social services Industrial construction and trade contractors Metals and mining Pipelines, oil, and gas Power and utilities Professional and other services Retail sector Sundry manufacturing and wholesale Telecommunications, cable, and media Transportation Total business and government Total Gross Impaired Loans<sup>2</sup> \$ 2,131 2,985 \$ 2,343 3,290 1,023 Gross Impaired Loans as a % of Gross Loans

### and Acceptances

Personal
----------

Personal
Residential mortgages
Consumer instalment and other personal
HELOC
Indirect auto
Other
Credit card
Total personal
Business and Government
Total Gross Impaired Loans <sup>2</sup>

9	0.16 %	1.69 %	- %	0.34 %	0.19 %	1.71 %	- %	0.39 %	0.20 %	1.70 %	- %	0.39 %
0	0.16	6.80	_	1.11	0.19	6.78	_	1.26	0.22	7.33	_	1.37
1	0.20	0.83	_	0.55	0.20	0.80	_	0.55	0.27	0.76	_	0.55
2	0.28	0.93	-	0.31	0.29	1.05	_	0.32	0.32	1.11	_	0.35
3	0.77	1.60	-	1.13	0.85	1.65	-	1.20	0.90	1.69	-	1.25
4	0.20	2.14		0.59	0.23	2.17		0.65	0.26	2.25	- ' ' '	0.68
5	0.20	0.38	-	0.29	0.21	0.41	_	0.32	0.23	0.48	-	0.36
6	0.20 %	1.13 %	- %	0.49 %	0.23 %	1.15 %	- %	0.53 %	0.25 %	1.23 %	- %	0.57 %

<sup>&</sup>lt;sup>1</sup> Primarily based on the geographic location of the customer's address.

<sup>&</sup>lt;sup>2</sup> Excludes ACI loans and debt securities classified as loans. For further details on ACI loans, refer to pages 37 to 39

## Impaired Loans and Acceptances by Industry Sector and Geographic Location (Continued)<sup>1</sup>

As at	LINE #			016 Q4					2016 Q3				201 Q2			
	- L	•		<del></del>		-	1			-			<del></del>	•		
By Industry Sector	ľ	•	United	•		•		United		•		T .	United	•		
Personal		Canada	States	Int'l		Total	Canada	States		Int'l	Total	Canada	States	Int'l		Total
Residential mortgages	1	\$ 400	\$ 452	\$ -	\$	852	\$ 405	\$ 436	\$	_	\$ 841	\$ 427	\$ 412	\$ -	\$	839
Consumer instalment and other personal																
HELOC	2	149	939	_		1,088	155	902		_	1.057	164	1,031	_		1.195
Indirect auto	3	49	196	_		245	67	182		_	249	61	169	_		230
Other	4	52	7	_		59	53	7		_	60	53	7	_		60
Credit card	5	152	222	_		374	145	186		_	331	158	176	_		334
Total personal	6	802	1,816	_		2,618	825	1,713		-	2,538	863	1,795			2,658
Business and Government																
Real estate																
Residential	7	10	61	_		71	6	53		-	59	7	66	_		73
Non-residential	8	9	99	_		108	7	115		_	122	9	123	_		132
Total real estate	9	19	160	-		179	13	168		-	181	16	189	_		205
Agriculture	10	11	1	_		12	11	2		_	13	12	1	_		13
Automotive	11	3	15	_		18	1	12		-	13	1	11	_		12
Financial	12	2	27	_		29	2	28		-	30	2	27	_		29
Food, beverage, and tobacco	13	2	6	_		8	2	6		-	8	-	6	_		6
Forestry	14	-	19	-		19	_	16		-	16	-	17	-		17
Government, public sector entities, and education	15	-	9	-		9	_	9		-	9	3	8	-		11
Health and social services	16	15	34	-		49	12	39		-	51	11	37	_		48
Industrial construction and trade contractors	17	33	26	-		59	28	25		-	53	25	30	_		55
Metals and mining	18	19	8	-		27	20	12		-	32	21	11	_		32
Pipelines, oil, and gas	19	87	102	-		189	122	118		-	240	112	99	_		211
Power and utilities	20	-	1	-		1	_	1		-	1	-	1	_		1
Professional and other services	21	12	83	_		95	11	81		-	92	10	78	-		88
Retail sector	22	22	51	_		73	22	54		-	76	21	58	-		79
Sundry manufacturing and wholesale	23	19	47	_		66	19	40		-	59	4	43	-		47
Telecommunications, cable, and media	24	_	10	_		10	1	10		-	11	-	14	-		14
Transportation	25	2	26	_		28	3	23		-	26	3	23	-		26
Other	26	6	14			20	5	13			18	7	8			15
Total business and government	27	252	639	_		891	272	657		_	929	248	661	_		909
Total Gross Impaired Loans <sup>2</sup>	28	\$ 1,054	\$ 2,455	\$ -	\$	3,509	\$ 1,097	\$ 2,370	\$		\$ 3,467	\$ 1,111	\$ 2,456	\$ -	\$	3,567
Gross Impaired Loans as a % of Gross Loans and Acceptances Personal																
Residential mortgages	29	0.21 %	1.63	6 –	%	0.39 %	0.22 %	6 1.64	%	- %	0.39 %	0.23	% 1.61 %	- %	,	0.40 %
Consumer instalment and other personal																
HELOC	30	0.23	7.11	_		1.39	0.24	6.97		_	1.37	0.26	8.19	_		1.60
Indirect auto	31	0.24	0.69	_		0.50	0.33	0.67		_	0.52	0.31	0.67	_		0.51
Other	32	0.32	0.94	_		0.34	0.33	0.99		_	0.35	0.33	1.01	_		0.36
Credit card	33	0.83	1.63	_		1.17	0.81	1.41		_	1.06	0.89	1.47	_		1.12
Total personal	34	0.26	2.17	_		0.67	0.27	2.13			0.66	0.29	2.36	_		0.70
Business and Government	35	0.27	0.56	_		0.43	0.29	0.61		_	0.46	0.27	0.66	_		0.47
Total Gross Impaired Loans <sup>2</sup>	36	0.26 %		6 -	%	0.58 %			0/_	- %	0.59 %	<del></del>		- %		0.63 %

Primarily based on the geographic location of the customer's address.
 Excludes ACI loans and debt securities classified as loans. For further details on ACI loans, refer to pages 37 to 39.

## Impaired Loans and Acceptances by Industry Sector and Geographic Location (Continued)<sup>1</sup>

(\$ millions, except as noted) As at	LINE #			016 Q1					2015 Q4	• •			2015 Q3			*
As at	#	L		Q1	-		L	<del></del>	Q4			L	હુર			
By Industry Sector			United	<del></del>			T	United				· · · · · ·	United			
Personal		Canada	States	Int'	ı	Total	Canada	States		Int'l	Total	Canada	States	Int'l		Total
Residential mortgages	1	\$ 434	\$ 445	\$ -		879		\$ 391	\$	- 5		\$ 402	\$ 400 \$		\$	802
Consumer instalment and other personal		φ 454	φ 445	Ψ –	φ	019	φ 393	φ 591	Ψ	- ,	<i>y</i> 700	φ 402	φ 400 φ	_	Ψ	002
HELOC	2	174	1,234	_		1,408	180	829		_	1,009	199	664	_		863
Indirect auto	3	53	1,234	_		233	47	162		_	209	41	159	_		200
Other	4	55	8	_		63	52	8		_	60	50	7	_		57
Credit card	5	157	208	_		365	153	153		_	306	145	124	_		269
									<del> </del>							
Total personal	6	873	2,075			2,948	827	1,543			2,370	837	1,354			2,191
Business and Government																
Real estate																
Residential	7	10	81	-		91	13	79		-	92	13	87	-		100
Non-residential	8	9	132	_		141	10	147		-	157	11	180	_		191
Total real estate	9	19	213	-		232	23	226		-	249	24	267	_		291
Agriculture	10	7	1	-		8	5	1		_	6	6	1	-		7
Automotive	11	3	13	-		16	2	13		_	15	2	12	-		14
Financial	12	2	31	-		33	1	30		_	31	3	32	-		35
Food, beverage, and tobacco	13	12	19	-		31	12	9		_	21	14	11	-		25
Forestry	14	_	19	_		19	_	1		_	1	1	2	_		3
Government, public sector entities, and education	15	3	10	_		13	3	9		_	12	3	8	_		11
Health and social services	16	6	18	_		24	5	41		_	46	5	42	_		47
Industrial construction and trade contractors	17	20	36	_		56	22	36		_	58	22	38	_		60
Metals and mining	18	9	12	_		21	6	15		_	21	6	16	_		22
Pipelines, oil, and gas	19	86	_	_		86	93	6		_	99	29	6	_		35
Power and utilities	20	_	1	_		1	_	_		_	_	_	_	_		_
Professional and other services	21	10	86	_		96	12	85		_	97	32	90	_		122
Retail sector	22	21	70	-		91	19	77		_	96	19	87	-		106
Sundry manufacturing and wholesale	23	5	53	-		58	5	52		_	57	7	53	-		60
Telecommunications, cable, and media	24	2	15	_		17	2	14		_	16	2	14	_		16
Transportation	25	4	31	_		35	4	33		_	37	3	17	_		20
Other	26	7	7	_		14	5	7		_	12	4	8	_		12
Total business and government	27	216	635	_		851	219	655		-	874	182	704	_		886
Total Gross Impaired Loans <sup>2</sup>	28	\$ 1,089	\$ 2,710	\$ -	\$	3,799	\$ 1,046	\$ 2,198	\$	- 5	\$ 3,244	\$ 1,019	\$ 2,058 \$	-	\$	3,077
Gross Impaired Loans as a % of Gross Loans and Acceptances																
Personal							,									
Residential mortgages	29	0.23 %	1.56	/-	%	0.41 %	0.21 %	1.45	%	- %	0.37 %	0.22 %	6 1.48 %	- %	)	0.39 %
Consumer instalment and other personal																
HELOC	30	0.28	8.68	-		1.86	0.29	6.22		-	1.35	0.33	4.97	_		1.16
Indirect auto	31	0.28	0.65	-		0.50	0.25	0.65		-	0.48	0.22	0.66	-		0.47
Other	32	0.35	1.06	-		0.38	0.32	1.15		-	0.36	0.30	1.00	-		0.33
Credit card	33	0.88	1.50	_		1.15	0.85	1.25		-	1.01	0.82	1.33	_		0.99
Total personal	34	0.29	2.44			0.76	0.28	1.98		-	0.63	0.28	1.82			0.59
Business and Government	35	0.24	0.59	_		0.43	0.26	0.68		-	0.48	0.22	0.78			0.51
Total Gross Impaired Loans <sup>2</sup>	36	0.28 %	1.41	% –	%	0.65 %	0.27 %	1.26	%	- %	0.58 %	0.27 %	6 1.25 %	- %	,	0.57 %

Primarily based on the geographic location of the customer's address.
 Excludes ACI loans and debt securities classified as loans. For further details on ACI loans, refer to pages 37 to 39.

	_	_	
			Losses

COUNTERPARTY-SPECIFIC ALLOWANCE Change in Allowance of Credit Losses – Counterparty-Specific Impairment allowance at beginning of period Ingament allowance as the ginning of period Ingament allowance for Credit Losses – Individually insignificant Ingament allowance as the ginning of period Ingament allowance for Credit Losses – Individually insignificant Ingament allowance as the ginning of period Ingament allowanc	(\$ millions)	LINE		2017			2016		·	2015		Year to		Full Y	
Sample   Allowance of Credit Losses - Counterparty-Specific   Implament allowance as the leginary of period   1   \$ 2.80   \$ 3.90   \$ 3.	As at	#	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	2017	2016	2016	2015
Sample   Allowance of Credit Losses - Counterparty-Specific   Implament allowance as the leginary of period   1   \$ 2.80   \$ 3.90   \$ 3.	COUNTERPARTY-SPECIFIC ALLOWANCE														
Imparent allowances at beginning of period   1   2   280   3.90															
Charge to the income statement — counterparty-specific 2 15 (19) (37) 7 14 53 7 (12) 27 (41) 74 88 87 Amounts written off 1 or	. , .	1	\$ 280	\$ 296 \$	399	\$ 418 \$	405 \$	396 \$	369	\$ 395 \$	364	\$ 399 \$	369	\$ 369 \$	355
Amounts written off nervious periods 4 10 (28) (11) (41) (18) (30) (10) (23) (27) (47) (58) (99) (67) (82) (82) (82) (83) (10) (10) (12) (12) (12) (12) (13) (13) (13) (14) (15) (15) (15) (15) (15) (15) (15) (15		2													24
Recoveries of amounts written off in previous periods   4						(41)			-						(87)
Disposals of loans   5		4								` '	` '				52
Exhange and other movements 6 (23) 8 (19) 3 7 (36) 17 (2) 21 (34) (12) (9) 28 (25) 28		5	_	_	(63)	_	(1)	_	_	_	_	(63)	(1)		(3)
Balance at end of period 7 272 280 296 399 418 405 396 369 395 272 418 399 365 2012 272 418 399 365 2012 272 418 399 365 2012 2012 2012 2012 2012 2012 2012 201		6	(23)	8		3		(36)	17	(2)	21				28
Collectively Assessed Allowance For Credit Losses - Individually insignificant Impairment allowance at beginning of period Individually insignificant Impairment allowance at beginning of period Individually insignificant 9 493 452 539 495 415 423 457 402 349 1,484 1,295 1,790 1,511 1,512 1,56 1,55 1,55	5	7		280	296	399	418	· · · · · ·	396	369	395	· - · · · · · ·	. , , ,	. , , , ,	369
Change in Allowance for Credit Losses – Individually Insignificant Impairment allowances at beginning of period  A 5 74 609 503 532 524 568 505 481 478 402 349 1,484 1,295 1,790 1,515 1,	Salariss at one or poriou			200		000		.00				1			000
Impairment allowances at beginning of period   8   574   609   593   532   524   568   505   481   478   478   479   4	COLLECTIVELY ASSESSED ALLOWANCE														
Charge to the income statement – individually insignificant 9   493   452   539   495   415   423   457   402   349   1,484   1,295   1,790   1,513   1,000	Change in Allowance for Credit Losses - Individually Insignificant														
Amounts written off (629) (653) (649) (570) (551) (560) (571) (503) (507) (1,931) (1,682) (2,252) (2,076) (2,007) (2,007) (2,007) (2,071) (2,0	Impairment allowances at beginning of period	8	574	609	593	532	524	568	505	481	478	593	505	505	442
Recoveries of amounts written off in previous periods 11 145 144 137 125 131 132 156 125 136 125 136 426 419 544 548 Disposals of loans 12 13 (36) 22 (11) 12 13 (39) 21 - 25 (25) (5) 7 77 Balance at end of period 14 547 574 609 593 532 524 568 505 481 547 532 593 500  Charge in Allowance for Credit Losses – Incurred but not identified Impairment allowances at beginning of period 15 (3) 67 131 46 127 108 178 119 61 195 413 459 146 Disposals of loans 16 (3) 67 131 46 127 108 178 119 61 195 413 459 146 Disposals of loans 17 - (20)	Charge to the income statement – individually insignificant	9	493	452	539	495	415	423	457	402	349	1,484	1,295	1,790	1,513
Disposals of loans Exchange and other movements 12	Amounts written off	10	(629)	(653)	(649)	(570)	(551)	(560)	(571)	(503)	(507)	(1,931)	(1,682)	(2,252)	(2,070)
Exchange and other movements 13 (36) 22 (11) 12 13 (39) 21 - 25 (25) (5) 7 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Recoveries of amounts written off in previous periods	11	145	144	137	125	131	132	156	125	136	426	419	544	549
Balance at end of period  14	Disposals of loans	12	-	-	_	(1)	-	_	-	-	-	-	_	(1)	_
Change in Allowance for Credit Losses – Incurred but not Identified Impairment allowances at beginning of period 15 3,597 3,426 3,381 3,280 3,080 3,174 2,873 2,755 2,571 3,381 2,873 2,505 2,507 2,50	Exchange and other movements	13								-				7	71
Impairment allowances at beginning of period   15   3,597   3,426   3,381   3,280   3,080   3,174   2,873   2,755   2,571   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   2,505   2,501   3,381   2,873   2,505   2,501   2,505   2,501   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   3,505   2,501   2,505   2,505	Balance at end of period	14	547	574	609	593	532	524	568	505	481	547	532	593	505
Impairment allowances at beginning of period   15   3,597   3,426   3,381   3,280   3,080   3,174   2,873   2,755   2,571   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   2,505   2,501   3,381   2,873   2,505   2,501   2,505   2,501   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   3,381   2,873   2,505   2,501   3,505   2,501   2,505   2,505															
Charge to the income statement – incurred but not identified 16 (3) 67 131 46 127 108 178 119 61 Disposals of loans 17 (20) (20) 123 (1) 123 Exchange and other movements 18 (196) 104 (66) 55 73 (202) 123 (1) 123 Balance at end of period 19 3,398 3,597 3,426 3,381 3,280 3,080 3,174 2,873 2,755 Allowance for Credit Losses at End of Period 20 4,217 4,451 4,331 4,373 4,230 4,009 4,138 3,747 3,631  Consisting of: Allowance for loan losses Canada 21 1,364 1,367 1,382 1,392 1,419 1,397 1,330 1,281 1,261 1,364 1,419 1,392 1,281 United States 22 2,308 2,520 2,428 2,476 2,349 2,214 2,391 2,148 2,079 2,308 2,349 2,476 2,148 Other International 23 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5															
Disposals of loans  17			-,	- , -		-,				,					
Exchange and other movements    18			(3)	67		46			178	119	61		413	459	146
Balance at end of period 19 3,398 3,597 3,426 3,381 3,280 3,080 3,174 2,873 2,755 Allowance for Credit Losses at End of Period 20 4,217 4,451 4,331 4,373 4,230 4,009 4,138 3,747 3,631 4,217 4,230 4,373 3,747 2,873 2,755 3,398 3,280 3,381 2,873 3,747 2,873 2,755 3,398 3,280 4,217 4,230 4,373 3,747 2,873 2,755 3,398 3,280 4,217 4,230 4,373 3,747 2,873 2,755 2,874 2,175 2,			-												_
Allowance for Credit Losses at End of Period 20 4,217 4,451 4,331 4,373 4,230 4,009 4,138 3,747 3,631 4,217 4,230 4,373 3,747 2,200	5	-			. , ,	L		_ ` '		\ /		<del>   </del>			
Consisting of: Allowance for loan losses  Canada 21 1,364 1,367 1,382 1,419 1,397 1,330 1,281 1,261 1,364 1,419 1,392 1,281 1,261 1,364 1,419 1,392 1,281 1,261 1,364 1,419 1,392 1,281 1,261 1,364 1,419 1,392 1,281 1,261 1,364 1,419 1,392 1,281 1,261 1,364 1,419 1,392 1,281 1,261 1,364 1,419 1,392 1,281 1,261 1,364 1,419 1,392 1,281 1,261 1,364 1,419 1,392 1,281 1,261 1,364 1,419 1,392 1,281 1,261 1,364 1,419 1,392 1,281 1,		-						-,							
Allowance for loan losses  Canada  Can	Allowance for Credit Losses at End of Period	20	4,217	4,451	4,331	4,373	4,230	4,009	4,138	3,747	3,631	4,217	4,230	4,373	3,747
Allowance for loan losses  Canada  Can															
Canada         21 United States         1,364 United States         1,364 2         1,367 2         1,382 2         1,419 1,397 1,330 1,281 1,261 2,148 2,079 2,148 2,079 2,308 2,349 2,14 2,391 2,148 2,079 2,308 2,349 2,476 2,318															
United States 22 2,308 2,520 2,428 2,476 2,349 2,214 2,391 2,148 2,079 2,308 2,349 2,476 2,145		04	4 004	4.007	4 000	4.000	4 440	4 007	4 000	4 004	4 004	4 004	4 440	4 000	4 004
Other International         23         5															
Total allowance for loan losses 24 Allowance for credit losses for off-balance sheet instruments 25 540 559 516 500 457 393 412 313 287 540 457 500 313										, -				, ,	
Allowance for credit losses for off-balance sheet instruments 25 <b>540</b> 559 516 500 457 393 412 313 287 <b>540</b> 457 500 313		-				·				· · · · · ·		<b> </b>			
Aniowanice for Great Losses at Life of Ferror 20 4,217 \$ 4,200 \$ 4,000 \$ 4,100 \$ 5,747 \$ 5,051 \$ 4,200 \$ 4,200 \$ 4,200 \$ 5,747 \$ 5,051	Allowance for Credit Losses at End of Period	26	\$ 4,217	\$ 4,451 \$	4,331	\$ 4,373 \$	4,230 \$	4,009 \$	4,138	\$ 3,747 \$	3,631	\$ 4,217 \$	4,230	\$ 4,373 \$	3,747

\$ millions, except as noted) As at	LINE #			2017 Q3		·		2017 Q2				2017 Q1		•
By Industry Sector	- L		•			,	· · · · · · · · · · · · · · · · · · ·				l			
Illowance for Credit Losses – Counterparty-Specific and	Ī		United					United	* *			United		-
Individually Insignificant – On-Balance Sheet Loans		Canada	States	Int'	ı	Total	Canada	States	Int'l	Total	Canada	States	Int'l	Tota
ersonal														
esidential mortgages	1	\$ 18 5	\$ 22	\$ -	\$	40	\$ 18 \$	23 \$	- \$	41	\$ 19 \$	28 \$	- \$	4
onsumer instalment and other personal HELOC	_	5	50			55	6	56		62	8	70		7
Indirect auto	2	35	18			53	32	10	_	42	43	6	_	4
Other	4	30	3	_		33	31	3	_	34	32	4	_	3
redit card	5	90	206	-		296	98	216	_	314	104	208	-	3
otal personal	6	178	299	_		477	185	308	-	493	206	316	-	52
usiness and Government	Ī													
eal estate														
Residential	7	7	8	-		15	7	6	-	13	7	9	-	
Non-residential	8	3	6		1	9	3	6		9	3	9		
otal real estate	9	10	14	-		24	10	12	-	22	10 2	18	-	2
griculture utomotive	10 11	2	2			4		1	-	2	1	_ 1	-	
nancial	12	-	6	_		6		2	_	2	<u>'</u>	3	_	
ood, beverage, and tobacco	13	1	2	_		3	1	3	_	4	_	2	_	
orestry	14	-	-	_		_		1	-	1	_	5	-	
lovernment, public sector entities, and education	15	-	1	-		1	-	1	-	1	-	1	-	
ealth and social services	16	5	.5	-		10	7	8	-	15	6	8	-	
dustrial construction and trade contractors	17	21	10	-		31	21	4	-	25	19	4	-	2
letals and mining	18	6	2	-		8	1	2 9	-	3	1	2	-	
ipelines, oil, and gas ower and utilities	19 20	23				31	25	9	-	34	26	13	-	;
rofessional and other services	21	8	-	_		14	8	7	_	15	- 8	8	_	
etail sector	22	11	7	_		18	12	7	_	19	11	6	_	
undry manufacturing and wholesale	23	15	4	_		19	13	6	_	19	14	5	_	
elecommunications, cable, and media	24	_	1	_		1	_	1	-	1	_	1	-	
ransportation	25	2	1	-		3	2	2	-	4	2	1	_	
Other	26	1	3			4	1	4		5	3	6	-	
otal business and government	27	106	72			178	103	70	_	173	103	84	_	18
Other Loans														
Debt securities classified as loans	28	Ξ	120 44	-		120 44	-	134	-	134	_	135	-	13
cquired credit-impaired loans <sup>2</sup>	29 30		164			164		54		54		61		. 6
otal other loans	30		104			104	-	188	-	188	-	196	-	19
otal Allowance for Credit Losses – Counterparty-Specific and Individually Insignificant	31	284	535	_		819	288	566		854	309	596		90
Mowance for Credit Losses – Incurred but Not Identified – On-Balance	31	204	333	<del></del>		013	200	300		004	309	390		- 90
Sheet Loans														
Personal														
Residential mortgages	32	14	25	_		39	9	34	_	43	10	33	_	4
Consumer instalment and other personal														
HELOC	33	3	62	-		65	3	70	-	73	4	66	-	7
Indirect auto	34	162	214	-		376	158	235	-	393	165	222	-	38
Other	35	167	33	-		200	170	31	-	201	170	28	-	19
Credit card	36	440	473			913	464	541		1,005	452	508		96
otal personal	37	786	807			1,593	804	911		1,715	801	857		1,65
Business and Government	38	293	933	5		1,231	275	1,008	5	1,288	272	942	5	1,21
Other Loans	20		33			34		25		25		22		
Debt securities classified as loans	39	1	33		<del> </del>	34	<u> </u>	35 35		35 35	ļ .	33		. 3
otal other loans	40 41	1,080	1,773			2,858	1,079	1,954	5	3,038	1,073	1,832	5	2,91
otal Allowance for Credit Losses – Incurred but Not Identified	41	1,364	2,308	5		3,677	1,367	2,520	5	3,892	1,382	2,428	5	
Mowance for Coan Losses – On-Balance Sheet Loans Mowances for Credit Losses – Off-Balance Sheet Instruments	42	1,364	2,308 355	2		540	1,367	376	2	5,692 559	1,362	335	2	3,81 51
otal Allowance for Credit Losses	44	\$ 1,547	\$ 2,663	\$ 7		4,217	\$ 1,548 \$	2,896 \$	7 S	4,451	\$ 1,561 \$		7 S	4,33
	***	ψ 1,047 (	2,000	<u>, , , , , , , , , , , , , , , , , , , </u>		7,217	ψ 1,540 ψ	2,030 9	7	4,451	9 1,501 ¢	2,703 φ	γ	4,00
llowance for Credit Losses - Counterparty-Specific and														
Individually Insignificant as a % of Gross Impaired Loans <sup>3</sup> ersonal														
	45	C4 0/	F 0	0/	0/	E 4 0/	5.0 %	47 0/	0/	4.9 %	4.9 %	C 4 0/	- %	
esidential mortgages onsumer instalment and other personal	45	6.1 %	5.0	% -	%	5.4 %	5.0 %	4.7 %	- %	4.9 %	4.9 %	6.1 %	- 70	5
HELOC	46	4.2	6.1	_		5.9	4.7	6.3	_	6.1	5.5	7.5	_	7
Indirect auto	47	79.5	7.9	_		19.6	78.0	4.3	_	15.5	78.2	2.9	_	18
Other	48	61.2	42.9	_		58.9	62.0	37.5	-	58.6	59.3	50.0	_	58
redit card	49	64.3	90.4	_		80.4	64.5	90.4	-	80.3	65.0	87.4	-	78
otal personal	50	27.5	17.4	-		20.1	25.3	16.6	-	19.0	25.8	17.1	-	19
usiness and Government	51	51.2	17.6			28.8	47.7	14.4	-	24.7	46.0	15.9	-	24
otal Allowance for Credit Losses – Counterparty-Specific and										_				
Individually Insignificant <sup>3</sup>	52	33.3 %	17.4	% -	%	21.9 %	30.4 %	16.1 %	- %	20.2 %	30.2 %	16.8 %	- %	20
otal allowance for credit losses as a % of gross loans	Ī													•
	53	0.4 %	1.3		%	0.7 %	0.4 %	1.3 %	0.7 %	0.7 %	0.4 %	1.3 %	1.1 %	0

<sup>Primarily based on the geographic location of the customer's address.

Includes all FDIC covered loans and other ACI loans.

Excludes ACI loans and debt securities classified as loans. For further details on ACI loans, refer to pages 37 to 39.</sup> 

(\$ millions, except as noted) As <i>at</i>	LINE #			2016 Q4		•			2016 Q3	•				2016 Q2		
By Industry Sector	"	L	+ +			•	<u> </u>		40			<b>L</b>		- 42		
Allowance for Credit Losses – Counterparty-Specific and		· · · · ·	United				r ·	He	nited			r ·	United	1		
Individually Insignificant – On-Balance Sheet Loans		Canada	States		Int'l	Total	Canada		ates	Int'l	Total	Canada	States		Int'l	Total
Personal																
Residential mortgages	1	\$ 15	\$ 34	\$	- \$	49	\$ 15	\$	21 \$	_	\$ 36	\$ 15	\$ 18	\$	- \$	33
Consumer instalment and other personal		,					,					,				
HELOC	2	9	76		_	85	8		56	_	64	9	54		-	63
Indirect auto	3	40	6		-	46	40		4	-	44	37	4		-	41
Other	4	32	3		-	35	33		3	_	36	32	3		-	35
Credit card	5	106	184			290	100		161		261	109	149			258
Total personal	6	202	303			505	196	2	245		441	202	228			430
Business and Government																
Real estate Residential	7	7	7		_	14	7		8	_	15	7	8		_	15
Non-residential	8	1	12		-	14	1		14	_	16	1	0 14		-	16
Total real estate	9	9	19			28	Q Q		22		31	9	22			31
Agriculture	10	2	-		_	2	1		_	_	1	1			_	1
Automotive	11	2	1		_	3	l i		2	_	3	I i	2		_	3
Financial	12		3		_	3			3	_	3		4		_	4
Food, beverage, and tobacco	13	-	2		_	2	-		1	_	1	-	2		_	2
Forestry	14	-	7		_	7	-		6	_	6	-	7		-	7
Government, public sector entities, and education	15	-	1		-	1	-		1	_	.1	2	1		-	3
Health and social services	16	4	5		-	9	5		6	_	11	6	5		-	11
Industrial construction and trade contractors	17	22	4		_	26	21		5	_	26	21	5		-	26
Metals and mining Pipelines, oil, and gas	18 19	1 36	4 25		_	5 61	1 62		4 25	_	5 87	- 56	4 24		_	4 80
Power and utilities	20	30	25		_	1	02		25	_	- 07	50	24		_	-
Professional and other services	21	8	8		_	16	8		10	_	18	7	8		_	15
Retail sector	22	11	8		_	19	11		11	_	22	10	10		_	20
Sundry manufacturing and wholesale	23	16	6		-	22	8		6	_	14	2	6		_	8
Telecommunications, cable, and media	24	-	1		_	1	_		1	_	1	-	3		-	3
Transportation	25	2	1		-	3	2		1	-	3	2	1		-	3
Other	26	2				10	3		4	_	7	4	4		-	8
Total business and government	27	115	104		_	219	132		108	_	240	121	108		-	229
Other Loans																
Debt securities classified as loans	28	_	206		-	206	_	2	203	-	203	_	199		-	199
Acquired credit-impaired loans <sup>2</sup>	29		62			62		· · · · · · · · · · · · · · · · · · ·	66		66		71			71
Total other loans	30	_	268		_	268	-		269	_	269	-	270		_	270
Total Allowance for Credit Losses – Counterparty-Specific and	31	317	675			992	328	,	622	_	950	323	606		_	929
Individually Insignificant  Allowance for Credit Losses – Incurred but Not Identified – On-Balance	31	317	0/5			992	320		022		950	323	000			929
Sheet Loans Personal																
Residential mortgages	32	11	37		_	48	14		50	_	64	16	55		-	71
Consumer instalment and other personal																
HELOC	33	4	60		-	64	5		103	-	108	6	117		-	123
Indirect auto	34	168	228		-	396	158		217	_	375	147	200		-	347
Other	35	167	29		-	196	167		27	-	194	169	25		-	194
Credit card	36	450	474			924	468		427		895	472	413			885
Total personal	37	800	828		-	1,628	812		824	-	1,636	810	810		-	1,620
Business and Government Other Loans	38	275	918		5	1,198	279		850	5	1,134	264	748		5	1,017
Debt securities classified as loans	39		55		_	55			53	_	53		50		_	50
Total other loans	40		55			55		<del>-, ,</del>	53		53	<del>-</del>	50			50
Total Officer Idahs  Total Allowance for Credit Losses – Incurred but Not Identified	41	1,075	1,801		5	2,881	1,091	4.5	727	5	2,823	1,074	1.608		5	2,687
Allowance for Loan Losses – Incurred but Not identified	42	1,392	2,476		5	3,873	1,419		349	5	3,773	1,397	2,214		5	3,616
Allowance for Credit Losses – On-Balance Sheet Loans  Allowances for Credit Losses – Off-Balance Sheet Instruments	42	1,392	325		2	500	1,419		349 283	2	3,773 457	1,397	2,214		3	393
Total Allowance for Credit Losses	44	\$ 1,565	\$ 2,801	s	7 S	4,373	\$ 1,591		632 \$	7	\$ 4,230	\$ 1,563	\$ 2,438		8 \$	4,009
Allowance for Credit Losses – Counterparty-Specific and Individually Insignificant as a % of Gross Impaired Loans <sup>3</sup>		1,000	2,501	· · · ·	· · · · · ·	1,010	1,001		50 <u>2</u>		1,200	1,000	2,100	· · · · ·	<u></u>	1,000
Personal Residential mortgages	45	3.8	% 7.5	%	- %	5.8 %	3.7	%	4.8 %	- %	4.3 %	3.5	% 4.4	%	- %	3.9
Consumer instalment and other personal										,-						
HELOC	46	6.0	8.1		_	7.8	5.2		6.2	_	6.1	5.5	5.2		_	5.3
Indirect auto	47	81.6	3.1		-	18.8	59.7		2.2	-	17.7	60.7	2.4		-	17.8
Other	48	61.5	42.9		-	59.3	62.3		2.9	-	60.0	60.4	42.9		-	58.3
Credit card	49	69.7	82.9		-	77.5	69.0		6.6	_	78.9	69.0	84.7		_	77.2
Total personal  Business and Government	50 51	25.2 45.6	16.7 16.3		-	19.3 24.6	23.8 48.5		4.3 6.4	-	17.4 25.8	23.4 48.8	12.7 16.3		-	16.2 25.2
	51	40.0	10.3			24.0	46.5	1	U. <del>4</del>		20.0	40.0	10.3			25.2
otal Allowance for Credit Losses – Counterparty-Specific and Individually Insignificant <sup>3</sup>	52	30.1	% 16.6	%	- %	20.6 %	29.9	% 1	4.9 %	- %	19.6 %	29.1	% 13.7	%	- %	18.5
	52	30.1	/0 10.0	/0	- 70	20.0 %	29.9	/v I	7.0 /0	- %	19.0 %	28.1	/0 13./	/0	- 70	10.0
Total allowance for credit losses as a % of gross loans				0/	07 ~		0.4	.,	1.2 %	0.7 %			0/ :-	0/	0.5 01	0.6
and acceptances	53	0.4	% 1.3	∜0	0.7 %	0.7 %					0.7 %	0.4		%	0.5 %	

<sup>Primarily based on the geographic location of the customer's address.
Includes all FDIC covered loans and other ACI loans.
Excludes ACI loans and debt securities classified as loans. For further details on ACI loans, refer to pages 37 to 39.</sup> 

millions, except as noted)	LINE		2016				2015		, ,		2015		
s at	#		Q1	<del></del>		<del> </del>	Q4	<del></del>		<del> </del>	Q3	<del></del>	
Industry Sector	i			<del> </del>									
lowance for Credit Losses – Counterparty-Specific and Individually Insignificant – On-Balance Sheet Loans		Canada	United States	Int'l	Total	Canada	United States	Int'l	Total	Canada	United States	Int'l	Total
ersonal		Canada	States		Total	Canada	States	11101	Total	Canada	States		TOtal
esidential mortgages	1	\$ 16 \$	21 \$	- \$	37	\$ 17 \$	30 \$	- \$	47	\$ 16 \$	31 \$	- \$	47
onsumer instalment and other personal													
HELOC Indirect auto	2	10 35	55 6	-	65 41	14 30	49	-	63 37	15 21	47	-	62 28
Other	4	34	3	_	37	33	3	_	36	32	2	_	34
edit card	5	109	168		277	108	109	-	217	102	93		195
tal personal	6	204	253	_	457	202	198		400	186	180		366
usiness and Government eal estate													
Residential	7	7	9	_	16	7	11	_	18	7	8	_	15
Non-residential	8	3	16	_	19	3	14	_	17	4	13		17
tal real estate	9	10	25	- ' '	35	10	25	- '	35	11	21	- ' ' '	32
priculture Itomotive	10 11	1 2	_ 2	-	1 4	2	2	-	2	2	-	-	2
nancial	12	_	5	_	5	-	4	_	4	-	4	_	2
od, beverage, and tobacco	13	10	3	-	13	11	2	-	13	12	1	-	13
restry	14	_	7	-	7	_	1	-	1	_	1	=	
overnment, public sector entities, and education ealth and social services	15 16	2	1 3	_	3 6	2	1	_	3 5	2	1	_	3
dustrial construction and trade contractors	17	17	6		23	20	6	_	26	20	5	_	25
etals and mining	18	_	2	-	2	_	2	-	2	-	3	-	3
pelines, oil, and gas	19	35	_	-	35	25	-	-	25	6	_	_	е
wer and utilities ofessional and other services	20 21	- 8	_ 10	_	18	- 8	_ 11	_	- 19	29	_ 12	_	41
etail sector	22	10	12	_	22	10	12	_	22	10	10	_	20
indry manufacturing and wholesale	23	3	11	-	14	3	12	-	15	5	8	-	13
elecommunications, cable, and media	24 25	2	1 2	_	1 4	2	1 2	<del>-</del> -	1 4	-	1	<del>-</del> -	1
ansportation her	25 26	4	2	_	6	2	2	_	4	3	4	_	7
tal business and government	27	107	92	_	199	98	86	_	184	104	75	_	179
her Loans									Ť				
ebt securities classified as loans	28	-	222	-	222	-	207	-	207	-	239	-	239
quired credit-impaired loans² tal other loans	29 30		86 308		86 308		83 290		83 290		92 331		92 331
tal Allowance for Credit Losses – Counterparty-Specific and	30		300		306		290		290		331	<del></del>	331
Individually Insignificant	31	311	653	_	964	300	574	_	874	290	586	_	876
lowance for Credit Losses – Incurred but Not Identified – On-Balance													
Sheet Loans													
ersonal esidential mortgages	32	11	62	_	73	10	48	_	58	12	47	_	59
onsumer instalment and other personal	02		02		70	10	40		56	12	41		00
HELOC	33	5	137	-	142	5	129	-	134	4	121	_	125
Indirect auto Other	34 35	135 155	218 31	-	353 186	127 143	202 26	<del>-</del> -	329 169	121 141	193 26	<del>-</del>	314 167
edit card	36	460	457	_	917	462	435	_	897	460	409	_	869
tal personal	37	766	905		1,671	747	840		1,587	738	796	=	1,534
isiness and Government	38	253	776	5	1,034	234	677	5	916	233	640	4	877
her Loans					`				"				
ebt securities classified as loans tal other loans	39 40		57 57		57 57	-	57 57		57 57		57 57		57 57
tal Allowance for Credit Losses – Incurred but Not Identified	40 41	1.019	1.738	- 5	2.762	981	1.574	5	2.560	971	1.493	4	2.468
lowance for Loan Losses - On-Balance Sheet Loans	42	1.330	2.391	5	3.726	1.281	2.148	5	3.434	1.261	2.079	4	3,344
lowances for Credit Losses – Off-Balance Sheet Instruments	43	158	251	3	412	141	171	1	313	133	153	1	287
tal Allowance for Credit Losses	44	\$ 1,488 \$	2,642 \$	8 \$	4,138	\$ 1,422 \$	2,319 \$	6 \$	3,747	\$ 1,394 \$	2,232 \$	5 \$	3,63
lowance for Credit Losses – Counterparty-Specific and													
Individually Insignificant as a % of Gross Impaired Loans <sup>3</sup>													
ersonal	45	27 0/	4.7 %	- %	4.2 0/	4.3 %	77 0/	- %	6.0 %	40.0/	70 0/	0/	E (
esidential mortgages onsumer instalment and other personal	40	3.7 %	4.7 %	- %	4.2 %	4.3 %	7.7 %	- %	6.0 %	4.0 %	7.8 %	- %	5.9
HELOC	46	5.7	4.5	-	4.6	7.8	5.9	-	6.2	7.5	7.1	-	7.2
Indirect auto	47	66.0	3.3	-	17.6	63.8	4.3	-	17.7	51.2	4.4	-	14.0
Other edit card	48 49	61.8 69.4	37.5 80.8	_	58.7 75.9	63.5 70.6	37.5 71.2	<del>-</del> -	60.0 70.9	64.0 70.3	28.6 75.0	<del>-</del> -	59.6 72.5
tal personal	50	23.4	12.2	<u>-</u>	15.5	24.4	12.8	_	16.9	22.2	13.3	_ _	16.
isiness and Government	51	49.5	14.5	-	23.4	44.7	13.1	-	21.1	57.1	10.7		20.2
tal Allowance for Credit Losses – Counterparty-Specific and		00.0	107.0/		47.0 0	00.7 %	100 %	- %	40.0 **	00.5 %	10.4 0/	- %	17.7
Individually Insignificant <sup>3</sup> tal allowance for credit losses as a % of gross loans	52	28.6 %	12.7 %	- %	17.3 %	28.7 %	12.9 %	- %	18.0 %	28.5 %	12.4 %	- 70	17.

<sup>Primarily based on the geographic location of the customer's address.
Includes all FDIC covered loans and other ACI loans.
Excludes ACI loans and debt securities classified as loans. For further details on ACI loans, refer to pages 37 to 39.</sup> 

#### Provision for Credit Losses<sup>1</sup> Year to Date (\$ millions) LINE **Full Year** Q3 For the period ended Q3 Q1 Q4 Q1 Q4 Q2 Q2 Q3 PROVISION FOR CREDIT LOSSES Provision for Credit losses for Counterparty-Specific and Individually Insignificant Provision for credit losses – counterparty-specific 2 \$ (10)19 \$ 25 \$ 75 \$ (1) \$ 17 \$ 139 \$ Provision for credit losses - individually insignificant 1.910 1.714 2.334 2.062 (155)(165) (164)(137)(142)(154)(169) (136)(146)(484)(465)(602)(601)Total provision for credit losses for counterparty-specific and individually insignificant 1,443 1,369 1,871 1,537 Provision for Credit Losses - Incurred But Not Identified Canadian Retail and Wholesale Banking<sup>2</sup> U.S. Retail - in USD - foreign exchange Corporate<sup>3</sup> – in USD (5) (1) - foreign exchange (2) (1) Total provision for credit losses - incurred but not identified (3) **Total Provision for Credit Losses** 500 \$ 548 \$ 556 \$ 584 \$ 509 \$ 1,638 \$ 1,782 2,330 \$ 1,683 PROVISION FOR CREDIT LOSSES BY SEGMENT Canadian Retail 235 \$ 263 \$ 258 \$ 262 \$ 221 \$ 742 \$ 1.011 \$ U.S. Retail - in USD - foreign exchange Wholesale Banking4 (28) (4) (24)Corporate U.S. strategic cards portfolio<sup>3</sup> - foreign exchange Wholesale Banking - CDS4 (2) (2) (2) (3) (3) (2) (4) (3) (3) (6) (9) (12) (12) Increase/(reduction) of allowance for incurred but not identified credit losses Other

**Total Provision for Credit Losses** 

Total Corporate

500 \$

548 \$

556 \$

584 \$

509 \$

1,638 \$

1,782

2,330 \$

1,683

<sup>&</sup>lt;sup>1</sup> Includes provision for off-balance sheet positions.

<sup>&</sup>lt;sup>2</sup> The incurred but not identified PCL is included in the Corporate segment results for management reporting.

<sup>&</sup>lt;sup>3</sup> The retailer program partners' share of the U.S. strategic cards portfolio's PCL.

<sup>&</sup>lt;sup>4</sup> Premiums on CDS recorded in PCL for Wholesale Banking are reclassified to trading income in the Corporate segment.

# Provision for Credit Losses by Industry Sector and Geographic Location 1,2

(\$ millions, except as noted) For the period ended	LINE #		201 Q3				2017 Q2				2017 Q1		
By Industry Sector Provision for Credit Losses – Counterparty-Specific and Individually Insignificant		Canada	United States	Int'l	Total	Canada	United States	Int'l	Total	Canada	United States	Int'l	Total
Personal Residential mortgages Consumer Instalment and Other Personal	1	\$ 5 \$	7	\$ -	\$ 12	\$ 4 \$	\$ (3) \$	- \$	1	\$ 7 \$	\$ (1) \$	- \$	6
HELOC Indirect auto	2	3 60	8 54	_	11 114	1 47	(5) 54	_	(4) 101	1 75	(3) 61	-	(2) 136
Other Credit card	4 5	41 113	31 165	_	72 278	41 127	25 156	_	66 283	47 124	33 182	_	80 306
Total personal	6	222	265		487	220	227		447	254	272		526
Business and Government Real estate													
Residential Non-residential	7 8	(1) -	1 -	- -	-	1 –	(2) (3)	- -	(1) (3)	_ 1	2 (3)	-	2 (2)
Total real estate	9	(1)	1	-	-	1	(5)	-	(4)	1	(1)	-	
Agriculture	10	-	-	-	-	-	-	-	_	-	-	-	-
Automotive Financial	11 12	_	1 4	=	1 4	_	(2)	_	(2)		_	_	_
Food, beverage, and tobacco	13	-	-	-	-	-	1	-	1	=	-	_	_
Forestry Government, public sector entities, and education	14 15	_	_ (1)	_	(1)	1	(5)	-	(4)	=	(2) (1)	Ξ	(2) (1)
Health and social services	16	_	(3)	_	(3)	1	6	_	7	2	(7)	_	(5)
Industrial construction and trade contractors	17	2	7	-	9	4	_	-	4	-	_	-	_
Metals and mining Pipelines, oil, and gas	18 19	5 (1)	- 1	=	5	(2)	(5)		- (7)	(8)	(1) (11)	Ξ	(1) (19)
Power and utilities	20	(1)	-	_	_	(2)	(5)	_	-	(0)	(1)	_	(1)
Professional and other services	21	3	1	-	4	1	2	-	3	2	_	-	2
Retail sector Sundry manufacturing and wholesale	22 23	3 1	1 (3)	_	4 (2)	3	2 (3)	_	5 (3)	2	(3)	_	(1)
Telecommunications, cable, and media	24	-	(1)	_	(1)	1	(5)	_	1	_	_	_	_
Transportation	25	1	(1)	-	_	1	1	-	2	<del>-</del>	-	-	=
Other Total business and government	26 27	1 14	9 16		10 30	13	(1)		1 4	1	6 (21)		(21)
Other Loans	21	14	10	· · · · · · · · · · · · · · · · · · ·	30	13	(9)		- 4		(21)		(21)
Debt securities classified as loans	28	-	_	-	-	-	(5)	-	(5)	-	-	_	-
Acquired credit-impaired loans <sup>3</sup>	29		(9)		(9)		(13)		(13)		(3)		(3)
Total other loans  Total Provision for Credit Losses – Counterparty-Specific and	30	-	(9)		(9)		(18)		(18)		(3)		(3)
Individually Insignificant	31	236	272	_	508	233	200	_	433	254	248	_	502
Provision for Credit Losses - Incurred but not Identified													
Personal, business and government Other Loans	32	1	(7)	1	(5)	9	58	-	67	4	126	-	130
Debt securities classified as loans	33	1	1	_	2	_	_	_	_	_	1	_	1
Total other loans	34	1	1		2	-	-		-		1	- ' '	1
Total Provision for Credit Losses – Incurred but not Identified	35	2	(6)	1	(3)	9	58		67	4	127		131
Total Provision for Credit Losses	36	\$ 238 \$	266	\$ 1	\$ 505	\$ 242 \$	\$ 258 \$	- \$	500	\$ 258 \$	375 \$	- \$	633
Provision for Credit Losses – Counterparty-Specific and Individually Insignificant as a % of Average Net Loans and Acceptances													
Personal		0.04 01	0.40		0.00 01	0.04 0	(0.04) 2/	0/	- %	0.04 0/	(0.04) 0/	0/	0.01 %
Residential mortgages Consumer instalment and other personal	37	0.01 %	0.10 %	- %	0.02 %	0.01 %	(0.04) %	- %	- %	0.01 %	(0.01) %	- %	0.01 %
HELOC	38	0.02	0.26	_	0.05	0.01	(0.16)	-	(0.02)	0.01	(0.09)	_	(0.01)
Indirect auto	39	1.13	0.78	_	0.93	0.94	0.79	-	0.86	1.46	0.87	-	1.12
Other Credit card	40 41	0.95 2.58	15.32 4.92	=	1.60 3.59	1.00 3.06	13.23 4.80	_	1.54 3.83	1.14 2.81	16.74 5.31	_	1.86 3.91
Total personal	42	0.28	1.30	_	0.49	0.29	1.13	_	0.47	0.33	1.31	_	0.53
Business and Government	43	0.06	0.06	-	0.06	0.06	(0.03)	-	0.01	_	(0.07)	-	(0.04)
Total Provision for Credit Losses – Counterparty-Specific and Individually Insignificant	44	0.23	0.56	_	0.33	0.24	0.42	_	0.29	0.25	0.50	_	0.33
Total Provision for Credit Losses – Counterparty-Specific and				=									
Individually Insignificant Excluding Other Loans	45	0.23 %	0.58 %	- %	0.34 %	0.24 %	0.46 %	- %	0.31 %	0.25 %	0.51 %	- %	0.34 %
Total Provision for Credit Losses as a % of Average Net Loans and Acceptances													
Total Provision for Credit Losses Total Provision for Credit Losses Excluding Other Loans	46 47	0.23 % 0.23	0.55 % 0.57	0.32 % 0.39	0.33 % 0.33	0.25 % 0.25	0.54 % 0.58	- %	0.34 % 0.35	0.26 % 0.26	0.76 % 0.77	- %	0.42 % 0.42
	47	n 22	0.57										0.42

Primarily based on the geographic location of the customer's address.
 Includes provision for off-balance sheet positions.
 Includes all FDIC covered loans and other ACI loans.

