

## Note 3: Securities

Securities are divided into four types, each with a different purpose and accounting treatment. The types of securities we hold are as follows:

**Trading securities** are securities that we purchase for resale over a short period of time. We classify trading securities and securities designated under the fair value option at fair value through profit or loss ("FVTPL"). We record the transaction costs, gains and losses realized on disposal and unrealized gains and losses due to changes in fair value in our Consolidated Statement of Income in trading revenues.

### *Securities Designated at FVTPL*

Securities designated at FVTPL are financial instruments that are accounted for at fair value, with changes in fair value recorded in income provided they meet certain criteria. Securities designated at FVTPL must have reliably measurable fair values and satisfy one of the following criteria: (1) the designation eliminates or significantly reduces the inconsistent treatment that would otherwise arise from measuring the gains and losses on a different basis; (2) the securities are part of a group of financial instruments that is managed and evaluated on a fair value basis; or (3) the securities are hybrid financial instruments with embedded derivatives that would significantly modify their cash flow. Securities must be designated on initial recognition, and the designation is irrevocable.

We designate certain securities held by our insurance subsidiaries that support our insurance liabilities at FVTPL, since the actuarial calculation of insurance liabilities is based on the fair value of the investments supporting them. This designation aligns the accounting result with the way the portfolio is managed on a fair value basis. The change in fair value of the securities is recorded in non-interest revenue, insurance revenue, and the change in fair value of the liabilities is recorded in insurance claims, commissions and changes in policy benefit liabilities. The fair value of these investments as at October 31, 2017 of \$8,465 million (\$7,887 million as at October 31, 2016) is recorded in securities, trading, in our Consolidated Balance Sheet. The impact of recording these investments at fair value through profit or loss was an increase in non-interest revenue, insurance revenue, of \$39 million for the year ended October 31, 2017 (increase of \$430 million in 2016 and \$8 million in 2015).

We designate certain investments held in our merchant banking business at FVTPL, which aligns the accounting result with the way the portfolio is managed. The fair value of these investments as at October 31, 2017 of \$333 million (\$320 million in 2016) is recorded in securities, other, in our Consolidated Balance Sheet. The impact of recording these investments at fair value through profit or loss was a decrease in non-interest revenue, securities gains, other than trading, of \$9 million for the year ended October 31, 2017 (decrease of \$40 million in 2016 and \$34 million in 2015).

**Available-for-sale securities** consist of debt and equity securities that may be sold in response to or in anticipation of changes in interest rates and resulting prepayment risk, changes in credit risk, changes in foreign currency risk, changes in funding sources or terms, or in order to meet liquidity needs.

Available-for-sale securities are initially recorded at fair value plus transaction costs. They are subsequently measured at fair value, with unrealized gains and losses recorded in unrealized gains (losses) on available-for-sale securities in our Consolidated Statement of Comprehensive Income until the security is sold. Gains and losses on disposal and impairment losses (recoveries) are recorded in our Consolidated Statement of Income in non-interest revenue, securities gains, other than trading. Interest income earned and dividends received on available-for-sale securities are recorded in our Consolidated Statement of Income in interest, dividend and fee income, securities.

Investments held by our insurance subsidiaries are classified as available-for-sale securities, except for those investments that support the policy benefit liabilities on our insurance contracts, which are designated at fair value through profit or loss, as discussed above. Interest and other fee income on the insurance available-for-sale securities is recognized when earned in our Consolidated Statement of Income in non-interest revenue, insurance revenue.

**Held-to-maturity securities** are debt securities that we have the intention and ability to hold to maturity and that do not meet the definition of a loan. These securities are initially recorded at fair value plus transaction costs and subsequently measured at amortized cost using the effective interest method. Impairment losses are recorded in our Consolidated Statement of Income in securities gains (losses), other than trading. Interest income earned and amortization of premiums or discounts on these debt securities are recorded in our Consolidated Statement of Income in interest, dividend and fee income, securities.

