

**FINANCIAL REPORT FOR THE THREE MONTHS ENDED MARCH 31, 2020**  
**THE BANK OF N.T. BUTTERFIELD & SON LIMITED**



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**The Bank of N.T. Butterfield & Son Limited**  
**Consolidated Balance Sheets (unaudited)**  
(In thousands of US dollars, except share and per share data)

	As at	
	March 31, 2020	December 31, 2019
<b>Assets</b>		
Cash and demand deposits with banks - Non-interest bearing	116,241	88,031
Demand deposits with banks - Interest bearing	824,451	839,320
Cash equivalents - Interest bearing	1,037,534	1,622,719
Cash due from banks	1,978,226	2,550,070
Securities purchased under agreements to resell	192,296	142,283
Short-term investments	1,047,628	1,218,380
Investment in securities		
Equity securities at fair value	6,766	7,419
Available-for-sale at fair value	2,399,811	2,220,341
Held-to-maturity (fair value: \$2,234,673 (2019: \$2,255,987))	2,131,084	2,208,663
<b>Total investment in securities</b>	<b>4,537,661</b>	<b>4,436,423</b>
Loans		
Loans	5,037,185	5,166,210
Allowance for credit losses	(36,217)	(23,588)
<b>Loans, net of allowance for credit losses</b>	<b>5,000,968</b>	<b>5,142,622</b>
Premises, equipment and computer software, net of accumulated depreciation	155,894	158,233
Goodwill	23,402	24,838
Other Intangible assets, net	67,796	71,665
Equity method investments	14,736	14,480
Other real estate owned, net	4,227	3,842
Accrued interest and other assets	174,553	158,739
<b>Total assets</b>	<b>13,197,387</b>	<b>13,921,575</b>
<b>Liabilities</b>		
Deposits		
Non-interest bearing	2,136,503	2,238,256
Interest bearing	9,616,344	10,203,369
<b>Total deposits</b>	<b>11,752,847</b>	<b>12,441,625</b>
Employee benefit plans	110,215	110,347
Accrued interest and other liabilities	210,272	262,360
<b>Total other liabilities</b>	<b>320,487</b>	<b>372,707</b>
Long-term debt	143,545	143,500
<b>Total liabilities</b>	<b>12,216,879</b>	<b>12,957,832</b>
<b>Commitments, contingencies and guarantees (Note 10)</b>		
<b>Shareholders' equity</b>		
Common share capital (BMD 0.01 par; authorized voting ordinary shares 2,000,000,000 and non-voting ordinary shares 6,000,000,000) issued and outstanding: 51,994,190 (2019: 53,005,177)	520	530
Additional paid-in capital	1,043,512	1,081,569
Retained earnings (Accumulated deficit)	258	(9,237)
Less: treasury common shares, at cost: 619,212 (2019: 619,212)	(15,734)	(22,022)
Accumulated other comprehensive loss	(48,048)	(87,097)
<b>Total shareholders' equity</b>	<b>980,508</b>	<b>963,743</b>
<b>Total liabilities and shareholders' equity</b>	<b>13,197,387</b>	<b>13,921,575</b>

The accompanying notes are an integral part of these consolidated financial statements.

**The Bank of N.T. Butterfield & Son Limited**  
**Consolidated Statements of Operations (unaudited)**  
*(In thousands of US dollars, except per share data)*

	Three months ended	
	March 31, 2020	March 31, 2019
<b>Non-interest income</b>		
Asset management	7,825	6,738
Banking	11,217	11,151
Foreign exchange revenue	10,784	8,760
Trust	12,150	12,607
Custody and other administration services	3,591	2,681
Other non-interest income	2,003	1,443
<b>Total non-interest income</b>	<b>47,570</b>	<b>43,380</b>
<b>Interest income</b>		
Interest and fees on loans	61,716	56,727
<i>Investments (none of the investment securities are intrinsically tax-exempt)</i>		
Available-for-sale	15,003	15,456
Held-to-maturity	16,243	17,038
Deposits with banks	9,427	9,930
<b>Total interest income</b>	<b>102,389</b>	<b>99,151</b>
<b>Interest expense</b>		
Deposits	12,931	9,155
Long-term debt	1,867	2,018
<b>Total interest expense</b>	<b>14,798</b>	<b>11,173</b>
<b>Net interest income before provision for credit losses</b>	<b>87,591</b>	<b>87,978</b>
Provision for credit recoveries (losses)	(5,177)	39
<b>Net interest income after provision for credit losses</b>	<b>82,414</b>	<b>88,017</b>
Net gains (losses) on equity securities	(653)	447
Net realized gains (losses) on available-for-sale investments	—	972
Net gains (losses) on other real estate owned	71	128
Net other gains (losses)	2	204
<b>Total other gains (losses)</b>	<b>(580)</b>	<b>1,751</b>
<b>Total net revenue</b>	<b>129,404</b>	<b>133,148</b>
<b>Non-interest expense</b>		
Salaries and other employee benefits	43,831	41,462
Technology and communications	16,415	14,610
Professional and outside services	5,802	5,600
Property	7,310	5,377
Indirect taxes	5,492	5,222
Non-service employee benefits expense	738	1,328
Marketing	1,569	1,674
Amortization of intangible assets	1,440	1,338
Other expenses	5,517	4,304
<b>Total non-interest expense</b>	<b>88,114</b>	<b>80,915</b>
<b>Net income before income taxes</b>	<b>41,290</b>	<b>52,233</b>
Income tax benefit (expense)	(1,013)	(126)
<b>Net income</b>	<b>40,277</b>	<b>52,107</b>
<b>Earnings per common share</b>		
Basic earnings per share	0.77	0.97
Diluted earnings per share	0.77	0.96