#### Provision for Credit Losses by Industry Sector and Geographic Location (Continued)<sup>1,2</sup> LINE 2016 2016 For the period ended By Industry Sector United United United Provision for Credit Losses – Counterparty-Specific and Canada States Int'l Total Canada States Int'l Total States Int'l Total Individually Insignificant Personal Residential mortgages 18 5 23 3 7 3 3 6 Consumer Instalment and Other Personal 27 30 13 15 HELOC. 2 Indirect auto 3 63 46 109 67 32 99 60 31 91 Other 42 26 68 47 23 70 45 20 65 Credit card 126 128 254 124 101 225 135 104 239 Total personal 6 239 245 484 242 164 406 245 171 416 **Business and Government** Real estate Residential (1) (1) (1) Non-residential 8 (1) Total real estate 9 (1) (1) (2) 2 2 Agriculture 10 (1) Automotive 11 (1) Financial 12 (1) (1) (2) (2) 13 (3) (4) Food, beverage, and tobacco (1) Forestry 14 (1) Government, public sector entities, and education 15 (1) (5) (6) 16 (2) (1) (1) Health and social services Industrial construction and trade contractors 17 (1) 3 (2) Metals and mining 18 19 25 Pipelines, oil, and gas (1) 24 49 Power and utilities 20 Professional and other services 21 (1) (2) Retail sector 22 (3) (4) (2) Sundry manufacturing and wholesale 23 6 (1) (3) (3) (1) Telecommunications, cable, and media 24 25 Transportation Other . 26 13 15 27 Total business and government 22 2 24 23 31 40 27 67 Other Loans Debt securities classified as loans 28 2 (8) (8) (7) Acquired credit-impaired loans<sup>3</sup> 29 (7) (9) (9) 30 (6) (6) (8) (8) (7) (7) Total Provision for Credit Losses - Counterparty-Specific and 31 261 241 502 265 164 429 285 191 476 Individually Insignificant Provision for Credit Losses - Incurred but not Identified Personal, business and government 32 (15) 61 46 23 104 (1) 126 62 48 (1) 109 Other Loans Debt securities classified as loans 33 (1) (1) Total other loans 34 (1) (1) Total Provision for Credit Losses - Incurred but not Identified 35 46 23 127 (15) 61 105 62 47 (1) 108 Total Provision for Credit Losses 548 347 238 36 246 302 288 269 (1) 556 (1) 584 Provision for Credit Losses - Counterparty-Specific and Individually Insignificant as a % of Average Net Loans and Acceptances Residential mortgages 37 0.01 0.27 0.04 0.01 % 0.06 % 0.01 % 0.01 0.05 % 0.01 % Consumer instalment and other personal 0.02 0.83 0.15 0.01 0.12 0.03 0.01 0.41 0.08 HELOC. 38 Indirect auto 39 1.24 0.66 0.91 1.35 0.48 0.85 1.27 0.49 0.83 Other 40 1.04 13.36 1.61 1.17 12.02 1.66 1.16 11.19 1.61 Credit card 41 2.89 4.04 3.37 2.85 3.36 3.06 3.24 3.59 3.38 Total personal 42 0.31 1.21 0.50 0.32 0.83 0.42 0.33 0.90 0.45 **Business and Government** 0.10 0.01 0.05 0.10 0.03 0.06 0.18 0.14 0.11 Total Provision for Credit Losses - Counterparty-Specific and 0.50 0.27 Individually Insignificant 44 0.26 0.34 0.35 0.29 0.30 0.43 0.34 Total Provision for Credit Losses - Counterparty-Specific and Individually Insignificant Excluding Other Loans 45 0.26 % 0.52 % 0.34 % 0.27 % 0.37 % 0.30 % 0.30 % 0.45 % 0.35 % Total Provision for Credit Losses as a % of Average Net Loans and Acceptances

46

0.25 %

0.25

0.63

0.65

%

0.37

0.37

0.29

0.29

0.58

0.60

(0.25) %

(0.31)

0.38

0.39

0.36

0.36

0.54

0.56

(0.19) %

(0.22)

**Total Provision for Credit Losses** 

Total Provision for Credit Losses Excluding Other Loans

0.42 %

0.42

<sup>&</sup>lt;sup>1</sup> Primarily based on the geographic location of the customer's address.

<sup>&</sup>lt;sup>2</sup> Includes provision for off-balance sheet positions.

<sup>3</sup> Includes all FDIC covered loans and other ACI loans.

#### Provision for Credit Losses by Industry Sector and Geographic Location (Continued)<sup>1,2</sup> LINE 2015 2015 For the period ended By Industry Sector United United United Provision for Credit Losses – Counterparty-Specific and Canada States Int'l Total Canada States Int'l Total States Int'l Total Individually Insignificant Personal Residential mortgages (9) (5) 6 11 Consumer Instalment and Other Personal 14 13 13 15 32 34 HELOC. 2 Indirect auto 3 63 37 100 45 37 82 31 25 56 Other 35 27 62 43 25 68 38 18 56 Credit card 118 158 276 127 98 225 121 62 183 Total personal 6 219 227 446 174 396 199 141 340 222 **Business and Government** Real estate Residential (3) (3) Non-residential 8 Total real estate 9 2 6 8 2 2 Agriculture 10 Automotive 11 1 2 Financial 12 13 (1) (1) 12 12 Food, beverage, and tobacco Forestry 14 Government, public sector entities, and education 15 (1) (1) 16 (1) (1) Health and social services Industrial construction and trade contractors 17 (1) 16 16 Metals and mining 18 19 11 11 19 19 Pipelines, oil, and gas Power and utilities 20 Professional and other services 21 (1) (20)(1) (21)Retail sector 22 Sundry manufacturing and wholesale 23 (1) Telecommunications, cable, and media 24 (1) 25 Transportation Other . 26 (7) (4) (2) 27 Total business and government 18 2 20 9 26 35 38 5 43 Other Loans Debt securities classified as loans 28 5 (29) (29) (7) (7) Acquired credit-impaired loans<sup>3</sup> 29 (7) (7) (12)(12)30 (2) (2) (41) (41) (7) (7) Total Provision for Credit Losses - Counterparty-Specific and 31 237 227 464 231 159 390 237 139 376 Individually Insignificant Provision for Credit Losses - Incurred but not Identified Personal, business and government 32 56 124 2 182 18 100 119 63 (7) 60 Other Loans Debt securities classified as loans 33 (4) (4) Total other loans 34 (4) (4) Total Provision for Credit Losses - Incurred but not Identified 35 18 100 119 56 120 178 64 (7) 61 Total Provision for Credit Losses 293 509 241 203 36 347 642 249 259 (7) 437 Provision for Credit Losses - Counterparty-Specific and Individually Insignificant as a % of Average Net Loans and Acceptances Residential mortgages 37 0.01 (0.13) % (0.01) % 0.01 % 0.01 % 0.01 0.02 % 0.06 % - % 0.02 % Consumer instalment and other personal 0.40 0.07 0.01 0.39 0.08 0.01 0.99 0.18 HELOC. 38 (0.01)Indirect auto 39 1.32 0.56 0.88 0.96 0.60 0.76 0.69 0.44 0.55 Other 40 0.88 13.34 1.48 1.07 13.00 1.61 0.91 9 72 1.28 Credit card 41 2.69 4.83 3.60 2.91 3.95 3.29 2.81 2.96 2.86 Total personal 42 0.29 1.10 0.47 0.30 0.92 0.42 0.27 0.79 0.37 **Business and Government** 0.08 0.01 0.04 0.04 0.11 0.08 0.19 0.02 0.10 Total Provision for Credit Losses - Counterparty-Specific and 0.32 Individually Insignificant 44 0.24 0.48 0.24 0.37 0.28 0.26 0.35 0.28 Total Provision for Credit Losses - Counterparty-Specific and 45 0.32 % Individually Insignificant Excluding Other Loans 0.24 % 0.49 % 0.24 % 0.47 % 0.31 % 0.26 % 0.37 % 0.29 % Total Provision for Credit Losses as a % of Average Net Loans and Acceptances

46

0.30

0.30

0.73 %

0.76

0.33 %

0.40

0.44

0.45

0.26

0.26

0.60

0.71

0.16 %

0.20

0.37

0.40

0.26 %

0.26

0.51

0.53

(1.13) %

**Total Provision for Credit Losses** 

Total Provision for Credit Losses Excluding Other Loans

0.33 %

0.33

<sup>&</sup>lt;sup>1</sup> Primarily based on the geographic location of the customer's address.

<sup>&</sup>lt;sup>2</sup> Includes provision for off-balance sheet positions.

<sup>3</sup> Includes all FDIC covered loans and other ACI loans.

(\$ millions) For the period ended	LINE #			2017 Q3		<u>.</u>		2017 Q2			<del> </del>	2017 Q1		
		Cana	ıda	United States	Int'l	Total	Canada	United States	Int'l	Total	Canada	United States	Int'l	Total
Gross Loans		Gunu		Otatos		10141	Odridad	Otateo		Total	Odridda	Otates		Total
Residential mortgages	1	\$	- \$	296 \$	- \$	296	\$ - \$	350 \$	- \$	350	\$ - \$	350 \$	- \$	350
Consumer instalment and other personal														
HELOC	2		-	53	-	53	-	68	-	68	-	73	-	73
Other Credit cards	3 4		-	10	-	10	-	15 _	_	15	-	15 _	-	15
Business and government	5		_	329	-	- 329	_	406	_	- 406	_	434	_	434
Total Gross Loans	6	¢	- \$	688 \$		688	\$ - \$	839 \$		839	<u> </u>	872 \$		872
Total Gross Edalis	O	Ψ	_ Ψ	000 ψ	– ψ	000	Ψ – Ψ	000 ψ	– ψ	000	Ψ – Ψ	072 ψ	- ψ	072
Change in Allowance for Credit Losses														
Balance at beginning of period	7	\$	- \$	54 \$	- \$	54	\$ - \$	61 \$	- \$	61	\$ - \$	62 \$	- \$	62
Provision for credit losses – counterparty-specific	8		-	-	-	-	-	(2)	-	(2)	_	(1)	-	(1)
Provision for credit losses – individually insignificant impaired loans	9		-	(9)	-	(9)	_	(11)	-	(11)	-	(2)	-	(2)
Write-offs <sup>2</sup>	10		-	-	-	-	_	-	_	_	_	(1)	-	(1)
Recoveries	11		-	6	-	6	-	2 4	-	2	-	12	_	12
Foreign exchange and other adjustments	12			(7)		(7)	_			4		(9)		(9)
Balance at end of period	13	\$	- \$	44 \$	- \$	44	\$ - \$	54 \$	- \$	54	\$ - \$	61 \$	- \$	61
Allowance for Credit Losses														
Residential mortgages	14	\$	- \$	13 \$	- \$	13	\$ - \$	17 \$	- \$	17	\$ - \$	17 \$	- \$	17
Consumer instalment and other personal														
HELOC	15		-	3	-	3	-	5	-	5	-	5	-	5
Other	16		-	3	-	3	-	3	-	3	-	3	-	3
Business and government Total Allowance for Credit Losses	17	<b>*</b>	_	25		25		29		29		36	_	36
Total Allowance for Credit Losses	18	\$	- \$	44 \$	- \$	44	\$ - \$	54 \$	- \$	54	\$ - \$	61 \$	- \$	61
Provision for Credit Losses – Counterparty-Specific and Individually Insignificant <sup>3</sup>														
Provision for credit losses – counterparty-specific		\$	- \$	- \$	- \$	-	\$ - \$	(2) \$	- \$	(2)	\$ - \$	(1) \$	- \$	(1)
Provision for credit losses – individually insignificant	20			(9)		(9)		(11)		(11)		(2)		(2)
Total Provision for Credit Losses – Counterparty-Specific and Individually Insignificant	21	\$	- \$	(9) \$	- \$	(9)	\$ - \$	(13) \$	- \$	(13)	\$ - \$	(3) \$	- \$	(3)
Provision for Credit Losses – Counterparty-Specific and Individually Insignificant														
Residential mortgages	22	\$	- \$	(2) \$	- \$	(2)	\$ - \$	(2) \$	- \$	(2)	\$ - \$	(1) \$	- \$	(1)
Consumer instalment and other personal														
HELOC	23		-	(2)	-	(2)	-	<del></del>	-		-	-	-	-
Other	24		-	(1)	-	(1)	-	(1)	-	(1)	-	- (0)	-	-
Business and government	25		-	(4)	-	(4)	-	(10)	_	(10)		(2)	_	(2)
Total Provision for Credit Losses – Counterparty-Specific and Individually Insignificant	26	¢	- \$	(9) \$	- \$	(9)	\$ - \$	(13) \$	- \$	(13)	s – \$	(3) \$	- \$	(3
and marviolally morginicant	20	Ψ	– ą	(a) A	– ą	(9)	φ – ֆ	(13) Þ	— ф	(13)	p – 3	(S) Ø	– ş	(3

Acquired Credit-Impaired Loans by Geographic Location<sup>1</sup>

Primarily based on the geographic location of the customer's address.
 Excludes write-offs for which a credit mark was established on acquisition date.
 PCL reflects loss sharing agreements with the FDIC, and is presented net of the amount expected to be reimbursed by the FDIC.

\$ millions)	LINE	•	2016				2016				2016		
For the period ended	#		Q4				Q3				Q2		
	ľ		United		<u> </u>		United				United		
		Canada	States	Int'l	Total	Canada	States	Int'l	Total	Canada	States	Int'l	Tota
Gross Loans Residential mortgages	1	\$ - \$	375 \$	- \$	375 \$	- \$	383 \$	- \$	383	s – s	385 \$	- \$	385
Consumer instalment and other personal		Ψ	0/0 ψ	Ψ	0,0	Ψ	σσσ ψ	Ψ	000	Ψ Ψ	σσσ ψ	•	00
HELOC	2	_	82	_	82	_	88	_	88	_	93	_	9
Other	3	_	17	_	17	_	19	_	19	_	22	_	2
Credit cards	4	_	_	_	_	_	_	_	_	_	(3)	_	(
Business and government	5	_	500	_	500	_	532	_	532	_	581	_	58
otal Gross Loans	6	\$ - \$	974 \$	- \$	974 \$	- \$	1,022 \$	- \$	1,022	\$ - \$	1,078 \$	- \$	1,07
Change in Allowance for Credit Losses													
Balance at beginning of period	7	\$ - \$	66 \$	- \$	66 \$	- \$	71 \$	- \$	71	\$ - \$	86 \$	- \$	8
Provision for credit losses – counterparty-specific	8	Ψ – Ψ	(1)	- Ψ	(1)	, – Ψ –	(1)	- Ψ	(1)	ψ – ψ –	(2)	- Ψ	(
rovision for credit losses – individually insignificant impaired loans	9	_	(6)	_	(6)	_	(7)	_	(7)	_	(7)	_	
/rite-offs <sup>2</sup>	10	_	(1)	_	(1)	_	(1)	_	(1)	_	(1)	_	
ecoveries	11	_	4	_	4	_	3	_	3	_	6	_	
oreign exchange and other adjustments	12	_	-	_	_	_	1	_	1	_	(11)	_	(*
alance at end of period	13	\$ - \$	62 \$	- \$	62 \$	- \$	66 \$	- \$	66	\$ - \$	71 \$	- \$	`7
llowance for Credit Losses													
tesidential mortgages	14	\$ - \$	19 \$	- \$	19 \$	- \$	20 \$	- \$	20	\$ - \$	20 \$	<b>-</b> \$	2
onsumer instalment and other personal		•		•		*	+	*		,	•	,	
HELOC	15	_	4	_	4	_	5	_	5	_	5	_	
Other	16	_	4	_	4	_	4	_	4	_	5	_	
Business and government	17	_	35	_	35	_	37	_	37	_	41	_	4
otal Allowance for Credit Losses	18	\$ - \$	62 \$	- \$	62 \$	- \$	66 \$	- \$	66	\$ - \$	71 \$	- \$	7
Provision for Credit Losses – Counterparty-Specific													
and Individually Insignificant <sup>3</sup>	40 [		(4) 6		(4) [6		(1) 0		(4)		(0)		
rovision for credit losses – counterparty-specific	19	\$ - \$	(1) \$	- \$	(1) \$	- \$	(1) \$	- \$	(1)	\$ - \$	(2) \$	- \$	(
rovision for credit losses – individually insignificant	20		(6)		(6)		(7)		(7)	-	(7)		
otal Provision for Credit Losses – Counterparty-Specific and Individually Insignificant	21	\$ - \$	(7) \$	- \$	(7) \$	- \$	(8) \$	- \$	(8)	\$ - \$	(9) \$	- \$	
•			` ' '	·		·		·					
rovision for Credit Losses – Counterparty-Specific and Individually Insignificant													
esidential mortgages	22	\$ - \$	(2) \$	- \$	(2) \$	- \$	(1) \$	- \$	(1)	S - S	(1) \$	- \$	
onsumer instalment and other personal		. •	(-/ 7	<b>*</b>	\_/	•	(:/ +	<b>~</b>	( · /		( · / +	•	
HELOC	23	_	_	_	_	_	_	_	_	_	_	_	
Other	24	_	_	_	_	_	(1)	_	(1)	_	_	_	
usiness and government	25	_	(5)	_	(5)	_	(6)	_	(6)	-	(8)	-	
otal Provision for Credit Losses – Counterparty-Specific	j		` '		` ' '		. , ,				` ' ' ' ' '		-
· · · · · · · · · · · · · · · · · · ·													

Primarily based on the geographic location of the customer's address.
 Excludes write-offs for which a credit mark was established on acquisition date.
 PCL reflects loss sharing agreements with the FDIC, and is presented net of the amount expected to be reimbursed by the FDIC.

	1												
\$ millions) For the period ended	LINE #		2016 Q1				2015 Q4				2015 Q3		
-or the period ended	# _		Q I	* *			Q4			<del> </del>	ų s		
		Canada	United States	Int'l	Total	Canada	United States	Int'l	Total	Canada	United States	Int'l	Total
Gross Loans		Curidu			- Ottai	Junada	0.0.00			Canada			
Residential mortgages	1 \$	- \$	447 \$	- \$	447	- \$	442 \$	- \$	442	\$ - \$	462 \$	- \$	462
Consumer instalment and other personal			440		440		445		445		105		405
HELOC	2	_	113	-	113	-	115	-	115	-	125	-	125
Other Credit cards	3	-	29	_	29	_	32	-	32	-	38	-	38
Business and government	5	_	(2) 785	_	(2) 785	_	- 825	_	825	_	- 895	_	895
Total Gross Loans	6 \$	- S	1,372 \$	\$	1,372	- S	1,414 \$	_ _ \$	1.414	\$ - \$	1,520 \$	- S	1,520
	, <u>r</u>	,	1,012 ψ	<u> </u>	.,0.2	<u> </u>	ι, ψ	<u> </u>	.,	<u> </u>	1,020 ψ	•	1,020
Change in Allowance for Credit Losses					1-								
Balance at beginning of period	7 \$	- \$	83 \$	- \$	83	- \$	92 \$	- \$	92	\$ - \$	93 \$	- \$	93
Provision for credit losses – counterparty-specific Provision for credit losses – individually insignificant impaired loans	8	-	(2)	_	(2)	-	(1) (11)	-	(1) (11)	-	(1) (6)	-	(1
Vrite-offs <sup>2</sup>	9 10	_	(5) (1)	_	(5) (1)	_	(11)	_	(11)	_	(3)	_	(6) (3)
Recoveries	11	_	7	_	7	_	3	_	3	_	2	_	2
Foreign exchange and other adjustments	12	_	4	_	4	_	_	_	_	_	7	_	7
Balance at end of period	13 \$	S - \$	86 \$	- \$	86 \$	- \$	83 \$	- \$	83	\$ - \$	92 \$	- \$	92
Allowance for Credit Losses													
Residential mortgages	14 \$	- \$	23 \$	- \$	23 \$	- \$	23 \$	- \$	23	\$ - \$	25 \$	- \$	25
Consumer instalment and other personal	1-1	, •		•	,	•	-σ ψ	•		•	-0 V	•	
HELOC	15	_	5	_	5	_	5	_	5	_	6	_	6
Other	16	_	5	_	5	_	5	_	5	_	4	_	4
Business and government	17	_	53	_	53	_	50	_	50	_	57	-	57
Total Allowance for Credit Losses	18 \$	- \$	86 \$	- \$	86	- \$	83 \$	- \$	83	\$ - \$	92 \$	- \$	92
Provision for Credit Losses – Counterparty-Specific													
and Individually Insignificant <sup>3</sup> Provision for credit losses – counterparty-specific	10 6	· •	(2) f	- \$	(2)	•	(1) \$	•	(4)	e e	(1) \$	•	/4
Provision for credit losses – counterparty-specific  Provision for credit losses – individually insignificant	19 \$ 20	S – \$ –	(2) \$ (5)	- <b>\$</b>	(2) (5)	- \$ -	(1) \$ (11)	- \$ -	(1) (11)	\$ - \$ -	(6)	- \$ -	(1) (6)
Fotal Provision for Credit Losses – Counterparty-Specific	20		(5)		(3)	<del> </del>	(11)		(11)		(0)		(0
and Individually Insignificant	21 \$	- \$	(7) \$	- \$	(7)	- \$	(12) \$	- \$	(12)	\$ - \$	(7) \$	- \$	(7)
	_	•		·	, , , ,	·			. , , ,			·	,
Provision for Credit Losses – Counterparty-Specific and Individually Insignificant													
Residential mortgages	22 \$	S - \$	(2) \$	- \$	(2)	- \$	(2) \$	- \$	(2)	\$ - \$	(3) \$	- \$	(3
Consumer instalment and other personal	4	, – ф	(Δ) Ψ	– <b>v</b>	(2)	- ф	( <i>Δ</i> ) Ψ	- φ	(4)	ψ – <b>ఫ</b>	(υ) φ	– Þ	(3)
HELOC	23	_	_	_	_	_	_	_	_	_	_	_	_
Other	24	_	(1)	_	(1)	_	_	_	_	_	_	_	_
Business and government	25	_	(4)	_	(4)	-	(10)	_	(10)	-	(4)	_	(4
Total Provision for Credit Losses – Counterparty-Specific													,
													(7

Primarily based on the geographic location of the customer's address.
 Excludes write-offs for which a credit mark was established on acquisition date.
 PCL reflects loss sharing agreements with the FDIC, and is presented net of the amount expected to be reimbursed by the FDIC.

(\$ millions, except as noted)	LINE		2017	· I		2010	6	1	201	5	,	Year to [	Date		Full Year	
For the period ended	#	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	201		2016	2016		015
Common Shares																
Balance at beginning of period Issued		\$ 20,809	\$ 20,836 \$	20,	\$ 20,597	, , , , ,	20,395 \$	20,294	\$ 20,180 \$	20,076	, ,	711 \$	20,294	\$ 20,29	•	19,811
Options Dividend reinvestment plan	2	18 85	56 84	47 78	30 84	12 86	20 84	124 81	32 82	7 97		121 247	156 251	18		128 355
Purchase of shares for cancellation	4	-	(167)	-	-	_	-	(104)	_	-		167)	(104)	(10		-
Balance at end of period	5	20,912	20,809	20,836	20,711	20,597	20,499	20,395	20,294	20,180	20,	912	20,597	20,71	1 2	20,294
Preferred Shares Balance at beginning of period Issue of shares	6 7	4,400 350	4,400	4,400	3,400 1,000	3,400	3,400	2,700 700	2,700	2,800 150		400 350	2,700 700	2,70 1,70		2,200 1,200
Redemption of shares	8	-	_	_	1,000	_	_	-	_	(250)	'	-	-	1,70	_	(700)
Balance at end of period	9	4,750	4,400	4,400	4,400	3,400	3,400	3,400	2,700	2,700	4,	750	3,400	4,40	00	2,700
Treasury Shares – Common Balance at beginning of period Purchase of shares Sale of shares Balance at end of period	10 11 12 13	(245) (2,180) 2,403 (22)	(218) (2,312) 2,285 (245)	(31) (2,478) 2,291 (218)	(42) (1,361) 1,372 (31)	(4) (1,389) 1,351 (42)	(51) (1,405) 1,452 (4)	(49) (1,614) 1,612 (51)	(17) (1,146) 1,114 (49)	(11) (1,475) 1,469 (17)	(6,9 6,9	(31) 970) 979 (22)	(49) (4,408) 4,415 (42)	(4 (5,76 5,78	9) 37	(54) (5,269) 5,274 (49)
Treasury Shares – Preferred Balance at beginning of period Purchase of shares	14 15	(7) (46)	(5) (41)	(5) (50)	(5) (58)	(4) (23)	(4) (17)	(3) (17)	(4) (9)	(14) (85)		(5) 137)	(3) (57)		(3)	(1) (244)
Sale of shares	16	45	39	50	58	22	17	16	10	95		134	55	11		242
Balance at end of period	17	(8)	(7)	(5)	(5)	(5)	(4)	(4)	(3)	(4)	-	(8)	(5)	-	5)	(3)
Contributed Surplus Balance at beginning of period Net premium (discount) on treasury shares Stock options expensed Stock options exercised Other	18 19 20 21 22	200 9 3 (3) (2)	206 1 4 (9) (2)	203 7 5 (8) (1)	197 10 3 (4) (3)	189 10 3 (2) (3)	198 1 1 (7) (4)	214 5 (1) (21) 1	226 (4) 4 (5) (7)	226 (1) 4 (1) (2)		203 17 12 (20) (5)	214 16 3 (30) (6)	(3	26 6 (4) (9)	205 25 20 (20) (16)
Balance at end of period	23	207	200	206	203	197	189	198	214	226	- :	207	197	20	13	214
Retained Earnings Balance at beginning of period Net income Dividends	24 25	37,577 2,740	37,330 2,475	35,452 2,504	34,387 2,274	33,442 2,329	32,585 2,024	32,053 2,194	30,764 1,810	29,362 2,238	35, 7,	452 719	32,053 6,547	32,05 8,82		27,585 7,912
Common	26	(1,108)	(1,113)	(1,021)	(1,019)	(1,020)	(1,017)	(946)	(945)	(945)		242)	(2,983)	(4,00		(3,700)
Preferred Share issue expenses and others	27 28	(47) (4)	(48)	(48)	(43) (8)	(36)	(37)	(25) (6)	(26)	(25) (2)	,	143) (4)	(98) (6)	(14		(99) (28)
Net premium on repurchase of common shares	29	Ξ'	(713)	-	_	-	-	(383)	_	_	(7	713)	(383)	(38	3)	_
Net premium on redemption of preferred shares Actuarial gains (losses) on employee benefit plans	30 31	315	(354)	443	(139)	(328)	(113)	(302)	- 450	(6) 142	l .	- 404	(743)	(88)	- (2)	(17) 400
Balance at end of period	32	39,473	37,577	37,330	35,452	34,387	33,442	32,585	32,053	30,764	39,		34,387	35,45		32,053
Accumulated Other Comprehensive Income (loss) Balance at beginning of period Net change in unrealized gains (losses) on AFS securities Net change in unrealized foreign currency translation	33 34	11,853 (94)	9,131 289	11,834 93	11,037 26	8,689 207	13,467 230	10,209 (245)	10,477 (424)	7,569 (147)	11,	834 288	10,209 192	10,20 21		4,936 (557)
gains (losses) on investment in subsidiaries, net of hedging activities Net change in gains (losses) on derivatives designated as	35	(4,428)	2,325	(1,423)	1,290	1,635	(4,535)	2,934	(19)	3,097	(3,	526)	34	1,32	24	5,326
cash flow hedges	36	(767)	108	(1,373)	(519)	506	(473)	569	175	(42)		032)	602		3	504
Balance at end of period	37	6,564	11,853	9,131	11,834	11,037	8,689	13,467	10,209	10,477		564	11,037	11,83		10,209
Non-Controlling Interests in Subsidiaries Total Equity	38 39	1,588 \$ 73,464	1,652 \$ 76,239 \$	1,622 73,302	1,650 \$ 74,214 \$	1,633 5 71,204 \$	1,612 67,823 \$	1,684 71,674	1,610 \$ 67,028 \$	1,639 65,965	1,5 \$ 73,4	588 464 \$	1,633 71,204	1,65 \$ 74,21		1,610 67,028
NUMBER OF COMMON SHARES OUTSTANDING (thousands)	50	0,101	<u>,</u>	. 5,002	r,=1-r (	,,20π ψ	σ.,σεο ψ	,01 =	- 0.,020 ψ	55,000	, 13,·	w	,204	¥ 17,21	. Ψ	,020
Balance at beginning of period Issued	40	1,843,449	1,856,383	1,857,180	1,854,821	1,853,509	1,850,269	1,855,145	1,853,596	1,851,560	1,857,	180	1,855,145	1,855,14	5 1,84	44,631
Options	41	372	1,162	1,020	679	273	923	3,043	755	210		554	4,239	4,91		3,288
Dividend reinvestment plan Purchase of shares for cancellation	42 43	1,309 -	1,287 (15,000)	1,142	1,378 —	1,506 —	1,508	1,585 (9,500)	1,507 —	1,868	(15,0	738 000)	4,599 (9,500)	5,97 (9,50		6,661
Impact of treasury shares	44	3,463	(383)	(2,959)	302	(467)	809	(4)	(713)	(42)	` '	121	338	64	0	565
Balance at end of period	45	1,848,593	1,843,449	1,856,383	1,857,180	1,854,821	1,853,509	1,850,269	1,855,145	1,853,596	1,848,	593	1,854,821	1,857,18	1,85	55,145

<sup>1</sup> The number of treasury common shares has been netted for the purpose of arriving at the total number of common shares considered for the calculation of EPS of the Bank.

# Change in Accumulated Other Comprehensive Income, Net of Income Taxes

(\$ millions)	LINE		2017			2016			2015	·	Year to	Date	Full Y	ear
For the period ended	#	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	2017	2016	2016	2015
	!			· ·	<u> </u>		<del></del>	· ·	L		<u> </u>		<u> </u>	
Unrealized Gains (Losses) on Available-for-Sale Securities														
Balance at beginning of period	1	\$ 681	\$ 392 \$	299	\$ 273 \$	66 \$	(164) \$	81	\$ 505 \$	652	\$ 299 \$	81	\$ 81 \$	638
Change in unrealized gains (losses)	2	(46)	296	120	39	233	265	(263)	(384)	(143)	370	235	274	(464)
Reclassification to earnings of losses (gains)	3	(48)	(7)	(27)	(13)	(26)	(35)	18	(40)	(4)	(82)	(43)	(56)	(93)
Net change for the period	4	(94)	289	93	26	207	230	(245)	(424)	(147)	288	192	218	(557)
Balance at end of period	5	587	681	392	299	273	66	(164)	81	505	587	273	299	81
Unrealized Foreign Currency Translation Gains (Losses) on Investments in Foreign Operations, Net of Hedging Activities														
Balance at beginning of period	6	10,581	8,256	9,679	8,389	6,754	11,289	8,355	8,374	5,277	9,679	8,355	8,355	3,029
Investment in foreign operations	7	(6,112)	3,210	(1,907)	1,639	2,268	(6,670)	4,053	(55)	4,734	(4,809)	(349)	1,290	8,090
Reclassification to earnings of net losses (gains) on investment in														
foreign operations	8	(25)	(9)	17	-	-	-	_	_	_	(17)	-	_	_
Hedging activities	9	2,309	(1,201)	652	(475)	(861)	2,900	(1,521)	47	(2,219)	1,760	518	43	(3,748)
Reclassification to earnings of net losses (gains) on hedges of														
investments in foreign operations	10	13	9	(17)	-	-	-	-	-	-	5	-	-	-
Recovery of (provision for) income taxes	11	(613)	316	(168)	126	228	(765)	402	(11)	582	(465)	(135)	(9)	984
Net change for the period	12	(4,428)	2,325	(1,423)	1,290	1,635	(4,535)	2,934	(19)	3,097	(3,526)	34	1,324	5,326
Balance at end of period	13	6,153	10,581	8,256	9,679	8,389	6,754	11,289	8,355	8,374	6,153	8,389	9,679	8,355
Gains (losses) on Derivatives Designated as Cash Flow Hedges														
Balance at beginning of period	14	591	483	1,856	2,375	1,869	2,342	1,773	1,598	1,640	1,856	1,773	1,773	1,269
Change in gains (losses)	15	(2,503)	1,375	(1,214)	591	1,530	(3,215)	1,929	(65)	1,929	(2,342)	244	835	4,805
Reclassification to earnings of losses (gains)	16	1,736	(1,267)	(159)	(1,110)	(1,024)	2,742	(1,360)	240	(1,971)	310	358	(752)	(4,301)
Net change for the period	17	(767)	108	(1,373)	(519)	506	(473)	569	175	(42)	(2,032)	602	83	504
Balance at end of period	18	(176)	591	483	1,856	2,375	1,869	2,342	1,773	1,598	(176)	2,375	1,856	1,773
Accumulated Other Comprehensive Income at End of Period	19	\$ 6,564	\$ 11,853 \$	9,131	\$ 11,834 \$	11,037 \$	8,689 \$	13,467	\$ 10,209 \$	10,477	\$ 6,564 \$	11,037	\$ 11,834 \$	10,209

(\$ millions)	LINE			2017				2016				2015	•		Year to I	Date	1 [	Full Yea	ar
For the period ended	#	Q3		Q2	 Q1	L	Q4	Q3	Q2	Q1	<u> </u>	Q4	Q3		2017	2016	١L	2016	2015
NON-CONTROLLING INTERESTS IN SUBSIDIARIES																			
Balance at beginning of period	1	\$ 1,652	\$	1,622	\$ 1,650	\$	1,633 \$	1,612 \$	1,684 \$	1,610	\$	1,639 \$	1,589	\$	1,650 \$	1,610	\$	1,610 \$	1,549
On account of income	2	29		28	29		29	29	28	29		29	28		86	86	1	115	112
Foreign exchange and other adjustments	3	(93)		2	(57)		(12)	(8)	(100)	45		(58)	22		(148)	(63)	1	(75)	(51)
Balance at end of period	4	\$ 1,588	\$	1,652	\$ 1,622	\$	1,650 \$	1,633 \$	1,612 \$	1,684	\$	1,610 \$	1,639	\$	1,588 \$	1,633	\$	1,650 \$	1,610
INVESTMENT IN TO AMERITRADE																			
Balance at beginning of period Decrease in reported investment through	5	\$ 7,281	\$	6,883	\$ 7,091	\$	6,859 \$	6,473 \$	7,220 \$	6,683	\$	6,577 \$	6,017	\$	7,091 \$	6,683	\$	6,683 \$	5,569
dividends received	6	(51)		(54)	(107)		(49)	_	(101)	(50)		-	(43)		(212)	(151)	1	(200)	(164)
Equity in net income, net of income taxes	7	122	I	111	113		94	121	109	109		108	91		346	339	11	433	377
Foreign exchange and other adjustments	8	(638)		341	(214)		187	265	(755)	478		(2)	512		(511)	(12)	J L	175	901
Balance at end of period	9	\$ 6.714	\$	7,281	\$ 6.883	\$	7.091 \$	6.859 \$	6.473 \$	7.220	\$	6.683 \$	6.577	4	6.714 \$	6,859	\$	7,091 \$	6,683

#### Derivatives - Notional

(\$ millions)