**Other securities** are investments in companies where we exert significant influence over operating, investing and financing decisions (generally companies in which we own between 20% and 50% of the voting shares). We account for these other securities using the equity method of accounting. Other securities also include certain securities held by our merchant banking business.

We account for all of our securities transactions using settlement date accounting in our Consolidated Balance Sheet. Changes in fair value between the trade date and settlement date are recorded in net income, except for those related to available-for-sale securities, which are recorded in other comprehensive income.

### Impairment Review

For available-for-sale, held-to-maturity and other securities, impairment losses are recognized if there is objective evidence of impairment as a result of an event that reduces the estimated future cash flows from the security.

For equity securities, a significant or prolonged decline in the fair value of a security below its cost is considered to be objective evidence of impairment.

The impairment loss on available-for-sale securities is the difference between the security's amortized cost and its current fair value, less any previously recognized impairment losses. If there is objective evidence of impairment, a write-down is transferred from our Consolidated Statement of Comprehensive Income, unrealized gains (losses) on available-for-sale securities, to our Consolidated Statement of Income in securities gains, other than trading.

The impairment loss on held-to-maturity securities is the difference between a security's carrying amount and the present value of its estimated future cash flows discounted at the original effective interest rate. If there is objective evidence of impairment, a write-down is recorded in our Consolidated Statement of Income in securities gains, other than trading.

For available-for-sale debt securities, a previous impairment loss is reversed through net income if an event occurs after the impairment was recognized that can be objectively attributed to an increase in fair value, to a maximum of the original impairment charge. For available-for-sale equity securities, previous impairment losses are not reversed through net income, and any subsequent increases in fair value are recorded in other comprehensive income. Reversals of impairment losses on held-to-maturity securities are recorded to a maximum of the amortized cost of the investment before the original impairment charge.

As at October 31, 2017, we had 1,775 available-for-sale securities (1,699 in 2016) with unrealized losses totalling \$480 million (unrealized losses of \$135 million in 2016). Unrealized losses on these instruments, excluding corporate equities, resulted from changes in interest rates and not from deterioration in the creditworthiness of the issuers. We expect full recovery of these available-for-sale securities and have determined that there is no significant impairment. The table on page 152 details unrealized gains and losses as at October 31, 2017 and 2016.

We did not own any securities issued by a single non-government entity where the book value, as at October 31, 2017 or 2016, was greater than 10% of our shareholders' equity.

### Fair Value Measurement

For traded securities, quoted market value is considered to be fair value. Quoted market value is based on bid prices. For securities where market quotes are not available, we use estimation techniques to determine fair value. A discussion of fair value measurement is included in Note 17.

(Canadian \$ in millions, except as noted)