The accompanying notes are an integral part of these consolidated financial statements.

**The Bank of N.T. Butterfield & Son Limited**  
**Consolidated Statements of Comprehensive Income (unaudited)**  
*(In thousands of US dollars)*

Three months ended

**March 31, 2020**      March 31, 2019

	<b>March 31, 2020</b>	March 31, 2019
<b>Net income</b>	<b>40,277</b>	52,107
<b>Other comprehensive income (loss), net of taxes</b>		
Net change in unrealized gains and losses on translation of net investment in foreign operations	<b>(1,225)</b>	814
Accretion of net unrealized gains and losses on held-to-maturity investments transferred from available-for-sale investments	<b>44</b>	7
Net change in unrealized gains and losses on available-for-sale investments	<b>38,543</b>	21,284
Employee benefit plans adjustments	<b>1,687</b>	504
Other comprehensive income (loss), net of taxes	<b>39,049</b>	22,609
<b>Total comprehensive income</b>	<b>79,326</b>	74,716

The accompanying notes are an integral part of these consolidated financial statements.

**The Bank of N.T. Butterfield & Son Limited**  
**Consolidated Statements of Changes in Shareholders' Equity (unaudited)**

	Three months ended			
	March 31, 2020		March 31, 2019	
	Number of shares	In thousands of US dollars	Number of shares	In thousands of US dollars
<b>Common share capital issued and outstanding</b>				
Balance at beginning of period	53,005,177	530	55,359,218	554
Retirement of shares	(1,295,000)	(13)	(780,000)	(8)
Issuance of common shares	284,013	3	357,615	3
<b>Balance at end of period</b>	<b>51,994,190</b>	<b>520</b>	<b>54,936,833</b>	<b>549</b>
<b>Additional paid-in capital</b>				
Balance at beginning of period		1,081,569		1,171,435
Share-based compensation		4,077		3,911
Retirement of common shares		(42,161)		(29,169)
Issuance of common shares, net of underwriting discounts and commissions		27		5
<b>Balance at end of period</b>		<b>1,043,512</b>		<b>1,146,182</b>
<b>Retained earnings (Accumulated deficit)</b>				
Balance at beginning of period		(9,237)		(92,676)
Cumulative effect from change in accounting policy (Note 2)		(7,841)		—
Net income for period		40,277		52,107
Common share cash dividends declared and paid, \$0.44 per share (2019: \$0.44 per share)		(22,941)		(23,618)
<b>Balance at end of period</b>		<b>258</b>		<b>(64,187)</b>
<b>Treasury common shares</b>				
Balance at beginning of period	619,212	(22,022)	1,254,212	(48,443)
Purchase of treasury common shares	1,295,000	(35,886)	1,145,000	(41,178)
Retirement of shares	(1,295,000)	42,174	(780,000)	29,177
<b>Balance at end of period</b>	<b>619,212</b>	<b>(15,734)</b>	<b>1,619,212</b>	<b>(60,444)</b>
<b>Accumulated other comprehensive income (loss)</b>				
Balance at beginning of period		(87,097)		(148,527)
Other comprehensive income (loss), net of taxes		39,049		22,609
<b>Balance at end of period</b>		<b>(48,048)</b>		<b>(125,918)</b>
<b>Total shareholders' equity</b>		<b>980,508</b>		<b>896,182</b>

The accompanying notes are an integral part of these consolidated financial statements.