LINE

(\$ millions) As at	LINE #			2017 Q3							2017 Q2			
				<del></del>			*	1 ·			<del></del>	- ·		
			1		Trading					1		Trading		
		Over-	-the-counter <sup>1</sup> Non-						Over	-the-counter <sup>1</sup> Non-				
		Clearing	clearing	Exchange-		Non-			Clearing	clearing	Exchange-		Non-	
		house <sup>2</sup>	house	traded	Total	trading	Total		house <sup>2</sup>	house	traded	Total	trading	Total
Interest Rate Contracts													-	
Futures	1	\$ - \$	- \$	917,857 \$	917,857 \$	- \$	917,857	\$	- \$	- \$	886,722 \$	886,722 \$	- \$	886,722
Forward rate agreements	2	379,757	128,271	-	508,028	179	508,207		615,718	138,393	-	754,111	187	754,298
Swaps Options written	3 4	5,308,908	482,129 19,065	74,332	5,791,037 93,397	1,370,365 269	7,161,402 93,666	5,	5,537,176	530,692 16,568	123,313	6,067,868 139,881	1,359,823 309	7,427,691 140,190
Options purchased	5	I	18,176	91,836	110,012	1,274	111,286		_	17.061	155,112	172,173	2,405	174,578
Options paronascu	6	5,688,665	647,641	1,084,025	7,420,331	1,372,087	8,792,418	6.	,152,894	702,714	1,165,147	8,020,755	1,362,724	9,383,479
Foreign Exchange Contracts				,,-	, .,	, , , , , ,	-, -, -							
Futures	7	-	-	3	3	-	3		-	-	7	7	_	7
Forward contracts	8	-	1,256,594	-	1,256,594	29,136	1,285,730		-	1,235,757	-	1,235,757	31,818	1,267,575
Swaps	9	-	-	-	-		-		-	-	-	-	-	
Cross-currency interest rate swaps Options written	10 11	l :	559,791 21,947	_	559,791 21,947	77,473	637,264 21,947		_	580,918 23,584	_	580,918 23,584	84,940	665,858 23,584
Options written Options purchased	12	I	22,030		22,030	_	22,030		_	22,376	_	22,376	_	22,376
Optiono paronasca	13	_	1,860,362	3	1,860,365	106,609	1,966,974		_	1,862,635	7	1,862,642	116,758	1,979,400
Credit Derivative Contracts			1,000,000		1,000,000	100,000	1,000,000			.,,		.,,	,	1,010,100
Credit default swaps														
Protection purchased	14	4,785	686	-	5,471	2,264	7,735		4,908	915	-	5,823	3,042	8,865
Protection sold	15	743	277	-	1,020		1,020		853	431		1,284		1,284
	16	5,528	963	-	6,491	2,264	8,755		5,761	1,346	_	7,107	3,042	10,149
Other Contracts Equity contracts	17	_	41,076	44,704	85,780	31,639	117,419			56,942	41,638	98,580	31,543	130,123
Commodity contracts	18	261	27,721	20,554	48,536	31,039	48,536		335	28,887	25,726	54,948	31,543	54,948
Commodity Contracts	19	261	68,797	65,258	134,316	31,639	165,955		335	85,829	67,364	153,528	31,543	185,071
Total	20	\$ 5,694,454 \$	2,577,763 \$	1,149,286 \$	9,421,503 \$	1,512,599 \$	10,934,102	\$ 6.	5,158,990 \$	2,652,524 \$	1,232,518 \$	10,044,032 \$	1,514,067 \$	11,558,099
								•						
				2017							2016			
				2017 Q1							2016 Q4			
					Trading	· ·	<u> </u>					Trading		
		Over	r-the-counter <sup>1</sup>		Trading				Over	-the-counter <sup>1</sup>		Trading		
			Non-	Q1	Trading	Non	<u> </u>			Non-	Q4	Trading	No.	
		Clearing	Non- clearing	Q1  Exchange-	<u>v</u>	Non- trading	Total		Clearing	Non- clearing	Q4 Exchange-	<u> </u>	Non- trading	Total
Interest Rate Contracts			Non-	Q1	Trading Total	Non- trading	Total			Non-	Q4	Trading Total	Non- trading	Total
Interest Rate Contracts	21	Clearing house <sup>2</sup>	Non- clearing house	Q1  Exchange-traded	Total	trading	*	s	Clearing house <sup>2</sup>	Non- clearing house	Q4  Exchange-traded	Total	trading	
Futures	21 22	Clearing house <sup>2</sup>	Non- clearing house	Q1  Exchange-	Total 549,709 \$	trading	549,709	-	Clearing house <sup>2</sup>	Non- clearing	Q4 Exchange-	Total 438,709 \$	trading - \$	Total 438,709 507,485
	21 22 23	Clearing house <sup>2</sup>	Non- clearing house	Q1  Exchange-traded	Total	trading  - \$ 123 1,204,406	*	Ť	Clearing house <sup>2</sup>	Non- clearing house	Q4  Exchange-traded	Total	trading  - \$ 214 1,072,602	438,709
Futures Forward rate agreements Swaps Options written	22 23 24	Clearing house <sup>2</sup> \$ - \$ 346,516	Non- clearing house - \$ 126,807 545,181 14,499	Exchange- traded  549,709 \$ - 91,087	Total  549,709 \$ 473,323 5,163,973 105,586	trading  - \$ 123 1,204,406 206	549,709 473,446 6,368,379 105,792	Ť	Clearing house <sup>2</sup> - \$ 388,754	Non- clearing house - \$ 118,517 560,316 14,841	Exchange- traded 438,709 \$  42,543	Total 438,709 \$ 507,271 4,990,864 57,384	trading  - \$ 214 1,072,602 340	438,709 507,485 6,063,466 57,724
Futures Forward rate agreements Swaps	22 23 24 25	\$ - \$ 346,516 4,618,792	Non- clearing house - \$ 126,807 545,181 14,499 13,075	Exchange- traded 549,709 \$	Total  549,709 \$ 473,323 5,163,973 105,586 132,321	trading  - \$ 123 1,204,406 206 1,256	549,709 473,446 6,368,379 105,792 133,577	4,	Clearing house <sup>2</sup> - \$ 388,754 ,430,548	Non- clearing house - \$ 118,517 560,316 14,841 16,717	Exchange- traded  438,709 \$ 42,543 68,989	Total 438,709 \$ 507,271 4,990,864 57,384 85,706	trading  - \$ 214 1,072,602 340 2,081	438,709 507,485 6,063,466 57,724 87,787
Futures Forward rate agreements Swaps Options written Options purchased	22 23 24	Clearing house <sup>2</sup> \$ - \$ 346,516	Non- clearing house - \$ 126,807 545,181 14,499	Exchange- traded  549,709 \$ - 91,087	Total  549,709 \$ 473,323 5,163,973 105,586	trading  - \$ 123 1,204,406 206	549,709 473,446 6,368,379 105,792	4,	Clearing house <sup>2</sup> - \$ 388,754	Non- clearing house - \$ 118,517 560,316 14,841	Exchange- traded 438,709 \$  42,543	Total 438,709 \$ 507,271 4,990,864 57,384	trading  - \$ 214 1,072,602 340	438,709 507,485 6,063,466 57,724
Futures Forward rate agreements Swaps Options written Options purchased Foreign Exchange Contracts	22 23 24 25 26	\$ - \$ 346,516 4,618,792	Non- clearing house - \$ 126,807 545,181 14,499 13,075	Exchange-traded  549,709 \$ 91,087 119,246 760,042	Total 549,709 \$ 473,323 5,163,973 105,586 132,321 6,424,912	trading  - \$ 123 1,204,406 206 1,256	549,709 473,446 6,368,379 105,792 133,577 7,630,903	4,	Clearing house <sup>2</sup> - \$ 388,754 ,430,548	Non- clearing house - \$ 118,517 560,316 14,841 16,717	Exchange-traded  438,709 \$	Total 438,709 \$ 507,271 4,990,864 57,384 85,706 6,079,934	trading  - \$ 214 1,072,602 340 2,081	438,709 507,485 6,063,466 57,724 87,787
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures	22 23 24 25 26	\$ - \$ 346,516 4,618,792	Non- clearing house - \$ 126,807 545,181 14,499 13,075 699,562	Exchange- traded 549,709 \$	Total 549,709 \$ 473,323 5,163,973 105,586 132,321 6,424,912 6	trading  - \$ 123 1,204,406 206 1,256 1,205,991	549,709 473,446 6,368,379 105,792 133,577 7,630,903	4,	Clearing house <sup>2</sup> - \$ 388,754 ,430,548	Non- clearing house - \$ 118,517 560,316 14,841 16,717 710,391	Exchange- traded  438,709 \$ 42,543 68,989	Total 438,709 \$ 507,271 4,990,864 57,384 85,706 6,079,934 7	trading  - \$ 214 1,072,602 340 2,081 1,075,237	438,709 507,485 6,063,466 57,724 87,787 7,155,171
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts	22 23 24 25 26	\$ - \$ 346,516 4,618,792	Non- clearing house - \$ 126,807 545,181 14,499 13,075	Exchange-traded  549,709 \$ 91,087 119,246 760,042	Total 549,709 \$ 473,323 5,163,973 105,586 132,321 6,424,912	trading  - \$ 123 1,204,406 206 1,256	549,709 473,446 6,368,379 105,792 133,577 7,630,903	4,	Clearing house <sup>2</sup> - \$ 388,754 ,430,548	Non- clearing house - \$ 118,517 560,316 14,841 16,717	Exchange-traded  438,709 \$	Total 438,709 \$ 507,271 4,990,864 57,384 85,706 6,079,934	trading  - \$ 214 1,072,602 340 2,081	438,709 507,485 6,063,466 57,724 87,787
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures	22 23 24 25 26 27 28	\$ - \$ 346,516 4,618,792	Non- clearing house - \$ 126,807 545,181 14,499 13,075 699,562	Exchange-traded  549,709 \$ 91,087 119,246 760,042	Total 549,709 \$ 473,323 5,163,973 105,586 132,321 6,424,912 6	trading  - \$ 123 1,204,406 206 1,256 1,205,991	549,709 473,446 6,368,379 105,792 133,577 7,630,903	4,	Clearing house <sup>2</sup> - \$ 388,754 ,430,548	Non- clearing house - \$ 118,517 560,316 14,841 16,717 710,391	Exchange-traded  438,709 \$	Total 438,709 \$ 507,271 4,990,864 57,384 85,706 6,079,934 7	trading  - \$ 214 1,072,602 340 2,081 1,075,237	438,709 507,485 6,063,466 57,724 87,787 7,155,171
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written	22 23 24 25 26 27 28 29 30 31	Clearing house <sup>2</sup> \$ - \$ 346,516 4,618,792 - 4,965,308	Non- clearing house  - \$ 126,807 545,181 14,499 13,075 699,562  - 1,269,060 - 549,963 27,160	Exchange-traded  549,709 \$	Total  549,709 \$ 473,323 5,163,973 105,586 132,321 6,424,912  6 1,269,060 549,963 27,160	trading  - \$ 123 1,204,406 206 1,256 1,205,991 - 30,872	549,709 473,446 6,368,379 105,792 133,577 7,630,903 6 1,299,932 6 633,761 27,160	4,	Clearing house - \$ 388,754 ,430,548	Non- clearing house - \$ 118,517 560,316 14,841 16,717 710,391 - 1,127,778 - 556,542 32,097	Exchange-traded  438,709 \$	Total  438,709 \$ 507,271 4,990,864 57,384 85,706 6,079,934  7 1,127,778 - 556,542 32,097	trading  - \$ 214 1,072,602 340 2,081 1,075,237  - 32,875	438,709 507,485 6,063,466 57,724 87,787 7,155,171 7 1,160,653 645,783 32,097
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps	22 23 24 25 26 27 28 29 30 31 32	Clearing house <sup>2</sup> \$ - \$ 346,516 4,618,792 - 4,965,308	Non-clearing house  - \$ 126,807 545,181 14,499 13,075 699,562  - 1,269,060 - 549,963 27,160 26,687	Exchange-traded  549,709 \$	Total  549,709 \$ 473,323 5,163,973 105,586 132,321 6,424,912  6 1,269,060 - 549,963 27,160 26,687	trading  - \$ 123 1,204,406 206 1,256 1,205,991  - 30,872 - 83,798	549,709 473,446 6,368,379 105,792 133,577 7,630,903 6 1,299,932 - 633,761 27,160 26,687	4,	Clearing house <sup>2</sup> - \$ 388,754 ,430,548	Non-clearing house - \$ 118,517 560,316 14,841 16,717 710,391 - 1,127,778 - 556,542 32,097 32,683	Exchange-traded  438,709 \$	Total  438,709 \$ 507,271 4,990,864 57,384 85,706 6,079,934  7 1,127,778 - 556,542 32,097 32,683	trading  - \$ 214 1,072,602 340 2,081 1,075,237  - 32,875 - 89,241	438,709 507,485 6,063,466 57,724 87,787 7,155,171 7 1,160,653 645,783 32,097 32,683
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased	22 23 24 25 26 27 28 29 30 31	Clearing house <sup>2</sup> \$ - \$ 346,516	Non- clearing house  - \$ 126,807 545,181 14,499 13,075 699,562  - 1,269,060 - 549,963 27,160	Exchange-traded  549,709 \$	Total  549,709 \$ 473,323 5,163,973 105,586 132,321 6,424,912  6 1,269,060 549,963 27,160	trading  - \$ 123 1,204,406 206 1,256 1,205,991 - 30,872	549,709 473,446 6,368,379 105,792 133,577 7,630,903 6 1,299,932 6 633,761 27,160	4,	Clearing house <sup>2</sup> - \$ 388,754 ,430,548819,302	Non- clearing house - \$ 118,517 560,316 14,841 16,717 710,391 - 1,127,778 - 556,542 32,097	Exchange-traded  438,709 \$	Total  438,709 \$ 507,271 4,990,864 57,384 85,706 6,079,934  7 1,127,778 - 556,542 32,097	trading  - \$ 214 1,072,602 340 2,081 1,075,237  - 32,875	438,709 507,485 6,063,466 57,724 87,787 7,155,171 7 1,160,653 645,783 32,097
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts	22 23 24 25 26 27 28 29 30 31 32	Clearing house <sup>2</sup> \$ - \$ 346,516 4,618,792 - 4,965,308	Non-clearing house  - \$ 126,807 545,181 14,499 13,075 699,562  - 1,269,060 - 549,963 27,160 26,687	Exchange-traded  549,709 \$	Total  549,709 \$ 473,323 5,163,973 105,586 132,321 6,424,912  6 1,269,060 - 549,963 27,160 26,687	trading  - \$ 123 1,204,406 206 1,256 1,205,991  - 30,872 - 83,798	549,709 473,446 6,368,379 105,792 133,577 7,630,903 6 1,299,932 - 633,761 27,160 26,687	4,	Clearing house <sup>2</sup> - \$ 388,754 ,430,548	Non-clearing house - \$ 118,517 560,316 14,841 16,717 710,391 - 1,127,778 - 556,542 32,097 32,683	Exchange-traded  438,709 \$	Total  438,709 \$ 507,271 4,990,864 57,384 85,706 6,079,934  7 1,127,778 - 556,542 32,097 32,683	trading  - \$ 214 1,072,602 340 2,081 1,075,237  - 32,875 - 89,241	438,709 507,485 6,063,466 57,724 87,787 7,155,171 7 1,160,653 645,783 32,097 32,683
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps	22 23 24 25 26 27 28 29 30 31 32 33	Clearing house <sup>2</sup> \$	Non-clearing house  - \$ 126,807 545,181 14,499 13,075 699,562  - 1,269,060 - 549,963 27,160 26,687 1,872,870	Exchange-traded  549,709 \$	Total  549,709 \$ 473,323 5,163,973 105,586 132,321 6,424,912  6 1,269,060 - 549,963 27,160 26,687 1,872,876	trading  - \$ 123 1,204,406 206 1,256 1,205,991  - 30,872 - 83,798 114,670	549,709 473,446 6,368,379 105,792 133,577 7,630,903 6 1,299,932 633,761 27,160 26,687 1,987,546	4,	Clearing house <sup>2</sup> - \$ 388,754 ,430,548	Non-clearing house - \$ 118,517 560,316 14,841 16,717 710,391	Exchange-traded  438,709 \$	Total  438,709 \$ 507,271 4,990,864 57,384 85,706 6,079,934  7 1,127,778 - 556,542 32,097 32,683 1,749,107	trading  - \$ 214 1,072,602 340 2,081 1,075,237  - 32,875 - 89,241 122,116	438,709 507,485 6,063,466 57,724 87,787 7,155,171 7 1,160,653 
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps Protection purchased	22 23 24 25 26 27 28 29 30 31 32 33	Clearing house <sup>2</sup> \$ - \$ 346,516 4,618,792 - 4,965,308	Non-clearing house  - \$ 126,807 545,181 14,499 13,075 699,562  - 1,269,060 - 549,963 27,160 26,687	Exchange-traded  549,709 \$	Total  549,709 \$ 473,323 5,163,973 105,586 132,321 6,424,912  6 1,269,060  549,963 27,160 26,687	trading  - \$ 123 1,204,406 206 1,256 1,205,991  - 30,872 - 83,798	549,709 473,446 6,368,379 105,792 133,577 7,630,903 6 1,299,932 - 633,761 27,160 26,687 1,987,546	4,	Clearing house - \$ 388,754 ,430,548819,302	Non-clearing house - \$ 118,517 560,316 14,841 16,717 710,391 - 1,127,778 - 556,542 32,097 32,683	Exchange-traded  438,709 \$	Total  438,709 \$ 507,271 4,990,864 57,384 85,706 6,079,934  7 1,127,778 - 556,542 32,097 32,683	trading  - \$ 214 1,072,602 340 2,081 1,075,237  - 32,875 - 89,241	438,709 507,485 6,063,466 57,724 87,787 7,155,171 7 1,160,653 645,783 32,097 32,683 1,871,223
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps	22 23 24 25 26 27 28 29 30 31 32 33	Clearing house <sup>2</sup> \$ - \$ 346,516	Non-clearing house  - \$ 126,807 545,181 14,499 13,075 699,562  - 1,269,060 - 549,963 27,160 26,687 1,872,870	Exchange-traded  549,709 \$	Total  549,709 \$ 473,323 5,163,973 105,586 132,321 6,424,912  6 1,269,060 - 549,963 27,160 26,687 1,872,876	trading  - \$ 123 1,204,406 206 1,256 1,205,991  - 30,872 - 83,798 114,670	549,709 473,446 6,368,379 105,792 133,577 7,630,903 6 1,299,932 633,761 27,160 26,687 1,987,546	4,	Clearing house <sup>2</sup> - \$ 388,754 ,430,548	Non-clearing house  - \$ 118,517 560,316 14,841 16,717 710,391  - 1,127,778 - 556,542 32,097 32,683 1,749,100	Exchange-traded  438,709 \$	Total  438,709 \$ 507,271 4,990,864 57,384 85,706 6,079,934  7 1,127,778  - 556,542 32,097 32,683 1,749,107	trading  - \$ 214 1,072,602 340 2,081 1,075,237  - 32,875 - 89,241 122,116	438,709 507,485 6,063,466 57,724 87,787 7,155,171 7 1,160,653 
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps Protection purchased	22 23 24 25 26 27 28 29 30 31 32 33 34	Clearing house <sup>2</sup> \$ - \$ 346,516	Non-clearing house  - \$ 126,807 545,181 14,499 13,075 699,562  - 1,269,060 - 549,963 27,160 26,687 1,872,870	Exchange-traded  549,709 \$ - 91,087 119,246 760,042  6 6	Total  549,709 \$ 473,323 5,163,973 105,586 132,321 6,424,912  6 1,269,060 549,963 27,160 26,687 1,872,876  5,430 1,024	trading  - \$ 123 1,204,406 206 1,256 1,256 1,205,991  - 30,872 - 83,798 114,670  3,622	549,709 473,446 6,368,379 105,792 133,577 7,630,903 6 1,299,932 - 633,761 27,160 26,687 1,987,546	4,	Clearing house 3 8 8 7 5 4 4 4 3 9 4 3 9	Non- clearing house - \$ 118,517 560,316 14,841 16,717 710,391 - 1,127,778 - 556,542 32,097 32,683 1,749,100	Exchange-traded  438,709 \$	Total  438,709 \$ 507,271 4,990,864 57,384 85,706 6,079,934  7 1,127,778 _ 556,542 32,097 32,683 1,749,107  5,580 858	trading  - \$ 214 1,072,602 340 2,081 1,075,237  - 32,875 - 89,241 - 122,116  3,853	438,709 507,485 6,063,466 57,724 87,787 7,155,171 7 1,160,653 
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps Protection purchased Protection sold  Other Contracts Equity contracts Equity contracts	22 23 24 25 26 27 28 29 30 31 32 33 34 35 36	Clearing house <sup>2</sup> \$	Non-clearing house  - \$ 126,807 545,181 14,499 13,075 699,562  - 1,269,060 - 549,963 27,160 26,687 1,872,870  1,162 443 1,605 54,514	Exchange-traded  549,709 \$ - 91,087 119,246 760,042  6 6	Total  549,709 \$ 473,323 5,163,973 105,586 132,321 6,424,912  6 1,269,060 549,963 27,160 26,687 1,872,876  5,430 1,024 6,454 98,991	trading  - \$ 123 1,204,406 206 1,256 1,256 1,205,991  - 30,872 - 83,798 114,670  3,622	549,709 473,446 6,368,379 105,792 133,577 7,630,903 6 1,299,932 	4,	Clearing house - \$ 388,754 ,430,548	Non-clearing house  - \$ 118,517 560,316 14,841 16,717 710,391  - 1,127,778 - 556,542 32,097 32,683 1,749,100  1,541 419 1,960 47,371	Exchange-traded  438,709 \$	Total  438,709 \$ 507,271 4,990,864 57,384 85,706 6,079,934  7 1,127,778 - 556,542 32,097 32,683 1,749,107  5,580 858 6,438 88,049	trading  - \$ 214 1,072,602 340 2,081 1,075,237  - 32,875 - 89,241 - 122,116  3,853	438,709 507,485 6,063,466 57,724 87,787 7,155,171 7 1,160,653 
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps Protection purchased Protection sold  Other Contracts	22 23 24 25 26 27 28 29 30 31 32 33 34 35 36	Clearing house <sup>2</sup> \$	Non-clearing house  - \$ 126,807   545,181   14,499   13,075   699,562   - 1,269,060   - 549,963   27,160   26,687   1,872,870   1,162   443   1,605   54,514   24,782	Exchange-traded  549,709 \$	Total  549,709 \$ 473,323 5,163,973 105,586 132,321 6,424,912  6 1,269,060 549,963 27,160 26,687 1,872,876  5,430 1,024 6,454 98,991 48,208	trading  - \$ 123 1,204,406 206 1,256 1,256 1,205,991  - 30,872 - 83,798	549,709 473,446 6,368,379 105,792 133,577 7,630,903 6 1,299,932 633,761 27,160 26,687 1,987,546 9,052 1,024 10,076	4,	Clearing house - \$ 388,754 ,430,548 ,819,302 4,039 4,478	Non-clearing house - \$ 118,517 560,316 14,841 16,717 710,391	Exchange-traded  438,709 \$	Total  438,709 \$ 507,271 4,990,864 57,384 85,706 6,079,934  7 1,127,778 556,542 32,097 32,683 1,749,107  5,580 858 6,438  88,049 46,287	trading  - \$ 214  1,072,602 340 2,081  1,075,237  - 32,875 - 89,241	438,709 507,485 6,063,466 57,724 87,787 7,155,171 7 1,160,653 645,783 32,097 32,683 1,871,223 9,433 858 10,291 120,884 46,287
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps Protection purchased Protection sold  Other Contracts Equity contracts Commodity contracts	22 23 24 25 26 27 28 29 30 31 32 33 34 35 36	Clearing house <sup>2</sup> \$	Non-clearing house  - \$ 126,807 545,181 14,499 13,075 699,562  - 1,269,060 - 549,963 27,160 26,687 1,872,870  1,162 443 1,605 54,514 24,782 79,296	Exchange-traded  549,709 \$	Total  549,709 \$ 473,323 5,163,973 105,586 132,321 6,424,912  6 1,269,060 - 549,963 27,160 26,687 1,872,876  5,430 1,024 6,454 98,991 48,208 147,199	trading  - \$ 123 1,204,406 206 1,256 1,205,991  - 30,872 - 83,798 114,670  3,622 31,440 - 31,440	549,709 473,446 6,368,379 105,792 133,577 7,630,903 6 1,299,932 633,761 27,160 26,687 1,987,546 9,052 1,024 10,076 130,431 48,208 178,639	4	Clearing house - \$ 388,754,430,548 ,819,302 4,039 439 4,478 246 246	Non-clearing house  - \$ 118,517 560,316 14,841 16,717 710,391  - 1,127,778 - 556,542 32,097 32,683 1,749,100  - 1,541 419 1,960  - 47,371 22,627 69,998	Exchange-traded  438,709 \$	Total  438,709 \$ 507,271 4,990,864 57,384 85,706 6,079,934  7 1,127,778 _ 556,542 32,097 32,683 1,749,107  5,580 858 6,438  88,049 46,287 134,336	trading  - \$ 214 1,072,602 340 2,081 1,075,237  - 32,875 - 89,241 122,116  3,853 - 3,853 32,835 - 32,835	438,709 507,485 6,063,466 57,724 87,787 7,155,171 7 1,160,653 
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps Protection purchased Protection sold  Other Contracts Equity contracts  Equity contracts	22 23 24 25 26 27 28 29 30 31 32 33 34 35 36	Clearing house <sup>2</sup> \$	Non-clearing house  - \$ 126,807   545,181   14,499   13,075   699,562   - 1,269,060   - 549,963   27,160   26,687   1,872,870   1,162   443   1,605   54,514   24,782	Exchange-traded  549,709 \$	Total  549,709 \$ 473,323 5,163,973 105,586 132,321 6,424,912  6 1,269,060 549,963 27,160 26,687 1,872,876  5,430 1,024 6,454 98,991 48,208	trading  - \$ 123 1,204,406 206 1,256 1,256 1,205,991  - 30,872 - 83,798	549,709 473,446 6,368,379 105,792 133,577 7,630,903 6 1,299,932 633,761 27,160 26,687 1,987,546 9,052 1,024 10,076	4	Clearing house - \$ 388,754 ,430,548 ,819,302 4,039 4,478	Non-clearing house - \$ 118,517 560,316 14,841 16,717 710,391	Exchange-traded  438,709 \$	Total  438,709 \$ 507,271 4,990,864 57,384 85,706 6,079,934  7 1,127,778 556,542 32,097 32,683 1,749,107  5,580 858 6,438  88,049 46,287	trading  - \$ 214  1,072,602 340 2,081  1,075,237  - 32,875 - 89,241	438,709 507,485 6,063,466 57,724 87,787 7,155,171 7 1,160,653 645,783 32,097 32,683 1,871,223 9,433 858 10,291 120,884 46,287

2017

counterparties.

2017

<sup>&</sup>lt;sup>1</sup> Collateral held under a Credit Support Annex (CSA) to help reduce counterparty credit risk is in the form of high quality and liquid assets such as cash and high quality government securities. Acceptable collateral is governed by the Collateralized Trading Policy.
<sup>2</sup> Derivatives executed through a central clearing house reduces settlement risk due to the ability to net settle offsetting positions for capital purposes and therefore receive preferential capital treatment compared to those settled with non-central clearing house

# Derivatives - Notional (Continued)

LINE

(\$ millions) As at

		L						٠			· · · · · · · · · · · · · · · · · · ·			
					Trading		•	T .				Trading		7
			1		rrading			-		1		rrading		
		Over	-the-counter1						Over-	the-counter1				
			Non-							Non-				
		Clearing	clearing	Exchange-		Non-			Clearing	clearing	Exchange-		Non-	
		house <sup>2</sup>	house	traded	Total	trading	Total		house <sup>2</sup>	house	traded	Total	trading	Total
Interest Rate Contracts													-	
Futures	1	\$ - \$	- \$	350,929 \$	350,929 \$	- \$	350,929	\$	- \$	- \$	298,219 \$	298,219 \$	- \$	298,219
Forward rate agreements	2	350,863	98,895	- CCC,020	449,758	201	449,959	Ť	359,826	73,884		433,710	157	433,867
Swaps	3	3,565,020	532,316	_	4,097,336	1,139,508	5,236,844		3,164,992	551,201	_	3,716,193	1,025,792	4,741,985
Options written	4	-	12,923	17,419	30,342	362	30,704		-	12,466	11,665	24,131	321	24,452
Options purchased	5		11,236	21,236	32,472	3,145	35,617			11,272	20,110	31,382	2,493	33,875
Options purchased	6	3,915,883	655,370	389,584	4,960,837	1,143,216	6,104,053	<u> </u>	3,524,818	648,823	329,994	4,503,635	1,028,763	5,532,398
	0	3,913,003	000,370	309,304	4,900,037	1,143,216	6,104,053		3,324,010	040,023	329,994	4,503,635	1,026,763	5,532,396
Foreign Exchange Contracts	_													
Futures	7	_	_	56	56	-	56		-	_	59	59	-	59
Forward contracts	8	-	968,910	-	968,910	34,515	1,003,425		-	796,039	_	796,039	36,091	832,130
Swaps	9	-	-	-	-	_	_		-	_	-	_	-	-
Cross-currency interest rate swaps	10	_	541,255	_	541,255	87,502	628,757		_	510,897	_	510,897	83,936	594,833
Options written	11	_	32,042	_	32,042	_	32,042		_	24,712	_	24,712	_	24,712
Options purchased	12	_	30,867	_	30,867	_	30,867		_	25,852	_	25,852	_	25,852
•	13	_	1,573,074	56	1,573,130	122,017	1,695,147		_	1,357,500	59	1,357,559	120,027	1,477,586
Credit Derivative Contracts	10		.,0.0,017		.,0.0,100	,5.11	.,000,177			.,00.,000		.,00.,000	0,0_1	., ,000
Credit default swaps														
	14	3.593	1.492	_	5.085	4,566	9.651		1.153	1.537		2,690	5,226	7.916
Protection purchased				_							_		5,220	
Protection sold	15	205	529		734		734		761	651		1,412		1,412
	16	3,798	2,021	-	5,819	4,566	10,385		1,914	2,188	_	4,102	5,226	9,328
Other Contracts														7
Equity contracts	17	_	38,045	33,342	71,387	33,913	105,300		_	33,271	33,566	66,837	34,643	101,480
Commodity contracts	18	219	10,981	24,933	36,133	· _	36,133		200	8,943	25,285	34,428		34,428
•	19	219	49,026	58,275	107,520	33,913	141,433		200	42,214	58,851	101,265	34,643	135,908
Total	20	\$ 3,919,900 \$	2,279,491 \$	447,915 \$	6,647,306 \$	1,303,712 \$	7,951,018	•	3,526,932 \$	2,050,725 \$	388,904 \$	5,966,561 \$	1,188,659 \$	7,155,220
Iotai	20	φ 3,919,900 φ	2,219,491 φ	447,91J Ø	0,047,300 φ	1,303,712 φ	7,951,010	Ψ	3,320,932 ¥	2,030,723 φ	300,904 ¢	J,900,501 \$	1,100,059 φ	1,133,220
				2016							2015			
				Q1							Q4			
					Trading							Trading		
			1		Trading					1		Trading		
		Over	-the-counter <sup>1</sup>		Trading				Over-	the-counter <sup>1</sup>		Trading		
		Over	-the-counter <sup>1</sup>		Trading				Over-	the-counter <sup>1</sup> Non-		Trading_		
				Q1	Trading_	Non-					Q4	Trading	Non-	
		Over  Clearing house <sup>2</sup>	Non-		Trading_		Total		Over- Clearing house <sup>2</sup>	Non-		Trading_		Total
Interest Rate Contracts		Clearing	Non- clearing	Q1  Exchange-		Non- trading	Total		Clearing	Non- clearing	Q4 Exchange-		Non- trading	Total
Interest Rate Contracts	21	Clearing house <sup>2</sup>	Non- clearing house	Q1  Exchange-traded	Total	trading	•	\$	Clearing house <sup>2</sup>	Non- clearing house	Exchange-traded	Total	trading	
Futures		Clearing house <sup>2</sup>	Non- clearing house	Q1  Exchange-	Total 424,056 \$	trading - \$	424,056	\$	Clearing house <sup>2</sup>	Non- clearing house	Q4 Exchange-	Total 261,425 \$		261,425
Futures Forward rate agreements	22	Clearing house <sup>2</sup> \$ - \$ 307,554	Non- clearing house  - \$ 67,894	Exchange-traded 424,056 \$	Total 424,056 \$ 375,448	trading - \$ 130	424,056 375,578	\$	Clearing house <sup>2</sup> - \$ 328,653	Non- clearing house  - \$ 44,238	Exchange-traded	Total 261,425 \$ 372,891	trading - \$ -	261,425 372,891
Futures Forward rate agreements Swaps	22 23	Clearing house <sup>2</sup>	Non- clearing house - \$ 67,894 602,886	Exchange-traded 424,056 \$	Total  424,056 \$ 375,448 3,881,023	trading  - \$ 130 1,148,904	424,056 375,578 5,029,927	\$	Clearing house <sup>2</sup>	Non- clearing house - \$ 44,238 581,091	Exchange-traded	Total  261,425 \$ 372,891 3,520,574	trading  - \$ - 1,115,863	261,425 372,891 4,636,437
Futures Forward rate agreements Swaps Options written	22 23 24	Clearing house <sup>2</sup> \$ - \$ 307,554	Non- clearing house - \$ 67,894 602,886 17,229	Exchange- traded  424,056 \$ 13,165	Total  424,056 \$ 375,448 3,881,023 30,394	trading  - \$ 130 1,148,904 284	424,056 375,578 5,029,927 30,678	\$	Clearing house <sup>2</sup> - \$ 328,653	Non- clearing house - \$ 44,238 581,091 20,356	Exchange- traded  261,425 \$ - 8,769	Total  261,425 \$ 372,891 3,520,574 29,125	trading  - \$ - 1,115,863 110	261,425 372,891 4,636,437 29,235
Futures Forward rate agreements Swaps	22 23 24 25	Clearing house <sup>2</sup> \$ - \$ 307,554 3,278,137	Non- clearing house - \$ 67,894 602,886 17,229 17,342	Exchange-traded  424,056 \$ 13,165 15,488	Total  424,056 \$ 375,448 3,881,023 30,394 32,830	trading  - \$ 130 1,148,904 284 1,040	424,056 375,578 5,029,927 30,678 33,870	\$	Clearing house <sup>2</sup> - \$ 328,653 2,939,483	Non- clearing house \$ 44,238 581,091 20,356 17,146	Exchange- traded  261,425 \$ 8,769 15,093	Total  261,425 \$ 372,891 3,520,574 29,125 32,239	trading  - \$ - 1,115,863 110 2,206	261,425 372,891 4,636,437 29,235 34,445
Futures Forward rate agreements Swaps Options written Options purchased	22 23 24	Clearing house <sup>2</sup> \$ - \$ 307,554	Non- clearing house - \$ 67,894 602,886 17,229	Exchange- traded  424,056 \$ 13,165	Total  424,056 \$ 375,448 3,881,023 30,394	trading  - \$ 130 1,148,904 284	424,056 375,578 5,029,927 30,678	\$	Clearing house <sup>2</sup> - \$ 328,653	Non- clearing house - \$ 44,238 581,091 20,356	Exchange- traded  261,425 \$ - 8,769	Total  261,425 \$ 372,891 3,520,574 29,125	trading  - \$ - 1,115,863 110	261,425 372,891 4,636,437 29,235
Futures Forward rate agreements Swaps Options written Options purchased Foreign Exchange Contracts	22 23 24 25 26	Clearing house <sup>2</sup> \$ - \$ 307,554 3,278,137	Non- clearing house - \$ 67,894 602,886 17,229 17,342	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751	trading  - \$ 130 1,148,904 284 1,040	424,056 375,578 5,029,927 30,678 33,870 5,894,109	\$	Clearing house <sup>2</sup> - \$ 328,653 2,939,483	Non- clearing house \$ 44,238 581,091 20,356 17,146	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254	trading  - \$ - 1,115,863 110 2,206	261,425 372,891 4,636,437 29,235 34,445 5,334,433
Futures Forward rate agreements Swaps Options written Options purchased	22 23 24 25 26	Clearing house <sup>2</sup> \$ - \$ 307,554 3,278,137	Non- clearing house - \$ 67,894 602,886 17,229 17,342	Exchange-traded  424,056 \$ 13,165 15,488	Total  424,056 \$ 375,448 3,881,023 30,394 32,830	trading  - \$ 130 1,148,904 2,84 1,040 1,150,358	424,056 375,578 5,029,927 30,678 33,870 5,894,109	\$	Clearing house <sup>2</sup> - \$ 328,653 2,939,483	Non- clearing house - \$ 44,238 581,091 20,356 17,146 662,831	Exchange- traded  261,425 \$ 8,769 15,093	Total  261,425 \$ 372,891 3,520,574 29,125 32,239	trading  - \$ 1,115,863 110 2,206 1,118,179	261,425 372,891 4,636,437 29,235 34,445 5,334,433
Futures Forward rate agreements Swaps Options written Options purchased Foreign Exchange Contracts	22 23 24 25 26	Clearing house <sup>2</sup> \$ - \$ 307,554 3,278,137	Non- clearing house - \$ 67,894 602,886 17,229 17,342	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751	trading  - \$ 130 1,148,904 284 1,040	424,056 375,578 5,029,927 30,678 33,870 5,894,109	\$	Clearing house <sup>2</sup> - \$ 328,653 2,939,483	Non- clearing house \$ 44,238 581,091 20,356 17,146	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254	trading  - \$ - 1,115,863 110 2,206	261,425 372,891 4,636,437 29,235 34,445 5,334,433
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures	22 23 24 25 26 27 28	Clearing house <sup>2</sup> \$ - \$ 307,554 3,278,137	Non- clearing house - \$ 67,894 602,886 17,229 17,342 705,351	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751	trading  - \$ 130 1,148,904 2,84 1,040 1,150,358	424,056 375,578 5,029,927 30,678 33,870 5,894,109	\$	Clearing house <sup>2</sup> - \$ 328,653 2,939,483	Non- clearing house - \$ 44,238 581,091 20,356 17,146 662,831	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254	trading  - \$ 1,115,863 110 2,206 1,118,179	261,425 372,891 4,636,437 29,235 34,445 5,334,433
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps	22 23 24 25 26 27 28 29	Clearing house <sup>2</sup> \$ - \$ 307,554 3,278,137	Non- clearing house - \$ 67,894 602,886 17,229 17,342 705,351	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751  68 871,308	trading  - \$ 130 1,148,904 284 1,040 1,150,358 - 52,287	424,056 375,578 5,029,927 30,678 33,870 5,894,109	\$	Clearing house <sup>2</sup> - \$ 328,653 2,939,483	Non-clearing house \$ 44,238 581,091 20,356 17,146 662,831	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254  37 664,852	trading  - \$ 1,115,863 110 2,206 1,118,179  - 48,838	261,425 372,891 4,636,437 29,235 34,445 5,334,433 37 713,690
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps	22 23 24 25 26 27 28 29 30	Clearing house <sup>2</sup> \$ - \$ 307,554 3,278,137	Non- clearing house - \$ 67.894 602,886 17,229 17,342 705,351 - 871,308 - 523,088	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751  68 871,308 - 523,088	trading  - \$ 130 1,148,904 2,84 1,040 1,150,358	424,056 375,578 5,029,927 30,678 33,870 5,894,109 68 923,595 604,322	\$	Clearing house <sup>2</sup> - \$ 328,653 2,939,483	Non- clearing house \$ 44,238 581,091 20,356 17,146 662,831	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254  37 664,852 471,797	trading  - \$ 1,115,863 110 2,206 1,118,179	261,425 372,891 4,636,437 29,235 34,445 5,334,433 37 713,690 548,953
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written	22 23 24 25 26 27 28 29 30 31	Clearing house?  \$ \$ 307.554	Non-clearing house - \$ 67.894 602.886 17.229 17.342 705,351	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751  68 871,308 - 523,088 27,688	trading  - \$ 130 1,148,904 284 1,040 1,150,358 - 52,287	424,056 375,578 5,029,927 30,678 33,870 5,894,109 68 923,595 - 604,322 27,688	\$	Clearing house <sup>2</sup> - \$ 328,653   2,939,483   -	Non-clearing house \$ 44,238 \$ 581,091 20,356 17,146 6 6 6 2,831 \$ 6 6 4,852 \$ 471,797 23,973	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254  37 664,852 471,797 23,973	trading  - \$ 1,115,863 110 2,206 1,118,179  - 48,838	261,425 372,891 4,636,437 29,235 34,445 5,334,433 7 713,690 - 548,953 23,973
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps	22 23 24 25 26 27 28 29 30 31 32	Clearing house <sup>2</sup> \$	Non-clearing house  - \$ 67,894 602,886 17,229 17,342 705,351  - 871,308 - 523,088 27,688 26,271	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751  68 871,308 - 523,088 27,688 26,271	trading  - \$ 130 1,148,904 284 1,040 1,150,358 - 52,287 - 81,234	424,056 375,578 5,029,927 30,678 33,870 5,894,109 68 923,595 - 604,322 27,688 26,271	\$	Clearing house <sup>2</sup> - \$ 328,653 2,939,483 3,268,136	Non-clearing house \$  44,238 581,091 20,356 17,146 662,831  - 664,852 - 471,797 23,973 23,286	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254  37 664,852 471,797 23,973 23,286	trading  - \$ 1,115,863 110 2,206 1,118,179 - 48,838 - 77,156	261,425 372,891 4,636,437 29,235 34,445 5,334,433 37 713,690 - 548,953 23,286
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased	22 23 24 25 26 27 28 29 30 31	Clearing house?  \$ \$ 307.554	Non-clearing house - \$ 67.894 602.886 17.229 17.342 705,351	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751  68 871,308 - 523,088 27,688	trading  - \$ 130 1,148,904 284 1,040 1,150,358 - 52,287	424,056 375,578 5,029,927 30,678 33,870 5,894,109 68 923,595 - 604,322 27,688	\$	Clearing house <sup>2</sup> - \$ 328,653   2,939,483   -	Non-clearing house \$ 44,238 \$ 581,091 20,356 17,146 6 6 6 2,831 \$ 6 6 4,852 \$ 471,797 23,973	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254  37 664,852 471,797 23,973	trading  - \$ 1,115,863 110 2,206 1,118,179  - 48,838	261,425 372,891 4,636,437 29,235 34,445 5,334,433 7 713,690 - 548,953 23,973
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts	22 23 24 25 26 27 28 29 30 31 32	Clearing house <sup>2</sup> \$	Non-clearing house  - \$ 67,894 602,886 17,229 17,342 705,351  - 871,308 - 523,088 27,688 26,271	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751  68 871,308 - 523,088 27,688 26,271	trading  - \$ 130 1,148,904 284 1,040 1,150,358 - 52,287 - 81,234	424,056 375,578 5,029,927 30,678 33,870 5,894,109 68 923,595 - 604,322 27,688 26,271	\$	Clearing house <sup>2</sup> - \$ 328,653 2,939,483 3,268,136	Non-clearing house \$  44,238 581,091 20,356 17,146 662,831  - 664,852 - 471,797 23,973 23,286	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254  37 664,852 471,797 23,973 23,286	trading  - \$ 1,115,863 110 2,206 1,118,179 - 48,838 - 77,156	261,425 372,891 4,636,437 29,235 34,445 5,334,433 37 713,690 - 548,953 23,286
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps	22 23 24 25 26 27 28 29 30 31 32 33	Clearing house <sup>2</sup> \$	Non-clearing house  - \$ 67,894 602,886 17,229 17,342 705,351  - 871,308 - 523,088 27,688 26,271 1,448,355	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751  68 871,308 - 523,088 27,688 26,271 1,448,423	trading  - \$ 130 1,148,904 284 1,040 1,150,358  - 52,287 - 81,234 133,521	424,056 375,578 5,029,927 30,678 33,870 5,894,109 68 923,595 604,322 27,688 26,271 1,581,944	\$	Clearing house <sup>2</sup> - \$ 328,653 2,939,483 3,268,136	Non-clearing house - \$ 44,238 581,091 20,356 17,146 662,831	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254  37 664,852 471,797 23,973 23,286 1,183,945	trading  - \$ 1,115,863 110 2,206 1,118,179  - 48,838 - 77,156 125,994	261,425 372,891 4,636,437 29,235 34,445 5,334,433 37 713,690 - 548,953 23,973 23,286 1,309,939
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps Protection purchased	22 23 24 25 26 27 28 29 30 31 32 33	Clearing house?  \$ - \$ 307,554   3,278,137	Non- clearing house - \$ 67,894 602,886 17,229 17,342 705,351 - 871,308 - 523,088 27,688 26,271 1,448,355	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751  68 871,308 - 523,088 27,688 27,688 26,271 1,448,423	trading  - \$ 130 1,148,904 284 1,040 1,150,358 - 52,287 - 81,234	424,056 375,578 5,029,927 30,678 33,870 5,894,109 68 923,595 - 604,322 27,688 26,271 1,581,944	\$	Clearing house <sup>2</sup> - \$ 328,653 2,939,483	Non-clearing house  - \$ 44,238 581,091 20,356 17,146 662,831  - 664,852 - 471,797 23,973 23,286 1,183,908	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254  37 664,852 471,797 23,973 23,286 1,183,945	trading  - \$ 1,115,863 110 2,206 1,118,179 - 48,838 - 77,156	261,425 372,891 4,636,437 29,235 34,445 5,334,433 37 713,690 - 548,953 23,973 23,286 1,309,939
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps	22 23 24 25 26 27 28 29 30 31 32 33 34	Clearing house? \$	Non- clearing house  - \$ 67.894 602.886 17.229 17.342 705.351  871.308 - 523.088 27.688 26.271 1,448,355	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751  68 871,308 - 523,088 27,688 26,271 1,448,423	trading  - \$ 130 1,148,904 2,84 1,040 1,150,358  - 52,287 - 81,234 133,521  6,249	424,056 375,578 5,029,927 30,678 33,870 5,894,109 68 923,595 - 604,322 27,688 26,271 1,581,944	\$	Clearing house <sup>2</sup> - \$ 328,653 2,939,483	Non-clearing house  - \$ 44,238 581,091 20,356 17,146 662,831	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254  37 664,852 471,797 23,973 23,286 1,183,945	trading  - \$ 1,115,863 110 2,206 1,118,179  - 48,838 - 77,156 - 125,994  6,146	261,425 372,891 4,636,437 29,235 34,445 5,334,433 37 713,690 548,953 23,973 23,286 1,309,939 8,333 904
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps Protection purchased	22 23 24 25 26 27 28 29 30 31 32 33	Clearing house?  \$ - \$ 307,554   3,278,137	Non- clearing house - \$ 67,894 602,886 17,229 17,342 705,351 - 871,308 - 523,088 27,688 26,271 1,448,355	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751  68 871,308 - 523,088 27,688 27,688 26,271 1,448,423	trading  - \$ 130 1,148,904 284 1,040 1,150,358  - 52,287 - 81,234 133,521	424,056 375,578 5,029,927 30,678 33,870 5,894,109 68 923,595 - 604,322 27,688 26,271 1,581,944	\$	Clearing house <sup>2</sup> - \$ 328,653 2,939,483	Non-clearing house  - \$ 44,238 581,091 20,356 17,146 662,831  - 664,852 - 471,797 23,973 23,286 1,183,908	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254  37 664,852 471,797 23,973 23,286 1,183,945	trading  - \$ 1,115,863 110 2,206 1,118,179  - 48,838 - 77,156 125,994	261,425 372,891 4,636,437 29,235 34,445 5,334,433 37 713,690 - 548,953 23,973 23,286 1,309,939
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps Protection purchased Protection sold	22 23 24 25 26 27 28 29 30 31 32 33 34	Clearing house? \$	Non- clearing house  - \$ 67.894 602.886 17.229 17.342 705.351  871.308 - 523.088 27.688 26.271 1,448,355	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751  68 871,308 - 523,088 27,688 26,271 1,448,423	trading  - \$ 130 1,148,904 2,84 1,040 1,150,358  - 52,287 - 81,234 133,521  6,249	424,056 375,578 5,029,927 30,678 33,870 5,894,109 68 923,595 - 604,322 27,688 26,271 1,581,944	\$	Clearing house <sup>2</sup> - \$ 328,653 2,939,483	Non-clearing house  - \$ 44,238 581,091 20,356 17,146 662,831	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254  37 664,852 471,797 23,973 23,286 1,183,945	trading  - \$ 1,115,863 110 2,206 1,118,179  - 48,838 - 77,156 - 125,994  6,146	261,425 372,891 4,636,437 29,235 34,445 5,334,433 37 713,690 548,953 23,973 23,286 1,309,939 8,333 904
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps Protection purchased Protection sold  Other Contracts	22 23 24 25 26 27 28 29 30 31 32 33 34 35 36	Clearing house? \$	Non-clearing house  - \$ 67,894 602,886 17,229 17,342 705,351 871,308 523,088 27,688 27,688 26,271 1,448,355  1,884 648 2,532	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751  68 871,308 - 523,088 27,688 26,271 1,448,423  2,747 1,327 4,074	trading  - \$ 130 1,148,904 284 1,040 1,150,358  - 52,287 - 81,234 133,521  6,249 - 6,249	424,056 375,578 5,029,927 30,678 30,678 33,870 5,894,109 68 923,595 - 604,322 27,688 26,271 1,581,944 8,996 1,327 10,323	\$	Clearing house <sup>2</sup> - \$ 328,653 2,939,483	Non-clearing house  - \$ 44,238 581,091 20,356 17,146 662,831  - 664,852 - 471,797 23,973 23,286 1,183,908  1,567 679 2,246	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254 37 664,852 471,797 23,973 23,286 1,183,945  2,187 904 3,091	trading  - \$ 1,115,863 110 2,206 1,118,179  - 48,838 - 77,156	261,425 372,891 4,636,437 29,235 34,445 5,334,433 37 713,690 - 548,953 23,973 23,286 1,309,939 8,333 904 9,237
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps Protection purchased Protection sold  Other Contracts Equity contracts Equity contracts	22 23 24 25 26 27 28 29 30 31 32 33 34 35 36	Clearing house S	Non- clearing house  - \$ 67,894 602,886 17,229 17,342 705,351  - 871,308 - 523,088 27,688 26,271 1,448,355  1,884 648 2,532 38,492	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751  68 871,308 - 523,088 27,688 26,271 1,448,423  2,747 1,327 4,074 85,434	trading  - \$ 130 1,148,904 2,84 1,040 1,150,358  - 52,287 - 81,234 133,521  6,249	424,056 375,578 5,029,927 30,678 33,870 5,894,109 68 923,595 - 604,322 27,688 26,271 1,581,944 8,996 1,327 10,323	\$	Clearing house <sup>2</sup> - \$ 328,653 2,939,483	Non-clearing house  - \$ 44,238 581,091 20,356 17,146 662,831  - 664,852 - 471,797 23,973 23,286 1,183,908  1,567 679 2,246 33,726	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254  37 664,852 471,797 23,973 23,286 1,183,945  2,187 904 3,091 76,359	trading  - \$ 1,115,863 110 2,206 1,118,179  - 48,838 - 77,156 - 125,994  6,146	261,425 372,891 4,636,437 29,235 34,445 5,334,433 37 713,690 - 548,953 23,973 23,286 1,309,939 8,333 904 9,237
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps Protection purchased Protection sold  Other Contracts	22 23 24 25 26 27 28 29 30 31 32 33 34 35 36	Clearing house <sup>2</sup> \$	Non-clearing house - \$ - \$ 67.894 602.886 17.229 17.342 705,351	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 4,743,751 68 871,308 - 523,088 27,688 26,271 1,448,423  2,747 1,327 4,074  85,434 23,000	trading  - \$ 130 1,148,904 284 1,040 1,150,358  - 52,287 - 81,234 133,521  6,249 - 6,249 34,837	424,056 375,578 5,029,927 30,678 33,870 5,894,109 68 923,595 - 604,322 27,688 26,271 1,581,944 8,996 1,327 10,323	\$	Clearing house <sup>2</sup> - \$ 328,653   2,939,483     3,268,136   -	Non-clearing house - \$ 44.238 581,091 20,356 17,146 662,831 - 664,852 - 471,797 23,973 23,286 1,183,908 - 1,567 679 2,246 - 33,726 9,453	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254  37 664,852 471,797 23,973 23,286 1,183,945  2,187 904 3,091  76,359 25,834	trading  - \$ 1,115,863 110 2,206 1,118,179  - 48,838 - 77,156 - 125,994  - 6,146 - 6,146 - 35,976	261,425 372,891 4,636,437 29,235 34,445 5,334,433 37 713,690 - 548,953 23,973 23,286 1,309,939 8,333 904 9,237
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps Protection purchased Protection sold  Other Contracts Equity contracts Commodity contracts	22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39	Clearing house <sup>2</sup> \$	Non-clearing house  - \$ 67,894 602,886 17,229 17,342 705,351  - 871,308 - 523,088 26,271 1,448,355 1,884 648 2,532 38,492 9,106 47,598	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 32,830 4,743,751  68 871,308 - 523,088 27,688 26,271 1,448,423  2,747 1,327 4,074  85,434 23,000 108,434	trading  - \$ 130 1,148,904 284 1,040 1,150,358  - 52,287 - 81,234	424,056 375,578 5,029,927 30,678 33,870 5,894,109 68 923,595 - 604,322 27,688 26,271 1,581,944 8,996 1,327 10,323	\$	Clearing house <sup>2</sup> - \$ 328,653	Non-clearing house - \$ 44,238 581,091 20,356 17,146 662,831	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254  37 664,852 471,797 23,973 23,286 1,183,945  2,187 904 3,091  76,359 25,834 102,193	trading  - \$ 1,115,863 110 2,206 1,118,179  - 48,838 - 77,156	261,425 372,891 4,636,437 29,235 34,445 5,334,433 37 713,690 - 548,953 23,973 23,286 1,309,939 8,333 904 9,237 112,335 25,834 138,169
Futures Forward rate agreements Swaps Options written Options purchased  Foreign Exchange Contracts Futures Forward contracts Swaps Cross-currency interest rate swaps Options written Options purchased  Credit Derivative Contracts Credit default swaps Protection purchased  Other Contracts Equity contracts Equity contracts	22 23 24 25 26 27 28 29 30 31 32 33 34 35 36	Clearing house <sup>2</sup> \$	Non-clearing house - \$ - \$ 67.894 602.886 17.229 17.342 705,351	Exchange-traded  424,056 \$	Total  424,056 \$ 375,448 3,881,023 30,394 4,743,751 68 871,308 - 523,088 27,688 26,271 1,448,423  2,747 1,327 4,074  85,434 23,000	trading  - \$ 130 1,148,904 284 1,040 1,150,358  - 52,287 - 81,234 133,521  6,249 - 6,249 34,837	424,056 375,578 5,029,927 30,678 33,870 5,894,109 68 923,595 - 604,322 27,688 26,271 1,581,944 8,996 1,327 10,323	\$	Clearing house <sup>2</sup> - \$ 328,653   2,939,483     3,268,136   -	Non-clearing house - \$ 44.238 581,091 20,356 17,146 662,831 - 664,852 - 471,797 23,973 23,286 1,183,908 - 1,567 679 2,246 - 33,726 9,453	Exchange-traded  261,425 \$	Total  261,425 \$ 372,891 3,520,574 29,125 32,239 4,216,254  37 664,852 471,797 23,973 23,286 1,183,945  2,187 904 3,091  76,359 25,834	trading  - \$ 1,115,863 110 2,206 1,118,179  - 48,838 - 77,156 - 125,994  - 6,146 - 6,146 - 35,976	261,425 372,891 4,636,437 29,235 34,445 5,334,433 37 713,690 - 548,953 23,973 23,286 1,309,939 8,333 904 9,237

2016 Q3

2016

<sup>&</sup>lt;sup>1</sup> Collateral held under a CSA to help reduce counterparty credit risk is in the form of high quality and liquid assets such as cash and high quality government securities. Acceptable collateral is governed by the Collateralized Trading Policy.