	Term to maturity					2017	2016
	Within 1 year	1 to 3 years	3 to 5 years	5 to 10 years	Over 10 years	Total	Total
<b>Trading Securities</b>							
Issued or guaranteed by:							
Canadian federal government	4,862	1,527	2,021	1,313	1,104	10,827	12,952
Canadian provincial and municipal governments	812	1,343	714	1,991	2,467	7,327	7,422
U.S. federal government	1,332	1,758	2,000	1,906	2,477	9,473	6,148
U.S. states, municipalities and agencies	642	222	86	100	1,081	2,131	1,124
Other governments	85	438	266	34	-	823	602
Mortgage-backed securities and collateralized mortgage obligations	147	571	203	8	2	931	1,062
Corporate debt	1,298	1,375	795	1,281	7,014	11,763	9,513
Loans	-	28	7	118	-	153	139
Corporate equity	-	-	-	-	55,641	55,641	45,496
<b>Total trading securities</b>	<b>9,178</b>	<b>7,262</b>	<b>6,092</b>	<b>6,751</b>	<b>69,786</b>	<b>99,069</b>	<b>84,458</b>
<b>Available-for-Sale Securities</b>							
Issued or guaranteed by:							
Canadian federal government							
Amortized cost	5,585	1,764	1,266	597	-	9,212	8,109
Fair value	5,578	1,749	1,262	591	-	9,180	8,168
Yield (%)	0.66	1.48	1.46	1.57	-	0.99	1.29
Canadian provincial and municipal governments							
Amortized cost	1,157	265	1,293	860	38	3,613	6,126
Fair value	1,156	266	1,310	855	40	3,627	6,232
Yield (%)	0.85	1.45	2.24	2.32	3.27	1.77	2.17
U.S. federal government							
Amortized cost	15	-	3,128	11,338	-	14,481	9,564
Fair value	17	-	3,115	11,137	-	14,269	9,557
Yield (%)	0.88	-	1.81	1.80	-	1.80	1.51
U.S. states, municipalities and agencies							
Amortized cost	370	563	463	1,329	1,333	4,058	4,379
Fair value	370	566	467	1,357	1,336	4,096	4,450
Yield (%)	1.63	1.78	2.26	2.40	1.71	2.00	1.80
Other governments							
Amortized cost	1,592	1,231	725	19	-	3,567	5,214
Fair value	1,593	1,225	722	18	-	3,558	5,227
Yield (%)	1.44	1.34	1.52	2.72	-	1.43	1.15
Mortgage-backed securities and collateralized mortgage obligations - Canada (1)							
Amortized cost	255	1,143	1,059	-	-	2,457	3,473
Fair value	262	1,141	1,052	-	-	2,455	3,507
Yield (%)	2.05	1.83	1.56	-	-	1.74	1.60
Mortgage-backed securities and collateralized mortgage obligations - U.S.							
Amortized cost	1	20	62	658	10,161	10,902	9,591
Fair value	1	19	62	659	10,020	10,761	9,615
Yield (%)	1.83	3.12	2.25	2.31	1.97	1.99	1.66
Corporate debt							
Amortized cost	995	2,082	737	607	93	4,514	7,219
Fair value	997	2,080	734	619	95	4,525	7,292
Yield (%)	0.75	2.08	2.48	3.08	3.64	2.02	1.76
Corporate equity							
Amortized cost	-	-	-	-	1,499	1,499	1,529
Fair value	-	-	-	-	1,604	1,604	1,615
Yield (%)	-	-	-	-	2.37	2.37	2.07
<b>Total cost or amortized cost</b>	<b>9,970</b>	<b>7,068</b>	<b>8,733</b>	<b>15,408</b>	<b>13,124</b>	<b>54,303</b>	<b>55,204</b>
<b>Total fair value</b>	<b>9,974</b>	<b>7,046</b>	<b>8,724</b>	<b>15,236</b>	<b>13,095</b>	<b>54,075</b>	<b>55,663</b>
<b>Yield (%)</b>	<b>0.89</b>	<b>1.72</b>	<b>1.85</b>	<b>1.95</b>	<b>2.00</b>	<b>1.72</b>	<b>1.62</b>
<b>Held-to-Maturity Securities</b>							
Issued or guaranteed by:							
Canadian federal government							
Amortized cost	1,855	-	-	-	-	1,855	2,005
Fair value	1,857	-	-	-	-	1,857	2,014
Canadian provincial and municipal governments							
Amortized cost	735	510	-	322	-	1,567	2,047
Fair value	737	512	-	341	-	1,590	2,085
Mortgage-backed securities and collateralized mortgage obligations (1)							
Amortized cost	191	485	364	999	3,633	5,672	4,913
Fair value	191	486	366	997	3,609	5,649	4,974
<b>Total cost or amortized cost</b>	<b>2,781</b>	<b>995</b>	<b>364</b>	<b>1,321</b>	<b>3,633</b>	<b>9,094</b>	<b>8,965</b>
<b>Total fair value</b>	<b>2,785</b>	<b>998</b>	<b>366</b>	<b>1,338</b>	<b>3,609</b>	<b>9,096</b>	<b>9,073</b>
<b>Other Securities</b>							
Carrying value	7	21	13	38	881	960	899
Fair value	7	21	13	38	3,161	3,240	3,098
<b>Total carrying value or amortized cost of securities</b>	<b>21,936</b>	<b>15,346</b>	<b>15,202</b>	<b>23,518</b>	<b>87,424</b>	<b>163,426</b>	<b>149,526</b>
<b>Total value of securities</b>	<b>21,940</b>	<b>15,324</b>	<b>15,193</b>	<b>23,346</b>	<b>87,395</b>	<b>163,198</b>	<b>149,985</b>
<b>Total by Currency (in Canadian \$ equivalent)</b>							
Canadian dollar	16,959	8,546	7,222	6,235	41,261	80,223	86,352
U.S. dollar	3,948	6,662	7,916	17,087	44,384	79,997	60,813
Other currencies	1,033	116	55	24	1,750	2,978	2,820
<b>Total securities</b>	<b>21,940</b>	<b>15,324</b>	<b>15,193</b>	<b>23,346</b>	<b>87,395</b>	<b>163,198</b>	<b>149,985</b>