<sup>2</sup> Derivatives executed through a central clearing house reduces settlement risk due to the ability to net settle offsetting positions for capital purposes and therefore receive preferential capital treatment compared to those settled with non-central clearing house

#### Derivatives - Credit Exposure

(\$ millions) As at	LINE #		2017 Q3			2017 Q2			2017 Q1	
		Current replacement cost <sup>1</sup>	Credit equivalent amount	Risk- weighted amount	Current replacement cost <sup>1</sup>	Credit equivalent amount	Risk- weighted amount	Current replacement cost <sup>1</sup>	Credit equivalent amount	Risk- weighted amount
Interest Rate Contracts										
Forward rate agreements	1	\$ 72	\$ 225	\$ 79	\$ 90	\$ 220	\$ 75	\$ 60	\$ 240	\$ 87
Swaps	2	13,764	17,980	6,957	16,838	21,341	8,701	16,320	20,656	8,690
Options purchased	3	374	443	188	420	492	224	378	436	205
	4	14,210	18,648	7,224	17,348	22,053	9,000	16,758	21,332	8,982
Foreign Exchange Contracts		,	· · · · · · · · · · · · · · · · · · ·			·	·	<u> </u>	·	·
Forward contracts	5	19,580	32,919	4,226	16,829	31,615	4,792	16,122	30,124	4,915
Swaps	6	_	_	, <u>-</u>		_	, -	_	_	_
Cross-currency interest rate swaps	7	24,093	40,636	7,785	23,578	41,082	9,018	22,234	39,159	8,530
Options purchased	8	490	814	174	336	666	167	421	764	177
	9	44,163	74,369	12,185	40,743	73,363	13,977	38,777	70,047	13,622
Other Contracts		,	· · · · · · · · · · · · · · · · · · ·			·	·	<u> </u>	·	·
Credit derivatives	10	5	362	155	_	395	181	8	380	166
Equity contracts	11	1,236	4,193	812	1,507	5,465	1,033	1,398	5,434	1,186
Commodity contracts	12	618	1,906	376	682	1,973	462	803	1,950	492
	13	1,859	6,461	1,343	2,189	7,833	1,676	2,209	7,764	1,844
Total	14	60,232	99,478	20,752	60,280	103,249	24,653	57,744	99.143	24,448
Less: impact of master netting agreements	15	43,138	60,320	14,947	41,124	59,539	17,371	40,032	58,212	16,813
Total after netting	16	17,094	39,158	5,805	19,156	43,710	7,282	17,712	40,931	7.635
Less: impact of collateral	17	6,703	7,730	1,301	7,666	7,893	1,435	8,430	9,088	1,934
Vet	18	10,391	31,428	4,504	11,490	35,817	5,847	9,282	31.843	5,701
Qualifying Central Counterparty (QCCP) contracts <sup>2</sup>	19	1,536	15,952	1,697	1,345	15,682	1,798	1,535	14,624	2,208
Total	20	\$ 11,927	\$ 47,380	\$ 6.201	\$ 12.835	\$ 51,499	\$ 7,645	\$ 10,817	\$ 46.467	\$ 7,909
		,	<u> </u>	Ψ 0,201	12,000	Ψ 01,100	Ψ 1,010	Ψ,σ	Ψ 10,101	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
			2016 Q4			2016 Q3			2016 Q2	
		Current	Credit	Risk-	Current	Credit	Risk-	Current	Credit	Risk-
		replacement	equivalent	weighted	replacement	equivalent	weighted	replacement	equivalent	weighted
		cost <sup>1</sup>	amount	amount	cost <sup>1</sup>	amount	amount	cost <sup>1</sup>	amount	amount
nterest Rate Contracts		•								

			Q4			uз			QZ	
	-									
		Current	Credit	Risk-	Current	Credit	Risk-	Current	Credit	Risk-
		replacement	equivalent	weighted	replacement	equivalent	weighted	replacement	equivalent	weighted
		cost <sup>1</sup>	amount	amount	cost <sup>1</sup>	amount	amount	cost <sup>1</sup>	amount	amount
Interest Rate Contracts			•		Ĭ .	, ,				
Forward rate agreements	21	\$ 132	\$ 256	\$ 64	\$ 198	\$ 321	\$ 82	\$ 76	\$ 166	\$ 45
Swaps	22	21,542	26,041	11,577	24,401	28,885	13,393	21,548	26,093	12,347
Options purchased	23	495	569	278	552	635	316	517	594	294
	24	22,169	26,866	11,919	25,151	29,841	13,791	22,141	26,853	12,686
Foreign Exchange Contracts				-					•	
Forward contracts	25	17,756	32,874	5,652	16,837	28,142	4,620	16,375	26,254	4,619
Swaps	26	_	_	_	_	_	_	_	_	_
Cross-currency interest rate swaps	27	23,382	40,645	9,315	23,506	40,744	9,364	24,612	40,756	9,062
Options purchased	28	542	954	198	465	855	193	475	803	195
	29	41,680	74,473	15,165	40,808	69,741	14,177	41,462	67,813	13,876
Other Contracts				-					•	
Credit derivatives	30	3	291	109	11	300	110	13	306	116
Equity contracts	31	1,285	4,963	1,087	1,010	4,236	917	911	3,887	881
Commodity contracts	32	777	1,925	516	538	1,421	405	602	1,392	433
	33	2,065	7,179	1,712	1,559	5,957	1,432	1,526	5,585	1,430
Total	34	65,914	108,518	28,796	67,518	105,539	29,400	65,129	100,251	27,992
Less: impact of master netting agreements	35	45,646	63,176	19,856	47,148	63,532	20,993	45,598	60,811	19,836
Total after netting	36	20,268	45,342	8,940	20,370	42,007	8,407	19,531	39,440	8,156
Less: impact of collateral	37	8,533	8,881	2,146	7,623	8,368	2,108	7,880	8,205	2,173
Net	38	11,735	36,461	6,794	12,747	33,639	6,299	11,651	31,235	5,983
QCCP contracts <sup>2</sup>	39	2,106	15,917	3,234	3,804	17,016	2,315	2,894	15,506	2,628
Total	40	\$ 13,841	\$ 52,378	\$ 10,028	\$ 16,551	\$ 50,655	\$ 8,614	\$ 14,545	\$ 46,741	\$ 8,611
		Ψ 10,011	Ψ 02,010	Ψ 10,020	Ψ 10,001	Ψ 00,000	Ψ 0,017	Ψ 1-7,0-70	Ψ -10,171	Ψ 0,011

<sup>&</sup>lt;sup>1</sup> Non-trading credit derivatives, which are given financial guarantee treatment for credit risk capital purposes, were excluded in accordance with OSFI's guidelines.
<sup>2</sup> RWA for OSFI "deemed" QCCP derivative exposures are calculated in accordance with the Basel III regulatory framework, which takes into account both trade exposures and default fund exposures related to derivatives, and are presented based on the "all-in" methodology. The amounts calculated are net of master netting agreements and collateral.

#### Derivatives - Credit Exposure (Continued)

(\$ millions)	LINE		2016	· · ·		2015			2015	
As at	#	<u>L.</u>	Q1		L	Q4		L	Q3	
		Current replacement cost <sup>1</sup>	Credit equivalent amount	Risk- weighted amount	Current replacement cost <sup>1</sup>	Credit equivalent amount	Risk- weighted amount	Current replacement cost <sup>1</sup>	Credit equivalent amount	Risk- weighted amount
Interest Rate Contracts			•	•		•				
Forward rate agreements	1	\$ 77	\$ 173	\$ 66	\$ 26	\$ 67	\$ 21	\$ 33	\$ 85	\$ 31
Swaps	2	24,231	29,260	14,807	21,908	26,915	13,869	21,914	27,179	14,174
Options purchased	3	607	695	366	638	727	359	633	734	377
	4	24,915	30,128	15,239	22,572	27,709	14,249	22,580	27,998	14,582
Foreign Exchange Contracts										
Forward contracts	5	16,749	27,709	5,834	11,976	20,750	4,866	17,177	25,825	5,883
Swaps	6	_	_	_	-	-	-	-	_	-
Cross-currency interest rate swaps	7	32,460	48,860	11,463	26,148	52,070	16,645	27,839	54,302	18,342
Options purchased	8	493	823	212	404	688	166	486	723	179
	9	49,702	77,392	17,509	38,528	73,508	21,677	45,502	80,850	24,404
Other Contracts		1			,			,		
Credit derivatives	10	32	346	144	17	287	118	6	244	99
Equity contracts	11	1,530	4,850	1,064	1,079	4,185	954	1,102	4,234	1,001
Commodity contracts	12	629	1,427	362	582	1,431	365	520	1,306	357
	13	2,191	6,623	1,570	1,678	5,903	1,437	1,628	5,784	1,457
Total	14	76,808	114,143	34,318	62,778	107,120	37,363	69,710	114,632	40,443
Less: impact of master netting agreements	15	50,108	65,412	23,914	39,962	58,659	24,957	45,354	64,765	27,804
Total after netting	16	26,700	48,731	10,404	22,816	48,461	12,406	24,356	49,867	12,639
Less: impact of collateral	17	12,612	13,090	3,202	11,820	12,173	3,649	11,685	11,926	3,523
Net	18	14,088	35,641	7,202	10,996	36,288	8,757	12,671	37,941	9,116
QCCP Contracts <sup>2</sup>	19	3,371	16,461	1,985	1,937	14,735	2,070	1,355	13,432	1,813
Total	20	\$ 17,459	\$ 52,102	\$ 9,187	\$ 12,933	\$ 51,023	\$ 10,827	\$ 14,026	\$ 51,373	\$ 10,929

<sup>1</sup> Non-trading credit derivatives, which are given financial guarantee treatment for credit risk capital purposes, were excluded in accordance with OSFI's guidelines.
2 RWA for OSFI "deemed" QCCP derivative exposures are calculated in accordance with the Basel III regulatory framework, which takes into account both trade exposures and default fund exposures related to derivatives, and are presented based on the "all-in" methodology. The amounts calculated are net of master netting agreements and collateral.

#### Consolidated Balance Sheet Cross-Referenced to Credit Risk Exposures

LINE 2017 (\$ millions) As at Q3

						Credit ı	isk exposures	<u>.</u>	Other expo	ures	
			Drawn			Ot	her exposures	Subject to			
		Non-			Repo-style			market risk			
		retail	Retail	Securitization	transactions		Derivatives	capital	All	ther <sup>1</sup>	Total
				000011112011011			20	- Jupitus	,		
Cash and due from banks	1	\$ 921	\$ _	\$ _	\$ _	\$	_	\$ _	\$	3,192	\$ 4,113
Interest-bearing deposits with banks	2	44,840	-	-	-		-	362		399	45,601
Trading loans, securities, and other	3	31	68	-	-		-	94,928		4,792	99,819
Derivatives	4	-	-	-	-		63,092	-		(5)	63,087
Financial assets designated at fair value through profit or loss	5	1,826	-	-	-		-	-		2,007	3,833
Available-for-sale securities	6	94,176	-	24,069	-		-	-		5,028	123,273
Held-to-maturity securities	7	51,356	-	19,876	-		-	-		1	71,233
Securities purchased under reverse repurchase agreements	8	_	-	-	120,400		_	_		-	120,400
Residential mortgages <sup>2</sup>	9	81,484	134,187	-	_		_	_		(166)	215,505
Consumer instalment and other personal <sup>2</sup>	10	16,511	131,794	-	_		_	_		3,087	151,392
Credit card	11	_	29,855	-	_		_	_		2,608	32,463
Business and government	12	174,776	11,396	7,230	_		_	_		103	193,505
Debt securities classified as loans	13	2,407	-	709	_		_	_		65	3,181
Allowance for loan losses <sup>3</sup>	14	(50)	-	(120)	_		_	_	(	3,507)	(3,677)
Customers' liability under acceptances	15	16,855	-	-	_		_	_		-	16,855
Investment in TD Ameritrade	16	_	-	-	_		_	_		6,714	6,714
Goodwill	17	_	-	-	_		_	_	1	5,630	15,630
Other intangibles	18	_	-	-	_		_	_		2,586	2,586
Land, buildings, equipment, and other depreciable assets	19	_	-	-	_		_	_		5,154	5,154
Deferred tax assets	20	_	-	-	_		_	_		2,472	2,472
Amounts receivable from brokers, dealers and clients	21	514	-	-	_		_	_	1	6,304	16,818
Other assets	22	2,678	52	295						9,399	12,424
Total	23	\$ 488,325	\$ 307,352	\$ 52,059	\$ 120,400	\$	63,092	\$ 95,290	\$ 7	5,863	\$ 1,202,381
				•							

Includes the Bank's insurance subsidiaries' assets and all other assets which are not subject to market risks or standardized/AIRB credit risk.
 Includes CMHC insured exposures classified as sovereign exposures under Basel III and therefore included in the non-retail category.
 Allowances related to exposures under standardized methodology are included under non-retail or retail.

#### **Gross Credit Risk Exposure** (\$ millions) LINE 2017 2017 Q3 Q2 As at Repo-style OTC<sup>3</sup> Other off-Repo-style OTC Other off-By Counterparty Type Undrawn<sup>2</sup> transactions derivatives balance sheet Total Undrawn<sup>2</sup> Drawn Drawn transactions derivatives balance sheet Total Retail Residential secured 297,264 \$ 47,117 \$ - \$ - \$ - \$ 344.381 295,341 \$ 46.477 \$ - \$ - \$ 341.818 93,504 22,293 71,403 93,696 Qualifying revolving retail 22,772 70,732 34 91,554 86,564 34 92,885 Other retail 85,338 6,182 6,287 405,374 124,031 34 529,439 404,198 124,167 34 528,399 Non-retail 181,633 68,004 129,865 11,041 15,124 405,667 189,580 71,234 133,299 13,354 16,540 424,007 Corporate 5 Sovereign 182,994 1,257 35,764 11,791 1,372 233,178 194,175 1,405 32,242 12,396 1,436 241,654 6 Bank 25,723 1,610 58,883 16,326 3,360 105,902 32,029 1,550 52,129 17,960 3,273 106,941 8 390,350 70,871 224,512 39,158 19,856 744,747 415,784 74,189 217,670 43,710 21,249 772,602 Total 795,724 \$ 194,902 \$ 224,512 \$ 39,158 \$ 19,890 \$ 1,274,186 819,982 \$ 198,356 \$ 217,670 \$ 43,710 \$ 21,283 \$ 1,301,001 By Country of Risk 10 440,089 \$ 125,253 \$ 75,148 \$ 11,751 \$ 9,203 \$ 661,444 429,950 \$ 124,041 \$ 73,070 \$ 17,480 \$ 8,942 \$ 653,483 Canada United States 11 289,678 66,278 75,244 10,993 10,022 452,215 318,914 70,893 71,548 13,078 11,741 486,174 Other International 12 2,578 113,820 9,884 Europe 47,090 52,368 11,403 381 51,792 2,543 55,012 333 119,564 Other 13 18,867 793 21,752 5,011 284 46,707 19,326 879 18.040 3,268 267 41,780 14 65.957 3.371 74.120 16.414 665 160.527 71,118 3.422 73.052 13.152 600 161.344 39,158 \$ 795,724 \$ 194,902 \$ 224,512 \$ 19,890 \$ 1,274,186 819,982 \$ 198,356 \$ 217,670 \$ 43,710 \$ Total 15 21,283 \$ 1,301,001 By Residual Contractual Maturity 264,024 \$ 138,058 \$ 224,512 \$ 18,867 \$ 8,638 \$ 654,099 Within 1 year 16 257,689 \$ 138,964 \$ 217,670 \$ 18,712 \$ 9,157 \$ 642,192 Over 1 year to 5 years 17 373,748 54,574 14,024 10,603 452,949 398,263 56,881 17,590 11,339 484,073 157,952 18 2,270 649 167,138 164,030 2,511 787 174,736 Over 5 years 6,267 7,408 795,724 \$ 194,902 \$ 224,512 \$ 39,158 \$ 19,890 \$ 1,274,186 819,982 \$ 198,356 \$ 217.670 \$ 43,710 \$ 21,283 \$ 1,301,001 19 Total Non-Retail Exposures by Industry Sector Real estate Residential 20 21,881 \$ 2,580 \$ 1 \$ 46 \$ 1,508 \$ 26,016 21,763 \$ 2,693 \$ 1 \$ 57 \$ 1,589 \$ 26,103 Non-residential 21 34,429 4,405 409 385 39,636 35,792 4,409 9 539 401 41,150 Total real-estate 22 56,310 6,985 9 455 1,893 65,652 57,555 7,102 10 596 1,990 67,253 355 13 26 323 22 Agriculture 23 5,912 6,311 5,840 5 25 6,215 Automotive 24 9,605 4,069 57 469 80 14,280 10,042 4,428 528 108 15,109 3 Financial 25 27,483 8,716 176,415 21,523 1,266 235,403 33,704 9,043 173,661 25,143 826 242,377 26 4,593 425 Food, beverage, and tobacco 3,076 448 469 8,586 4,903 3,216 683 9,227 Forestry 27 1,298 663 42 2,012 1,264 625 12 47 1,948 Government, public sector entities, and education 28 196,645 2,941 36,631 13,105 4,879 254,201 208,337 3,135 33,224 13,093 5,310 263,099 14,997 1,745 2,103 Health and social services 29 941 452 99 18,234 16,036 1,057 523 137 19,856 Industrial construction and trade contractors 30 3,795 1,114 67 15 697 5,688 3,886 1,103 54 22 733 5,798 31 2,948 3,179 252 181 839 7,399 3,205 3,342 582 181 931 8,241 Metals and mining 25 Pipelines, oil, and gas 32 6,291 9,589 577 1,912 18,394 6,539 10,052 31 802 1,835 19,259 Power and utilities 33 5,556 6,265 21 359 3,329 15,530 5,505 6,257 39 449 3,737 15,987 Professional and other services 34 12,222 4,558 150 154 558 17,642 13,840 4,273 181 84 822 19,200 35 5,966 2,114 457 206 6,227 2,279 296 37 223 Retail sector 99 8,842 9,062 Sundry manufacturing and wholesale 36 9.470 6.059 32 340 435 16.336 9.843 6.110 43 259 549 16.804 Telecommunications, cable, and media 37 5,613 6,402 581 309 12,905 5,946 7,858 602 301 14,707 38 31 341 1,991 68 750 Transportation 11,272 1.944 1,031 14,619 12,499 1,142 16,450 Other 39 10.374 1.901 9.908 390 140 22.713 10.613 1.995 8.950 307 145 22.010 Total 40 390,350 \$ 70,871 \$ 224,512 \$ 39,158 \$ 19,856 \$ 744,747 415,784 \$ 74,189 \$ 217,670 \$ 43,710 \$ 21,249 \$ 772,602

<sup>&</sup>lt;sup>1</sup> Gross credit risk exposure is before credit risk mitigants. This table excludes securitization, equity, and other credit RWA.

<sup>2</sup> Gross exposure on undrawn commitments is exposure at default which is the amount currently undrawn but expected to be drawn assuming a default on the underlying committed loan agreement.

<sup>3</sup> Over-the-counter (OTC).

Gross Credit Risk Exposure (		ieu)												
(\$ millions)	LINE		*	2017	*		*	T	• •	*	2016	3	* * *	*
As at	#			Q1				<u> </u>			Q4			
	r			Repo-style	OTC	Other off-		T .		·	Done of de	OTC	Other off-	
By Counterparty Type		Drawn	Undrawn <sup>2</sup>	transactions		palance sheet	Total		Drawn	Undrawn <sup>2</sup>	Repo-style transactions		balance sheet	Total
Retail	-	Diawii	Ondrawn	transactions	derivatives b	Maiarice Sricet	rotai		Diawii	Ondrawn	transactions	uciivatives i	balarioc sricci	Total
Residential secured	1 9	3 291,422 \$	45,322 \$	- \$	- \$	- \$	336,744	\$	291,821 \$	44,391 \$	- \$	- \$	- \$	336,212
Qualifying revolving retail	2	21,700	70,156				91,856	1	22,420	68,358			_ '	90,778
Other retail	3	83,979	6,232	_	_	32	90,243		84,662	6,139	_	_	33	90,834
	4	397,101	121,710			32	518,843	Ì	398,903	118,888		-	33	517,824
Non-retail														
Corporate	5	181,471	68,551	111,795	11,006	14,911	387,734		183,612	64,623	101,927	15,089	14,764	380,015
Sovereign	6	187,438	1,403	23,046	10,756	1,370	224,013		183,763	1,514	19,974	9,889	1,393	216,533
Bank	7	27,948	1,599	49,431	19,169	3,475	101,622		28,460	1,593	30,097	20,363	3,640	84,153
	8	396,857	71,553	184,272	40,931	19,756	713,369		395,835	67,730	151,998	45,341	19,797	680,701
Total	9 \$	793,958 \$	193,263 \$	184,272 \$	40,931 \$	19,788 \$	1,232,212	\$	794,738 \$	186,618 \$	151,998 \$	45,341 \$	19,830 \$	1,198,525
	-		·		·		·		·			·		
By Country of Risk	-							, .						
Canada	10 \$	422,869 \$	122,075 \$		13,942 \$	8,632 \$	636,566	\$	416,921 \$	117,930 \$		17,403 \$		614,989
United States	11	306,161	68,093	59,856	12,927	10,651	457,688		309,192	65,629	59,290	13,146	10,798	458,055
Other International	40	40.000	0.000	44.004	0.707	004	400.050		40.054	0.000	00.700	40.000	050	00.450
Europe Other	12 13	46,698 18,230	2,290 805	41,934	9,737 4,325	294 211	100,953 37,005		48,954	2,300 759	30,720	10,820 3,972	359 214	93,153
Other	_	64,928	3,095	13,434	14,062	505	137,958	1	19,671		7,712 38,432		573	32,328
Total	14			55,368					68,625	3,059		14,792		125,481
Total	15	793,958 \$	193,263 \$	184,272 \$	40,931 \$	19,788 \$	1,232,212	ф	794,738 \$	186,618 \$	151,998 \$	45,341 \$	19,830 \$	1,198,525
By Residual Contractual Maturity														
Within 1 year	16	246,215 \$	136,331 \$	184,165 \$	17,228 \$	7,343 \$	591,282	\$	250,126 \$	130,068 \$	151,428 \$	16,963 \$	8,143 \$	556,728
Over 1 year to 5 years	17	387,017	54,767	107	16,492	11,733	470,116	*	378,716	53,928	390	20,109	10,974	464,117
Over 5 years	18	160,726	2,165	_	7,211	712	170,814		165,896	2,622	180	8,269	713	177,680
Total	19	793,958 \$	193,263 \$	184,272 \$	40,931 \$	19,788 \$	1,232,212	\$	794,738 \$	186,618 \$	151,998 \$	45,341 \$	19,830 \$	1,198,525
	_													
Non-Retail Exposures by Industry Sector														
Real estate								1.						
Residential	20 \$	21,520 \$	2,651 \$		55 \$	1,525 \$	25,753	\$	21,376 \$	2,555 \$		101 \$		25,554
Non-residential	21	30,789	2,635	16	409	348	34,197	<del> </del>	34,447	4,082	10	789	417	39,745
Total real-estate	22	52,309	5,286	18	464	1,873	59,950		55,823	6,637	12	890	1,937	65,299
Agriculture	23 24	5,638 9,633	282 4.475	4	9 605	32 108	5,965		5,382	337 4,390	4 2	28 702	27 104	5,778
Automotive Financial	25	33,073	4,475 10,266	148,557	24,034	1,232	14,823 217,162		8,946 30,703	4,390 8,381	122,107	28,458	1,168	14,144 190,817
Food, beverage, and tobacco	26	4,239	2,521	140,557	652	457	7,875		5,637	2,880	122,107	667	481	9,679
Forestry	27	1,281	631	_	9	47	1,968		1,323	600	-	14	47	1,984
Government, public sector entities, and education	28	199,882	2,963	24,317	11,508	5,072	243,742		197,137	3,217	20,879	10,641	5,216	237,090
Health and social services	29	17,617	1,322	548	129	1,923	21,539		14,917	1,039	553	186	1,781	18,476
Industrial construction and trade contractors	30	2,813	1,036	70	21	595	4,535		3,586	1,225	58	30	630	5,529
Metals and mining	31	3,516	3,213	554	180	888	8,351	1	3,202	3,242	666	142	817	8,069
Pipelines, oil, and gas	32	5,702	9,689	35	872	1,305	17,603		7,244	9,704	54	920	1,273	19,195
Power and utilities	33	4,592	6,487	38	490	3,429	15,036		4,598	5,927	-	650	3,393	14,568
Professional and other services	34	10,423	3,092	217	92	699	14,523	1	13,563	3,938	134	173	804	18,612
Retail sector	35	5,281	2,183	379	62	195	8,100		5,761	2,009	321	63	186	8,340
Sundry manufacturing and wholesale	36	10,965	6,232	29	206	448	17,880	1	9,544	5,735	47	193	440	15,959
Telecommunications, cable, and media	37	7,339	7,536	-	371	282	15,528		6,747	4,454	-	600	296	12,097
Transportation Other	38 39	12,587 9,967	1,866 2,473	61 9,437	784 443	1,032 139	16,330 22,459		12,975 8,747	1,821 2,194	50 7,097	835 149	1,069 128	16,750 18,315
	40 9	9,967 396,857 \$			40,931 \$	19,756 \$	713,369	6	395,835 \$	67,730 \$	151,998 \$			680,701
Total	40	\$ 158,08C ¢	71,553	184,272 \$	40,931 \$	19,/56 \$	113,309	Ф	აყე,ი <u>ა</u> ე \$	01,130 \$	151,998 \$	45,341 \$	19,/9/ \$	000,701

Gross Cradit Dick Exposure (Continued)1

<sup>&</sup>lt;sup>1</sup> Gross credit risk exposure is before credit risk mitigants. This table excludes securitization, equity, and other credit RWA.
<sup>2</sup> Gross exposure on undrawn commitments is exposure at default which is the amount currently undrawn but expected to be drawn assuming a default on the underlying committed loan agreement.

(\$ millions)	LINE		*	2016	i	•	*	<u> </u>			2010		· · · · · · · · · · · · · · · · · · ·	
As at	#			Q3				<u> </u>			Q2			
Du Countaments Time		Dec	Llader 2	Repo-style	OTC	Other off-	T-4-1	[	Drove	Lindae 2	Repo-style	OTC	Other off-	T-1-1
By Counterparty Type Retail	<del>  -</del>	Drawn	Undrawn <sup>2</sup>	transactions	derivatives	balance sheet	Total		Drawn	Undrawn <sup>2</sup>	transactions	derivatives	balance sheet	Total
Residential secured	1 \$	287,853 \$	42,969 \$	- \$	_	\$ - \$	330,822	\$	275,685 \$	36,391	- \$	- \$	- \$	312,076
Qualifying revolving retail	2	21,541	66,574	_	_	-	88,115		19,471	54,095	-	_	-	73,566
Other retail	3	82,929 392,323	5,958 115,501			35 35	88,922 507,859		89,502 384,658	5,630 96,116			34 34	95,166 480,808
Non-retail		332,323	113,301	<del></del>			307,033		304,030	30,110				400,000
Corporate	5	176,098	61,864	100,606	12,693	14,711	365,972		167,974	57,256	97,432	10,127	14,414	347,203
Sovereign Bank	6	174,940 29,454	1,463 1,605	15,380 52,328	11,052 18,262	1,386 3,364	204,221 105,013		161,106 28,383	1,361 1,554	18,572 48,506	11,133 18,181	1,384 3,241	193,556 99,865
Dalik	8	380,492	64,932	168,314	42,007	19,461	675,206		357,463	60,171	164,510	39,441	19,039	640,624
Total	9 \$	772,815 \$	180,433 \$	168,314 \$		\$ 19,496 \$	1,183,065		742,121 \$	156,287	164,510 \$	39,441 \$		1,121,432
Do Constant of Biological														
By Country of Risk Canada	10 \$	412,286 \$	115,048 \$	56,066 \$	16,458	\$ 8,604 \$	608,462	\$	407,153 \$	114,815	60,069 \$	15,131 \$	8,578 \$	605,746
United States	11	294,810	61,670	60,525	10,394	10,362	437,761		273,256	37,993	55,709	10,380	9,994	387,332
Other International Europe	12	45,276	2,943	40,548	10,479	324	99,570		40,728	2,848	36,687	9,722	382	90,367
Other	13	20,443	772	11,175	4,676	206	37,272		20,984	631	12,045	4,208	119	37,987
	14	65,719	3,715	51,723	15,155	530	136,842		61,712	3,479	48,732	13,930	501	128,354
Total	15 \$	772,815 \$	180,433 \$	168,314 \$	42,007	\$ 19,496 \$	1,183,065	\$	742,121 \$	156,287	164,510 \$	39,441	19,073 \$	1,121,432
By Residual Contractual Maturity														
Within 1 year	16 \$	251,015 \$	127,147 \$			\$ 8,167 \$	570,564		241,965 \$	106,376		15,290 \$		535,323
Over 1 year to 5 years Over 5 years	17 18	368,789 153,011	50,901 2,385	652 287	15,892 9,255	10,632 697	446,866 165,635		349,692 150,464	47,446 2,465	596	16,148 8,003	10,636 659	424,518 161,591
Total	19 \$	772,815 \$	180,433 \$		42,007		1,183,065		742,121 \$	156,287 \$	164,510 \$	39,441 \$		1,121,432
		<u>.</u> .	•	2016 Q1			·				2019 Q4		<del>.</del>	
	<u>-</u>			Repo-style	OTC	Other off-	•	· ·	•	•	Repo-style	OTC	Other off-	
By Counterparty Type Retail		Drawn	Undrawn <sup>2</sup>	transactions	derivatives	balance sheet	Total		Drawn	Undrawn <sup>2</sup>	transactions		balance sheet	Total
Residential secured	20 \$	278,885 \$	35,197 \$	- \$	_	\$ - \$	314,082	\$	274,984 \$	34,439 \$	- \$	- \$	- \$	309,423
Qualifying revolving retail	21	18,760	51,362	- '	_	_	70,122	*	16,787	46,382	- ,	- '	_ `	63,169
Other retail	22	95,390	6,108 92,667		<u> </u>	38 38	101,536 485,740		92,933 384,704	5,639 86,460			35 35	98,607 471,199
Non-retail	23	393,035	92,007			30	465,740		304,704	80,400			აე	471,199
Corporate	24	173,953	65,264	92,577	13,452	14,970	360,216		162,764	59,863	92,143	10,494	14,697	339,961
Sovereign	25	161,732	1,480	27,954	12,605	1,552	205,323		146,208	1,381	24,677	10,942	1,222	184,430
Bank	26 27	30,824 366,509	1,790 68,534	59,064 179,595	22,674 48,731	3,717 20,239	118,069 683,608		28,698 337,670	1,573 62,817	65,217 182,037	27,025 48,461	2,631 18,550	125,144 649,535
Total	28 \$	759,544 \$	161,201 \$		48,731		1,169,348		722,374 \$	149,277 \$		48,461		1,120,734
By Country of Risk														
Canada	29 \$	403,933 \$	113,239 \$	52,918 \$	22,715	\$ 8,520 \$	601,325	\$	400,076 \$	105,635	54,827 \$	20,684 \$	7,910 \$	589,132
United States	30	290,281	43,788	60,504	12,334	10,955	417,862		262,407	39,566	55,135	12,040	10,133	379,281
Other International Europe	31	40.111	3,387	38,755	10,989	610	93,852		37,043	3,133	46,328	12,248	422	99,174
Other	32	25,219	787	27,418	2,693	192	56,309		22,848	943	25,747	3,489	120	53,147
	33	65,330	4,174	66,173	13,682	802	150,161		59,891	4,076	72,075	15,737	542	152,321
Total	34 \$	759,544 \$	161,201 \$	179,595 \$	48,731	\$ 20,277 \$	1,169,348	\$	722,374 \$	149,277	182,037 \$	48,461 \$	18,585 \$	1,120,734
By Residual Contractual Maturity														
Within 1 year	35 \$	245,124 \$	105,729 \$		15,078		552,595		242,093 \$	99,302 \$ 47,275		10,754 \$ 25,081		541,223
	36	350.182	53,171	583	22,923	11,698	438,557	1	323,706	4/275	405	76 US1	10,355	406,822
Over 1 year to 5 years Over 5 years	37	164,238	2,301	1	10,730	926	178,196		156,575	2,700	405	12,626	788	172,689

<sup>&</sup>lt;sup>1</sup> Gross credit risk exposure is before credit risk mitigants. This table excludes securitization, equity, and other credit RWA.
<sup>2</sup> Gross exposure on undrawn commitments is exposure at default which is the amount currently undrawn but expected to be drawn assuming a default on the underlying committed loan agreement.

Exposures Covered	l By C	redit	Risk Mit	inat	tion														
Exposures covered	ı Dy C	rcuit	INION WIII	igai															
(\$ millions) As at	LINE #				2017 Q3		·				2017 Q2						2017 Q1		
					Standardized		AIRB <sup>1</sup>	1	<del></del>		Standardized		AIRB <sup>1</sup>	1	<del>_</del>		Standardized		AIRB <sup>1</sup>
			Eligible	•	Guarantees /	•	Guarantees /		Eligible		Guarantees /		Guarantees /		Eligible		Guarantees /		Guarantees /
By Counterparty Type			financial collateral <sup>2</sup>		credit derivatives		credit derivatives		financial collateral <sup>2</sup>		credit derivatives		credit derivatives		financial collateral <sup>2</sup>		credit derivatives		credit derivatives
Retail		-	Collateral		derivatives			<b>.</b>	conateral		•			-	Collateral				
Residential secured Qualifying revolving retail	1 2	\$	-	\$	110	\$	124,431	\$	_	\$	129	\$	129,229	\$	_	\$	208	\$	132,567
Other retail	3		498		110				686		108				786		158		
New voteil	4		498		220		124,431		686		237		129,229		786		366		132,567
Non-retail Corporate	5		2,315		9,670		14,895		2,512		10,803		14,983		2,646		10,577		14,954
Sovereign	6 7				_ 115		108 464				140		94 25				147		14,954 96 28
Bank	8		2,315		9,785		15,467		2,512		10,943		15,102		2,646		10,724		15,078
Gross Credit Risk Exposure	9	\$	2,813	\$	10,005	\$	139,898	\$	3,198	\$	11,180	\$	144,331	\$	3,432	\$	11,090	\$	147,645
			•		2016 Q4		·				2016 Q3		•		•		2016 Q2		
			•				·		·		•			ļ .					
			Fr. 21.		Standardized	_	AIRB <sup>1</sup>		er ar		Standardized		AIRB <sup>1</sup>		er a. ·		Standardized		AIRB <sup>1</sup>
			Eligible financial		Guarantees / credit		Guarantees / credit		Eligible financial		Guarantees / credit		Guarantees / credit		Eligible financial		Guarantees / credit		Guarantees / credit
By Counterparty Type			collateral <sup>2</sup>		derivatives		derivatives	l .	collateral <sup>2</sup>		derivatives		derivatives		collateral <sup>2</sup>		derivatives		derivatives
Retail Residential secured	10	\$	_	\$	227	\$	136,221	\$	_	\$	234	\$	139,245	\$	_	\$	593	\$	141,944
Qualifying revolving retail	11	•	_	Ψ	_	•	-	1	_	•	_	•	-	_	_	•	_	Ψ.	-
Other retail	12 13		488 488		169 396		136.221		540 540		171 405		139,245		526 526		173 766		141,944
Non-retail					•			1	•		•				•				•
Corporate Sovereign	14 15		2,578		11,123		15,090 106		2,855		10,520		15,351 110		2,932		9,620		15,542 113
Bank	16		_		696		29				732		45		_		823		49
Gross Credit Risk Exposure	17 18	ę.	2,578 3,066	\$	11,819 12,215	\$	15,225 151,446	e ·	2,855 3,395	\$	11,252 11,657	\$	15,506 154,751	0	2,932 3,458	\$	10,443 11,209	\$	15,704 157,648
Gross Credit Kisk Exposure	10	Ψ.	3,000	Ψ.	12,213	Ψ.	131,440	Ψ	3,393	Ψ	11,037	Ψ	154,751	Ψ	3,430	Ψ	11,209	Ψ	137,040
					2016 Q1		<del>.</del>		<del></del>		2015 Q4		<del>.</del>				2015 Q3		<del></del>
		L	•				*	l			4			l .	•	-,	<b>Q</b> 3		
					Standardized		AIRB <sup>1</sup>				Standardized		AIRB <sup>1</sup>				Standardized		AIRB <sup>1</sup>
			Eligible financial		Guarantees / credit		Guarantees / credit		Eligible financial		Guarantees / credit		Guarantees / credit		Eligible financial		Guarantees / credit		Guarantees / credit
By Counterparty Type			collateral <sup>2</sup>		derivatives		derivatives		collateral <sup>2</sup>		derivatives		derivatives		collateral <sup>2</sup>		derivatives		derivatives
Retail Residential secured	19	s	_	\$	673	\$	146,213	\$	_	\$	360	\$	148,509	\$	_	\$	462	\$	149,131
Qualifying revolving retail	20	Ψ	_	φ	-	φ	140,213	۳	_	φ	-	φ	-	Ψ	-	φ	_	Ψ	- 149,131
Other retail	21 22		441 441		197 870		146,213		487 487		466 826		148,509		369 369		358 820		149,131
Non-retail	22		441		670		140,213		407		620		140,509	$\vdash$	309		620		149,131
Corporate	23 24		2,699		10,795		16,503 133		2,123		10,380		16,009 157		2,074		9,359		16,441 160
Sovereign Bank	24 25		_		- 1,085		133 105		_		- 1,226		15 <i>7</i> 75		_		- 1,383		160 88
	26		2,699	_	11,880		16,741		2,123		11,606		16,241		2,074		10,742		16,689
Gross Credit Risk Exposure	27	\$	3,140	\$	12,750	\$	162,954	\$	2,610	\$	12,432	\$	164,750	\$	2,443	\$	11,562	\$	165,820

<sup>&</sup>lt;sup>1</sup> For exposures under the AIRB approach, eligible financial collateral is taken into account in the Bank's Loss Given Default (LGD) models. Separate disclosure of eligible financial collateral is, therefore, not required.
<sup>2</sup> For exposures under the Standardized approach, eligible financial collateral can include cash, gold, highly rated debt securities, and equities listed on the main index.

#### Standardized Credit Risk Exposures<sup>1</sup> (\$ millions) LINE 2017 2017 As at Q3 Risk-weight Risk-weight 20% 35% 50% 20% 35% 50% 0% 75% 100% 150% Total 0% 75% 100% 150% Total By Counterparty Type Retail Residential secured - \$ 110 \$ 183 \$ - \$ 1,071 \$ 24 \$ - \$ 1,388 \$ 129 \$ 174 \$ - \$ 1,145 \$ 27 \$ - \$ 1,475 400 18,741 686 431 19,498 Other retail<sup>2</sup> 2 498 110 17,733 108 18,273 3 498 220 183 18,804 24 400 20,129 686 237 174 19,418 27 431 20,973 Non-retail Corporate 10,715 1,270 107,266 202 119,453 11,911 1,404 117,001 254 130,570 Sovereign 55,817 24,574 80,391 62,132 27,538 89,670 5 17.807 Bank 115 16.820 16.936 140 17.949 66,647 42,664 107,266 202 216,780 74,183 46,749 117,001 255 238,189 Total 67,145 \$ 42.884 \$ 183 \$ 1 \$ 18.804 \$ 107.290 \$ 602 \$ 236.909 74.869 46.986 174 \$ 1 \$ 19.418 \$ 117.028 \$ 686 \$ 259.162 2017 2016 01 Risk-weight Risk-weight 20% 35% 50% 75% 100% 20% 35% 50% 75% 100% By Counterparty Type 0% 150% Total 0% 150% Total Retail 957 \$ Residential secured - \$ 208 \$ 98 \$ - \$ 1,023 \$ 26 \$ - \$ 1,355 - \$ 227 \$ 123 \$ - \$ 27 \$ - \$ 1,334 10 Other retail<sup>2</sup> 786 158 17.855 418 19.217 488 169 17.840 397 18.894 98 123 11 786 366 18,878 418 20,572 488 396 18,797 397 20,228 Non-retail 12 13 1,478 Corporate 11.802 1.421 110,411 284 123.918 12.223 113,280 353 127,334 60,190 24.069 54,043 Sovereign 84.259 23,123 77.166 Bank 14 147 17.275 17.423 696 17.024 17.721 15 72,139 42,765 110,411 284 225,600 66,962 41,625 113,280 353 222,221 72.925 \$ 98 \$ 67,450 \$ 123 \$ 750 \$ 16 43 131 \$ 18 878 \$ 110.437 \$ 246.172 42.021 \$ 18 797 \$ 113.307 \$ Total 702 \$ 1 \$ 242,449 2016 2016 Q3 Q2 Risk-weight Risk-weight 20% 35% 75% 20% 35% 50% 75% 100% By Counterparty Type 0% 50% 100% 150% Total 0% 150% Total Retail Residential secured 17 - \$ 234 \$ 104 \$ - \$ 880 \$ 27 \$ - \$ 1,245 356 \$ 237 \$ 27,726 \$ - \$ 2.833 \$ 472 \$ - \$ 31,624 18 540 17.604 360 18.675 578 Other retail 171 603 96 54 414 55.691 19 540 405 104 18,484 27 360 19,920 959 333 27,726 57,247 472 578 87,315 Non-retail 12,374 1,002 12,402 149 114,225 Corporate 20 107,702 361 121,439 101,291 383 Sovereign 21 49,443 21.387 70,830 43,168 18.861 62.029 Bank 22 732 15.260 15,993 823 14,434 15,258 23 62,549 37,649 107,702 361 208,262 56,393 33,444 101,291 383 191,512 18,484 \$ 57,247 \$ 24 63,089 \$ 104 \$ 107,729 \$ 33,777 27,726 \$ Total 38,054 1 \$ 721 \$ 228,182 57,352 1 \$ 101,763 \$ 961 \$ 278,827 2016 2015 Q1 Q4 Risk-weight Risk-weight By Counterparty Type 0% 20% 35% 50% 75% 100% 150% Total 0% 20% 35% 50% 75% 100% 150% Total Retail Residential secured 25 393 \$ 280 \$ 31,134 \$ - \$ 3,173 \$ 514 \$ - \$ 35,494 360 \$ 29,152 \$ - \$ 2,927 \$ 458 \$ 32,897 710 389 630 Other retail<sup>2</sup> 26 525 114 60,634 61.983 564 58,072 59,655

514

109,480

109,480

109,994 \$

63,807

63,807 \$

710

456

456

1,166 \$

97,477

123,431

67,631

16,219

207,281

304,758

924

12,344

38,551

52,121

1,226

53,045 \$

389

160

17,383

12,315

29,858

30,247

29,152

29,152 \$

13,340

48,188

62,613

1,085

394

155

19,443

15,133

34,731

35,125

31,134

31,134 \$

27

28

29

30

31

32

Non-retail

Corporate

Sovereign

Total

92,552

114,623

55,934

13,542

184,099

276,651

458

101,630

101,630

102,088 \$

630

489

489

1,119 \$

60,999

60,999 \$

1 \$

<sup>63,531 \$</sup> <sup>1</sup> Credit risk exposures are after credit risk mitigants and net of counterparty-specific allowance.

<sup>&</sup>lt;sup>2</sup> Under the Standardized approach, "Other retail" includes qualifying revolving retail exposures.

# Retail Advanced IRB Exposures – By Obligor Grade – Residential Secured<sup>1</sup>

LINE 2017 (\$ millions, except as noted) Q3

	ĺ			Notional					Average		EL adjusted
				of undrawn	Average	Average	Average		risk		average
Insured Drawn and Undrawn <sup>2,3</sup>		PD range	EAD <sup>4</sup>	commitments	EAD	PD <sup>5</sup>	LGD	RWA	weighting	EL <sup>6</sup>	risk weight <sup>7</sup>
Low Risk	1	0.00 to 0.15 % \$	114,234	\$ 21,301	90.76 %	- %	25.21 % \$	104	0.09 % \$		0.09 %
Normal Risk	2	0.16 to 0.41	5,996	21,301	100.00	0.25	9.23	264	4.40	1	4.61
Normal Risk	3	0.42 to 1.10	2,613	_	100.00	0.63	9.23	219	8.38	2	9.34
Medium Risk	4	1.11 to 2.93	871		100.00	1.73	9.41	145	16.65	1	18.08
Wediam Nak	5	2.94 to 4.74	201	_	100.00	3.71	9.41	53	26.37	1	32.59
High Risk	6	4.75 to 7.59	143	_	100.00	6.09	8.88	46	32.17	1	40.91
	7	7.60 to 18.20	240	_	100.00	10.19	7.96	86	35.83	2	46.25
	8	18.21 to 99.99	96	-	100.00	31.90	8.91	47	48.96	3	88.02
Default	9	100.00	38	-	100.00	100.00	8.09	38	100.00		100.00
Total	10	\$	124,432	\$ 21,301	91.45 %	0.13 %	23.90 % \$	1,002	0.81 % \$	11	0.92 %
Uninsured Undrawn <sup>2</sup>			·		•						
Low Risk	11	0.00 to 0.15 % \$	25,882	\$ 50,709	51.04 %	0.03 %	19.97 % \$	519	2.01 % \$	2	2.10 %
Normal Risk	12	0.16 to 0.41	3,347	4,405	76.00	0.26	38.71	634	18.94	3	20.06
Normal Nor	13	0.42 to 1.10	395	535	73.87	0.58	30.37	103	26.08	1	29.24
Medium Risk	14	1.11 to 2.93	56	73	76.36	1.61	33.09	31	55.36		55.36
	15	2.94 to 4.74	6	7	87.07	3.67	24.68	4	66.67	_	66.67
High Risk	16	4.75 to 7.59	3	3	80.08	5.91	21.11	2	66.67	_	66.67
_	17	7.60 to 18.20	1	1	100.00	11.36	20.67	1	100.00	-	100.00
	18	18.21 to 99.99	11	1	84.43	26.67	12.83	11	100.00		100.00
Default	19	100.00							-		-
Total	20	\$	29,691	\$ 55,734	53.27 %	0.07 %	22.25 % \$	1,295	4.36 % \$	6	4.61 %
Uninsured Drawn <sup>2</sup>											
Low Risk	21	0.00 to 0.15 % \$	90,705	n/a	n/a	0.06 %	22.95 % \$	3,028	3.34 % \$	12	3.50 %
Normal Risk	22	0.16 to 0.41	32,670	n/a	n/a	0.25	26.92	4,191	12.83	22	13.67
	23	0.42 to 1.10	13,896	n/a	n/a	0.64	24.32	3,115	22.42	22	24.40
Medium Risk	24	1.11 to 2.93	4,506	n/a	n/a	1.70	25.67	2,027	44.98	20	50.53
	25	2.94 to 4.74	817	n/a	n/a	3.69	24.74	566	69.28	7	79.99
High Risk	26	4.75 to 7.59	550	n/a	n/a	5.98	22.00	436	79.27	7	95.18
	27	7.60 to 18.20	647	n/a	n/a	11.35	19.66	597	92.27	14	119.32
	28	18.21 to 99.99	370	n/a	n/a	38.77	16.37	317	85.68	22	160.00
Default	29	100.00	159	n/a	n/a	100.00	19.74	288	181.13	8	244.03
Total	30	\$	144,320	n/a	n/a	0.51 %	24.03 % \$	14,565	10.09 % \$	134	11.25 %
U.S. Retail Uninsured Drawn and Undrawn											
Low Risk	31	0.00 to 0.15 % \$	12,956	\$ 9,390	80.40 %	0.07 %	31.15 % \$	569	4.39 % \$	2	4.58 %
Normal Risk	32	0.16 to 0.41	13,981	892	97.14	0.26	19.45	1,317	9.42	7	10.05
	33	0.42 to 1.10	9,459	565	97.03	0.66	23.85	2,134	22.56	15	24.54
Medium Risk	34	1.11 to 2.93	4,579	632	93.82	1.76	30.73	2,545	55.58	25	62.40
	35	2.94 to 4.74	1,123	119	95.04	3.67	35.04	1,097	97.68	14	113.27
High Risk	36	4.75 to 7.59	655	62	95.35	5.94	36.02	848	129.47	14	156.18
	37 38	7.60 to 18.20 18.21 to 99.99	717 284	139 30	90.52 95.20	11.46 34.41	39.58 39.78	1,344 606	187.45 213.38	33 39	244.98 385.04
Default		100.00	796	- 30	100.00	100.00	31.96	461	57.91	217	398.68
Default	39	100.00		\$ 11,829	91.12 %	2.79 %	26.26 % \$	10,921	24.51 % \$	366	398.68
Total	40	\$	44,350	φ 11,829	91.72 %	2.19 %	20.20 % \$	10,921	∠4.31 % <b>\$</b>	300	34.78 %

<sup>&</sup>lt;sup>1</sup> Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

<sup>2</sup> Includes Canadian residential mortgages and home equity lines of credit.

<sup>3</sup> Includes CMHC insured exposures and exposures insured by corporate entities. CMHC insured exposures are already included in the Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign on pages 70 to 71.

Exposure at Default (EAD).

Probability of Default (PD).

Expected Loss (EL).

EL adjusted average risk weight is calculated as (RWA + 12.5 x EL) / EAD.

# Retail Advanced IRB Exposures – By Obligor Grade – Residential Secured (Continued)<sup>1</sup>

(\$ millions, except as noted)	LINE		,		•		2017		* *		* *	
As at	#	· · · · · · · · · · · · · · · · · · ·					Q2	<del></del>		<del> </del>		
	r				Notional					Average		EL adjusted
					of undrawn	Average	Average	Average		risk		average
Insured Drawn and Undrawn <sup>2,3</sup>		PD range	EAD		commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	1	0.00 to 0.15 % \$	118,022	\$	21,678	90.93 %	- %	25.72 % \$	102	0.09 % \$	_	0.09 %
Normal Risk	2	0.16 to 0.41	6,333		-	100.00	0.25	9.21	275	4.34	1	4.54
	3	0.42 to 1.10	3,104		-	100.00	0.63	9.34	263	8.47	2	9.28
Medium Risk	4	1.11 to 2.93	983		-	100.00	1.73	9.48	165	16.79	2	19.33
	5	2.94 to 4.74	220		<u> </u>	100.00	3.73	9.47	59	26.82	1	32.50
High Risk	6	4.75 to 7.59	136		_	100.00	6.03	9.23	46	33.82	1	43.01
	7 8	7.60 to 18.20 18.21 to 99.99	286 107		-	100.00 100.00	10.38 31.47	7.99 8.99	105 53	36.71 49.53	2	45.45 84.58
Default	9	100.00	39	<del></del>		100.00	100.00	8.17	40	102.56		102.56
Total	10	\$	129,230	\$	21,678	91.65 %	0.14 %	24.29 % \$	1,108	0.86 % \$	12	0.97 %
Total	10		120,200	Ψ.	21,070	01.00 /0	0.14 /0	24.20 /0 φ	1,100	0.00 /0 ψ	12	0.01 /0
Uninsured Undrawn <sup>2</sup>												
Low Risk	11	0.00 to 0.15 % \$	25,982	\$	50,092	51.87 %	0.03 %	20.45 % \$	534	2.06 % \$	2	2.15 %
Normal Risk	12	0.16 to 0.41	1,843		2,906	63.40	0.24	34.93	289	15.68	2	17.04
	13	0.42 to 1.10	401		552	72.59	0.61	33.64	122	30.42	1	33.54
Medium Risk	14	1.11 to 2.93	75		81	92.23	1.56	40.98	49	65.33	-	65.33
	15	2.94 to 4.74	6		6	93.22	3.62	26.62	4	66.67	_	66.67
High Risk	16 17	4.75 to 7.59 7.60 to 18.20	3 2		3 2	94.00 90.89	5.86 11.67	20.18 19.05	2	66.67 100.00	_	66.67 100.00
	17	18.21 to 99.99	1		1	72.62	36.97	11.88	1	100.00	_	100.00
Default	19	100.00	<u> </u>		<u> </u>	-	-	-	<u> </u>	-	_	-
Total	20	\$	28,313	\$	53,643	52.78 %	0.06 %	21.64 % \$	1,003	3.54 % \$	5	3.76 %
	-	•			·					•		
Uninsured Drawn <sup>2</sup>	=											
Low Risk	21	0.00 to 0.15 % \$	84,358		n/a	n/a	0.06 %	23.05 % \$	2,849	3.38 % \$	11	3.54 %
Normal Risk	22	0.16 to 0.41	28,863		n/a	n/a	0.25	25.43	3,413	11.82	18	12.60
M. F. Did	23	0.42 to 1.10	13,774		n/a	n/a	0.64	24.48 25.54	3,112	22.59	22	24.59
Medium Risk	24 25	1.11 to 2.93 2.94 to 4.74	4,650 851		n/a n/a	n/a n/a	1.70 3.68	25.54 25.20	2,077 600	44.67 70.51	20 8	50.04 82.26
High Risk	26	4.75 to 7.59	523		n/a	n/a	5.99	21.85	412	78.78	7	95.51
riigirriioik	27	7.60 to 18.20	717		n/a	n/a	11.35	20.31	683	95.26	16	123.15
	28	18.21 to 99.99	380		n/a	n/a	37.91	16.66	333	87.63	23	163.29
Default	29	100.00	186		n/a	n/a	100.00	19.28	324	174.19	10	241.40
Total	30	\$	134,302		n/a	n/a	0.57 %	23.77 % \$	13,803	10.28 % \$	135	11.53 %
U.S. Retail Uninsured Drawn and Undrawn												
Low Risk	31	0.00 to 0.15 % \$	13,851	\$	9,984	80.41 %	0.07 %	31.17 % \$	615	4.44 % \$	2	4.62 %
Normal Risk	32	0.16 to 0.41	15,043		976	97.16	0.26	19.71	1,435	9.54	8	10.20
	33	0.42 to 1.10	10,569		642	96.93	0.66	23.65	2,363	22.36	17	24.37
Medium Risk	34	1.11 to 2.93	5,090		701	93.78	1.76	30.49	2,812	55.25	28	62.12
	35	2.94 to 4.74	1,315		128	95.30	3.68	34.65	1,273	96.81	17	112.97
High Risk	36	4.75 to 7.59	693		62	95.15	5.91	36.01	895	129.15	15	156.20
	37	7.60 to 18.20	750		103	93.24	11.47	36.67	1,307	174.27	32	227.60
D. C. II	38	18.21 to 99.99	306		26	95.87	34.50	38.95	634	207.19	41	374.67
Default	39	100.00	881	•	12.622	100.00	100.00	32.00 26.22 % \$	516	58.57	241 401	400.51
Total	40	\$	48,498	\$	12,622	91.24 %	2.82 %	20.22 % \$	11,850	24.43 % \$	401	34.77 %

<sup>1</sup> Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.
2 Includes Canadian residential mortgages and home equity lines of credit.
3 Includes CMHC insured exposures and exposures insured by corporate entities. CMHC insured exposures are already included in the Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign on pages 70 to 71.

# Retail Advanced IRB Exposures – By Obligor Grade – Residential Secured (Continued)<sup>1</sup>

(\$ millions, except as noted)	LINE				• •		2017		•		• •	
As at	#						Q1					
	ľ						* * *					
					Notional of undrawn	Average	Average	Average		Average risk		EL adjusted average
Insured Drawn and Undrawn <sup>2,3</sup>		PD range	EAD		commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	1	0.00 to 0.15 % \$	121,111	\$	21,822	91.07 %	- %	27.44 % \$	110	0.09 % \$		0.09 %
Normal Risk	2	0.16 to 0.41	6,550			100.00	0.25	9.51	296	4.52	2	4.90
	3	0.42 to 1.10	3,136		_	100.00	0.62	9.58	271	8.64	2	9.44
Medium Risk	4	1.11 to 2.93	983		_	100.00	1.72	9.66	167	16.99	2	19.53
	5	2.94 to 4.74	222			100.00	3.69	9.69	60	27.03	11	32.66
High Risk	6	4.75 to 7.59	148		-	100.00	6.12	9.14	49	33.11	1	41.55
	7	7.60 to 18.20	279		-	100.00	10.29	8.39	107	38.35	2	47.31
	8	18.21 to 99.99	99		<del>-</del>	100.00	32.35	9.04 8.24	49 38	49.49	3	87.37
Default	9	100.00	37 132,565	•	21,822	100.00 91.78 %	100.00 0.13 %	25.89 % \$	1,147	102.70 0.87 % \$	13	102.70 0.99 %
Total	10	\$	132,565	\$	21,822	91.78 %	0.13 %	25.89 % \$	1,147	0.87 % \$	13	0.99 %
Uninsured Undrawn <sup>2</sup>												
Low Risk	11	0.00 to 0.15 % \$	25,031	\$	47,947	52.21 %	0.03 %	23.18 % \$	581	2.32 % \$	2	2.42 %
Normal Risk	12	0.16 to 0.41	2,282		3,491	65.38	0.23	38.53	390	17.09	2	18.19
	13	0.42 to 1.10	353		560	62.98	0.60	32.28	101	28.61	1	32.15
Medium Risk	14	1.11 to 2.93	68		89	76.77	1.63	31.60	37	54.41	- ' '	54.41
	15	2.94 to 4.74	9		12	79.40	3.66	24.76	7	77.78	-	77.78
High Risk	16	4.75 to 7.59	4		4	94.95	5.84	25.79	4	100.00	_	100.00
	17	7.60 to 18.20	3		3	91.51	11.10	21.83	3	100.00	-	100.00
Defend	18 19	18.21 to 99.99 100.00	2		2	86.71	36.47	14.51	1	50.00		50.00
Default <b>Total</b>	20	\$	27,752	\$	52,108	53.26 %	0.07 %	24.58 % \$	1,124	4.05 % \$	5	4.28 %
Total	20	Ψ	21,132	Ψ	32,100	33.20 //	0.07 /6	24.30 // φ	1,124	4.03 /0 \$		4.20 //
Uninsured Drawn <sup>2</sup>												
Low Risk	21	0.00 to 0.15 % \$	81,591		n/a	n/a	0.06 %	24.68 % \$	2,912	3.57 % \$	11	3.74 %
Normal Risk	22	0.16 to 0.41	27,640		n/a	n/a	0.25	27.45	3,507	12.69	19	13.55
	23	0.42 to 1.10	12,740		n/a	n/a	0.64	25.94	3,046	23.91	21	25.97
Medium Risk	24	1.11 to 2.93	4,371		n/a	n/a	1.69	27.24	2,078	47.54	20	53.26
	25	2.94 to 4.74	826		n/a	n/a	3.70	26.44	612	74.09	8	86.20
High Risk	26 27	4.75 to 7.59 7.60 to 18.20	522 656		n/a n/a	n/a n/a	6.00 11.32	24.13 21.36	454 657	86.97 100.15	8 16	106.13 130.64
	28	18.21 to 99.99	381		n/a	n/a	37.64	18.15	365	95.80	25	177.82
Default	29	100.00	193		n/a	n/a	100.00	20.65	377	195.34	10	260.10
Total	30	\$	128,920		n/a	n/a	0.57 %	25.45 % \$	14,008	10.87 % \$	138	12.20 %
		* * * * * * * * * * * * * * * * * * * *			* *	• • •	• • •	* * * * *		* * * *	• •	
U.S. Retail Uninsured Drawn and												
Undrawn	24	0.00 to 0.15 % \$	13,039	\$	9,299	80.28 %	0.07 %	30.99 % \$	579	4.44 % \$	2	4.63 %
Low Risk Normal Risk	31 32	0.16 to 0.41	14,366	φ	925	97.21	0.07 %	20.10	1,399	9.74	8	10.43
Normal Risk	33	0.42 to 1.10	10,079		572	97.15	0.66	23.86	2,278	22.60	16	24.59
Medium Risk	34	1.11 to 2.93	4,887		652	93.76	1.76	30.16	2,663	54.49	26	61.14
Wedam Nok	35	2.94 to 4.74	1,195		112	95.38	3.66	34.96	1,165	97.49	15	113.18
High Risk	36	4.75 to 7.59	676		60	95.53	5.92	36.13	878	129.88	15	157.62
,	37	7.60 to 18.20	756		109	92.34	11.40	38.12	1,367	180.82	33	235.38
	38	18.21 to 99.99	317		26	95.73	34.92	40.23	686	216.40	45	393.85
Default	39	100.00	837			100.00	100.00	32.36	496	59.26	231	404.24
Total	40	\$	46,152	\$	11,755	91.29 %	2.85 %	26.34 % \$	11,511	24.94 % \$	391	35.53 %

<sup>1</sup> Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.
2 Includes Canadian residential mortgages and home equity lines of credit.
3 Includes CMHC insured exposures and exposures insured by corporate entities. CMHC insured exposures are already included in the Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign on pages 70 to 71.

# Retail Advanced IRB Exposures – By Obligor Grade – Residential Secured (Continued)<sup>1</sup>

(\$ millions, except as noted)	LINE		*	• •		2016		•		• •	
As at	#			 		Q4					
	r			 Notional					Average		EL adjusted
				of undrawn	Average	Average	Average		risk		average
Insured Drawn and Undrawn <sup>2,3</sup>		PD range	EAD	commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	1	0.00 to 0.15 % \$	124,428	\$ 21,834	91.22 %	- %	27.70 % \$	114	0.09 % \$	-	0.09 %
Normal Risk	2	0.16 to 0.41	6,652	 -	100.00	0.26	9.52	303	4.56	2	4.93
	3	0.42 to 1.10	3,334	_	100.00	0.63	9.60	290	8.70	2	9.45
Medium Risk	4	1.11 to 2.93	1,008	-	100.00	1.73	9.65	173	17.16	2	19.64
	5	2.94 to 4.74	229	 - , ,	100.00	3.68	9.79	63	27.51	1	32.97
High Risk	6	4.75 to 7.59	143	-	100.00	5.98	9.50	49	34.27	1	43.01
	7	7.60 to 18.20	289	-	100.00	10.32	8.34	110	38.06	3	51.04
	8	18.21 to 99.99	93	 	100.00	31.66	8.94	46	49.46	3	89.78
Default	9	100.00	43	 -	100.00	100.00	8.24	44	102.33	-	102.33
Total	10	\$	136,219	\$ 21,834	91.92 %	0.13 %	26.12 % \$	1,192	0.88 % \$	14	1.00 %
Uninsured Undrawn <sup>2</sup>											
Low Risk	11	0.00 to 0.15 % \$	24,644	\$ 47,038	52.39 %	0.03 %	23.37 % \$	580	2.35 % \$	2	2.45 %
Normal Risk	12	0.16 to 0.41	1,798	 2,874	62.57	0.24	35.48	289	16.07	2	17.46
TO MAINTEN	13	0.42 to 1.10	358	573	62.45	0.60	32.37	102	28.49	1	31.98
Medium Risk	14	1.11 to 2.93	61	 81	75.82	1.63	32.77	34	55.74	_	55.74
	15	2.94 to 4.74	8	8	100.00	3.53	63.48	13	162.50	_	162.50
High Risk	16	4.75 to 7.59	3	3	93.48	5.88	23.60	3	100.00	-	100.00
	17	7.60 to 18.20	3	3	84.67	11.03	21.23	3	100.00	-	100.00
	18	18.21 to 99.99	1	1	94.33	29.06	17.54	1	100.00	-	100.00
Default	19	100.00		-	-	-	-	_	-	_	-
Total	20	\$	26,876	\$ 50,581	53.14 %	0.06 %	24.33 % \$	1,025	3.81 % \$	5	4.05 %
Uninsured Drawn <sup>2</sup>											
Low Risk	21	0.00 to 0.15 % \$	77,377	 n/a	n/a	0.06 %	25.00 % \$	2,846	3.68 % \$	11	3.86 %
Normal Risk	22	0.16 to 0.41	26,829	 n/a	n/a	0.25	27.07	3,379	12.59	18	13.43
Tionnal Tion	23	0.42 to 1.10	13,200	n/a	n/a	0.64	26.41	3,217	24.37	22	26.45
Medium Risk	24	1.11 to 2.93	4,386	n/a	n/a	1.69	27.81	2,127	48.50	21	54.48
	25	2.94 to 4.74	831	n/a	n/a	3.69	26.56	618	74.37	8	86.40
High Risk	26	4.75 to 7.59	512	n/a	n/a	5.97	24.24	447	87.30	7	104.39
	27	7.60 to 18.20	662	n/a	n/a	11.20	21.60	667	100.76	16	130.97
	28	18.21 to 99.99	366	 n/a	n/a	37.44	18.26	355	96.99	24	178.96
Default	29	100.00	208	 n/a	n/a	100.00	20.00	392	188.46	10	248.56
Total	30	\$	124,371	 n/a	n/a	0.60 %	25.66 % \$	14,048	11.30 % \$	137	12.67 %
U.S. Retail Uninsured Drawn and Undrawn	ı										
Low Risk	31	0.00 to 0.15 % \$	13,126	\$ 9,319	80.27 %	0.07 %	31.44 % \$	592	4.51 % \$	2	4.70 %
Normal Risk	32	0.16 to 0.41	14,716	 941	97.23	0.26	21.09	1,509	10.25	9	11.02
Normal Nor	33	0.42 to 1.10	10,383	608	97.03	0.66	25.46	2,499	24.07	18	26.24
Medium Risk	34	1.11 to 2.93	5,233	 698	93.82	1.75	31.27	2,952	56.41	29	63.34
	35	2.94 to 4.74	1,283	112	95.66	3.67	36.44	1,304	101.64	17	118.20
High Risk	36	4.75 to 7.59	718	 63	95.17	5.92	37.16	958	133.43	16	161.28
	37	7.60 to 18.20	768	114	92.52	11.32	39.13	1,422	185.16	34	240.49
	38	18.21 to 99.99	331	 21	96.80	34.30	39.32	701	211.78	45	381.72
Default	39	100.00	854	 	100.00	100.00	33.78	528	61.83	246	421.90
Total	40	\$	47,412	\$ 11,876	91.37 %	2.85 %	27.34 % \$	12,465	26.29 % \$	416	37.26 %

<sup>1</sup> Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.
2 Includes Canadian residential mortgages and home equity lines of credit.
3 Includes CMHC insured exposures and exposures insured by corporate entities. CMHC insured exposures are already included in the Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign on pages 70 to 71.

### Retail Advanced IRB Exposures - By Obligor Grade - Residential Secured (Continued)<sup>1</sup>

(\$ millions, except as noted)	LINE	•		•	•			2016					
As at	#							Q3					
		•				Notional of undrawn	Average	Average	Average		Average risk	· ·	EL adjusted average
Insured Drawn and Undrawn <sup>2,3</sup>		PD range		EAD		commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	1	0.00 to 0.15		6,868	\$	22,120	91.28 %	- %	28.01 % \$	107	0.08 % \$	- , ,	0.08 %
Normal Risk	2	0.16 to 0.41		7,015		-	100.00	0.26	9.50	320	4.56	2	4.92
	3	0.42 to 1.10		3,491		-	100.00	0.63	9.57	304	8.71	2	9.42
Medium Risk	4	1.11 to 2.93		1,048		_	100.00	1.72	9.69	179	17.08	2	19.47
	5	2.94 to 4.74		251			100.00	3.67	9.85	69	27.49	1	32.47
High Risk	6	4.75 to 7.59		147		-	100.00	5.92	9.71	51	34.69	1	43.20
	7	7.60 to 18.20 18.21 to 99.99		283 102		-	100.00 100.00	10.54 32.75	8.39 8.93	109 50	38.52 49.02	3 3	51.77 85.78
D ( #	8	100.00		40		<del>-</del>	100.00	100.00	8.26	41	102.50	<u> </u>	102.50
Default	9	100.00	\$ 13		•	22.420	92.00 %	0.13 %	26.36 % \$		0.88 % \$	14	
Total	10		\$ 13	9,245	\$	22,120	92.00 %	0.13 %	20.30 % \$	1,230	U.00 % \$	14	1.01 %
Uninsured Undrawn <sup>2</sup>													
Low Risk	11	0.00 to 0.15	% \$ 2	2,991	\$	44,812	51.31 %	0.03 %	23.33 % \$	535	2.33 % \$	2	2.44 %
Normal Risk	12	0.16 to 0.41		2,334		3,558	65.59	0.24	38.65	410	17.57	2	18.64
Tromai Frion	13	0.42 to 1.10		340		545	62.36	0.59	31.84	94	27.65	1	31.32
Medium Risk	14	1.11 to 2.93		63		78	81.28	1.65	37.25	40	63.49	_	63.49
	15	2.94 to 4.74		8		8	100.00	3.60	23.09	5	62.50	_	62.50
High Risk	16	4.75 to 7.59		5		6	77.23	5.79	21.89	3	60.00	_	60.00
-	17	7.60 to 18.20		2		2	100.00	11.51	23.20	2	100.00	_	100.00
	18	18.21 to 99.99		1		1	92.11	44.67	16.01	1	100.00	-	100.00
Default	19	100.00		_		_	-	-	-	-	-	-	_
Total	20		\$ 2	5,744	\$	49,010	52.53 %	0.07 %	24.87 % \$	1,090	4.23 % \$	5	4.48 %
Uninsured Drawn <sup>2</sup>		0.001.015	0/ 0 7	0.454			<del> </del>	0.00 0/	05.00 0/ 0	0.700	0.70 0/ 0	40	0.00 0/
Low Risk	21	0.00 to 0.15		2,451		n/a	n/a	0.06 %	25.38 % \$	2,700	3.73 % \$	10	3.90 %
Normal Risk	22	0.16 to 0.41		6,693		n/a n/a	n/a	0.25	28.11	3,488	13.07 24.27	18	13.91 26.41
Madisus Diels	23	0.42 to 1.10 1.11 to 2.93		2,796 4,221		n/a n/a	n/a	0.64 1.69	26.31 28.06	3,105 2,064	48.90	22	54.82
Medium Risk	24 25	2.94 to 4.74		835		n/a	n/a n/a	3.68	26.85	627	46.90 75.09	8	54.62 87.07
High Risk	26	4.75 to 7.59		487		n/a	n/a	5.97	24.53	431	88.50	7	106.47
HIGH KISK	27	7.60 to 18.20		689		n/a	n/a	11.27	22.32	721	104.64	17	135.49
	28	18.21 to 99.99		401		n/a	n/a	37.65	18.55	395	98.50	27	182.67
Default	29	100.00		205		n/a	n/a	100.00	20.53	396	193.17	10	254.15
Total	30		\$ 11	8,778		n/a	n/a	0.63 %	26.15 % \$	13,927	11.73 % \$	139	13.19 %
		•	· · · · · ·				•						
U.S. Retail Uninsured Drawn and Undrawn													
Low Risk	31	0.00 to 0.15	% \$ 1	2,407	\$	8,881	80.11 %	0.07 %	32.22 % \$	574	4.62 % \$	2	4.84 %
Normal Risk	32	0.16 to 0.41	1	4,065		874	97.23	0.26	21.86	1,498	10.65	8	11.37
	33	0.42 to 1.10	1	0,238		575	97.11	0.66	26.48	2,565	25.06	18	27.27
Medium Risk	34	1.11 to 2.93		5,143		660	94.01	1.75	32.40	3,010	58.53	30	65.77
	35	2.94 to 4.74		1,294		115	95.88	3.68	37.12	1,343	103.78	18	120.86
High Risk	36	4.75 to 7.59		732		63	95.60	5.95	38.40	1,012	138.21	17	166.82
	37	7.60 to 18.20		774		103	92.94	11.48	40.56	1,488	192.30	36	250.71
	38	18.21 to 99.99		327		20	97.00	35.93	41.13	717	219.38	47	399.30
Default	39	100.00		830			100.00	100.00	35.68	530	63.87	254	446.20
Total	40	•	\$ 4	5,810	\$	11,291	91.47 %	2.90 %	28.28 % \$	12,737	27.80 % \$	430	39.53 %

<sup>1</sup> Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.
2 Includes Canadian residential mortgages and home equity lines of credit.
3 Includes CMHC insured exposures and exposures insured by corporate entities. CMHC insured exposures are already included in the Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign on pages 70 to 71.

### Retail Advanced IRB Exposures – By Obligor Grade – Residential Secured (Continued)<sup>1,2</sup>

(\$ millions, except as noted)	LINE		•		<del></del>	• • • • •	2016 Q2		·		, ,	
As at	#	· · · · · · · · · · · · · · · · · · ·			<del></del>	<del> </del>	Q2	<del> </del>				
	ı				Notional	<del> </del>		<del></del>		Average		EL adjusted
					of undrawn	Average	Average	Average		risk		average
Insured Drawn and Undrawn <sup>3</sup>		PD range	EAD		commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	1	0.00 to 0.15 % \$	129,044	\$	23,077	91.11 %	- %	28.34 % \$	105	0.08 % \$	-	0.08 %
Normal Risk	2	0.16 to 0.41	7,069			100.00	0.25	9.52	321	4.54	2	4.89
	3	0.42 to 1.10	3,844		_	100.00	0.62	9.63	332	8.64	2	9.29
Medium Risk	4	1.11 to 2.93	1,147		_	100.00	1.72	9.64	195	17.00	2	19.18
	5	2.94 to 4.74	259		-	100.00	3.70	9.76	71	27.41	1	32.24
High Risk	6	4.75 to 7.59	175			100.00	5.97	9.61	61	34.86	1	42.00
	7	7.60 to 18.20	262		-	100.00	10.28	8.42	100	38.17	2	47.71
	8	18.21 to 99.99	107		-	100.00	31.88	8.88	52	48.60	3	83.64
Default	9	100.00	38			100.00	100.00	8.27	40	105.26	-	105.26
Total	10	\$	141,945	\$	23,077	91.85 %	0.13 %	26.63 % \$	1,277	0.90 % \$	13	1.01 %
							• •					
Uninsured Undrawn		0.001.045.0/.0	00.010		10.015	54.00 0/	224 0/	0101 0/ 0	0.10	0.70 0/ 0		2.02.0/
Low Risk	11	0.00 to 0.15 % \$	23,813	\$	43,915	54.23 %	0.04 %	24.24 % \$	642	2.70 % \$	2	2.80 %
Normal Risk	12	0.16 to 0.41 0.42 to 1.10	1,479 344		2,457 551	60.20 62.39	0.24 0.60	35.46 32.28	236 99	15.96 28.78	1 1	16.80 32.41
M 15 - 15 - 1	13		77	· · · ·	79							
Medium Risk	14	1.11 to 2.93	9		79 9	98.22	1.55	47.10	59	76.62 122.22	1	92.86 122.22
11: 1 B: 1	15	2.94 to 4.74			4	100.00 86.62	3.70	41.78 24.10	11			
High Risk	16	4.75 to 7.59 7.60 to 18.20	4 2		2	96.55	6.01 10.93	24.10 22.63	3 2	75.00 100.00	_	75.00 100.00
	17 18	18.21 to 99.99	1		1	96.55 84.72	50.52	12.89	1	100.00		100.00
Defeat	19	10.21 10 99.99	<u> </u>						'			
Default		100.00	25,729	•	47,018	54.72 %	0.07 %	25.07 % \$	1,053	4.09 % \$	5	4.34 %
Total	20	\$	25,729	\$	47,018	54.72 %	0.07 %	25.07 % \$	1,053	4.09 % \$	5	4.34 %
Uninsured Drawn												
Low Risk	21	0.00 to 0.15 % \$	67,808		n/a	n/a	0.06 %	25.87 % \$	2,622	3.87 % \$	10	4.05 %
Normal Risk	22	0.16 to 0.41	24,888		n/a	n/a	0.25	27.40	3,182	12.79	17	13.64
	23	0.42 to 1.10	13,112		n/a	n/a	0.64	26.97	3,270	24.94	23	27.13
Medium Risk	24	1.11 to 2.93	4,338		n/a	n/a	1.68	28.60	2,158	49.75	21	55.80
	25	2.94 to 4.74	846		n/a	n/a	3.68	27.56	651	76.95	9	90.25
High Risk	26	4.75 to 7.59	490		n/a	n/a	5.96	26.14	461	94.08	8	114.49
	27	7.60 to 18.20	665		n/a	n/a	11.36	22.43	700	105.26	17	137.22
	28	18.21 to 99.99	405		n/a	n/a	35.31	18.60	405	100.00	26	180.25
Default	29	100.00	226		n/a	n/a	100.00	20.70	440	194.69	12	261.06
Total	30	\$	112,778		n/a	n/a	0.68 %	26.40 % \$	13,889	12.32 % \$	143	13.90 %

<sup>1</sup> Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

<sup>&</sup>lt;sup>2</sup> Includes Canadian residential mortgages and home equity lines of credit.

Includes CMHC insured exposures and exposures insured by corporate entities. CMHC insured exposures are already included in the Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign on pages 70 to 71.

### Retail Advanced IRB Exposures – By Obligor Grade – Residential Secured (Continued)<sup>1,2</sup>

(\$ millions, except as noted)	LINE	÷	•	 • •	• • • •	2016		•			
As at	#					Q1					
	-	•		 							
	Ī	•		Notional				•	Average		EL adjusted
				of undrawn	Average	Average	Average		risk		average
Insured Drawn and Undrawn <sup>3</sup>		PD range	EAD	commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	1	0.00 to 0.15 %	\$ 133,126	\$ 23,219	91.27 %	- %	28.33 % \$	110	0.08 % \$	-	0.08 %
Normal Risk	2	0.16 to 0.41	7,045	- ' '	100.00	0.26	9.47	323	4.58	2	4.94
	3	0.42 to 1.10	3,953	_	100.00	0.63	9.55	343	8.68	2	9.31
Medium Risk	4	1.11 to 2.93	1,205	-	100.00	1.72	9.65	205	17.01	2	19.09
	5	2.94 to 4.74	276		100.00	3.70	9.73	75	27.17	1	31.70
High Risk	6	4.75 to 7.59	211	-	100.00	6.08	9.24	71	33.65	1	39.57
	7	7.60 to 18.20	259	-	100.00	10.59	8.44	101	39.00	2	48.65
	8	18.21 to 99.99	105	 	100.00	32.26	8.90	51	48.57	3	84.29
Default	9	100.00	34		100.00	100.00	8.11	34	100.00	_	100.00
Total	10		\$ 146,214	\$ 23,219	91.99 %	0.13 %	26.64 % \$	1,313	0.90 % \$	13	1.01 %
		•						·			
Uninsured Undrawn											
Low Risk	11	0.00 to 0.15 %		\$ 42,321	52.62 %	0.03 %	23.74 % \$	528	2.37 % \$	2	2.48 %
Normal Risk	12	0.16 to 0.41	1,825	2,892	63.11	0.23	36.67	290	15.89	1	16.58
	13	0.42 to 1.10	335	 545	61.52	0.61	31.41	93	27.76	1	31.49
Medium Risk	14	1.11 to 2.93	67	89	75.59	1.62	30.64	35	52.24	-	52.24
	15	2.94 to 4.74	8	9	97.14	3.67	30.01	7	87.50		87.50
High Risk	16	4.75 to 7.59	6	7	77.22	5.79	22.51	4	66.67	-	66.67
	17	7.60 to 18.20	3	4	96.44	11.28	21.01	3	100.00	-	100.00
	18	18.21 to 99.99	_	_	99.65	29.45	22.61	_	_	-	-
Default	19	100.00	-	-	-	-	-	_		-	-
Total	20		\$ 24,513	\$ 45,867	53.45 %	0.06 %	24.83 % \$	960	3.92 % \$	4	4.12 %
Uninsured Drawn				 <del> </del>		<del> </del>			<del> </del>		
Low Risk	21	0.00 to 0.15 %		 n/a	n/a	0.06 %	25.76 % \$	2,472	3.83 % \$	9	4.00 %
Normal Risk	22	0.16 to 0.41	24,041	n/a	n/a	0.25	27.66	3,081	12.82	16	13.65
	23	0.42 to 1.10	12,461	n/a	n/a	0.64	26.59	3,067	24.61	21	26.72
Medium Risk	24	1.11 to 2.93	4,241	n/a	n/a	1.69	28.21	2,090	49.28	20	55.18
	25	2.94 to 4.74	820	 n/a	n/a	3.67	27.62	633	77.20	8	89.39
High Risk	26	4.75 to 7.59	507	n/a	n/a	5.98	26.14	477	94.08	8	113.81
	27	7.60 to 18.20	649	n/a	n/a	11.41	21.73	664	102.31	16	133.13
	28	18.21 to 99.99	382	 n/a	n/a	36.10	18.65	383	100.26	25	182.07
Default	29	100.00	218	 n/a	n/a	100.00	20.42	423	194.04	11	257.11
Total	30		\$ 107,861	n/a	n/a	0.69 %	26.33 % \$	13,290	12.32 % \$	134	13.87 %

Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

<sup>&</sup>lt;sup>2</sup> Includes Canadian residential mortgages and home equity lines of credit.

Includes CMHC insured exposures and exposures insured by corporate entities. CMHC insured exposures are already included in the Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign on pages 70 to 71.

#### Retail Advanced IRB Exposures - By Obligor Grade - Residential Secured (Continued)<sup>1,2</sup>

2015 (\$ millions, except as noted) LINE Q4 Notional Average EL adjusted of undrawn Average Average Average risk average Insured Drawn and Undrawn<sup>3</sup> PD range EAD commitments EAD PD LGD RWA weighting EL risk weight 91.39 % 28.64 0.08 % Low Risk 0.00 to 0.15 % \$ 135,556 23,117 % \$ 102 0.08 % \$ \$ % Normal Risk 2 0.16 to 0.41 7,002 100.00 0.26 9.52 321 4.58 2 4.94 3 2 0.42 to 1.10 3.838 100.00 0.63 9.63 338 8.81 9.46 4 1.11 to 2.93 1,219 100.00 1.72 9.72 209 17.15 2 19.20 Medium Risk 282 77 27.30 5 2.94 to 4.74 100.00 3.70 9.81 1 31.74 High Risk 6 4.75 to 7.59 208 100.00 6.12 9.10 69 33.17 1 39.18 7 7.60 to 18.20 259 100.00 10.77 8.61 103 39.77 2 49.42 8 18.21 to 99.99 111 100.00 31.82 8.94 55 49.55 3 83.33 8.17 Default 9 100.00 34 100.00 100.00 35 102.94 102.94 10 0.99 % 148,509 23,117 92.08 % 0.13 % 26.98 % \$ 1,309 0.88 % \$ Total \$ 13 Uninsured Undrawn Low Risk 11 0.00 to 0.15 % \$ 21,948 \$ 41,863 52.43 % 0.03 % 23.81 % \$ 523 2.38 % \$ 2 2.50 % 12 2,530 35.50 249 Normal Risk 0.16 to 0.41 1,537 60.76 0.24 16.20 17.01 13 0.42 to 1.10 350 558 62.80 0.61 33.40 103 29.43 33.00 Medium Risk 14 1.11 to 2.93 70 94 74.67 1.64 32.66 39 55.71 55.71 15 10 10 94.30 3.65 28.93 8 80.00 80.00 2.94 to 4.74 High Risk 16 4.75 to 7.59 4 5 85.94 5.76 25.75 4 100.00 100.00 17 21.90 7.60 to 18.20 4 4 91.84 11.46 4 100.00 100.00 18 18.21 to 99.99 100.00 28.56 21.13 100.00 100.00 Default 19 100.00 20 \$ 23,924 \$ 45,065 53.09 % 0.07 % 24.73 % \$ 931 3.89 % \$ 4.10 % Total 4 Uninsured Drawn Low Risk 21 0.00 to 0.15 % \$ 60,333 n/a 0.06 % 25.95 % \$ 2.378 3.94 % \$ 9 4.13 % n/a 22 0.16 to 0.41 23,847 0.25 27.77 3,098 12.99 16 13.83 Normal Risk n/a n/a 23 0.42 to 1.10 12,861 n/a n/a 0.64 27.19 3,237 25.17 23 27.40 Medium Risk 24 1.11 to 2.93 4.404 n/a 1.69 28.64 2.202 50.00 21 55.96 n/a 25 840 660 2.94 to 4.74 n/a n/a 3.72 27.95 78.57 9 91.96 High Risk 26 4.75 to 7.59 548 26.48 526 95.99 9 116.51 n/a n/a 6.06

n/a

n/a

n/a

n/a

11.46

35.21

100.00

0.72 %

22.63

19.08

20.52

26.59 % \$

691

396

441

13,629

106.47

102.86

195.13

13.09 % \$

17

25

11

140

139.21

184.03

255.97

14.77 %

100.00

\$

649

385

226

104,093

7.60 to 18.20

18.21 to 99.99

Default

Total

27

28

29

30

n/a

n/a

n/a

n/a

<sup>1</sup> Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

<sup>&</sup>lt;sup>2</sup> Includes Canadian residential mortgages and home equity lines of credit.

<sup>&</sup>lt;sup>3</sup> Includes CMHC insured exposures and exposures insured by corporate entities. CMHC insured exposures are already included in the Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign on pages 70 to 71.

### Retail Advanced IRB Exposures – By Obligor Grade – Residential Secured (Continued)<sup>1,2</sup>

(\$ millions, except as noted) As at	LINE #				· · ·		2015 Q3					
	1	<del> </del>			Notional			<del> </del>	*	Average		EL adjusted
					of undrawn	Average	Average	Average		risk		average
Insured Drawn and Undrawn <sup>3</sup>		PD range	EAD		commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	1	0.00 to 0.15 % \$	138,105	\$	23,337	91.50 %	- %	28.61 % \$	119	0.09 % \$		0.09 %
Normal Risk	2	0.16 to 0.41	4,780			100.00	0.25	9.35	212	4.44	1	4.70
	3	0.42 to 1.10	3,388		_	100.00	0.67	9.48	305	9.00	2	9.74
Medium Risk	4	1.11 to 2.93	1,713		_	100.00	1.74	9.73	296	17.28	3	19.47
	5	2.94 to 4.74	406		_	100.00	3.70	9.80	111	27.34	1	30.42
High Risk	6	4.75 to 7.59	248			100.00	5.91	9.66	86	34.68	1	39.72
_	7	7.60 to 18.20	273		_	100.00	11.68	9.15	119	43.59	3	57.33
	8	18.21 to 99.99	178		_	100.00	31.66	9.00	89	50.00	5	85.11
Default	9	100.00	41		- ' '	100.00	100.00	8.76	45	109.76	-	109.76
Total	10	\$	149,132	\$	23,337	92.08 %	0.15 %	27.19 % \$	1,382	0.93 % \$	16	1.06 %
Uninsured Undrawn												
Low Risk	11	0.00 to 0.15 % \$	21,128	\$	40,118	52.67 %	0.03 %	23.17 % \$	484	2.29 % \$	2	2.41 %
Normal Risk	12	0.16 to 0.41	1,616	φ	2,608	61.96	0.03 %	36.21	279	17.26	1	18.04
Normal Risk	13	0.42 to 1.10	284		470	60.40	0.60	30.93	279 77	27.11	1	31.51
Medium Risk	14	1.11 to 2.93	56		73	76.98	1.66	31.20	30	53.57	<u> </u>	53.57
Medium Risk	15	2.94 to 4.74	9		11	84.52	3.63	28.51	7	77.78	_	77.78
High Risk	16	4.75 to 7.59	5		8	66.77	5.82	22.16		80.00		80.00
riigirixisk	17	7.60 to 18.20	3		3	100.00	10.89	23.01	4	133.33	_	133.33
	18	18.21 to 99.99	2		2	91.72	32.53	18.00	2	100.00	_	100.00
Default	19	100.00						_			_	-
Total	20	\$	23,103	\$	43,293	53.37 %	0.07 %	24.20 % \$	887	3.84 % \$	4	4.06 %
Uninsured Drawn		·		<u> </u>	,	3333. 73					<u> </u>	
Low Risk	21	0.00 to 0.15 % \$	54,223		n/a	n/a	0.06 %	26.09 % \$	2,055	3.79 % \$	8	3.97 %
Normal Risk	22	0.16 to 0.41	21,570		n/a	n/a	0.25	28.12	2,892	13.41	15	14.28
	23	0.42 to 1.10	13,332		n/a	n/a	0.65	26.75	3,337	25.03	23	27.19
Medium Risk	24	1.11 to 2.93	5,293		n/a	n/a	1.69	28.57	2,639	49.86	26	56.00
	25	2.94 to 4.74	963		n/a	n/a	3.69	28.21	760	78.92	10	91.90
High Risk	26	4.75 to 7.59	584		n/a	n/a	5.97	25.94	546	93.49	9	112.76
	27	7.60 to 18.20	666		n/a	n/a	11.62	23.07	728	109.31	18	143.09
	28	18.21 to 99.99	399		n/a	n/a	34.71	19.52	422	105.76	26	187.22
Default	29	100.00	252		n/a	n/a	100.00	21.21	512	203.17	13	267.66
Total	30	\$	97,282		n/a	n/a	0.82 %	26.73 % \$	13,891	14.28 % \$	148	16.18 %

<sup>1</sup> Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

<sup>&</sup>lt;sup>2</sup> Includes Canadian residential mortgages and home equity lines of credit.

<sup>&</sup>lt;sup>3</sup> Includes CMHC insured exposures and exposures insured by corporate entities. CMHC insured exposures are already included in the Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign on pages 70 to 71.