(1) These amounts are supported by insured mortgages or issued by U.S. agencies and government-sponsored enterprises.

Yields in the table above are calculated using the cost of the security and the contractual interest rate associated with each security, adjusted for any amortization of premiums and discounts. Tax effects are not taken into consideration. The term to maturity included in the table above is based on the contractual maturity date of the security. Actual maturities could differ, as issuers may have the right to call or prepay obligations. Equity securities with no maturity date are included in the over 10 years category.

Certain comparative figures have been reclassified to conform with the current year's presentation.

## Unrealized Gains and Losses on Available-for-Sale Securities

	2017				2016			
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
(Canadian \$ in millions)								
Issued or guaranteed by:								
Canadian federal government	9,212	6	38	9,180	8,109	62	3	8,168
Canadian provincial and municipal governments	3,613	29	15	3,627	6,126	110	4	6,232
U.S. federal government	14,481	12	224	14,269	9,564	47	54	9,557
U.S. states, municipalities and agencies	4,058	43	5	4,096	4,379	77	6	4,450
Other governments	3,567	3	12	3,558	5,214	17	4	5,227
Mortgage-backed securities and collateralized mortgage obligations - Canada (1)	2,457	9	11	2,455	3,473	37	3	3,507
Mortgage-backed securities and collateralized mortgage obligations - U.S.	10,902	6	147	10,761	9,591	50	26	9,615
Corporate debt	4,514	23	12	4,525	7,219	78	5	7,292
Corporate equity	1,499	121	16	1,604	1,529	116	30	1,615
<b>Total</b>	<b>54,303</b>	<b>252</b>	<b>480</b>	<b>54,075</b>	<b>55,204</b>	<b>594</b>	<b>135</b>	<b>55,663</b>

(1) These amounts are supported by insured mortgages.

Income from securities, excluding net realized and unrealized gains on trading securities, has been included in our consolidated financial statements as follows:

	2017	2016	2015
(Canadian \$ in millions)			
<b>Reported in Consolidated Statement of Income:</b>			
<b>Interest, Dividend and Fee Income (1)</b>			
Trading securities	977	923	1,016
Available-for-sale securities	806	623	504
Held-to-maturity securities	150	143	167
Other securities	12	15	18
	<b>1,945</b>	<b>1,704</b>	<b>1,705</b>
<b>Non-Interest Revenue</b>			
Available-for-sale securities			
Gross realized gains	228	59	116
Gross realized (losses)	(99)	(16)	(18)
Unrealized gain on investments reclassified from available-for-sale to equity	-	7	-
Other securities, net realized and unrealized gains	49	51	85
Impairment write-downs	(7)	(17)	(12)
<b>Securities gains, other than trading (1)</b>	<b>171</b>	<b>84</b>	<b>171</b>

(1) The following amounts of income related to our insurance operations were included in non-interest revenue, insurance revenue, in our Consolidated Statement of Income: Interest, dividend and fee income of \$325 million for the year ended October 31, 2017 (\$309 million in 2016 and \$282 million in 2015); and securities gains, other than trading, of \$nil for the year ended October 31, 2017 (\$nil in 2016 and \$1 million in 2015).

Unrealized gains and losses on trading securities are included in trading-related revenue in Note 17.