### Retail Advanced IRB Exposures – By Obligor Grade – Qualifying Revolving Retail<sup>1</sup>

 (\$ millions, except as noted)
 LINE
 2017

 As at
 #
 Q3

				Notional undrawn Averag	e Average	Average		Average risk		EL adjusted average
		PD range	EAD	nitments EA	_	LGD		weighting	EL	risk weight
Low Risk	1	0.00 to 0.15 % \$	57,297	\$ 70,575 76.2	2 % 0.04	% 88.13	% \$ 1,426	2.49 % \$	21	2.95 %
Normal Risk	2	0.16 to 0.41	11,272	12,004 75.5	0.25	89.35	1,291	11.45	25	14.23
	3	0.42 to 1.10	9,437	8,135 76.4	0.70	88.93	2,410	25.54	58	33.22
Medium Risk	4	1.11 to 2.93	7,644	4,699 79.9	5 1.85	89.09	4,099	53.62	126	74.23
	5	2.94 to 4.74	3,051	1,340 85.3	3.71	88.97	2,705	88.66	101	130.04
High Risk	6	4.75 to 7.59	2,027	630 90.3	5.96	89.38	2,469	121.81	108	188.41
	7	7.60 to 18.20	1,838	387 94.9	5 11.13	87.78	3,157	171.76	179	293.50
	8	18.21 to 99.99	812	172 97.4	2 35.87	78.56	1,659	204.31	240	573.77
Default	9	100.00	126	- 100.0	100.00	73.48	14	11.11	92	923.81
Total	10	\$	93,504	\$ 97,942 77.4	5 % 1.19	% 88.38	% \$ 19,230	20.57 % \$	950	33.27 %

2017 Q2

			Notional					Average		EL adjusted
			of undrawn	Average	Average	Average		risk		average
	PD range	EAD	commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
11	0.00 to 0.15 % \$	56,158	\$ 69,658	76.20 %	0.04 %	88.24 % \$	1,428	2.54 % \$	21	3.01 %
12	0.16 to 0.41	11,804	12,751	75.53	0.25	89.45	1,353	11.46	27	14.32
13	0.42 to 1.10	9,813	8,647	76.45	0.70	88.97	2,508	25.56	61	33.33
14	1.11 to 2.93	7,839	 4,978	79.60	1.85	89.16	4,213	53.74	129	74.31
15	2.94 to 4.74	3,141	1,437	84.49	3.72	89.08	2,789	88.79	104	130.18
16	4.75 to 7.59	2,087	674	89.66	5.96	89.47	2,546	121.99	111	188.48
17	7.60 to 18.20	1,890	413	94.52	11.12	87.81	3,245	171.69	184	293.39
18	18.21 to 99.99	833	190	97.10	36.27	78.95	1,700	204.08	250	579.23
19	100.00	131	-	100.00	100.00	74.20	15	11.45	96	927.48
20	\$	93,696	\$ 98,748	77.41 %	1.23 %	88.49 % \$	19,797	21.13 % \$	983	34.24 %

2017 Q1

				Notional					Average		EL adjusted
				of undrawn	Average	Average	Average		risk		average
		PD range	EAD	commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	21	0.00 to 0.15 %	\$ 55,511	\$ 68,822	76.04 %	0.04 %	88.20 % \$	1,395	2.51 % \$	21	2.99 %
Normal Risk	22	0.16 to 0.41	11,301	12,185	75.54	0.25	89.38	1,294	11.45	25	14.22
	23	0.42 to 1.10	9,507	8,450	76.18	0.70	88.89	2,429	25.55	59	33.31
Medium Risk	24	1.11 to 2.93	7,633	4,933	79.53	1.85	89.05	4,096	53.66	126	74.30
	25	2.94 to 4.74	3,066	1,464	84.11	3.71	88.97	2,718	88.65	101	129.83
High Risk	26	4.75 to 7.59	2,045	691	90.06	5.96	89.29	2,490	121.76	109	188.39
	27	7.60 to 18.20	1,841	441	94.90	11.13	87.56	3,153	171.27	179	292.80
	28	18.21 to 99.99	818	193	96.90	36.03	78.70	1,677	205.01	243	576.34
Default	29	100.00	134	_	100.00	100.00	72.75	14	10.45	97	915.30
Total	30		\$ 91,856	\$ 97,179	77.27 %	1.23 %	88.42 % \$	19,266	20.97 % \$	960	34.04 %

<sup>&</sup>lt;sup>1</sup> Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

Low Risk Normal Risk Medium Risk High Risk

Default Total

### Retail Advanced IRB Exposures - By Obligor Grade - Qualifying Revolving Retail (Continued)<sup>1</sup>

LINE

(\$ millions, except as noted)

Low Risk Normal Risk Medium Risk High Risk

Default Total

As at	#				<u> </u>	Q4				<del></del>	<del> </del>
	Г			Notional					Average	* *	EL adjusted
				of undrawn	Average	Average	Average		risk		average
		PD range	EAD	commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	1	0.00 to 0.15 % \$	55,089 \$	67,684	76.32 %	0.04 %	88.24 % \$	1,382	2.51 % \$	21	2.99 %
Normal Risk	2	0.16 to 0.41	11,149	11,753	76.19	0.25	89.36	1,274	11.43	25	14.23
	3	0.42 to 1.10	9,222	7,889	76.85	0.70	88.85	2,353	25.52	57	33.24
Medium Risk	4	1.11 to 2.93	7,537	4,631	80.03	1.85	89.07	4,051	53.75	124	74.31
	5	2.94 to 4.74	3,011	1,327	84.82	3.71	89.02	2,670	88.67	100	130.19
High Risk	6	4.75 to 7.59	2,012	613	90.87	5.96	89.23	2,448	121.67	107	188.15
	7	7.60 to 18.20	1,818	378	95.36	11.13	87.53	3,114	171.29	177	292.99
	8	18.21 to 99.99	804	172	97.27	35.23	78.39	1,658	206.22	232	566.92
Default	9	100.00	136	-	100.00	100.00	73.88	15	11.03	99	920.96
Total	10	\$	90,778 \$	94,447	77.68 %	1.22 %	88.44 % \$	18,965	20.89 % \$	942	33.86 %

	 	 2016	<del> </del>	 	* + +	
		Q3				

Ī	•			Notional	•						Average			EL adjusted
				of undrawn	Average		Average	Average			risk			average
	PD range		EAD	commitments	EAD		PD	LGD		RWA	weighting		EL	risk weight
11	0.00 to 0.15	% \$	53,540	\$ 65,686	76.41	%	0.04	% 88.19	% \$	1,338	2.50	% \$	20	2.97 %
12	0.16 to 0.41		10,668	11,392	75.73		0.25	89.34		1,220	11.44		24	14.25
13	0.42 to 1.10		8,989	7,900	75.97		0.70	88.83		2,298	25.56		56	33.35
14	1.11 to 2.93		7,309	4,669	79.01		1.85	88.92		3,923	53.67		121	74.37
15	2.94 to 4.74		2,932	1,349	83.94		3.71	88.86		2,596	88.54		97	129.89
16	4.75 to 7.59		1,959	624	90.10		5.96	89.05		2,379	121.44		104	187.80
17	7.60 to 18.20		1,798	399	94.83		11.15	87.23		3,070	170.75		174	291.71
18	18.21 to 99.99		792	 186	97.18		34.28	77.82		1,642	207.32		220	554.55
19	100.00		128	-	100.00		100.00	74.10		14	10.94	•	93	919.14
20		\$	88,115	\$ 92,205	77.47	%	1.22	% 88.36	% \$	18,480	20.97	% \$	909	33.87 %

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				Notional					Average			EL adjusted
				of undrawn	Average	Average	Average		risk			average
		PD range	EAD	commitments	EAD	PD	LGD	RWA	weighting		EL	risk weight
Low Risk	21	0.00 to 0.15 %	\$ 45,100	\$ 51,542	80.60	% 0.04	% 87.25	% \$ 1,085	2.41	% \$	16	2.85 %
Normal Risk	22	0.16 to 0.41	8,715	7,592	85.84	0.25	87.13	973	11.16		19	13.89
	23	0.42 to 1.10	7,660	5,297	86.00	0.70	87.05	1,920	25.07		46	32.57
Medium Risk	24	1.11 to 2.93	5,954	2,663	90.42	1.84	86.78	3,101	52.08		95	72.03
	25	2.94 to 4.74	2,190	673	93.38	3.73	86.34	1,888	86.21		70	126.16
High Risk	26	4.75 to 7.59	1,557	356	95.22	5.98	86.53	1,840	118.18		81	183.20
	27	7.60 to 18.20	1,552	256	97.75	11.29	85.05	2,603	167.72		149	287.73
	28	18.21 to 99.99	692	162	99.06	28.23	74.66	1,478	213.58		145	475.51
Default	29	100.00	146		100.00	100.00	76.13	15	10.27		110	952.05
Total	30		\$ 73,566	\$ 68,541	83.59	% 1.22	% 86.95	% \$ 14,903	20.26	% \$	731	32.68 %

<sup>1</sup> Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

### Retail Advanced IRB Exposures - By Obligor Grade - Qualifying Revolving Retail (Continued)<sup>1</sup>

115

63,169

(\$ millions, except as noted) As at	LINE #					2016 Q1					
		PD range	EAD	 Notional of undrawn commitments	Average EAD	Average PD	Average LGD	RWA	Average risk weighting	EL	EL adjusted average risk weight
Low Risk	1	0.00 to 0.15 % \$	42,925	\$ 47,786	81.83 %	0.04 %	87.18 % \$	1,025	2.39 % \$	15	2.82 %
Normal Risk	2	0.16 to 0.41	8,396	 7,063	87.89	0.25	87.09	938	11.17	18	13.85
	3	0.42 to 1.10	7,348	4,768	89.94	0.70	86.96	1,837	25.00	44	32.49
Medium Risk	4	1.11 to 2.93	5,638	2,241	95.90	1.84	86.65	2,931	51.99	90	71.94
	5	2.94 to 4.74	2,070	571	98.16	3.72	86.23	1,782	86.09	66	125.94
High Risk	6	4.75 to 7.59	1,475	 319	98.85	5.97	86.44	1,740	117.97	76	182.37
	7	7.60 to 18.20	1,487	273	99.09	11.28	84.87	2,487	167.25	142	286.62
	8	18.21 to 99.99	649	170	98.95	28.13	74.29	1,379	212.48	135	472.50
Default	9	100.00	134		100.00	100.00	74.66	13	9.70	99	933.21
Total	10	\$	70,122	\$ 63,191	85.57 %	1.20 %	86.87 % \$	14,132	20.15 % \$	685	32.36 %

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				Notional					Average		EL adjusted
				of undrawn	Average	Average	Average		risk		average
		PD range	EAD	commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	11	0.00 to 0.15 %	\$ 38,770	\$ 43,021	82.68 %	0.04 %	86.95 % \$	920	2.37 % \$	14	2.82 %
Normal Risk	12	0.16 to 0.41	7,477	 6,169	88.44	0.25	86.76	833	11.14	16	13.82
	13	0.42 to 1.10	6,645	4,214	90.09	0.69	86.65	1,636	24.62	39	31.96
Medium Risk	14	1.11 to 2.93	5,070	1,950	95.92	1.85	86.28	2,637	52.01	81	71.98
	15	2.94 to 4.74	1,883	505	98.10	3.72	85.91	1,615	85.77	60	125.60
High Risk	16	4.75 to 7.59	1,333	280	98.67	5.97	86.18	1,567	117.55	69	182.26
	17	7.60 to 18.20	1,317	223	98.90	11.25	84.76	2,196	166.74	125	285.38
	18	18.21 to 99.99	559	143	98.87	27.87	73.48	1,171	209.48	114	464.40

100.00

86.19 %

56,505

2015
Q3

73.50

86.60 % \$

12,586

11

9.57

19.92 % \$

84

602

922.61

31.84 %

100.00

1.18 %

2015 Q4

				•	Notional of undrawn	Average	Average	Average		Average risk	, ,	EL adjusted average
		PD range	EAD		commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	21	0.00 to 0.15 % \$	37,892	\$	41,942	82.78 %	0.04 %	87.55 % \$	926	2.44 % \$	14	2.91 %
Normal Risk	22	0.16 to 0.41	7,597		6,382	88.33	0.25	86.61	842	11.08	17	13.88
	23	0.42 to 1.10	6,609		4,231	89.90	0.68	86.84	1,630	24.66	39	32.04
Medium Risk	24	1.11 to 2.93	5,014		1,926	95.85	1.85	86.50	2,612	52.09	80	72.04
	25	2.94 to 4.74	1,843		478	98.06	3.72	86.22	1,586	86.06	59	126.07
High Risk	26	4.75 to 7.59	1,320		268	98.71	5.97	85.80	1,546	117.12	68	181.52
	27	7.60 to 18.20	1,323		218	98.95	11.24	83.79	2,180	164.78	124	281.93
	28	18.21 to 99.99	452		76	99.01	28.60	76.43	983	217.48	98	488.50
Default	29	100.00	101		- ' '	100.00	100.00	73.31	12	11.88	73	915.35
Total	30	\$	62,151	\$	55,521	86.24 %	1.13 %	87.02 % \$	12,317	19.82 % \$	572	31.32 %

<sup>1</sup> Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

100.00

19

Default

# Retail Advanced IRB Exposures – By Obligor Grade – Other Retail 1,2

				Notional					Average		EL adjusted
				of undrawn	Average	Average	Average		risk		average
		PD range	EAD	commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	1	0.00 to 0.15 %	\$ 13,380	\$ 4,014	90.49 %	0.07 %	42.80 % \$	1,082	8.09 % \$	4	8.46 %
Normal Risk	2	0.16 to 0.41	18,096	3,249	91.95	0.29	39.46	3,609	19.94	20	21.33
	3	0.42 to 1.10	14,474	1,735	95.83	0.72	47.87	5,991	41.39	50	45.71
Medium Risk	4	1.11 to 2.93	12,992	 717	98.04	1.85	49.15	7,942	61.13	118	72.48
	5	2.94 to 4.74	4,783	218	97.99	3.71	49.47	3,391	70.90	88	93.90
High Risk	6	4.75 to 7.59	3,402	99	98.41	5.98	49.72	2,545	74.81	101	111.92
	7	7.60 to 18.20	3,595	56	99.59	11.43	49.29	3,123	86.87	202	157.11
	8	18.21 to 99.99	1,721	29	99.05	34.41	49.32	2,012	116.91	291	328.27
Default	9	100.00	370	5	100.00	100.00	47.41	165	44.59	162	591.89
Total	10		\$ 72,813	\$ 10,122	94.71 %	2.97 %	45.37 % \$	29,860	41.01 % \$	1,036	58.79 %

2017 Q2

			Notional					Average		EL adjusted
			of undrawn	Average	Average	Average		risk		average
	PD range	EAD	commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
11	0.00 to 0.15 %	\$ 11,636	\$ 3,002	90.87 %	0.07 %	42.96 % \$	966	8.30 % \$	4	8.73 %
12	0.16 to 0.41	17,118	2,837	92.18	0.30	39.41	3,424	20.00	19	21.39
13	0.42 to 1.10	14,863	2,039	95.79	0.72	48.49	6,257	42.10	53	46.56
14	1.11 to 2.93	14,390	1,289	97.90	1.85	48.46	8,672	60.26	128	71.38
15	2.94 to 4.74	5,262	338	98.43	3.72	48.29	3,644	69.25	95	91.82
16	4.75 to 7.59	3,881	193	98.65	5.96	48.09	2,807	72.33	111	108.08
17	7.60 to 18.20	4,028	169	99.82	11.33	48.56	3,443	85.48	222	154.37
18	18.21 to 99.99	1,821	31	99.14	34.51	49.94	2,151	118.12	312	332.29
19	100.00	388	4	100.00	100.00	46.47	180	46.39	166	581.19
20		\$ 73,387	\$ 9,902	95.15 %	3.18 %	45.48 % \$	31,544	42.98 % \$	1,110	61.89 %

2017 Q1

				Notional					Average		EL adjusted
				of undrawn	Average	Average	Average		risk		average
		PD range	EAD	commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	21	0.00 to 0.15 %	\$ 11,804	\$ 3,080	90.91 %	0.07 %	41.98 % \$	955	8.09 % \$	4	8.51 %
Normal Risk	22	0.16 to 0.41	16,854	2,835	92.13	0.29	38.61	3,298	19.57	19	20.98
	23	0.42 to 1.10	14,240	1,821	96.10	0.72	46.51	5,713	40.12	48	44.33
Medium Risk	24	1.11 to 2.93	13,560	 1,254	97.96	1.83	47.28	7,954	58.66	117	69.44
	25	2.94 to 4.74	5,044	374	98.19	3.72	46.92	3,393	67.27	88	89.08
High Risk	26	4.75 to 7.59	3,657	194	98.76	5.96	47.06	2,588	70.77	103	105.97
	27	7.60 to 18.20	3,760	176	99.79	11.30	47.55	3,144	83.62	203	151.10
	28	18.21 to 99.99	1,692	33	99.04	35.16	48.79	1,939	114.60	288	327.36
Default	29	100.00	415	4	100.00	100.00	47.27	199	47.95	180	590.12
Total	30		\$ 71,026	\$ 9,771	95.12 %	3.17 %	44.20 % \$	29,183	41.09 % \$	1,050	59.57 %

<sup>1</sup> Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

Low Risk Normal Risk Medium Risk High Risk

Default Total

<sup>&</sup>lt;sup>2</sup> Includes all other retail exposures, such as drawn and undrawn retail exposures outside of Canada.

# Retail Advanced IRB Exposures – By Obligor Grade – Other Retail (Continued)<sup>1,2</sup>

(\$ millions, except as noted)  As at	LINE #	2016 Q4										
			*		Notional					Average		EL adjusted
					of undrawn	Average	Average	Average		risk		average
		PD range	EAD		commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	1	0.00 to 0.15 % \$	12,313	\$	3,027	91.33 %	0.08 %	41.52 % \$	988	8.02 % \$	4	8.43 %
Normal Risk	2	0.16 to 0.41	13,002		2,801	90.10	0.27	43.50	2,757	21.20	15	22.65
	3	0.42 to 1.10	18,881		1,798	97.05	0.65	42.38	6,666	35.31	54	38.88
Medium Risk	4	1.11 to 2.93	13,731		1,266	97.91	1.82	47.17	8,030	58.48	118	69.22
	5	2.94 to 4.74	4,965		348	98.44	3.72	47.10	3,353	67.53	87	89.44
High Risk	6	4.75 to 7.59	3,572		197	98.63	5.96	47.31	2,542	71.16	101	106.51
	7	7.60 to 18.20	3,563		170	99.78	11.27	47.66	2,984	83.75	192	151.11
	8	18.21 to 99.99	1,502		34	98.95	34.30	49.57	1,762	117.31	253	327.86
Default	9	100.00	411		4	100.00	100.00	47.10	197	47.93	178	589.29
Total	10	\$	71,940	\$	9,645	95.21 %	2.98 %	44.36 % \$	29,279	40.70 % \$	1,002	58.11 %
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		<u> </u>			<del></del>	•	2016					· · · · · · · · · · · · · · · · · · ·
							Q3					

				Notional					Average		EL adjusted
				of undrawn	Average	Average	Average		risk		average
		PD range	EAD	commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	11	0.00 to 0.15 %	\$ 12,076	\$ 2,998	91.21 %	0.08 %	41.89 % \$	980	8.12 % \$	4	8.53 %
Normal Risk	12	0.16 to 0.41	12,805	 2,627	90.54	0.27	43.73	2,728	21.30	15	22.77
	13	0.42 to 1.10	18,549	1,781	97.04	0.66	42.78	6,642	35.81	55	39.51
Medium Risk	14	1.11 to 2.93	13,429	1,224	97.87	1.81	47.49	7,897	58.81	115	69.51
	15	2.94 to 4.74	4,795	345	98.35	3.72	47.66	3,277	68.34	85	90.50
High Risk	16	4.75 to 7.59	3,407	188	98.50	5.94	47.65	2,441	71.65	97	107.24
	17	7.60 to 18.20	3,382	170	99.80	11.19	48.13	2,855	84.42	183	152.05
	18	18.21 to 99.99	1,401	34	98.91	34.04	50.55	1,675	119.56	238	331.91
Default	19	100.00	403	3	100.00	100.00	47.62	196	48.64	176	594.54
Total	20		\$ 70,247	\$ 9,370	95.24 %	2.92 %	44.71 % \$	28,691	40.84 % \$	968	58.07 %

2016	
Q2	

				Notional					Average		EL adjusted
				of undrawn	Average	Average	Average		risk		average
		PD range	EAD	commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	21	0.00 to 0.15 %	\$ 6,974	\$ 2,954	85.96 %	0.07 %	50.96 % \$	663	9.51 % \$	3	10.04 %
Normal Risk	22	0.16 to 0.41	7,494	2,305	86.47	0.27	48.89	1,780	23.75	10	25.42
	23	0.42 to 1.10	12,091	1,316	97.48	0.64	44.19	4,428	36.62	36	40.34
Medium Risk	24	1.11 to 2.93	6,779	1,035	97.35	1.80	53.20	4,450	65.64	65	77.63
	25	2.94 to 4.74	2,230	295	97.61	3.72	54.53	1,743	78.16	45	103.39
High Risk	26	4.75 to 7.59	1,614	167	97.61	5.91	53.82	1,306	80.92	52	121.19
	27	7.60 to 18.20	1,528	167	99.78	11.04	56.12	1,501	98.23	96	176.77
	28	18.21 to 99.99	597	28	97.83	31.07	59.92	868	145.39	111	377.81
Default	29	100.00	168	4	100.00	100.00	51.56	152	90.48	74	641.07
Total	30		\$ 39,475	\$ 8,271	93.11 %	2.34 %	49.53 % \$	16,891	42.79 % \$	492	58.37 %

<sup>1</sup> Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

<sup>&</sup>lt;sup>2</sup> Includes all other retail exposures, such as drawn and undrawn retail exposures outside of Canada.

# Retail Advanced IRB Exposures – By Obligor Grade – Other Retail (Continued)<sup>1,2</sup>

(\$ millions, except as noted)	LINE					2016	3				
As at	#			<del> </del>		Q1					
		<del> </del>	·	Notional					Average		EL adjusted
				of undrawn	Average	Average	Average		risk		average
		PD range	EAD	commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	1	0.00 to 0.15 % \$	7,916	\$ 3,798	83.23 %	0.07 %	49.53 % \$	740	9.35 % \$	3	9.82 %
Normal Risk	2	0.16 to 0.41	6,548	1,588	92.30	0.26	50.73	1,590	24.28	9	26.00
	3	0.42 to 1.10	12,171	1,511	96.64	0.62	44.05	4,407	36.21	36	39.91
Medium Risk	4	1.11 to 2.93	6,851	1,089	97.27	1.80	53.34	4,507	65.79	65	77.65
	5	2.94 to 4.74	2,207	276	98.77	3.73	54.97	1,740	78.84	45	104.33
High Risk	6	4.75 to 7.59	1,579	143	99.23	5.94	54.35	1,291	81.76	51	122.13
	7	7.60 to 18.20	1,561	181	99.42	11.02	56.17	1,535	98.33	98	176.81
	8	18.21 to 99.99	553	16	99.84	30.96	60.80	815	147.38	104	382.46
Default	9	100.00	167	4	100.00	100.00	51.33	154	92.22	74	646.11
Total	10	\$	39,553	\$ 8,606	93.37 %	2.30 %	49.63 % \$	16,779	42.42 % \$	485	57.75 %
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						2015					
						Q4					
		<u> </u>		Notional					Average		EL adjusted
				of undrawn	Average	Average	Average		risk		average
		PD range	EAD	commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight

		•		 Notional	• •	. , ,			Average		EL adjusted
				of undrawn	Average	Average	Average		risk		average
		PD range	EAD	commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	11	0.00 to 0.15 %	\$ 7,609	\$ 3,464	83.64 %	0.07 %	48.11 % \$	696	9.15 % \$	3	9.64 %
Normal Risk	12	0.16 to 0.41	6,382	1,500	92.40	0.26	50.13	1,532	24.01	8	25.57
	13	0.42 to 1.10	12,256	1,430	96.86	0.62	43.61	4,393	35.84	36	39.52
Medium Risk	14	1.11 to 2.93	6,705	1,034	97.37	1.80	53.14	4,394	65.53	64	77.46
	15	2.94 to 4.74	2,209	268	98.86	3.73	54.09	1,714	77.59	45	103.06
High Risk	16	4.75 to 7.59	1,589	143	99.16	5.95	54.11	1,293	81.37	51	121.49
	17	7.60 to 18.20	1,527	169	99.39	11.04	55.44	1,483	97.12	95	174.89
	18	18.21 to 99.99	541	13	99.86	30.97	59.47	779	143.99	100	375.05
Default	19	100.00	134	4	100.00	100.00	51.61	115	85.82	60	645.52
Total	20		\$ 38,952	\$ 8,025	93.65 %	2.22 %	48.93 % \$	16,399	42.10 % \$	462	56.93 %

2015	• "
Q3	

					Notional					Average		EL adjusted
					of undrawn	Average	Average	Average		risk		average
		PD range	EA	.D	commitments	EAD	PD	LGD	RWA	weighting	EL	risk weight
Low Risk	21	0.00 to 0.15	% \$ 7,44	9 \$	3,433	83.56 %	0.07 %	55.44 % \$	774	10.39 % \$	3	10.89 %
Normal Risk	22	0.16 to 0.41	5,96	5	1,445	92.09	0.26	55.48	1,583	26.54	9	28.42
	23	0.42 to 1.10	12,81	7	1,380	97.17	0.63	46.80	4,971	38.78	41	42.78
Medium Risk	24	1.11 to 2.93	6,67	5	988	97.46	1.82	55.86	4,617	69.17	68	81.90
	25	2.94 to 4.74	2,35	5	269	98.83	3.72	55.98	1,890	80.25	49	106.26
High Risk	26	4.75 to 7.59	1,63	6	148	99.18	5.96	54.74	1,347	82.33	53	122.83
	27	7.60 to 18.20	1,45	1	180	99.38	11.04	55.26	1,405	96.83	90	174.36
	28	18.21 to 99.99	43	7	12	99.86	30.71	61.66	647	148.05	82	382.61
Default	29	100.00	12	7	4	100.00	100.00	47.63	115	90.55	51	592.52
Total	30		\$ 38,91	2 \$	7,859	93.79 %	2.13 %	52.71 % \$	17,349	44.59 % \$	446	58.91 %

<sup>1</sup> Represents retail exposures under the AIRB approach. Amounts are before allowance for credit losses and after credit risk mitigation.

<sup>&</sup>lt;sup>2</sup> Includes all other retail exposures, such as drawn and undrawn retail exposures outside of Canada.

# Non-Retail Advanced IRB Exposures – By Obligor Grade – Corporate

(\$ millions, except as no As at	ted)		LINE #			2017 Q3					2017 Q2					2017 Q1	•	
PD Range <sup>1</sup>	Internal ratings grade	External rating			Average	Average		Average risk	·	Average	Average		Average risk		Average	Average		Average risk
Investment Grade (%)	(BRR) <sup>2</sup>	equivalent		EAD <sup>3</sup>	PD	LGD	RWA	weighting	EAD <sup>3</sup>	PD	LGD	RWA	weighting	EAD <sup>3</sup>	PD	LGD	RWA	weighting
0.00 to 0.01	0	AAA/Aaa	1	\$ 11,768	_ 9	65.37 % <b>\$</b>	26	0.22 %				% \$ 35	0.29 %		-	% 64.22 % \$	57	0.48 %
0.01 to 0.03	1A	AA+/Aa1	2	19.632	0.03	2.42	70	0.22 /8	19.170	0.03	2.54	76 76	0.40	15,321	0.03	2.02	55	0.36
0.03 to 0.03	1B	AA/Aa2	3	16,154	0.03	3.16	166	1.03	24.340	0.03	3.04	236	0.40	19,905	0.03	3.43	225	1.13
0.03 to 0.04	1C	AA-/Aa3	4	15,917	0.03	12.68	825	5.18	16.654	0.03	13.81	947	5.69	15,706	0.03	12.47	896	5.70
0.04 to 0.05	2A	A+/A1	5	14,968	0.04	13.98	854	5.71	14.847	0.04	15.81	947	6.38	11,392	0.04	19.51	919	8.07
0.05 to 0.07	2B	A/A2	6	11,649	0.06	19.23	1.166	10.01	11.939	0.06	22.94	1.497	12.54	11,600	0.06	23.46	1.455	12.54
0.07 to 0.09	2C	A-/A3	7	19,169	0.07	13.15	1,322	6.90	23.395	0.07	12.96	1.676	7.16	17,364	0.07	17.47	1,702	9.80
0.09 to 0.11	3A	BBB+/Baa1	8	32,974	0.07	15.24	3.239	9.82	30.147	0.07	20.13	4,003	13.28	24.541	0.09	22.73	3.791	15.45
0.11 to 0.16	3B	BBB/Baa2	9	32,268	0.12	16.49	4.268	13.23	29.992	0.12	19.78	4.702	15.68	24,212	0.12	23.06	4.486	18.53
0.16 to 0.22	3C	BBB-/Baa3	10	22,459	0.12	22.34	4.766	21.22	22,852	0.12	22.57	4,945	21.64	18,090	0.12	28.08	4,938	27.30
Non-Investment Grade	30	DDD-/Daa5	10	22,433	0.10	22.04	4,700	21.22	22,002	0.17	22.51	7,070	21.04	10,030	0.17	20.00	4,330	21.00
0.22 to 0.32	4A	BB+/Ba1	11	24.409	0.23	14.68	4,138	16.95	19,204	0.25	16.04	3,739	19.47	17.620	0.25	16.76	3,595	20.40
0.32 to 0.48	4B	BB/Ba2	12	14,943	0.23	27.25	5.041	33.73	17.001	0.23	26.18	5,863	34.49	18,352	0.23	23.78	5,822	31.72
0.48 to 0.74	4D 4C	BB-/Ba3	13	11,129	0.32	23.65	4.044	36.34	14,245	0.54	22.34	5,003	36.10	18,712	0.54	17.09	5,022	27.28
0.74 to 1.12	5A	B+/B1	14	7,048	0.49	28.93	3,847	54.58	6.780	0.82	30.05	3,919	57.80	9,292	0.82	21.78	3,883	41.79
1.12 to 2.39	5B	B/B2	15	8.333	1.13	33.14	5.920	71.04	7.625	1.24	33.06	5.426	71.16	7.175	1.24	33.94	5,338	74.40
2.39 to 10.81	5C	B-/B3	16	20,268	2.40	33.14 15.45	5,920 8.249	71.04 40.70	19,745	2.59	33.06 15.67	8,265	41.86	19,372	2.59	33.94 14.70	7,573	74.40 39.09
Watch and Classified	50	D-/D3	10	20,200	2.40	13.43	0,249	40.70	19,745	2.59	13.07	0,203	41.00	19,372	2.59	14.70	1,313	39.09
	0	000.104	47	4 400	40.04	00.00	4 070	407.05	4.045	44.00	00.57	4 774	400.70	4.040	44.00	00.50	4.500	440.00
10.81 to 20.32	6	CCC+/Caa1	17	1,123	10.81	39.00	1,876	167.05	1,045	11.20	38.57	1,774	169.76	1,048	11.20	32.58	1,502	143.32
20.32 to 44.71	/	to	18	1,541	20.32	29.06	2,354	152.76	1,750	21.43	30.66	2,845	162.57	1,498	21.43	30.21	2,395	159.88
44.71 to 99.99	8	CC/Ca	19	215	44.72	48.40	518	240.93	233	46.46	37.48	436	187.12	342	46.46	36.73	625	182.75
Impaired/Default	_	_																
100.00	9	D	20	197	100.00	49.10	452	229.44	231	100.00	45.24	597	258.44	254	100.00	43.54	619	243.70
Total			21	\$ 286,164	0.58	<b>% 18.25 % \$</b>	53,141	18.57 %	\$ 293,391	0.62	% 19.12 <sup>9</sup>	% \$ 57,071	19.45 %	\$ 263,759	0.70	% 20.36 % \$	54,980	20.84 %
								_	-									

				Q4						Q3					Q2				
Ir	Internal																		
	ratings	External						Average					Average					Average	
PD Range g	grade	rating		_	Average	Average		risk	_	Average	Average		risk	_	Average	Average		risk	
Investment Grade (%) (E	(BRR)	equivalent		EAD <sup>3</sup>	PD	LGD	RWA	weighting	EAD <sup>3</sup>	PD	LGD	RWA	weighting	EAD <sup>3</sup>	PD	LGD	RWA	weighting	
0.00 to 0.01 0	0	AAA/Aaa	22	\$ 10,939	- 9	68.44 % \$	42	0.38 %	\$ 10,964	-	% 68.24 % \$	75	0.68 %	\$ 10,746	_	% 68.78 % \$	38	0.35 %	
0.01 to 0.03	1A	AA+/Aa1	23	13,135	0.03	2.07	53	0.40	9,415	0.03	3.01	65	0.69	6,167	0.03	2.24	36	0.58	
0.03 to 0.04 1	1B	AA/Aa2	24	17,374	0.03	6.26	378	2.18	19,487	0.03	4.31	327	1.68	26,130	0.03	2.74	211	0.81	
0.04 to 0.05	1C	AA-/Aa3	25	14,592	0.04	14.65	995	6.82	14,164	0.04	14.11	913	6.45	17,643	0.04	13.49	1,048	5.94	
0.05 to 0.06 2	2A	A+/A1	26	12,131	0.05	18.84	1,023	8.43	11,327	0.05	19.08	968	8.55	8,407	0.05	20.67	833	9.91	
0.06 to 0.07 2	2B	A/A2	27	13,447	0.06	22.44	1,682	12.51	12,896	0.06	23.72	1,676	13.00	9,836	0.06	31.87	1,739	17.68	
0.07 to 0.08	2C	A-/A3	28	17,579	0.07	15.87	1,658	9.43	17,269	0.07	16.74	1,709	9.90	16,051	0.07	15.27	1,480	9.22	
0.09 to 0.11 3.	3A	BBB+/Baa1	29	24,820	0.09	19.43	3,340	13.46	23,627	0.09	20.29	3,423	14.49	21,845	0.09	20.67	3,182	14.57	
0.12 to 0.15 3	3B	BBB/Baa2	30	28,645	0.12	19.40	4,657	16.26	27,667	0.12	18.36	4,285	15.49	24,316	0.12	18.85	3,706	15.24	
0.16 to 0.23	3C	BBB-/Baa3	31	19,738	0.17	27.61	5,256	26.63	19,971	0.17	27.04	5,336	26.72	19,377	0.17	26.93	5,234	27.01	
Non-Investment Grade																			
0.24 to 0.33 4.	4A	BB+/Ba1	32	17,546	0.25	16.46	3,569	20.34	16,716	0.25	16.69	3,433	20.54	15,484	0.25	18.73	3,421	22.09	
0.34 to 0.52 4	4B	BB/Ba2	33	14,912	0.36	28.77	5,771	38.70	14,748	0.36	27.23	5,559	37.69	13,389	0.36	27.39	4,838	36.13	
0.53 to 0.79 4	4C	BB-/Ba3	34	14,024	0.54	21.11	4,731	33.74	12,973	0.54	22.46	4,717	36.36	11,968	0.54	24.29	4,722	39.46	
0.80 to 1.22 5.	5A	B+/B1	35	6,248	0.82	28.53	3,332	53.33	6,354	0.82	29.39	3,563	56.07	6,445	0.82	29.40	3,591	55.72	
1.23 to 2.50 5	5B	B/B2	36	6,734	1.24	34.57	5,121	76.05	6,746	1.24	34.65	5,167	76.59	6,287	1.24	34.23	4,704	74.82	
2.51 to 10.95 5	5C	B-/B3	37	17,190	2.59	16.85	7,730	44.97	16,694	2.59	16.10	7,213	43.21	15,759	2.59	17.18	7,224	45.84	
Watch and Classified																			
10.96 to 21.10 6	6	CCC+/Caa1	38	1,076	11.20	34.05	1,622	150.74	1,101	11.20	33.41	1,628	147.87	961	11.20	35.91	1,533	159.52	
21.11 to 45.99 7	7	to	39	1,686	21.43	32.12	2,881	170.88	1,482	21.43	35.13	2,772	187.04	1,376	21.43	32.38	2,383	173.18	
46.00 to 99.99 8	8	CC/Ca	40	461	46.46	34.29	785	170.28	491	46.46	33.73	826	168.23	505	46.46	29.34	736	145.74	
Impaired/Default							•	•					•						
100.00 9	9	D	41	339	100.00	43.92	828	244.25	371	100.00	43.65	851	229.38	212	100.00	51.75	488	230.19	
Total			42	\$ 252,616	0.76 %	6 21.09 % \$	55,454	21.95 %	\$ 244,463	0.78	% 21.20 % \$	54,506	22.30 %	\$ 232,904	0.71	% 21.27 %\$	51,147	21.96 %	

2016

2016

2016

<sup>&</sup>lt;sup>1</sup> PD ranges were revised to reflect non-retail parameter updates in the third quarter of 2017.

<sup>&</sup>lt;sup>2</sup> Borrower Risk Rating (BRR).

<sup>&</sup>lt;sup>3</sup> EAD includes the effects of credit risk mitigation.

# Non-Retail Advanced IRB Exposures – By Obligor Grade – Corporate (Continued)

(\$ millions, except as noted)	LINE	2016	2015	2015
As at	#	Q1	Q4	Q3

	Internal							•		•			•		•			
	ratings	External						Average					Average					Average
PD Range	grade	rating			Average	Average		risk		Average	Average		risk		Average	Average		risk
Investment Grade (%)	(BRR)	equivalent		EAD <sup>1</sup>	PD	LGD	RWA	weighting	EAD <sup>1</sup>	PD	LGD	RWA	weighting	EAD	PD	LGD	RWA	weighting
0.00 to 0.01	ò	AAA/Aaa	1	\$ 10,999	_	% 70.73 % \$	43	0.39 %	\$ 10,650	_ 9	% 70.00 % <b>\$</b>	37	0.35 %	\$ 10,927	_	% 69.35 % \$	37	0.34 %
0.01 to 0.03	1A	AA+/Aa1	2	4,374	0.03	1.69	28	0.64	3,145	0.03	1.92	30	0.95	3.713	0.03	1.86	25	0.67
0.03 to 0.04	1B	AA/Aa2	3	14,384	0.03	3.51	175	1.22	14,580	0.03	3.71	189	1.30	19,025		3.35	196	1.03
0.04 to 0.05	1C	AA-/Aa3	4	25,393	0.04	11.06	1.333	5.25	26,942	0.04	9.01	1.089	4.04	25,919	0.04	8.13	856	3.30
0.05 to 0.06	2A	A+/A1	5	11,896	0.05	17.46	1,092	9.18	11,841	0.05	17.30	1,017	8.59	12,585	0.05	15.91	1,034	8.22
0.06 to 0.07	2B	A/A2	6	10,580	0.06	29.39	1,829	17.29	11,299	0.06	27.31	1,852	16.39	12,154	0.06	28.60	2,119	17.43
0.07 to 0.10	2C	A-/A3	7	16,623	0.08	20.57	2,216	13.33	16,513	0.08	26.50	2,572	15.58	15,948	0.08	21.14	2,159	13.54
0.11 to 0.14	3A	BBB+/Baa1	8	25,230	0.11	19.48	3,919	15.53	21,801	0.11	18.64	3,221	14.77	16,242	0.11	21.53	2,779	17.11
0.15 to 0.19	3B	BBB/Baa2	9	25,710	0.15	16.20	4,044	15.73	19,498	0.15	18.17	3,435	17.62	13,847	0.15	22.95	3,166	22.86
0.20 to 0.26	3C	BBB-/Baa3	10	18,800	0.20	26.39	5,461	29.05	17,173	0.20	26.54	5,118	29.80	22,340	0.20	21.00	5,295	23.70
Non-Investment Grade									<u> </u>	•				·				·
0.27 to 0.36	4A	BB+/Ba1	11	15,901	0.27	17.97	3,556	22.36	15,017	0.27	19.76	3,809	25.36	12,839	0.27	20.40	3,373	26.27
0.37 to 0.55	4B	BB/Ba2	12	13,178	0.37	25.43	4,449	33.76	13,064	0.37	24.83	4,324	33.10	12,505	0.37	24.77	4,203	33.61
0.56 to 0.85	4C	BB-/Ba3	13	12,419	0.56	23.06	4,865	39.17	13,312	0.56	20.29	4,639	34.85	12,682	0.56	22.84	4,830	38.09
0.86 to 1.29	5A	B+/B1	14	8,065	0.86	27.05	4,275	53.01	7,176	0.86	25.35	3,546	49.41	6,379	0.86	27.71	3,386	53.08
1.30 to 2.69	5B	B/B2	15	5,938	1.30	33.68	4,429	74.59	5,570	1.30	33.49	4,132	74.18	4,688	1.30	32.54	3,428	73.12
2.70 to 11.67	5C	B-/B3	16	14,903	2.70	15.74	6,362	42.69	15,710	2.70	13.16	5,608	35.70	18,429	2.70	12.73	6,464	35.08
Watch and Classified					•			•	•	•	•		•	•		•		
11.68 to 22.12	6	CCC+/Caa1	17	969	11.73	35.92	1,570	162.02	838	11.73	33.86	1,275	152.15	602	11.73	33.79	912	151.50
22.13 to 45.99	7	to	18	903	22.13	27.36	1,304	144.41	780	22.13	30.44	1,263	161.92	587	22.13	34.03	1,053	179.39
46.00 to 99.99	8	CC/Ca	19	253	46.00	27.67	344	135.97	187	46.00	23.99	221	118.18	134	46.00	30.89	205	152.99
Impaired/Default																		
100.00	9	D	20	186	100.00	59.97	623	334.95	167	100.00	64.21	725	434.13	162	100.00	58.28	340	209.88
Total			21	\$ 236,704	0.62	% 21.20 % \$		21.93 %	\$ 225,263	0.61	% 21.08 % \$	48,102	21.35 %		0.59	% 20.48 % \$	45,860	20.68 %

<sup>&</sup>lt;sup>1</sup> EAD includes the effects of credit risk mitigation.

# Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign

(\$ millions, except as note As at	ed)		LINE #			2017 Q3					2017 Q2			•		2017 Q1		
PD Range <sup>1</sup> Investment Grade (%)	Internal ratings grade (BRR)	External rating equivalent		EAD <sup>2</sup>	Average PD	Average LGD	RWA	Average risk weighting	FAD <sup>2</sup>	Average PD	Average LGD	RWA	Average risk weighting	EAD <sup>2</sup>	Average PD	Average LGD	RWA	Average risk weighting
0.00 to 0.01	0	AAA/Aaa	1	\$ 197,158	- %	16.21 % \$	65	0.03 %	\$ 198,739	- %		\$ 68	0.03 %	\$ 200,363	- %	18.00 % \$	68	0.03 %
0.01 to 0.03	1A	AA+/Aa1	2	10.186	0.01	2.56	55	0.54	18,030	0.01	2.33	67	0.37	15,472	0.01	2.17	65	0.42
0.03 to 0.03	1B	AA/Aa2	3	16,563	0.03	2.60	101	0.61	19,238	0.03	2.16	138	0.72	16.623	0.03	2.44	116	0.70
0.03 to 0.04	1C	AA-/Aa3	4	12,677	0.04	1.58	88	0.69	8.461	0.04	1.68	64	0.76	6,540	0.04	1.83	55	0.84
0.04 to 0.05	2A	A+/A1	5	10,438	0.05	2.50	93	0.89	9.118	0.05	2.82	102	1.12	9,956	0.05	2.78	113	1.13
0.05 to 0.07	2B	A/A2	6	10,617	0.06	1.49	53	0.50	7,553	0.06	1.28	41	0.54	2,787	0.06	4.57	43	1.54
0.07 to 0.09	2C	A-/A3	7	1,265	0.07	2.70	28	2.21	1,444	0.07	1.69	18	1.25	1,542	0.07	1.73	17	1.10
0.09 to 0.11	3A	BBB+/Baa1	8	229	0.09	7.34	14	6.11	328	0.09	4.32	12	3.66	323	0.09	4.58	12	3.72
0.11 to 0.16	3B	BBB/Baa2	9	1,104	0.12	6.17	32	2.90	384	0.12	9.99	18	4.69	311	0.12	9.16	13	4.18
0.16 to 0.22	3C	BBB-/Baa3	10	208	0.16	5.58	9	4.33	278	0.17	7.32	14	5.04	245	0.17	7.22	13	5.31
Non-Investment Grade																		
0.22 to 0.32	4A	BB+/Ba1	11	7	0.23	9.54	-	-	5	0.25	15.17	1	20.00	3	0.25	24.38	1	33.33
0.32 to 0.48	4B	BB/Ba2	12	24	0.32	24.84	5	20.83	19	0.36	33.03	6	31.58	27	0.36	52.22	13	48.15
0.48 to 0.74	4C	BB-/Ba3	13	_	-	-	-	-	_	_	_	_	_	_	_	_	_	_
0.74 to 1.12	5A	B+/B1	14	10	0.74	56.00	8	80.00	6	0.82	56.89	5	83.33	_	_	_	_	_
1.12 to 2.39	5B	B/B2	15	-	-	-	-	-	_	_	_	_	_	_	_	_	_	_
2.39 to 10.81	5C	B-/B3	16	-	-	-	-	-	1	2.59	13.87	_	_	_	_	-	_	-
Watch and Classified																		
10.81 to 20.32	6	CCC+/Caa1	17	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_
20.32 to 44.71	7	to	18	-	-	-	-	-	_	_	_	_	_	_	_	_	_	_
44.71 to 99.99	8	CC/Ca	19	-	-	-	-	-	_	_	_	_	_	_	_	_	_	_
Impaired/Default					•		•	•	•		•		•	•		•		
100.00	9	D	20	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total			21	\$ 260,486	0.01 %	12.83 % \$	551	0.21 %	\$ 263,604	0.01 %	13.23 %	\$ 554	0.21 %	\$ 254,192	0.01 %	14.73 % \$	529	0.21 %

						Q4					Q3					Q2		
											:			Г				
	Internal ratings	External						Average					Average					Average
PD Range	grade	rating			Average	Average		risk		Average	Average		risk		Average	Average		risk
Investment Grade (%)	(BRR)	equivalent		EAD <sup>2</sup>	PD	LGD	RWA	weighting	EAD <sup>2</sup>	PD	LGD	RWA	weighting	EAD <sup>2</sup>	PD	LGD	RWA	weighting
0.00 to 0.01	0	AAA/Aaa	22	\$ 202,684	- %	18.33 % \$	70	0.03 %	\$ 200,592	- %	24.58 %	6 <b>\$</b> 76	0.04 %	\$ 204,237	- %	19.07 %	6 \$ 84	0.04 %
0.01 to 0.03	1A	AA+/Aa1	23	13,545	0.01	2.28	63	0.47	18,165	0.01	1.93	79	0.43	12,502	0.01	2.23	59	0.47
0.03 to 0.04	1B	AA/Aa2	24	14,349	0.03	2.43	112	0.78	11,673	0.03	2.58	93	0.80	13,518	0.03	2.18	92	0.68
0.04 to 0.05	1C	AA-/Aa3	25	8,925	0.04	1.34	55	0.62	5,445	0.04	2.22	56	1.03	5,793	0.04	2.06	55	0.95
0.05 to 0.06	2A	A+/A1	26	10,063	0.05	2.74	116	1.15	8,544	0.05	3.01	97	1.14	7,221	0.05	3.01	85	1.18
0.06 to 0.07	2B	A/A2	27	4,253	0.06	2.50	40	0.94	6,627	0.06	4.01	107	1.61	6,690	0.06	4.45	116	1.73
0.07 to 0.08	2C	A-/A3	28	1,842	0.07	2.25	24	1.30	1,750	0.07	2.76	27	1.54	3,328	0.07	19.87	231	6.94
0.09 to 0.11	3A	BBB+/Baa1	29	368	0.09	5.95	16	4.35	274	0.09	4.50	10	3.65	317	0.09	3.72	9	2.84
0.12 to 0.15	3B	BBB/Baa2	30	399	0.12	2.67	5	1.25	79	0.12	6.68	2	2.53	172	0.12	5.83	5	2.91
0.16 to 0.23	3C	BBB-/Baa3	31	257	0.17	4.87	10	3.89	271	0.17	5.75	11	4.06	320	0.17	5.78	12	3.75
Non-Investment Grade																		
0.24 to 0.33	4A	BB+/Ba1	32	3	0.25	32.99	1	33.33	1	0.25	35.51	_	-	2	0.25	43.82	1	50.00
0.34 to 0.52	4B	BB/Ba2	33	269	0.36	0.60	2	0.74	246	0.36	0.38	1	0.41	11	0.36	27.45	3	27.27
0.53 to 0.79	4C	BB-/Ba3	34	_	-	-	-	_	3	0.54	58.96	2	66.67	5	0.54	58.96	4	80.00
0.80 to 1.22	5A	B+/B1	35	_	-	-	_	-	_	-	_	_	-	_	_	_	-	-
1.23 to 2.50	5B	B/B2	36	_	-	-	-	-	_	-	_	_	-	_	_	_	_	-
2.51 to 10.95	5C	B-/B3	37	_	_	_	_	-	_	_	_	_	_	_	_	_		-
Watch and Classified																		
10.96 to 21.10	6	CCC+/Caa1	38	_	-	-	_	-	_	-	_	_	-	_	_	_	-	-
21.11 to 45.99	7	to	39	_	-	-	_	-	_	-	_	_	-	_	_	_	-	-
46.00 to 99.99	8	CC/Ca	40	_	_	-	_	_	I	_	_	_	_	_	_	_	_	-
Impaired/Default				•	· ·		-	•			•	•	Ÿ		Ÿ	-		Ÿ
100.00	9	D	41	_	_	-	_	_	_	_	_	_	_	_	_	_	_	-
Total			42	\$ 256,957	0.01 %	14.94 % \$	514	0.20 %	\$ 253,670	0.01 %	19.98 %	\$ 561	0.22 %	\$ 254,116	0.01 %	16.08 %	\$ 756	0.30 %

PD ranges were revised to reflect non-retail parameter updates in the third quarter of 2017.
 EAD includes the effects of credit risk mitigation.

# Non-Retail Advanced IRB Exposures – By Obligor Grade – Sovereign (Continued)

(\$ millions, except as noted)	LINE	2016	2015	2015
As at	#	Q1	Q4	Q3

	Internal								·	<del>-</del>		•			•	_		<del></del>		
	ratings	External							Average						Average					Average
PD Range	grade	rating			Average	Average			risk		Average	Average			risk		Average	Average		risk
Investment Grade (%)	(BRR)	equivalent		EAD <sup>1</sup>	PD	LGD	R\	WA v	weighting	EAD <sup>1</sup>	PD	LGD		RWA	weighting	EAD <sup>1</sup>	PD	LGD	RW.	A weighting
0.00 to 0.01	0	AAA/Aaa	1	\$ 206,081	- %	20.06	% \$	93	0.05 %	\$ 202,378	- 9	6 20.35	% \$	91	0.04 %	\$ 198,180	-	% 20.86	% \$ 95	0.05 %
0.01 to 0.03	1A	AA+/Aa1	2	14,627	0.01	2.64		07	0.73	15,801	0.01	1.79		68	0.43	17,089		1.71	70	
0.03 to 0.04	1B	AA/Aa2	3	10,047	0.03	2.10		82	0.82	9,393	0.03	2.01		76	0.81	10,762	0.03	1.76	78	
0.04 to 0.05	1C	AA-/Aa3	4	5,414	0.04	2.28		55	1.02	5,653	0.04	2.07		53	0.94	10,851	0.04	3.10	126	
0.05 to 0.06	2A	A+/A1	5	9,249	0.05	2.92		97	1.05	9,843	0.05	2.56		94	0.95	2,129	0.05	1.32	14	
0.06 to 0.07	2B	A/A2	6	13,347	0.06	1.05		78	0.58	12,202	0.06	0.90		60	0.49	8,765	0.06	3.43	114	
0.07 to 0.10	2C	A-/A3	7	2,644	0.08	23.32		236	8.89	1,978	0.08	16.31		128	6.47	1,505	0.08	3.16	30	
0.11 to 0.14	3A	BBB+/Baa1	8	1,966	0.11	0.62		10	0.51	138	0.11	8.23		10	7.25	276	0.11	5.17	12	
0.15 to 0.19	3B	BBB/Baa2	9	386	0.15	2.75		6	1.55	174	0.15	6.31		6	3.45	185	0.15	7.32	7	3.78
0.20 to 0.26	3C	BBB-/Baa3	10	290	0.20	4.56		10	3.45	144	0.20	4.93		5	3.47	54	0.20	6.18		2 3.70
Non-Investment Grade																· ·				"
0.27 to 0.36	4A	BB+/Ba1	11	13	0.27	26.06		3	23.08	15	0.27	19.23		2	13.33	2	0.27	48.12	•	50.00
0.37 to 0.55	4B	BB/Ba2	12	4	0.37	12.00		-	-	6	0.37	6.78		-	_	4	0.37	9.35	-	
0.56 to 0.85	4C	BB-/Ba3	13	1	0.56	60.00		1	100.00	1	0.56	60.00		1	100.00	_	_	_	-	
0.86 to 1.29	5A	B+/B1	14	-	_	_		-	-	_	_	_		_	_	-	_	_	-	
1.30 to 2.69	5B	B/B2	15	-	_	_		-	-	_	_	-		_	_	_	_	_	-	
2.70 to 11.67	5C	B-/B3	16	-	_	_		-	-	_	_	_		_	_	-	_	_	-	
Watch and Classified						-			•						•		-	-		
11.68 to 22.12	6	CCC+/Caa1	17	_	_	_		_	-	_	_	_		_	_	_	_	_	-	
22.13 to 45.99	7	to	18	_	_	_		_	-	_	_	_		_	_	_	_	_	-	
46.00 to 99.99	8	CC/Ca	19	_	_	_		_	_	_	_	_		_	_	_	_	_	-	
Impaired/Default																				
100.00	9	D	20	_	_	_		_	_	_	_	_		_	_	_	_	_		
Total			21	\$ 264,069	0.01 %	16.33	% \$ 7	78	0.29 %	\$ 257,726	0.01	6 16.49	% \$	594	0.23 %	\$ 249,802	0.01	% 17.04	% \$ 549	0.22 %

<sup>&</sup>lt;sup>1</sup> EAD includes the effects of credit risk mitigation.

# Non-Retail Advanced IRB Exposures – By Obligor Grade – Bank

(\$ millions, except as not As at	ed)		LINE #		-	2017 Q3					2017 Q2					2017 Q1		
PD Range <sup>1</sup> Investment Grade (%)	Internal ratings grade (BRR)	External rating equivalent		EAD	Average PD	Average LGD	RWA	Average risk weighting	EAD <sup>2</sup>	Average PD	Average LGD	RWA	Average risk weighting	EAD <sup>2</sup>	Average PD	Average LGD	RWA	Average risk weighting
0.00 to 0.01	ò	AAA/Aaa	1	\$ 442	_	% 13.49 % \$	_	- %	\$ 1	- %	6 11.75 % \$	_	- %	\$ 6	_ (	% 13.92 % \$	_	- %
0.01 to 0.03	1A	AA+/Aa1	2	_	_		_		_		_	_	- "	_	_	_	_	- "
0.03 to 0.03	1B	AA/Aa2	3	1,091	0.03	1.57	5	0.46	589	0.03	4.93	8	1.36	693	0.03	4.19	8	1.15
0.03 to 0.04	1C	AA-/Aa3	4	9,020	0.04	21.28	629	6.97	11,126	0.04	35.96	1,042	9.37	10,900	0.04	26.54	820	7.52
0.04 to 0.05	2A	A+/A1	5	38,539	0.05	14.92	1,885	4.89	31,239	0.05	17.81	1,874	6.00	28,423	0.05	18.05	1,939	6.82
0.05 to 0.07	2B	A/A2	6	24,028	0.06	11.15	945	3.93	32,067	0.06	14.68	1,660	5.18	24,502	0.06	18.95	1,867	7.62
0.07 to 0.09	2C	A-/A3	7	5,990	0.07	11.51	282	4.71	5,817	0.07	24.57	491	8.44	10,046	0.07	21.19	623	6.20
0.09 to 0.11	3A	BBB+/Baa1	8	4,615	0.09	11.38	288	6.24	4,310	0.09	14.94	371	8.61	5,751	0.09	10.60	335	5.83
0.11 to 0.16	3B	BBB/Baa2	9	2,001	0.12	8.59	110	5.50	1,155	0.12	10.21	64	5.54	1,028	0.12	9.70	54	5.25
0.16 to 0.22	3C	BBB-/Baa3	10	2,221	0.16	6.30	105	4.73	1,592	0.17	12.28	135	8.48	1,733	0.17	11.36	133	7.67
Non-Investment Grade																		
0.22 to 0.32	4A	BB+/Ba1	11	564	0.23	9.01	49	8.69	355	0.25	10.01	47	13.24	401	0.25	9.88	48	11.97
0.32 to 0.48	4B	BB/Ba2	12	391	0.32	9.41	43	11.00	632	0.36	13.89	108	17.09	632	0.36	13.95	110	17.41
0.48 to 0.74	4C	BB-/Ba3	13	50	0.49	25.05	18	36.00	61	0.54	31.76	29	47.54	22	0.54	12.02	3	13.64
0.74 to 1.12	5A	B+/B1	14	2	0.74	45.96	2	100.00	6	0.82	16.77	2	33.33	5	0.82	15.01	1	20.00
1.12 to 2.39	5B	B/B2	15	5	1.13	14.87	2	40.00	15	1.24	4.69	2	13.33	20	1.24	11.41	5	25.00
2.39 to 10.81	5C	B-/B3	16	6	2.40	50.29	6	100.00	27	2.59	55.57	32	118.52	37	2.59	39.47	32	86.49
Watch and Classified				I '				-						·				,
10.81 to 20.32	6	CCC+/Caa1	17	-	-	-	-	-	_	_	-	_	-	_	_	_	_	-
20.32 to 44.71	7	to	18	1	20.32	21.15	1	100.00	_	_	_	_	-	_	_	-	_	-
44.71 to 99.99	8	CC/Ca	19	_	-	-	-	-	_	_	-	_	-	_	_	-	_	_
Impaired/Default																		
100.00	9	D	20	-	-	-	-	-	_	_	_	_	-	_	_	_	-	-
Total			21	\$ 88,966	0.06	% 13.55 % \$	4,370	4.91 %	\$ 88,992	0.06 %	6 18.93 % \$	5,865	6.59 %	\$ 84,199	0.06	% 18.86 % \$	5,978	7.10 %
				P														
						2046		<del> </del>			2046		. r	-		2046		
						2016 Q4					2016 Q3		l			2016 Q2		
				L		Ų4					પડ					Ų2		

			L			Q4					Q3					Q2		
														1				
	Internal							_										
	ratings	External						Average					Average					Average
PD Range	grade	rating			Average	Average		risk	2	Average	Average		risk	2	Average	Average		risk
Investment Grade (%)	(BRR)	equivalent		EAD <sup>2</sup>	PD	LGD	RWA	weighting	EAD <sup>2</sup>	PD	LGD	RWA	weighting	EAD <sup>2</sup>	PD	LGD	RWA	weighting
0.00 to 0.01	0	AAA/Aaa	22	\$ 3	- %	31.70 % \$	-	- %	\$ 3	- %	32.85 % \$	_	- %	\$ 4	- '	% 33.74 % \$	-	- %
0.01 to 0.03	1A	AA+/Aa1	23	_	_	_	_	_	_	_	58.96	_	_	_	0.03	58.96	_	-
0.03 to 0.04	1B	AA/Aa2	24	681	0.03	4.41	9	1.32	785	0.03	3.41	9	1.15	611	0.03	5.20	9	1.47
0.04 to 0.05	1C	AA-/Aa3	25	10,470	0.04	30.43	929	8.87	13,079	0.04	25.14	965	7.38	13,066	0.04	26.32	1,028	7.87
0.05 to 0.06	2A	A+/A1	26	18,252	0.05	24.84	1,844	10.10	18,569	0.05	20.08	1,523	8.20	19,099	0.05	19.17	1,572	8.23
0.06 to 0.07	2B	A/A2	27	19,679	0.06	21.59	1,687	8.57	32,047	0.06	15.71	1,874	5.85	31,075	0.06	13.69	1,585	5.10
0.07 to 0.08	2C	A-/A3	28	7,212	0.07	12.04	401	5.56	11,611	0.07	9.22	476	4.10	8,126	0.07	14.70	515	6.34
0.09 to 0.11	3A	BBB+/Baa1	29	6,618	0.09	11.61	419	6.33	8,470	0.09	9.14	425	5.02	7,999	0.09	10.09	440	5.50
0.12 to 0.15	3B	BBB/Baa2	30	1,135	0.12	8.53	57	5.02	2,353	0.12	6.99	92	3.91	2,407	0.12	14.95	172	7.15
0.16 to 0.23	3C	BBB-/Baa3	31	1,473	0.17	12.52	129	8.76	1,050	0.17	16.64	121	11.52	1,099	0.17	15.00	125	11.37
Non-Investment Grade			Ī		-													
0.24 to 0.33	4A	BB+/Ba1	32	241	0.25	9.75	37	15.35	393	0.25	9.16	48	12.21	342	0.25	9.09	44	12.87
0.34 to 0.52	4B	BB/Ba2	33	591	0.36	15.51	115	19.46	614	0.36	15.04	115	18.73	740	0.36	20.31	160	21.62
0.53 to 0.79	4C	BB-/Ba3	34	8	0.54	43.39	5	62.50	5	0.54	43.31	3	60.00	3	0.54	46.08	2	66.67
0.80 to 1.22	5A	B+/B1	35	53	0.82	56.05	44	83.02	4	0.82	26.48	2	50.00	4	0.82	22.99	2	50.00
1.23 to 2.50	5B	B/B2	36	10	1.24	9.61	2	20.00	9	1.24	9.40	2	22.22	9	1.24	8.99	2	22.22
2.51 to 10.95	5C	B-/B3	37	6	2.59	22.36	4	66.67	28	2.59	18.21	15	53.57	8	2.59	29.99	5	62.50
Watch and Classified			Ī															
10.96 to 21.10	6	CCC+/Caa1	38	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
21.11 to 45.99	7	to	39	_	_	_	_	_	_	_	_	_	_	14	21.43	58.96	41	292.86
46.00 to 99.99	8	CC/Ca	40	_	_	_	_	_	_	_	_	_	_			-		-
Impaired/Default			1	-	-													
100.00	9	D	41	_	_	_	_	_	_	_	_	_	_	1	100.00	71.15	5	500.00
Total	ŭ	_	42	\$ 66,432	0.07 %		5,682		\$ 89,020	0.07 %	16.18 % \$	5,670	6.37 %	\$ 84,607	0.07	% 16.68 % \$	5,707	6.75 %
iolai			42	φ 00,432	0.07 70	Δ1.10 70 Φ	3,002	0.55 %	φ 09,020	0.07 70	10.10 70 φ	3,070	0.37 70	φ 04,007	0.07	/0 10.00 70 φ	3,707	0.73 70

 $<sup>^1\,</sup>$  PD ranges were revised to reflect non-retail parameter updates in the third quarter of 2017.  $^2\,$  EAD includes the effects of credit risk mitigation.

# Non-Retail Advanced IRB Exposures – By Obligor Grade – Bank (Continued)

(\$ millions, except as noted)	LINE	2016	2015	2015
As at	#	Q1	Q4	Q3

	Internal						•	·							•			·
	ratings	External						Average					Average					Average
PD Range	grade	rating			Average	Average		risk		Average	Average		risk		Average	Average		risk
Investment Grade (%)	(BRR)	equivalent		EAD <sup>1</sup>	PD	LGD	RWA	weighting	EAD <sup>1</sup>	PD	LGD	RWA	weighting	EAD	PD	LGD	RWA	weighting
0.00 to 0.01	0	AAA/Aaa	1	\$ 38	- %	4.99 % \$	_	- %	\$ 5	- %	34.41 % \$	_	- %	\$ 19	_	% 17.20 % \$	_	- %
0.01 to 0.03	1A	AA+/Aa1	2	1,237	0.03	1.19	3	0.24	1,166	0.03	3.92	17	1.46	1,239	0.03	3.71	18	1.45
0.03 to 0.04	1B	AA/Aa2	3	511	0.03	5.98	9	1.76	878	0.03	3.82	10	1.14	957	0.03	3.54	11	1.15
0.04 to 0.05	1C	AA-/Aa3	4	15,038	0.04	21.74	1,110	7.38	15,080	0.04	26.60	1,634	10.84	15,548	0.04	27.46	1,711	11.01
0.05 to 0.06	2A	A+/A1	5	25,279	0.05	17.04	1,661	6.57	23,787	0.05	19.40	2,090	8.79	24,303	0.05	20.83	2,290	9.42
0.06 to 0.07	2B	A/A2	6	36,013	0.06	13.87	1,927	5.35	45,349	0.06	11.95	2,464	5.43	32,014	0.06	13.20	1,922	6.00
0.07 to 0.10	2C	A-/A3	7	9,626	0.08	12.17	627	6.51	14,017	0.08	15.86	1,175	8.38	17,625	0.08	13.37	1,490	8.45
0.11 to 0.14	3A	BBB+/Baa1	8	8,000	0.11	10.27	511	6.39	5,813	0.11	14.49	606	10.42	7,818	0.11	17.76	1,063	13.60
0.15 to 0.19	3B	BBB/Baa2	9	2,368	0.15	4.25	71	3.00	1,778	0.15	11.54	206	11.59	1,960	0.15	12.77	238	12.14
0.20 to 0.26	3C	BBB-/Baa3	10	2,245	0.20	17.56	347	15.46	2,149	0.20	17.67	360	16.75	3,318	0.20	18.40	553	16.67
Non-Investment Grade													•					· ·
0.27 to 0.36	4A	BB+/Ba1	11	1,095	0.27	11.08	146	13.33	1,175	0.27	20.39	245	20.85	247	0.27	12.81	49	19.84
0.37 to 0.55	4B	BB/Ba2	12	324	0.37	54.60	184	56.79	320	0.37	23.75	82	25.63	673	0.37	25.46	176	26.15
0.56 to 0.85	4C	BB-/Ba3	13	45	0.56	15.50	9	20.00	40	0.56	18.64	10	25.00	174	0.56	5.42	12	6.90
0.86 to 1.29	5A	B+/B1	14	2	0.86	47.45	2	100.00	3	0.86	30.24	2	66.67	Į.	0.86	21.63	2	40.00
1.30 to 2.69	5B	B/B2	15	12	1.30	3.68	1	8.33	_	_	_	_	_	19	1.30	60.00	26	136.84
2.70 to 11.67	5C	B-/B3	16	17	2.70	32.51	19	111.76	42	2.70	46.36	48	114.29	6	2.70	17.40	3	50.00
Watch and Classified								•		•			•		•			·
11.68 to 22.12	6	CCC+/Caa1	17	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
22.13 to 45.99	7	to	18	_	_	_	_	_	_	_	_	_	_	-		_	_	-
46.00 to 99.99	8	CC/Ca	19	-	_	_	_	_	-	_	_	_	_	-		_	_	_
Impaired/Default																		
100.00	9	D	20	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
Total			21	\$ 101,850	0.07 %	15.14 % \$	6,627	6.51 %	\$ 111,602	0.07 %	16.24 % \$	8,949	8.02 %	\$ 105,922	0.07	% 17.44 %\$	9,564	9.03 %

<sup>&</sup>lt;sup>1</sup> EAD includes the effects of credit risk mitigation.

Corporate   S	AIRB Credit Risk E	xposur	es: Undrawn Com	mitments a	and EAD on U	ndrawn Commit	nents <sup>1,2</sup>				
Part	(f)			0047			0047			0047	
Notificial   Section   S	·· /	LINE #									
	AS at	#	<u> </u>	Q3		<u> </u>	Q2		<u> </u>	<u> </u>	·
Residential secured   1											
Configuration   Configuratio									<del>                                     </del>		
Other   Feelina				\$			\$	·		\$	
Non-retail											
Non-retail Composite   6	Other retail										
Corporate   S		4	196,928		123,635	196,593		123,747	192,635		121,336
Sovereign   6	Non-retail										
Bank   7	Corporate	5	68,788		47,335	71,369		50,149	67,954		47,752
Page	Sovereign										
Total   Page	Bank	7	1,019		706	998		707	917		650
Part		8	71,198		49,005	73,874		51,923	70,227	•	49,362
Notional   EAD on Notional   EAD on Notional   EAD on Undrawn	Total	9	\$ 268,126	\$	172,640	\$ 270,467	\$	175,670	\$ 262,862	\$	170,698
Notional   EAD on Notional   EAD on Notional   EAD on Undrawn						•			-		
Notional undrawn und				2016	•		2016	•		2016	
By Counterparty Type   Retail   Undrawn   Un				Q4			Q3			Q2	
By Counterparty Type   Retail   Undrawn   Un			Notional	<u> </u>	FAD on	Notional		FAD on	Notional		FAD on
Retail   Commitments   Commi	By Counterparty Type										
Residential secured											
Qualifying revolving retail   1		10		•	•		•			•	
Cher retail   12			Ψ 0.,20.	Ф	·		Ф	·		Ф	
Non-retail   18,383											
Non-retail   Corporate	Other retail			<del></del>	· ·		<del> </del>	· ·	<del>                                     </del>	<del></del>	
Corporate         14         62,252         43,670         59,353         41,728         55,190         38,830           Sovereign         15         1,383         979         1,365         966         13,300         977         690           Bank         16         911         645         987         699         975         690           Total         17         64,546         45,294         61,705         43,393         57,545         40,497           Total         2016         2015         2015         201,503         204,452         3136,153           Notional undrawn coll undrawn collarian	Non-note!!	13	188,383		118,527	183,996		115,200	146,907		95,656
Sovereign   15			20.050		40.070	50.050		44.700	55.400		00.000
Bank	•		1						The state of the s		
Total   18	•										
Total   18   \$ 252,929	Bank								· · · · · · · · · · · · · · · · · · ·		
Page									t		
Notional windrawn w	Total	18	\$ 252,929	\$	163,821	\$ 245,701	\$	158,593	\$ 204,452	\$	136,153
Notional windrawn w											
Notional   EAD on   Undrawn   Undr											
By Counterparty Type         undrawn commitments         defended         33,609         45,600         45,601         45,601         45,601         45,601         45,601         45,601         45,601         45,601         45,601         45,601         45,601         45,601         45,601         45,601         47,605         47,605         47,905				Q1			Q4			Q3	
By Counterparty Type         undrawn commitments         defended         33,609         45,600         45,601         45,601         45,601         45,601         45,601         45,601         45,601         45,601         45,601         45,601         45,601         45,601         45,601         45,601         47,605         47,605         47,905			Notional	* *	EAD on	Notional		EAD on	Notional		EAD on
Retail         commitments         defs.60         33,60         68,10 <td>By Counterparty Type</td> <td></td> <td>undrawn</td> <td></td> <td>undrawn</td> <td>undrawn</td> <td></td> <td>undrawn</td> <td>undrawn</td> <td></td> <td>undrawn</td>	By Counterparty Type		undrawn		undrawn	undrawn		undrawn	undrawn		undrawn
Residential secured         19 Qualifying revolving retail         69,086 (63,191)         35,000 (51,362)         68,182 (56,505)         34,267 (56,632)         66,630 (55,521)         33,609 (45,601)           Other retail         21 (63,191)         51,362 (58,00)         56,505 (50,55)         46,382 (55,521)         55,521 (58,00)         45,601           Nom-retail         22 (140,883)         92,162 (78,00)         132,712 (78,00)         86,034 (78,00)         130,010 (78,00)         84,493           Noprateal         23 (60,448)         44,507 (78,00)         56,009 (78,00)         41,289 (78,00)         47,965 (78,00)         35,376           Sovereign         24 (1,445)         1,075 (1,344)         1,000 (1,611)         1,194         1,198           Bank         25 (1,160)         863 (1,294)         963 (1,234)         50,810         37,492	Retail										
Qualifying revolving retail         20         63,191         51,362         56,505         46,382         55,521         45,601           Other retail         21         8,606         5,800         8,025         5,385         7,859         5,283           Nom-retail         22         140,883         92,162         132,712         86,034         130,010         84,493           Nom-retail         Corporate         23         60,448         44,507         56,009         41,289         47,965         35,376           Sovereign         24         1,445         1,075         1,344         1,000         1,611         1,198           Bank         25         1,160         863         1,294         963         1,234         918           45         6,30,53         46,445         58,647         43,252         50,810         37,492	Residential secured	19		\$			\$		·	\$	
Other retail         21 graph         8,606 graph         5,800 graph         8,025 graph         5,385 graph         7,859 graph         5,283 graph           Non-retail         Volume         80,034 graph         130,010 graph         84,493 graph           Corporate         23 graph         60,448 graph         44,507 graph         56,009 graph         41,289 graph         47,965 graph         35,376 graph           Sovereign graph         24 graph         1,445 graph         1,075 graph         1,344 graph         1,000 graph         1,611 graph         1,194 graph           Bank graph         25 graph         63,053 graph         46,445 graph         58,647 graph         43,252 graph         50,810 graph         37,492 graph			1 .	•			•			•	
Non-retail     Vorporate     23     140,883     92,162     132,712     86,034     130,010     84,493       Corporate     23     60,448     44,507     56,009     41,289     47,965     35,376       Sovereign     24     1,445     1,075     1,344     1,000     1,611     1,198       Bank     25     1,160     863     1,294     963     1,234     918       26     63,053     46,445     58,647     43,252     50,810     37,492	Other retail										
Corporate     23     60,448     44,507     56,009     41,289     47,965     35,376       Sovereign     24     1,445     1,075     1,344     1,000     1,611     1,198       Bank     25     1,160     863     1,294     963     1,234     918       26     63,053     46,445     58,647     43,252     50,810     37,492				· ·		· · · · · · · · · · · · · · · · · · ·	<u> </u>		· · · · · · · · · · · · · · · · · · ·	•	
Sovereign     24     1,445     1,075     1,344     1,000     1,611     1,198       Bank     25     1,160     863     1,294     963     1,234     918       26     63,053     46,445     58,647     43,252     50,810     37,492	Non-retail		1								
Bank         25         1,160         863         1,294         963         1,234         918           26         63,053         46,445         58,647         43,252         50,810         37,492	Corporate	23	60,448		44,507	56,009		41,289	47,965		35,376
26 63,053 46,445 58,647 43,252 50,810 37,492	Sovereign		1,445		1,075	1,344		1,000	1,611		1,198
	Bank	25	1,160		863	1,294		963	1,234		918
		26	63,053		46,445	58,647		43,252	50,810		37,492
	Total	27	\$ 203,936	\$	138,607	\$ 191,359	\$	129,286	\$ 180,820	\$	121,985

<sup>&</sup>lt;sup>1</sup> Notional undrawn commitments are equal to the contractually available amounts provided via committed loan agreements less amounts currently outstanding under those committed loan agreements.
<sup>2</sup> EAD on undrawn commitments is the amount currently undrawn but expected to be drawn assuming a default on the underlying committed loan agreement.

### AIRB Credit Risk Exposures: Loss Experience

(Percentage)	LINE	2017	2017	2017	2016
	#	Q3	Q2	Q1	Q4

2016

By Counterparty Type
Retail
Residential secured
Qualifying revolving retail
Other retail
Corporate
Sovereign
Bank

By Counterparty Type

Retail
Residential secured
Qualifying revolving retail

Bank

Other retail Non-retail Corporate Sovereign Bank

	Actual loss rate <sup>1,2</sup>	Expected loss rate <sup>1,2</sup>	Actual loss rate <sup>1,2</sup>	Expected loss rate <sup>1,2</sup>	Actual loss rate <sup>1,2</sup>	Expected loss rate <sup>1,2</sup>	Historical actual loss rate <sup>3</sup>	Actual loss rate <sup>1,2</sup>	Expected loss rate <sup>1,2</sup>
!	0.01 %	0.06 %	0.01 %	0.06 %	0.01 %	0.06 %	0.01 %	0.01 %	0.07 %
	2.16	3.04	2.10	2.98	2.34	2.94	3.16	2.19	2.86
	0.95	1.14	0.99	1.14	1.00	1.12	1.02	0.93	1.10
	(0.01)	0.63	-	0.57	0.06	0.47	0.24	0.10	0.42
	-	-	-	_	-	-	-	-	-
	-	0.03	-	0.01	-	0.03	-	-	0.04

2016

	Q3		Q2		Q1			Q4	
	Actual loss rate <sup>1,2</sup>	Expected loss rate <sup>1,2</sup>	Actual loss rate <sup>1,2</sup>	Expected loss rate 1,2	Actual loss rate <sup>1,2</sup>	Expected loss rate <sup>1,2</sup>	Historical actual loss rate <sup>3</sup>	Actual loss rate <sup>1,2</sup>	Expected loss rate <sup>1,2</sup>
7 8 9	0.01 % 2.10 0.88	0.07 % 2.97 1.03	0.01 % 2.19 0.79	0.07 % 2.96 1.02	0.01 % 2.06 0.73	0.07 % 2.97 1.03	0.01 % 3.25 1.01	0.01 % 1.96 0.69	0.07 % 3.02 1.14
10 11	0.09	0.43 - 0.04	0.11 _ _	0.37 _ 0.04	0.05	0.38 - 0.05	0.25	0.03	0.39 - 0.05

			2015 Q3		
By Counterparty Type		Actual loss rate <sup>1,2</sup>		Expected loss rate <sup>1,2</sup>	
Retail					
Residential secured	13	0.01	%	0.07	%
Qualifying revolving retail	14	2.08		3.30	
Other retail	15	0.74		1.07	
Non-retail					
Corporate	16	0.03		0.42	
Sovereign	17	_		_	

<sup>1</sup> Retail actual and expected loss rates are measured as follows:

Actual loss rate represents the actual write-offs net of recoveries for the current and prior three quarters divided by the outstanding balances taken at the beginning of the four-quarter period starting 15 months ago. This reflects the three-month lag between the definition of default (at 90 days past due) and write-off (at 180 days past due). Expected loss rate represents the loss rate that was predicted at the beginning of the four-quarter period defined above. The expected loss is measured using credit risk parameters (PD x LGD x EAD) divided by outstanding balances at the beginning of the four-quarter period.

<sup>2</sup> Non-retail actual and expected loss rates are measured as follows:

Actual loss rate represents the change in counterparty-specific allowance plus write-offs less recoveries, divided by the outstanding balances for the same period, for each of the current and prior three quarters. Expected loss rate represents the loss rate that was predicted at the beginning of the applicable four-quarter period defined above. The expected loss is measured using credit risk parameters (PD x LGD x EAD) divided by outstanding balances at the beginning of the four-quarter period.

<sup>3</sup> The historical loss rate equals total actual losses for all years in the historically measured period. Currently, the Bank includes comparable data from fiscal 2002 through to the current year in the historically measured period. This historical data will be updated annually until a complete business cycle is included in the historically measured period. A business cycle is estimated to be 10 to 15 years in duration.

### Commentary:

Differences between actual loss rates and expected loss rates are due to the following reasons:

- Expected losses are calculated using "through the cycle" risk parameters while actual losses are determined at a "point in time" and reflect economic conditions at that time. Using "through the cycle" parameters has the effect of stabilizing expected losses over a longer period of time. As a result, actual losses may exceed expected losses during a recession and may fall below expected losses during economic growth.
- Expected loss parameters are conservatively estimated (that is, adjusted upwards) to account for the limited number of years of historical data available.

0.05

- LGD parameters used in the expected loss estimates are adjusted upwards to reflect potential economic downturn conditions.

2016

To ensure the Bank's models and risk parameters continue to be reasonable predictors of potential loss, the Bank assesses and reviews its risk parameters against actual loss experience and public sources of information at least annually and the Bank's models are updated as required.

#### Retail:

Actual loss rate for the overall Canadian Retail exposures are below the expected loss rates and is a reflection of prudent assumptions and good quality of originations.

#### Non-retail

Actual loss rates for non-retail exposures remain below the historically measured period. This is because of lower average default rates during these quarters than they were during the historically measured period.

2015

#### AIRB Credit Risk Exposures: Actual and Estimated Parameters<sup>1</sup> 2017 (Percentage) LINE 2017 Q3 As at Q2 Average Actual Average Average Average Actual Average Average Estimated Default Estimated Actual Estimated Actual Estimated Default Estimated Actual Estimated Actual $PD^2$ LGD<sup>3</sup> LGD EAD EAD $PD^2$ Rate LGD<sup>3</sup> LGD EAD EAD Rate Retail Residential secured uninsured 0.63 % 0.43 % 29.43 % 14.24 % 96.63 % 97.21 % 0.64 % 0.44 % 29.57 % 14.95 % 96.90 96.99 % Residential secured insured<sup>4</sup> 2 0.61 0.34 n/a n/a 99.31 99.41 0.65 0.38 n/a n/a 99.36 99.50 79.33 80.30 Qualifying revolving retail 3 1.52 1.60 86.18 93.01 88.88 1.56 1.58 86.11 93.09 88.86 Other retail 2.27 2.12 50.94 42.20 99.15 91.15 2.41 2.00 51.87 42.23 99.05 91.26 Non-Retail Corporate 1.19 0.47 18.25 16.90 91.43 58.54 1.27 0.56 19.12 17.69 91.87 68.03 Sovereign 6 80.0 12.83 99.77 n/a 0.09 13.23 n/a 99.78 n/a Bank 0.17 13.55 98.83 n/a 0.18 18.93 n/a 99.12 n/a 2017 2016 Q1 Q4 Actual Average Actual Average Average Average Average Average Estimated Default Estimated Actual Estimated Actual Estimated Default Estimated Actual Estimated Actual $PD^2$ Rate LGD<sup>3</sup> LGD EAD EAD $PD^2$ Rate LGD<sup>3</sup> LGD EAD EAD Retail Residential secured uninsured 0.65 % 0.45 % 30.53 % 14.41 % 97.12 % 97.37 % 0.64 % 0.49 % 32.08 % 16.52 % 97.14 % 97.25 % Residential secured insured4 0.62 0.38 99.39 99.41 0.62 0.38 99.40 99.32 n/a n/a n/a n/a 10 Qualifying revolving retail 1.53 1.55 85.91 80.11 93.37 84.66 1.48 1.51 85.91 79.79 93.20 85.27 Other retail 11 2.37 51.04 42.50 99.06 91.44 2.26 1.90 51.67 42.86 99.07 92.64 1.94 Non-Retail 12 0.56 20.36 17.21 91.90 66.17 1.19 0.48 15.26 92.44 Corporate 1.24 21.09 71.78 99.78 Sovereign 13 0.09 14.73 99.79 0.09 14.95 n/a n/a n/a n/a Bank 14 0.17 18.86 n/a 99.08 n/a 0.19 21.18 n/a 99.09 n/a 2016 2016 Q3 Q2 Actual Average Average Average Actual Average Average Average Estimated Default Estimated Actual Estimated Actual Estimated Default Estimated Actual Estimated Actual LGD<sup>3</sup> $PD^2$ LGD<sup>3</sup> LGD EAD $PD^2$ LGD Rate EAD Rate EAD EAD Retail 0.67 % 0.50 % 33.01 % 19.37 % 97.13 % 97.19 % 0.30 % 0.28 % 27.55 % 98.35 100.48 % Residential secured uninsured 6.43 % 15 Residential secured insured<sup>4</sup> 16 0.55 0.33 n/a n/a 99.39 99.42 0.44 0.28 n/a n/a 99.17 99.86 Qualifying revolving retail 17 1.48 1.53 85.78 79.34 93.62 85.34 1.29 1.31 84.47 77.33 96.39 88.66 2.24 53.04 92.64 Other retail 18 45.45 1.82 1.38 53.92 44.83 97.63 1.84 99.10 92.35 Non-Retail

21.20

19.98

16.18

9.55

n/a

n/a

92.51

99.77

99.05

73.25

n/a

n/a

0.44

0.12

21.27

16.08

16.68

1.16

0.09

0.22

8.72

n/a

n/a

92.67

99.75

99.03

0.45

1.14

0.09

0.20

19

20

21

Corporate

Sovereign

67.02

n/a

n/a

<sup>1</sup> Effective the third quarter of 2016, OSFI approved the Bank to calculate the majority of the retail portfolio credit RWA in the U.S. Retail segment using the AIRB approach.

<sup>&</sup>lt;sup>2</sup> Estimated PD reflects a one-year through-the-cycle time horizon and is based on long run economic conditions.

<sup>&</sup>lt;sup>3</sup> Estimated LGD reflects loss estimates under a severe downturn economic scenario.

<sup>&</sup>lt;sup>4</sup> LGD for the residential secured insured portfolio is n/a due to the effect of credit risk mitigation from government backed entities.

## Securitization and Resecuritization Exposures in the Banking Book<sup>1</sup>

2017

LINE

13

14 15

16

(\$ millions)

BBB+ to BBB-

Below BB-/Unrated

Gains on sale recorded upon securitization

BB+ to BB-

Total

As at

			•	•									
		Gross	Gross	Risk-		Gross	Risk-	Gross	Gross	Risk-	Gross		Risk-
		securitization	resecuritization	weighted									
Capital Approach and Risk Weighting		exposures	exposures <sup>2</sup>	assets									
Standardized Approach <sup>3</sup>		•	,	Ť	·		•			•			
AA- and above	1	\$ 13,481	\$ - \$	2,696	\$ 12,874 \$	- \$	2,575	\$ 11,459	\$ - \$	2,292	\$ 42,791	\$ - \$	8,558
A+ to A-	2	-	-	-	-	_	_	_	_	_	382	_	191
BBB+ to BBB-	3	-	-	-	-	-	_	-	-	_	284	-	284
BB+ to BB-	4	-	-	-	-	-	_	-	-	_	519	-	1,818
Below BB-/Unrated	5	-	-	-	-	_	_	_	_	_	-	_	_
Ratings Based Approach <sup>4</sup>													
AA- and above	6	30,055	-	2,138	36,368	_	2,598	32,617	_	2,334	2,493	_	187
A+ to A-	7	471	-	77	1,206	_	173	998	_	143	768	712	825
BBB+ to BBB-	8	824	6	812	931	8	920	181	7	170	84	153	403
BB+ to BB-	9	78	2	265	89	2	306	91	2	311	31	2	172
Below BB-/Unrated	10	658	-	6,722	748	_	7,676	747	_	7,650	76	354	2,801
Internal Assessment Approach <sup>5</sup>													
AA- and above	11	20,830	-	1,118	18,088	-	898	17,995	-	866	16,724	-	770
A+ to A-	12	1,006	-	134	584	-	70	748	-	90	1,269	-	152

70,888 \$

n/a

64,836 \$

2016

Q1

15,216

2017

2017

n/a

65,421 \$

13,856

2016

											_		
		Gross	Gross	Risk-									
		securitization	resecuritization	weighted									
Capital Approach and Risk Weighting		exposures	exposures <sup>2</sup>	assets									
Standardized Approach <sup>3</sup>													
AA- and above	18	\$ 41,480	\$ - \$	8,296	\$ 39,487	\$ - \$	7,897	\$ 42,833	\$ - \$	8,567	\$ 40,276	\$ - \$	8,055
A+ to A-	19	-	_	_	_	_	-	-	-	_	-	_	_
BBB+ to BBB-	20	-	_	_	_	_	-	-	-	_	-	_	_
BB+ to BB-	21	-	_	_	_	_	-	-	-	_	-	_	_
Below BB-/Unrated	22	-	_	_	_	_	-	-	-	_	-	_	_
Ratings Based Approach <sup>4</sup>													
AA- and above	23	2,506	_	187	2,908	47	233	3,380	57	269	3,277	56	261
A+ to A-	24	755	725	835	781	758	868	896	886	1,012	601	860	948
BBB+ to BBB-	25	91	159	422	41	119	295	50	193	469	52	190	456
BB+ to BB-	26	28	2	124	45	3	194	53	3	229	67	3	261
Below BB-/Unrated	27	78	354	2,862	74	356	2,890	85	350	2,661	84	331	2,604
Internal Assessment Approach⁵													
AA- and above	28	16,409	_	774	13,873	_	651	13,138	-	607	11,255	_	462
A+ to A-	29	1,302	_	156	773	_	93	654	-	79	224	_	27
BBB+ to BBB-	30	-	_	_	_	_	-	-	-	_	-	_	_
BB+ to BB-	31	-	_	_	_	_	-	-	-	_	-	_	_
Below BB-/Unrated	32	-	_	_	_	_	-	-	-	_	-	_	_
Gains on sale recorded upon securitization	33	_	-	n/a	-	-	n/a	-	-	n/a	-	-	n/a
Total	34	\$ 62,649	\$ 1,240 \$	13,656	\$ 57,982	\$ 1,283 \$	13,121	\$ 61,089	\$ 1,489 \$	13,893	\$ 55,836	\$ 1,440 \$	13,074

2016

Q2

67,403 \$

n/a

13,962

8 \$

2016

Q3

n/a

1,221 \$

2015

Q4

Securitization exposures include the Bank's exposures as originator and investor under both the IRB and the Standardized approaches.
 None of the Bank's resecuritization exposures were subject to credit risk mitigation.

<sup>&</sup>lt;sup>3</sup> Securitization exposures subject to the Standardized approach are primarily comprised of investments held in the Banking book.

Securifization exposures subject to the ratings based approach primarily include liquidity facilities, credit enhancements, letters of credit, and investments held in the Banking book.

Securitization exposures subject to the internal assessment approach are primarily comprised of liquidity facilities provided to the Bank's asset-backed commercial paper (ABCP) conduits.

# Risk-Weighted Assets<sup>1</sup>

(\$ millions)	LINE	2017	2017	2017	2016
As at	#	Q3	Q2	Q1	Q4
		• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	

ſ	Risk-weighted assets					•		Risk-wei	ghted assets			Risk-weig	hted assets			
	Gross	Standardized	Advanced		Gross	Standardized	Advanced		Gross	Standardized	Advanced		Gross	Standardized	Advanced	
	exposures	Approach	Approach	Total	exposures	Approach	Approach	Total	exposures	Approach	Approach	Total	exposures	Approach	Approach	Total
ſ																
1	\$ 344,381	\$ 913	\$ 27,783 \$	28,696	\$ 341,818	\$ 972	\$ 27,764 \$	28,736	\$ 336,744	\$ 870	\$ 27,790		\$ 336,212	\$ 833	\$ 28,730 \$	29,563
2	93,504	-	19,230	19,230	93,696	_	19,797	19,797	91,856	_	19,266		90,778	-	18,965	18,965
3	91,554	13,921	29,860	43,781	92,885	14,374	31,544	45,918	90,243	14,050	29,183	43,233	90,834	14,009	29,279	43,288
4	405,667	107,823	53,141	160,964	424,007	117,662	57,071	174,733	387,734	111,121	54,980	166,101	380,015	114,105	55,454	169,559
5	233,178	4,915	551	5,466	241,654	5,508	554	6,062	224,013	4,814		5,343	216,533	4,625	514	5,139
6			,	,												9,087
7		2,696				2,575				2,292				10,851		16,161
8	2,617	-	888	888	2,827	_	912	912	2,740		901	901	2,712	_	789	789
9	1,344,214	133,633	147,089	280,722	1,374,726	144,653	156,148	300,801	1,299,797	136,602	150,191	286,793	1,267,879	147,828	144,723	292,551
10				8,422				8,908				8,552				8,515
11	142,855	n/a	n/a	36,945	143,738	n/a	n/a	40,309	126,069	n/a	n/a	39,138	121,577	n/a	n/a	39,230
12	\$ 1,487,069		\$	326,089	\$ 1,518,464		\$	350,018	\$ 1,425,866			\$ 334,483	\$ 1,389,456		\$	340,296
13	n/a	552	13,290	13,842	n/a	2,612	11,169	13,781	n/a	1,546	12,041	13,587	n/a	1,187	11,024	12,211
14	n/a	3,487	43,840	47,327	n/a	3,298	47,622	50,920	n/a	3,158	45,638	48,796	n/a	3,001	45,000	48,001
15	n/a			21,545	n/a			5,334	n/a			5,302	n/a			5,336
ľ																
16				408,803				420,053				402,168				405,844
17				408,803	•	•	•	420,053				402,168				405,844
18			\$	408,803			\$	420,053				\$ 402,168			\$	405,844
	9 10 11 12 13 14 15 16 17	1 \$ 344,381 2 93,504 3 91,554 4 405,667 5 233,178 6 105,902 7 67,411 8 2,617 9 1,344,214 10 11 142,855 12 1,487,069 13 n/a 14 n/a 15 n/a	exposures Approach  1 \$ 344,381 \$ 913 93,504 — 3 91,554 13,921  4 405,667 107,823 5 233,178 4,915 6 105,902 3,365 7 67,411 2,696 8 2,617 — 9 1,344,214 133,633  10 11 142,855 n/a 12 14 142,855 n/a 15 1,487,069 n/a 552 14 n/a 3,487 n/a 16 17	Gross   Standardized   Advanced   Approach	Gross   Standardized exposures   Approach   Advanced Approach   Total	Gross Standardized Approach Approach Total Gross exposures  1 \$ 344,381 \$ 913 \$ 27,783 \$ 28,696 \$ 341,818 2 93,504 - 19,230 19,230 93,696 93 91,554 13,921 29,860 43,781 160,964 424,007 5 233,178 4,915 551 5,466 241,654 6 105,902 3,365 4,370 7,735 106,941 7 67,411 2,696 11,266 13,962 70,898 8 2,617 - 888 888 2,827 9 1,344,214 133,633 147,089 280,722 1,374,726 10 8,422 11 142,855 n/a n/a 36,945 143,738 12 \$ 1,487,069  \$ 326,089 \$ 1,518,464 n/a 14,743 3,487 43,840 47,327 n/a 15 n/a 408,803 10 10 10 10 10 10 10 10 10 10 10 10 10	Gross   Standardized   Advanced   Approach   Total   Gross   Standardized   Approach   Approach   Approach   Total   Gross   Standardized   Approach   Ap	Gross   Standardized exposures   Approach   Approach	Gross   Standardized exposures   Advanced exposures   Approach   Total	Gross   Standardized exposures   Advanced exposures   Approach   Approach	Gross   Standardized exposures   Approach   Advanced exposures   Approach   Approach	Gross   Standardized   Advanced   Approach   Approach	Gross   Standardized exposures   Advanced exposur	Cross   Standardized   Advanced   Approach   Approach	Gross   Standardized exposures   Advanced exposures   Advanced exposures   Approach   Total   Gross   Standardized exposures   Approach   App	Gross Standardized exposures Approach A

		2016 Q3				2016 Q2				2016 Q1				2015 Q4			
				Diek-weir	hted assets			Dick-wair	hted assets			Diek-weig	ahted assets			Diek-wein	ihted assets
		Gross	Standardized	Advanced	inteu assets	Gross	Standardized	Advanced	nicu assets	Gross	Standardized	Advanced	grited assets	Gross	Standardized	Advanced	grited assets
		exposures	Approach	Approach	Total	exposures	Approach	Approach	Total	exposures	Approach	Approach	Total	exposures	Approach	Approach	Total
Credit Risk							•		·				·				
Retail																	
Residential secured	19	\$ 330,822	\$ 771	\$ 28,984 \$	29,755		\$ 12,348	\$ 16,219 \$		\$ 314,082	\$ 13,846	\$ 15,563 \$	29,409	\$ 309,423	\$ 12,857	\$ 15,869 \$	28,726
Qualifying revolving retail	20	88,115	-	18,480	18,480	73,566	_	14,903	14,903	70,122	-	14,132	14,132	63,169	-	12,586	12,586
Other retail	21	88,922	13,777	28,691	42,468	95,166	41,696	16,891	58,587	101,536	46,564	16,779	63,343	98,607	44,577	16,399	60,976
Non-retail <sup>2</sup>																	
Corporate	22	365,972	108,444	54,506	162,950	347,203	101,895	51,147	153,042	360,216	110,195	51,917	162,112	339,961	102,395	48,102	150,497
Sovereign	23	204,221	4,277	561	4,838	193,556	3,772	756	4,528	205,323	3,889	778	4,667	184,430	3,477	594	4,071
Bank	24	105,013	3,053	5,670	8,723	99,865	2,887	5,707	8,594	118,069	3,027	6,627	9,654	125,144	2,463	8,949	11,412
Securitization exposures	25	63,889	8,296	5,360	13,656	59,265	7,897	5,224	13,121	62,578	8,567	5,326	13,893	57,276	8,055	5,019	13,074
Equity exposures	26	2,650		797	797	2,523		755	755	2,700		735	735	2,679		866	866
Exposures subject to standardized																	
or IRB approaches	27	1,249,604	138,618	143,049	281,667	1,183,220	170,495	111,602	282,097	1,234,626	186,088	111,857	297,945	1,180,689	173,824	108,384	282,208
Adjustment to IRB RWA for																	
scaling factor	28				8,411				6,523				6,552				6,347
Other assets not included in																	
standardized or IRB approaches <sup>2</sup>	29	120,970	n/a	n/a	38,773	117,910	n/a	n/a	38,925	124,714	n/a	n/a	41,092	111,415	n/a	n/a	40,032
Total credit risk	30	\$ 1,370,574		\$	328,851	\$ 1,301,130		\$	327,545	\$ 1,359,340		\$	345,589	\$ 1,292,104		\$	328,587
Market Risk	31	n/a	1,062	11,394	12,456	n/a	915	11,977	12,892	n/a	847	10,961	11,808	n/a	606	12,049	12,655
Operational Risk	32	n/a	2,880	44,056	46,936	n/a	43,152		43,152	n/a	42,220		42,220	n/a	41,118		41,118
Regulatory Floor	33	n/a			_	n/a				n/a			_	n/a			_
Total Common Equity Tier 1 Capital																	
risk-weighted assets <sup>3</sup>	34				388,243				383,589				399,617				382,360
Tier 1 Capital risk-weighted assets <sup>3</sup>	35	·		·	388,872	·		·	384,330	•			400,498			·	383,301
Total Capital risk-weighted assets <sup>3</sup>	36			\$	389,412			\$	384,966	ļ.,			401,253		<del>.</del>	\$	384,108

Amounts are calculated in accordance with the Basel III regulatory framework, and are presented based on the "all-in" methodology.

Non-retail exposures do not include OSFI "deemed" QCCP exposures; as such exposures are included in "Other assets not included in standardized or IRB approaches", in accordance with the Basel III regulatory framework.

Bach capital ratio has its own RWA measure due to the OSFI-prescribed scalar for inclusion of the CVA. For fiscal 2015 and 2016, the scalars for inclusion of CVA for CET1, Tier 1, and Total Capital RWA were 64%, 71%, and 77%, respectively. For fiscal 2017, the scalars are 72%, 77%, and 81%, respectively.

# Capital Position – Basel III<sup>1</sup>

(\$ millions)	Line	· · · · · · · · · · · · · · · · · · ·	2017	•		201	6		201	5	Cross	OSFI
As at	#	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Reference <sup>2</sup>	Template
									<u> </u>		<u> </u>	. ,
Common Equity Tier 1 Capital										*	]	
Common shares plus related contributed surplus	1	\$ 21,095		\$ 20,822	\$ 20,881 \$	,	.,		\$ 20,457 \$	,	A1+A2+B	1
Retained earnings	2	39,473	37,577	37,330	35,452	34,387	33,442	32,585	32,053	30,764	C	2
Accumulated other comprehensive income (loss)	3	6,564	11,853	9,131	11,834	11,037	8,689	13,467	10,209	10,477	D	3
Common Equity Tier 1 Capital before regulatory adjustments	4	67,132	70,192	67,283	68,167	66,175	62,813	66,592	62,719	61,628		6
Common Equity Tier 1 Capital regulatory adjustments												
Goodwill (net of related tax liability)	5	(18,269)	(19,837)	(18,986)	(19,517)	(19,047)	(18,371)	(20,386)	(19,143)	(19,150)	E1+E2-E3	8
Intangibles (net of related tax liability)	6	(2,261)	(2,350)	(2,264)	(2,241)	(2,119)	(2,071)	(2,215)	(2,192)	(2,273)	F1-F2	9
Deferred tax assets excluding those arising from temporary differences	7	(120)	(144)	(189)	(172)	(263)	(322)	(359)	(367)	(412)	G	10
Cash flow hedge reserve	8	278	(488)	(350)	(1,690)	(2,168)	(1,595)	(2,127)	(1,498)	(1,296)	Н	11
Shortfall of provisions to expected losses	9	(747)	(823)	(769)	(906)	(881)	(262)	(178)	(140)	(118)	I	12
Gains and losses due to changes in own credit risk on fair valued liabilities	10	(103)	(142)	(138)	(166)	(166)	(170)	(249)	(188)	(136)	J	14
Defined benefit pension fund net assets (net of related tax liability)	11	(11)	(11)	(11)	(11)	(12)	(12)	(11)	(104)	(17)	K	15
Investment in own shares	12	(157)	_	_	(72)	(43)	(64)	-	(4)	(24)		16
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)	13	(767)	(980)	(855)	(1,064)	(1,113)	(1,013)	(1,290)	(1,125)	(1,041)	L1+L2+L3	19
Amounts exceeding the 15% threshold	13	(101)	(900)	(000)	(1,004)	(1,113)	(1,013)	(1,290)	(1,120)	(1,041)	LIILZTLO	22
of which: significant investments in the common stocks of financials	14	_ [	_	_	_	_	_	(121)	_	_		23
of which: deferred tax assets arising from temporary differences	15	_	_	_	_	_	_	(59)	_	_		25
Total regulatory adjustments to Common Equity Tier 1 Capital	16	(22,157)	(24,775)	(23,562)	(25,839)	(25,812)	(23,880)	(26,995)	(24,761)	(24,467)	İ	28
Common Equity Tier 1 Capital	17	44,975	45,417	43,721	42,328	40,363	38,933	39,597	37,958	37,161		29
		ŕ	•	•		•	•					
Additional Tier 1 capital instruments												
Directly issued qualifying Additional Tier 1 instruments plus stock surplus	18	4,247	3,896	3,899	3,899	2,900	2,902	2,901	2,202	2,201	M+N+O	30/31
Directly issued capital instruments subject to phase out from Additional Tier 1	19	3,070	3,070	3,070	3,236	3,237	3,239	3,240	3,211	3,240	P1+P2+P3+P4	33
Additional Tier 1 instruments issued by subsidiaries and held by third parties subject to phase out	20	306	306	306	286	279	270	302	399	398	Q	34/35
Additional Tier 1 capital instruments before regulatory adjustments	21	7,623	7,272	7,275	7,421	6,416	6,411	6,443	5,812	5,839		36
Additional Tier 1 capital instruments regulatory adjustments												
Investment in own Additional Tier 1 instruments	22	_	_	_	_	_	_	_	(2)	_		37
Significant investments in the capital of banking, financial and insurance entities that are outside the									(-)			
scope of regulatory consolidation, net of eligible short positions	23	(352)	(352)	(352)	(352)	(352)	(352)	(352)	(352)	(352)	R+S	40
Total regulatory adjustments to Additional Tier 1 Capital	24	(352)	(352)	(352)	(352)	(352)	(352)	(352)	(354)	(352)	ĺ	43
Additional Tier 1 Capital	25	7,271	6,920	6,923	7,069	6,064	6,059	6,091	5,458	5,487	ĺ	44
Tier 1 Capital	26	52,246	52,337	50,644	49,397	46,427	44,992	45,688	43,416	42,648	Ī	45
Tier 2 capital instruments and provisions	07	7.000	F 700	F 700	5.700	0.746	0.740	0.500	0.400	4 467	_	40
Directly issued qualifying Tier 2 instruments plus related stock surplus  Directly issued capital instruments subject to phase out from Tier 2	27 28	7,082 2,641	5,786 2,646	5,700 2,649	5,760 4,899	3,740 4,897	3,748 4,898	2,500 4,897	2,489 5,927	1,497 5,927	T U	46 47
Tier 2 instruments issued by subsidiaries and held by third parties subject to phase out	29	2,641	2,040	2,049	4,699 270	4,697 276	281	317	207	207	V1+V2	48/49
Collective allowances	30	1,571	1,680	1,585	1.660	1,567	1,820	1.940	1,731	1,629	W	50
Tier 2 Capital before regulatory adjustments	31	11,573	10,375	10,196	12,589	10,480	10,747	9,654	10,354	9,260	i "	51
						•	•	•	•			
Tier 2 regulatory adjustments												
Investments in own Tier 2 instruments	32	(19)	_	-	-	_	(20)	-	-	-		52
Significant investments in the capital of banking, financial and insurance entities that are outside the	00	(470)	(470)	(470)	(470)	(470)	(470)	(470)	(470)	(470)		
scope of regulatory consolidation, net of eligible short positions	33	(170)	(170)	(170)	(170)	(170)	(170)	(170)	(170)	(170)	Х	55
Total regulatory adjustments to Tier 2 Capital	34	(189)	(170)	(170)	(170)	(170)	(190)	(170)	(170)	(170)	{	57
Tier 2 Capital	35	11,384	10,205	10,026	12,419	10,310	10,557	9,484	10,184	9,090	}	58
Total Capital	36	63,630	62,542	60,670	61,816	56,737	55,549	55,172	53,600	51,738	{	59
Common Equity Tier 1 Capital RWA <sup>3</sup>	37	408,803	420,053	402,168	405,844	388,243	383,589	399,617	382,360	369,495	}	60a
Tier 1 Capital RWA <sup>3</sup>	38	408,803	420,053	402,168	405,844	388,872	384,330	400,498	383,301	370,461	{	60b
Total Capital RWA <sup>3</sup>	39	\$ 408,803	\$ 420,053	\$ 402,168	\$ 405,844	\$ 389,412 \$	384,966 \$	401,253	\$ 384,108 \$	371,289	J	60c

Capital position has been calculated using the "all-in" basis.

Cross referenced to the Reconciliation with Balance Sheet Under Regulatory Scope of Consolidation table on page 81.

Bach capital ratio has its own RWA measure due to the OSFI prescribed scalar for inclusion of the CVA. For fiscal 2015 and 2016, the scalars for inclusion of CVA for CET1, Tier 1, and Total Capital RWA were 64%, 71%, and 77%, respectively. For fiscal 2017, the corresponding scalars are 72%, 77%, and 81%, respectively.

# Capital Position - Basel III (Continued)

(\$ millions, except as noted)	Line		2017			20	16			2015	OSFI
As at	#	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Template
Capital Ratios <sup>1</sup>			1		· · · · · ·	<del> </del>	<del> </del>		1	<del> </del>	- 1
Common Equity Tier 1 Capital (as percentage of CET1 Capital RWA)	40	11.0 %	10.8 %	10.9 %	10.4 %	6 10.4 %	10.1 %	9.9 %	9.9 %	10.1 %	61
Tier 1 (as percentage of Tier 1 Capital RWA)	41	12.8	12.5	12.6	12.2	11.9	11.7	11.4	11.3	11.5	62
Total Capital (as percentage of Total Capital RWA)	42	15.6	14.9	15.1	15.2	14.6	14.4	13.7	14.0	13.9	63
Buffer requirement (minimum CET1 requirement plus capital conservation buffer plus global	72	13.0	14.5	13.1	13.2	14.0	17.7	10.7	14.0	10.0	03
systemically important banks (G-SIBs) buffer plus domestic systemically important											
banks (D-SIBs) buffer requirement expressed as percentage of RWA) <sup>2,3</sup>	43	8.0	8.0	8.0	8.0	8.0	8.0	8.0	7.0	7.0	64
of which: capital conservation buffer requirement	44	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	65
of which: countercyclical buffer requirement <sup>4</sup>	45	2.5	2.5	2.5	n/a	n/a	n/a	n/a	n/a	n/a	66
of which: D-SIB buffer requirement <sup>5</sup>	46	1.0	1.0	1.0	1.0	1.0	1.0	1.0	n/a	n/a	67a
Common Equity Tier 1 available to meet buffers (as percentage of RWA)	47	11.0	10.8	10.9	10.4	10.4	10.1	9.9	9.9	10.1	68
OSFI all-in target (minimum plus conservation buffer plus D-SIB											
surcharge (if applicable))											
Common Equity Tier 1 all-in target ratio	48	8.0	8.0	8.0	8.0	8.0	8.0	8.0	7.0	7.0	69
Tier 1 all-in target ratio	49	9.5	9.5	9.5	9.5	9.5	9.5	9.5	8.5	8.5	70
Total Capital all-in target ratio	50	11.5	11.5	11.5	11.5	11.5	11.5	11.5	10.5	10.5	71
Amounts below the thresholds for deduction (before risk weighting)											
Non-significant investments in the capital of other financials	51	\$ 1,501	\$ 1,149	\$ 1,047	\$ 1,094	\$ 866		\$ 933	\$ 538	\$ 527	72
Significant investments in the common stock of financials	52	4,574	4,640	4,458	4,339	4,148	3,994	3,986	3,909	3,820	73
Mortgage servicing rights	53	27	28	26	25	23	21	22	20	18	74
Deferred tax assets arising from temporary differences (net of related tax liability)	54	1,073	1,317	1,472	1,541	1,561	1,571	1,932	1,664	1,453	75
Applicable caps on the inclusion of allowances in Tier 2											
Allowance eligible for inclusion in Tier 2 in respect of exposures subject to standardized approach											
(prior to application of cap)	55	1,571	1,680	1,585	1,660	1,567	1,820	1,940	1,731	1,629	76
Cap on inclusion of allowances in Tier 2 under standardized approach	56	1,894	2,056	1,945	2,108	1,984	2,447	2,675	2,511	2,384	77
Capital instruments subject to phase-out arrangements (only applicable between											
January 1, 2013 to January 1, 2022)											
Current cap on Additional Tier 1 instruments subject to phase out arrangements	57	3,376	3,376	3,376	4,051	4,051	4,051	4,051	4,726	4,726	82
Amounts excluded from Additional Tier 1 due to cap (excess over cap after redemptions		,		•	·	,	•	•	·	·	
and maturities)	58	10	33	21	_	_	_	_	_	_	83
Current cap on Tier 2 instruments subject to phase out arrangements	59	4,381	4,381	4,381	5,258	5,258	5,258	5,258	6,134	6,134	84
Amounts excluded from Tier 2 due to cap (excess over cap after redemptions and maturities)	60	_	_	-	_	_	_	_	48	859	85
Capital Ratios – transitional basis <sup>6</sup>											
Risk-weighted assets	61	\$ 416,529	\$ 427,618	\$ 409,629	\$ 420,930	\$ 401,698	\$ 396,826	\$ 415,418	\$ 405,997	\$ 392,371	
Common Equity Tier 1 Capital	62	49,458	50,267	48,360	50,989	48,000	46,439	47,500	45,712	44,920	
Tier 1 Capital	63	52.994	53,110	51.394	50.989	48.000	46.439	47,500	45.712	44.920	
Total Capital	64	64,265	63,168	61,291	63,082	57,980	56,817	56,759	55,618	53,765	
Common Equity Tier 1 (as percentage of RWA)	65	11.9 %			12.1 %			11.4 %	11.3 %		
Tier 1 Capital (as percentage of RWA)	66	12.7	12.4	12.5	12.1	11.9	11.7	11.4	11.3	11.4	
Total Capital (as percentage of RWA)	67	15.4	14.8	15.0	15.0	14.4	14.3	13.7	13.7	13.7	
Capital Ratios for significant bank subsidiaries											
TD Bank, National Association (TD Bank, N.A.) <sup>7</sup>											
Common Equity Tier 1 Capital	68	14.4	14.2	13.7	13.5	13.4	13.4	13.4	13.6	13.6	
Tier 1 Capital	69	14.4	14.2	13.8	13.6	13.5	13.5	13.4	13.7	13.7	
Total Capital	70	15.5	15.3	14.8	14.6	14.5	14.5	14.5	14.7	14.7	
TD Mortgage Corporation	74	25.5	20.4	22.2	20.4	20.4	24.0	00.5	00.4	00.4	
Common Equity Tier 1 Capital	71	35.5	33.1	33.2	33.1	33.4	31.8	29.5	29.4	29.4	
Tier 1 Capital	72	35.5	33.1	33.2	33.1	33.4	31.8	29.5	29.4	29.4	
Total Capital	73	36.6	34.1	34.2	34.3	34.6	33.0	30.7	30.8	30.8	J

<sup>&</sup>lt;sup>1</sup> The "all-in" basis of regulatory reporting includes all of the regulatory adjustments that will be required by 2019.

<sup>&</sup>lt;sup>2</sup> The minimum CET1 requirement prior to the buffers is 4.5%.

<sup>3</sup> The Financial Stability Board, in consultation with Basel Committee on Banking Supervision and national authorities, has identified the 2016 list of G-SIBs, using 2015 fiscal year-end data. The Bank was not identified as a G-SIB.

<sup>&</sup>lt;sup>4</sup> Effective January 1, 2017, the countercyclical buffer surcharge is in effect.

<sup>&</sup>lt;sup>5</sup> Common equity capital D-SIB surcharge is in effect from January 1, 2016.

The "transitional" basis of regulatory reporting allows for certain adjustments to CET1, the largest of which being goodwill, intangible assets and the threshold deductions, to be phased-in over a period of five years starting in 2014, while retaining the phase-out rules for non-qualifying capital instruments. In addition, 100% of the CVA is included for calculation of the transitional ratios.

On a stand-alone basis, TD Bank, N.A. reports regulatory capital to the Office of the Comptroller of the Currency (OCC) on calendar quarter ends.

## Reconciliation with Balance Sheet Under Regulatory Scope of Consolidation

(\$ millions)		'	2017	
As at			Q3	
	Line	Balance Sheet <sup>1</sup>	Under Regulatory scope	Cross Reference <sup>3</sup>
Cash and due from banks	# 1	\$ 4,113	of consolidation <sup>2</sup> \$ \$ 4,113	Keterence
Interest-bearing deposits with banks	2	45,601	45,583	
Trading loans, securities, and other	3	99.819	99.819	
Derivatives	4	63,087	63,092	
Financial assets designated at fair value through profit or loss	5	3,833	1,880	
Held-to-maturity securities	6	71,233	71,233	
Available-for-sale securities	7	123,273	121,383	
Securities purchased under reverse repurchase agreements	8	120,400	120,400	
Loans	9	596,046	595,831	
Allowance for loan losses Eligible general allowance reflected in Tier 2 regulatory capital	10	(3,677)	(3,677)	w
Eligible general allowance reliected in Tier 2 regulatory capital  Shortfall of allowance to expected loss	11 12		(747)	VV I
Allowances not reflected in regulatory capital	13		(1,359)	'
Other	14	78,653	76,671	
Investment in TD Ameritrade		.,	.,.	
Significant investments exceeding regulatory thresholds	15		546	L1
Significant investments not exceeding regulatory thresholds	16		3,410	
Imputed goodwill	17		2,758	E2
Goodwill	18		15,630	E1 F1
Other intangibles Other intangibles (Mortgage Servicing Rights)	19 20		2,559 27	FI
Deferred tax assets	20		21	
Deferred tax assets (DTA) excluding those arising from temporary differences	21		120	G
DTA's (net of associated deferred tax liabilities (DTL)) realizable through net operating loss (NOL) carryback	22		1,073	
DTA's (net of associated DTL's) arising from temporary differences but not realizable through NOL carryback	23		1,492	
DTA's (net of associated DTL's) arising from temporary differences but not realizable through NOL carryback				
exceeding regulatory thresholds	24			
Other DTA/DTL adjustments <sup>4</sup>	25		(342)	
Significant investments in financials (excluding TD Ameritrade)  Significant investments exceeding regulatory thresholds	26		44	L2
Significant investments exceeding regulatory thresholds Significant investments in Additional Tier 1 Capital	26 27		11 2	S S
Significant investments not exceeding regulatory thresholds	28		65	3
Defined pension benefits	29		11	к
Other Assets	30		49,309	
TOTAL ASSETS	31	1,202,381	1,196,328	1
LIABILITIES AND EQUITY <sup>5</sup>				1
Trading deposits	32	81,732	81,732	
Derivatives	33	61,300	61,300	
Securitization liabilities at fair value	34	12,435	12,435	
Other financial liabilities designated at fair value through profit or loss	35	39	39	
Deposits Office Control of the Contr	36 37	773,867	773,867	
Other Deferred tax liabilities	3/	189,830	183,777	
Goodwill	38		119	E3
Intangible assets (excluding mortgage servicing rights)	39		298	F2
Other deferred tax liabilities (Cash flow hedges and other DTL's)	40		253	
Other DTA/DTL adjustments <sup>4</sup>	41		(343)	
Gains and losses due to changes in own credit risk on fair value liabilities	42		103	J
Other liabilities	43		183,347	
Subordinated notes and debentures	44	9,714	9,714	т
Directly issued qualifying Tier 2 instruments	45		7,082	Ü
Directly issued capital instruments subject to phase out from Tier 2 Capital instruments issued by subsidiaries and held by third parties-Tier 2	46 47		2,641 270	V1
Capital instruments not allowed for regulatory capital	48		(279)	V 1
Liabilities	49	1,128,917	1,122,864	1
Common Shares	50	20,912	20,912	A1
Preferred Shares	51	4,750	4,750	
Directly issued qualifying Additional Tier 1 instruments	52		4,250	M
Directly issued capital instruments subject to phase out from Additional Tier 1	53		1,698	P2
Preferred shares not allowed for regulatory capital	54	()	(1,198)	
Treasury Shares - Common	55	(22)	(22)	A2
Treasury Shares - Preferred Treasury Shares - non-viability contingent capital (NVCC) Preferred Shares	56 57	(8)	(8)	0
Treasury Shares - non-NVCC Preferred Shares	58		(3)	P4
Contributed Surplus	59	207	207	1 7
Contributed surplus - Common Shares	60		205	В
Contributed surplus - Preferred Shares	61		2	N
Retained Earnings	62	39,473	39,473	С
Accumulated other comprehensive income	63	6,564	6,564	D
Cash flow hedges requiring derecognition	64		(278)	Н
Net AOCI included as capital	65	4.500	6,842	
Non-controlling interests in subsidiaries  Portion allowed for regulatory capital (directly issued)	66	1,588	1,588 497	D2
Portion allowed for regulatory capital (directly issued)  Portion allowed for regulatory capital (issued by subsidiaries and held by third parties) subject to phase out - additional Tier 1	67 68		306	P3 Q
Portion allowed for regulatory capital (issued by subsidiaries and held by third parties) subject to phase out - Tier 2	69		9	V2
Portion not allowed for regulatory capital subject to phase out	70		776	I
TOTAL LIABILITIES AND EQUITY	71	\$ 1,202,381	\$ 1,196,328	1
<sup>1</sup> As per Balance Sheet on page 13.				-
		CONTRACTOR TO LIVE LOCKER		

As per Balance Sheet on page 13.

Legal entities excluded from the regulatory scope of consolidation included the following insurance subsidiaries: Meloche Monnex Inc. (consolidated), TD Life Insurance Company and TD Reinsurance (Barbados) inc. which have total assets included in the consolidated Bank of \$5.1 billion and total equity of \$2 billion of which \$210 million is deducted from CET1, \$350 million is deducted from additional Tier 1 and \$170 million is deducted from Tier 2 Capital. Cross referenced (L3, R, X) respectively, to the Capital Position - Basel III on page 79.

This adjustment is related to deferred tax assets/liabilities netted for financial accounting purposes.

Included in current cap on additional Tier 1 instruments is \$1.7 billion related to TD Capital Position - Basel III on page 79).

# Flow Statement for Regulatory Capital<sup>1</sup>

(\$ millions)	Line 2017				2	016			*	1	2	015	*					
	#	Q3		Q2		Q1		Q4		Q3		Q2		Q1		Q4		Q3
Common Equity Tier 1																		
Balance at beginning of period	1	\$ 45,417	\$	43,721	\$	42,328	\$	40,363	\$	38,933	\$	39,597	\$	37,958	\$	37,161	\$	34,140
New capital issues	2	18	Ť	56	•	47	Ť	30	•	12	*	20	•	124	Ť	32	•	7
Redeemed capital <sup>2</sup>	3	_		(880)		_		_		_		_		(487)		_		_
Gross dividends (deductions)	4	(1,155)		(1,161)		(1,069)		(1,062)		(1,056)		(1,054)		(971)		(971)		(970)
Shares issued in lieu of dividends (add back)	5	85		84		78		84		86		84		` 81 <sup>′</sup>		82		97
Profit attributable to shareholders of the parent company <sup>3</sup>	6	2,740		2,475		2,504		2,274		2,329		2,024		2,194		1,810		2,238
Removal of own credit spread (net of tax)	7	39		(4)		28		_		4		79		(61)		(52)		(42)
Movements in other comprehensive income				. ,										` ,		` ,		` ′
Currency translation differences	8	(4,428)		2,325		(1,423)		1,290		1,635		(4,535)		2,934		(19)		3,097
Available-for-sale investments	9	(94)		289		93		26		207		230		(245)		(424)		(147)
Other	10	(1)		(30)		(33)		(41)		(67)		59		(60)		(27)		(67)
Goodwill and other intangible assets (deduction, net of related tax liability)	11	1,657		(937)		508		(592)		(724)		2,159		(1,266)		88		(1,402)
Other, including regulatory adjustments and transitional arrangements				, ,				` '		, ,				, , ,				, ,
Deferred tax assets that rely on future profitability																		
(excluding those arising from temporary differences)	12	24		45		(17)		91		59		37		8		45		183
Prudential valuation adjustments	13	_		_		` _		_		_		_		_		_		_
Other	14	673		(566)		677		(135)		(1,055)		233		(612)		233		27
Balance at end of period	15	44,975		45,417		43,721		42,328		40,363		38,933		39,597		37,958		37,161
Additional Tier 1 Capital																		
Balance at beginning of period	16	6,920		6,923		7,069		6,064		6,059		6,091		5,458		5,487		5,547
New additional Tier 1 eligible capital issues	17	350		0,923		7,009		1,000		0,039		0,091		700		3,407		150
Redeemed capital	18	350		_		_		1,000		_		_		700		_		(250)
Other, including regulatory adjustments and transitional arrangements	19	_		(3)		(146)		5		- 5		(32)		(67)		(29)		40
Balance at end of period	20	7,271	<b>!</b>	6,920		6,923		7,069		6,064		6,059		6,091		5,458		5,487
Total Tier 1 Capital	21	52,246		52,337		50,644		49,397		46,427		44,992		45,688		43,416		42,648
Tier 2 Capital																		
Balance at beginning of period	22	10,205		10,026		12,419		10,310		10,557		9,484		10,184		9,090		7,462
New Tier 2 eligible capital issues	23	1,500		_		_		2,012		_		1,250		_		1,000		1,500
Redeemed capital	24	_		_		(2,250)		_		_				(1,000)		(800)		_
Amortization adjustments	25	-		_				_		_		_				` _		-
Allowable collective allowance	26	(109)		95		(75)		93		(253)		(120)		209		102		131
Other, including regulatory adjustments and transitional arrangements	27	(212)		84		(68)		4		6		(57)		91		792		(3)
Balance at end of period	28	11,384		10,205		10,026		12,419		10,310		10,557		9,484		10,184		9,090
Total Regulatory Capital	29	\$ 63,630	\$	62,542	\$	60,670	\$	61,816	\$	56,737	\$	55,549	\$	55,172	\$	53,600	\$	51,738
· · · · · · · · · · · · · · · · · · ·		+ 20,000	<u>,                                     </u>	,- :-		22,070		2.,0.0		22,707		22,010		,	1.	,000		2 . , . 00

The statement is based on the applicable regulatory rules in force at the period end.
 Represents impact of shares repurchased for cancellation.
 Profit attributable to shareholders of the parent company reconciles to the income statement.

(\$ millions, except as noted)	Line		2017		<u> </u>	<del></del>	2016	<del> </del>	T :	2015	OSFI
As at	#	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3	Templa
Summary comparison of accounting assets vs. leverage ratio											
exposure measure – Traditional Basis											
Total consolidated assets as per published financial statements	1	\$ 1,202,381	\$ 1,251,920	\$ 1,186,883	\$ 1,176,967	\$ 1,182,436	\$ 1,124,786	\$ 1,173,584	\$ 1,104,373	\$ 1,099,202	1
Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope		(4.540)	(4.070)	(4.777)	(4.000)	(4.050)	(4.050)	(4.000)	(0.070)	(0.074)	
of regulatory consolidation Adjustments for fiduciary assets recognized on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio	2	(4,518)	(4,678)	(4,777)	(4,982)	(4,853)	(4,059)	(4,093)	(3,979)	(3,874)	2
exposure measure	3	- (24 722)	- (40.000)	- (47.004)	-	-	- (00.000)	- (00.470)	- (00,000)	- (00 475)	3
Adjustments for derivative financial instruments Adjustment for securities financing transactions (SFT)	4 5	(21,720) 1,993	(16,829) 2,759	(17,604) 1,183	(27,103) 785	(35,946) 1,322	(32,323) 1,515	(39,178) 1,785	(22,603) 1,500	(26,475) 1,408	4 5
Adjustment for off-balance sheet items (credit equivalent amounts)	6	128,124	131,619	126,170	123,936	121,008	112,988	118,441	107,995	104,637	6
Other adjustments	7	(22,307)	(24,831)	(23,671)	(25,189)	(25,181)	(23,382)	(26,108)	(23,561)	(23,327)	7
Leverage Ratio Exposure – Transitional basis	8	\$ 1,283,953	\$ 1,339,960	\$ 1,268,184	\$ 1,244,414	\$ 1,238,786	\$ 1,179,525	\$ 1,224,431	\$ 1,163,725	\$ 1,151,571	8
Leverage Ratio Common Disclosure Template	ı		_		<u>,                                      </u>	<u>.</u>	<del> </del>	<del></del>			
On-balance sheet exposures On-balance sheet items (excluding derivatives, SFTs and											
grandfathered securitization exposures but including collateral)  Less: Asset amounts deducted in determining Basel III transitional	9	\$ 1,013,739	\$ 1,070,150	\$ 1,024,472	\$ 1,013,018	\$ 998,946	\$ 953,134	\$ 982,290	\$ 932,802	\$ 917,148	1
Tier 1 Capital	10	(21,675)	(24,233)	(23,050)	(24,491)	(24,484)	(22,678)	(25,449)	(22,735)	(22,489)	2
Total on-balance sheet exposures (excluding derivatives and SFTs)	11	992,064	1,045,917	1,001,422	988,527	974,462	930,456	956,841	910,067	894,659	3
Derivative exposures	'''	332,004	1,043,917	1,001,422	900,327	974,402	930,430	950,041	910,007	094,039	⊢ ĭ
Replacement cost associated with all derivative transactions											
(such as net of eligible cash variation margin)  Add-on amounts for potential future exposure (PFE) associated with	12	11,784	14,388	13,543	15,192	16,328	15,082	20,929	16,252	18,777	4
all derivative transactions  Gross up for derivatives collateral provided where deducted from the	13	35,865	38,303	35,806	38,477	34,609	32,224	34,716	38,069	37,236	5
balance sheet assets pursuant to the operative accounting framework  Deductions of receivables assets for cash variation margin provided	14	-	-	-	-	-	-	-	-	-	6
in derivative transactions	15	(6,998)	(7,216)	(6,640)	(8,982)	(9,402)	(7,004)	(9,696)	(8,023)	(7,920)	7
Exempted central counterparty (CCP)-leg of client cleared trade exposures Adjusted effective notional amount of written credit derivatives	16 17	- 1,020	1,284	- 1,024	- 858	- 734	- 1,413	- 1,328	904	- 727	8 9
Adjusted effective notional afficient of whiten credit derivatives  Adjusted effective notional offsets and add-on deductions for written	17	1,020	1,204	1,024	030	734	1,413	1,320	304	121	9
credit derivatives	18	(299)	(928)	(713)	(431)	(383)	(967)	(853)	(403)	(278)	10
Total derivative exposures	19	41,372	45,831	43,020	45,114	41,886	40,748	46,424	46,799	48,542	11
Securities financing transaction exposures  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	20	120,400	113,834	96,389	86,052	100,108	93,819	100,940	97,364	102,325	12
assets Counterparty credit risk (CCR) exposure for SFTs	21 22	- 1,993	2,759	- 1,183	- 785	- 1,322	- 1,515	- 1,785	1,500	- 1,408	13 14
Agent transaction exposures	23	1,993	2,759	1,165	765	1,322	1,515	1,765	1,500	1,406	15
Total securities financing transaction exposures	24	122,393	116,593	97,572	86,837	101,430	95,334	102,725	98,864	103,733	16
Other off-balance sheet exposures											
Off-balance sheet exposure at gross notional amount Adjustments for conversion to credit equivalent amounts	25 26	493,474 (365,350)	500,589 (368,970)	478,340 (352,170)	470,646 (346,710)	461,665 (340,657)	437,787 (324,800)	449,318 (330,877)	421,002 (313,007)	387,045 (282,408)	17 18
Off-balance sheet items	27	128,124	131,619	126,170	123,936	121,008	112,987	118,441	107,995	104,637	19
Capital and Total Exposures – Transitional basis Tier 1 Capital	28	52,994	53,110	51,394	50,989	48,000	46,439	47,500	45,712	44,920	20
Total Exposures (sum of lines 11, 19, 24, and 27)	29	\$ 1,283,953	\$ 1,339,960	\$ 1,268,184	\$ 1,244,414	\$ 1,238,786	\$ 1,179,525	\$ 1,224,431	\$ 1,163,725	\$ 1,151,571	21
Leverage Ratio – Transitional basis (line 28 divided by line 29)	30	4.1 %	4.0						3.9		<del></del>
"All-in" basis (required by OSFI)											
Tier 1 Capital – "All-in" basis (line 26 on page 79) Regulatory adjustments	31 32	\$ 52,246 (22,406)	\$ 52,337 (24,984)	\$ 50,644 (23,776)	\$ 49,397 (26,024)	\$ 46,427 (25,997)	\$ 44,992 (24,061)	\$ 45,688 (27,098)	\$ 43,416 (24,927)	\$ 42,648 (24,683)	23 24
Total Exposures (sum of lines 29 and 32,	52	(22,700)	(24,504)	(20,110)	(20,024)	(20,031)	(24,001)	(27,000)	(27,521)	(24,000)	2-7
less the amount reported in line 10) - All-in basis	33	\$ 1,283,222	\$ 1,339,209	\$ 1,267,458	\$ 1,242,881	\$ 1,237,273	\$ 1,178,142	\$ 1,222,782	\$ 1,161,533	\$ 1,149,377	25
Leverage Ratio - "All-in" basis (line 31 divided by line 33)	34	4.1 %	3.9	% 4.0 %	4.0	% 3.8 9	% 3.8 9	% 3.7 %	3.7	% 3.7 %	6 26

### Adjustments for Items of Note - Footnotes<sup>1</sup>

- 1 The adjustments for items of note are removed from reported results to arrive at adjusted results.
- 2 Amortization of intangibles relates to intangibles acquired as a result of asset acquisitions and business combinations, including the after tax amounts for amortization of intangibles relating to the equity in net income of the investment in TD Ameritrade. Although the amortization of software and asset servicing rights are recorded in amortization of intangibles, they are not included for purposes of the items of note.
- 3. On June 2, 2017, the Bank completed the sale of its Direct Investing business in Europe to Interactive Investor PLC. A loss of \$40 million after tax, which remains subject to the final purchase price adjustment, was recorded in the Corporate segment in other income (loss). The loss is not considered to be in the normal course of business for the Bank.
- 4 The Bank changed its trading strategy with respect to certain trading debt securities and reclassified these securities from trading to the available-for-sale category effective August 1, 2008. These debt securities are economically hedged, primarily with credit default swap and interest rate swap contracts which are recorded on a fair value basis with changes in fair value recorded in the period's earnings. As a result the derivatives were accounted for on an accrual basis in Wholesale Banking and the gains and losses related to the derivatives in excess of the accrued amounts were reported in the Corporate segment. Adjusted results of the Bank in prior periods exclude the gains and losses of the derivatives in excess of the accrued amount. Effective February 1, 2017, the total gains and losses as a result of changes in fair value of these derivatives are recorded in Wholesale Banking.
- 5 In the second quarter of 2016, the Bank recorded impairment losses on goodwill, certain intangibles, other non-financial assets and deferred tax assets, as well as other charges relating to the Direct Investing business in Europe that had been experiencing continued losses. These amounts are reported in the Corporate segment.
- 6 During 2015, the Bank commenced its restructuring review and recorded restructuring charges of \$337 million (\$228 million after tax) and \$349 million after tax) on a net basis, in the second quarter and fourth quarter of 2015, respectively. The restructuring initiatives were intended to reduce costs and manage expenses in a sustainable manner and to achieve greater operational efficiencies. These measures included process redesign and business restructuring, retail branch and real estate optimization, and organizational review. The restructuring charges have been recorded as an adjustment to net income within the Corporate segment.
- 7 On October 1, 2015, the Bank acquired substantially all of Nordstrom's existing U.S. Visa and private label consumer credit card portfolio and became the primary issuer of Nordstrom credit cards in the U.S. The transaction was treated as an asset acquisition and the difference on the date of acquisition of the transaction price over the fair value of assets acquired has been recorded in Non-interest income. In addition, the Bank incurred set-up, conversion and other one-time costs related to integration of the acquired cards and related program agreement. These amounts are included as an item of note in the U.S. Retail segment.
- 8 As a result of an adverse judgment and evaluation of certain other developments and exposures in the U.S. in 2015, the Bank took prudent steps to reassess its litigation provision. Having considered these factors, including related or analogous cases, the Bank determined, in accordance with applicable accounting standards, that an increase of \$52 million (\$32 million after tax) to the Bank's litigation provision was required in the second quarter of 2015. During the third quarter of 2015, distributions of \$39 million (\$24 million after tax) were received by the Bank as a result of previous settlements reached on certain matters in the U.S., whereby the Bank was assigned the right to these distributions, if and when made available. The amount in the third quarter of 2015 reflects this recovery of previous settlements.
- 9 The impact of the items of note on EPS is calculated by dividing net income available to common shareholders by the weighted-average number of common shares outstanding for the period. As a result, the sum of the quarterly EPS impact may not equal the year-to-date EPS impact.

### Glossary - Basel

### Risk-weighted assets (RWA)

# Approaches used by the Bank to calculate RWA For Credit Risk

Standardized Approach

Advanced Internal Ratings Based (AIRB) Approach

### For Operational Risk

Advanced Measurement Approach (AMA)

The Standardized Approach (TSA)

#### For Market Risk

Standardized Approach Internal Models Approach

#### Credit Risk Terminology

Gross credit risk exposure

#### Counterparty Type / Exposure Classes: Retail

Residential Secured
Qualifying Revolving Retail (QRR)

Other Retail

### Non-retail

Corporate Sovereign

Bank

### **Equities**

### **Exposure Types:**

Drawn

Undrawn (commitment)

Repo-style transactions

OTC derivatives

Other off-balance sheet

### AIRB Credit Risk Parameters:

Probability of Default (PD) Exposure at Default (EAD)

Loss Given Default (LGD)

#### Credit Valuation Adjustment (CVA)

Common Equity Tier 1 (CET1)

### **CET1 Ratio**

Return on Common Equity Tier 1 (CET1) Capital risk-weighted assets

Liquidity Coverage Ratio (LCR)

Countercyclical Capital Buffer (CCB)

- Used in the calculation of risk-based capital ratios, total risk-weighted assets are calculated for credit, operational and market risks using the approaches described below. There are three different measures of RWA used for each capital ratio due to the different scalars used for the phase-in of the CVA. For fiscal 2015 and fiscal 2016, the scalars for inclusion of CVA for CET1, Tier 1, and Total Capital RWA were 64%, 71% and 77%, respectively. For fiscal 2017, the corresponding scalars are 72%, 77%, and 81%, respectively.
- Under this approach, banks apply a standardized set of risk-weights to exposures, as prescribed by the regulator, to calculate credit risk capital requirements. Standardized risk-weights are based on external credit assessments, where available, and other risk-related factors, including exposure asset class, and collateral.
- Under this approach, banks use their own internal historical experience of PD, LGD, EAD, and other key risk assumptions to calculate credit risk capital requirements. Use of the AIRB approach is subject to supervisory approval.
- Under this approach, banks use their own internal operational risk measurement system with quantitative and qualitative criteria to calculate operational risk capital.
- Under this approach, banks apply prescribed factors to a three-year average of annual gross income for each of eight different business lines representing the different activities of the institution (such as, Corporate Finance, Retail Banking, Asset Management).
- Under this approach, banks use standardized capital charges prescribed by the regulator to calculate general and specific risk components of market risk.
- Under this approach, banks use their own internal risk management models to calculate specific risk and general market risk charges.
- The total amount the Bank is exposed to at the time of default measured before counterparty-specific provisions or write-offs. Includes exposures under both the Standardized and AIRB approaches to credit risk.
- Includes residential mortgages and home equity lines of credit extended to individuals.
- Includes credit cards, unsecured lines of credit and overdraft protection products extended to individuals (in the case of the Standardized approach to credit risk, credit card exposures are included in the "Other Retail" category).
- Includes all other loans (such as, personal loans, student lines of credit and small business loans) extended to individuals and small businesses.
- Includes exposures to corporations, partnerships or proprietorships.
- Includes exposures to central governments, central banks, multilateral development banks and certain public sector entities.
- Includes exposures to deposit-taking institutions, securities firms and certain public sector entities.
- Equities exposures in the banking book comprise mainly of exposures held with the objective of earning profits or to meet regulatory requirements in the United States (including Federal Reserve Bank and Federal Home Loan Bank equities). A small portfolio is held for strategic and other reasons.
- The amount of funds advanced to a borrower.
- The difference between the authorized and drawn amounts (for instance, the unused portion of a line of credit / committed credit facility).
- Repurchase and reverse repurchase agreements, securities borrowing and lending.
- Privately negotiated derivative contracts.
- All off-balance sheet arrangements other than derivatives and undrawn commitments (such as letters of credit, letters of guarantee).
- The likelihood that the borrower will not be able to meet its scheduled repayments within a one year time horizon.
- The total amount the Bank is exposed to at the time of default.
- The amount of the loss when a borrower defaults on a loan, which is expressed as a percentage of EAD.
- CVA represents a capital charge that measures credit risk due to default of derivative counterparties. This charge requires banks to capitalize for the potential
  changes in counterparty credit spread for the derivative portfolios. As per OSFI's final Capital Adequacy Requirements (CAR) guideline, the CVA capital
  charge has been implemented for 2014 and will be fully phased in by 2019.
- This is a primary Basel III capital measure comprised mainly of common equity, retained earnings and accumulated other comprehensive income (loss).

  Regulatory deductions made to arrive at the CET1 Capital include, goodwill and intangibles, unconsolidated investments in banking, financial, and insurance entities, deferred tax assets, defined benefit pension fund assets and shortfalls in allowances.
- CET1 ratio represents the predominant measure of capital adequacy under Basel III and equals CET1 Capital divided by CET1 Capital RWA.
- Net income available to common shareholders as a percentage of average CET1 Capital RWA.
- LCR is calculated by dividing the total stock of unencumbered high quality liquid assets by the expected next 30 day stressed cash outflow.
- CCB is an extension of the capital conservation buffer which takes into account the macro-financial environment in which the banks operate and aims to protect the
  banking sector against future potential losses during periods of excess aggregate credit growth from a build-up of system-wide risk. The Bank's CCB will be a
  weighted average of the buffers deployed across jurisdictions to which the institution has private sector credit exposures.

# Acronyms

Acronym	Definition	Acronym	Definition
АВСР	Asset-Backed Commercial Paper	HELOC	Home Equity Line of Credit
ACI	Acquired Credit-Impaired	IFRS	International Financial Reporting Standards
AFS	Available-For-Sale	IRB	Internal Ratings Based
AOCI	Accumulated Other Comprehensive Income	MBS	Mortgage-Backed Security
AUA	Assets under Administration	N/A	Not Applicable
AUM	Assets under Management	NHA	National Housing Act
BRR	Borrower Risk Rating	осс	Office of the Comptroller of the Currency
CCP	Central Counterparty	OCI	Other Comprehensive Income
CDS	Credit Default Swaps	OSFI	Office of the Superintendent of Financial Institutions Canada
СМНС	Canada Mortgage and Housing Corporation	PCL	Provision for Credit Losses
D-SIBs	Domestic Systemically Important Banks	PFE	Potential Future Exposure
EPS	Earnings Per Share	QCCP	Qualifying Central Counterparty
EVaR	Economic Value at Risk	ROE	Return on Common Equity
FDIC	Federal Deposit Insurance Corporation	ТЕВ	Taxable Equivalent Basis
G-SIBs	Global Systemically Important Banks		

# Appendix – Canadian Personal and Commercial Banking

### RESULTS OF OPERATIONS

(\$ millions, except as noted)	LINE	2017				2016								2015				Year to Date				Full Year			
For the period ended	#	Q3	Q:	2	Q1	Q4	ļ _	Q3		Q2		Q1		Q4		Q3		2017		2016	١L	2016		2015	
			٦			ī							Τ_				ı [_				1 =				
Net interest income	1	\$ 2,526	\$ 2,3		\$ 2,445	\$ 2,3		\$ 2,364	\$	, -	\$	2,337	\$		\$	2,328	\$	.,	\$	- , -	\$	9,367	\$	9,182	
Non-interest income	2	902		38	869		29	821		790		805	+	798		802	l ⊨	2,609		2,416	ŀ⊢	3,245		3,134	
Total revenue	3	3,428	3,2		3,314	3,2		3,185		3,060		3,142		3,149		3,130		9,949		9,387	i I	12,612		12,316	
Provision for credit losses	4	238		35	269		63	258		262		228		221		237		742		748	i I	1,011		887	
Non-interest expenses	5	1,418	1,4		1,407	1,4		1,358		1,337	<del></del>	1,318	+	1,399		1,352	Į Ļ	4,232		4,013	łЬ	5,456		5,406	
Income (loss) before income taxes	6	1,772	1,5		1,638	1,5		1,569		1,461		1,596		1,529		1,541		4,975		4,626	i I	6,145		6,023	
Provision for (recovery of) income taxes	7	473		18	438		06	418	_	390	_	423		407	_	406	۱ ا	1,329		1,231	1 I.	1,637	_	1,593	
Net income – reported	8	\$ 1,299	\$ 1,1	47	\$ 1,200	\$ 1,1	13	\$ 1,151	\$	1,071	\$	1,173	\$	1,122	\$	1,135	\$	3,646	\$	3,395	\$	4,508	\$	4,430	
Average common equity (\$ billions)	9	\$ 11.2	\$ 1	.1	\$ 11.0	\$ 11	.0	\$ 10.9	\$	10.7	\$	10.5	\$	10.6	\$	10.5	\$	11.1	\$	10.7	\$	10.8	\$	10.4	
Return on common equity – reported <sup>1</sup>	10	45.9	6 4:	2.5 %	43.3 %	40	0.3 %	42.0	%	40.9	%	44.1 %	6	42.1 %	%	42.9 %		43.9	%	42.3 %	i I	41.8	%	42.5 %	
Key Performance Indicators (\$ billions, except as noted)																									
Common Equity Tier 1 Capital risk-weighted assets <sup>2</sup>	11	\$ 92	\$	93	\$ 91	\$	91	\$ 91	\$	101	\$	98	\$	96	\$	97	\$	92	\$	91	\$	91	\$	96	
Average loans – personal																					i I				
Residential mortgages	12	188.0	18	.5	188.2	188	3.0	185.6		185.3		185.2		182.2		177.3		187.9		185.4	i I	186.0		177.5	
Consumer instalment and other personal																					i I				
HELOC	13	69.6		6.5	65.3	64		62.8		61.2		61.0		60.8		60.3		67.2		61.7	i I	62.3		60.0	
Indirect auto	14	21.6		).9	20.8	20		19.9		19.2		19.0		18.5		17.7		21.0		19.3	i I	19.7		17.4	
Other	15	12.7		2.5	12.4	12		12.6		12.3		12.2		12.3		12.8		12.6		12.4	i I	12.4		12.6	
Credit card	16	19.2		8.8	19.3	19		19.1		18.7		19.2		19.0		18.7	Į∟	19.1		19.0	ıL	19.0		18.7	
Total average loans – personal	17	311.1	30		306.0	304		300.0		296.7		296.6		292.8		286.8		307.8		297.8	i I	299.4		286.2	
Average loans and acceptances – business	18	66.5	6	5.4	63.8	62	2.7	61.6		60.4		58.3		57.0		55.9		65.2		60.1	i I	60.8		55.0	
Average deposits																					i I				
Personal	19	185.0	18		179.8	176		172.2		168.9		167.1		165.1		161.4		182.1		169.4	i I	171.1		160.9	
Business	20	105.6	99	9.2	99.0	95	5.6	90.6		85.0		85.2		84.4		84.0		101.3		86.9	i I	89.1		83.1	
Margin on average earning assets including																					i I				
securitized assets	21	2.75		71 %	2.72 %		69 %	2.69	%		%	2.71 %	6	2.76 %	%	2.79 %		2.72	%	2.69 %	i I	2.00	%	2.78 %	
Efficiency ratio – reported	22	41.4		3.9	42.5	44		42.6		43.7		41.9		44.4		43.2		42.5		42.8	i I	43.3		43.9	
Number of Canadian retail branches at period end	23	1,138	1,1		1,154	1,1		1,152		1,152		1,157		1,165		1,166		1,138		1,152	i I	1,156		1,165	
Average number of full-time equivalent staff	24	27,532	27,5	61	27,866	27,8	75	27,688		27,109		27,412	L	27,764		27,944	╵┖	27,654		27,405	ıЦ	27,523		27,949	
Additional Information on Canadian Wealth and Insurance Breakdown of Total Net Income (loss)																									
Wealth	25	\$ 268	\$ 2	44	\$ 244	\$ 2	50	\$ 250	\$	223	\$	212	\$	221	\$	228	\$	756		685	\$	935		855	
Insurance	26	158		79	122		39	108		170		128	1	153		194	H	459		406	i l	545		653	
			_																						

Capital allocated to the business segments was based on 9% CET1 Capital in fiscal 2015, 2016, and 2017.
 Amounts are calculated in accordance with the Basel III regulatory framework, and are presented based on the "all-in" methodology.