**The Bank of N.T. Butterfield & Son Limited**  
**Consolidated Statements of Cash Flows (unaudited)**  
*(In thousands of US dollars)*

Three months ended

**March 31, 2020**                      March 31, 2019

Cash flows from operating activities	March 31, 2020	March 31, 2019
<b>Net income</b>	<b>40,277</b>	52,107
<b>Adjustments to reconcile net income to operating cash flows</b>		
Depreciation and amortization	13,185	10,574
Provision for credit (recoveries) losses	5,177	(39)
Share-based payments and settlements	4,077	3,911
Net change in equity securities at fair value	653	(447)
Net realized (gains) losses on available-for-sale investments	—	(972)
Net (gains) losses on other real estate owned	(71)	(128)
(Increase) decrease in carrying value of equity method investments	(301)	(32)
Dividends received from equity method investments	45	—
<b>Changes in operating assets and liabilities</b>		
(Increase) decrease in accrued interest receivable and other assets	(17,145)	(39,300)
Increase (decrease) in employee benefit plans, accrued interest payable and other liabilities	(47,053)	14,234
<b>Cash provided by (used in) operating activities</b>	<b>(1,156)</b>	40,355
<b>Cash flows from investing activities</b>		
(Increase) decrease in securities purchased under agreements to resell	(50,013)	(45,125)
Short-term investments other than restricted cash: proceeds from maturities and sales	569,533	23,234
Short-term investments other than restricted cash: purchases	(479,294)	(179,615)
Available-for-sale investments: proceeds from sale	—	972
Available-for-sale investments: proceeds from maturities and pay downs	91,972	60,062
Available-for-sale investments: purchases	(235,744)	(55,814)
Held-to-maturity investments: proceeds from maturities and pay downs	94,240	42,931
Held-to-maturity investments: purchases	(18,183)	(165,300)
Net (increase) decrease in loans	5,408	78,949
Additions to premises, equipment and computer software	(5,698)	(2,528)
Proceeds from sale of other real estate owned	—	787
<b>Cash provided by (used in) investing activities</b>	<b>(27,779)</b>	(241,447)
<b>Cash flows from financing activities</b>		
Net increase (decrease) in deposits	(415,976)	810,154
Common shares repurchased	(35,886)	(41,178)
Proceeds from stock option exercises	30	8
Cash dividends paid on common shares	(22,941)	(23,618)
<b>Cash provided by (used in) financing activities</b>	<b>(474,773)</b>	745,366
Net effect of exchange rates on cash, cash equivalents and restricted cash	(83,733)	9,277
<b>Net increase (decrease) in cash, cash equivalents and restricted cash</b>	<b>(587,441)</b>	553,104
<b>Cash, cash equivalents and restricted cash: beginning of period</b>	<b>2,578,902</b>	2,070,120
<b>Cash, cash equivalents and restricted cash: end of period</b>	<b>1,991,461</b>	2,623,224
<b>Components of cash, cash equivalents and restricted cash at end of period</b>		
Cash due from banks	1,978,226	2,601,269
Restricted cash included in short-term investments on the consolidated balance sheets	13,235	21,955
<b>Total cash, cash equivalents and restricted cash at end of period</b>	<b>1,991,461</b>	2,623,224
<b>Supplemental disclosure of non-cash items</b>		
Transfer to (out of) other real estate owned	314	—
Initial recognition of right-of-use assets and operating lease liabilities	—	22,370
Reduction in net loans due to initial adoption of a current expected credit loss model	7,841	—

The accompanying notes are an integral part of these consolidated financial statements.

### **Note 1: Nature of business**

The Bank of N.T. Butterfield & Son Limited ("Butterfield", the "Bank" or the "Company") is incorporated under the laws of Bermuda and has a banking license under the Banks and Deposit Companies Act, 1999 ("the Act"). Butterfield is regulated by the Bermuda Monetary Authority ("BMA"), which operates in accordance with Basel principles.

Butterfield is a full service bank and wealth manager headquartered in Hamilton, Bermuda. The Bank operates its business through three geographic segments: Bermuda, the Cayman Islands, and the Channel Islands and the United Kingdom ("UK"), where its principal banking operations are located and where it offers specialized financial services. Butterfield offers banking services, comprised of retail and corporate banking, and wealth management, which consists of trust, private banking, and asset management. In the Bermuda and Cayman Islands segments, Butterfield offers both banking and wealth management. In the Channel Islands and the UK segment, the Bank offers wealth management and residential property lending. Butterfield also has operations in the jurisdictions of The Bahamas, Canada, Mauritius, Singapore and Switzerland, which are included in our Other segment.

The Bank's common shares trade on the New York Stock Exchange under the symbol "NTB" and on the Bermuda Stock Exchange ("BSX") under the symbol "NTB.BH".

### **Note 2: Significant accounting policies**

The accompanying unaudited interim consolidated financial statements of the Bank have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and should be read in conjunction with the Bank's audited financial statements for the year ended December 31, 2019.

In the opinion of Management, these unaudited interim consolidated financial statements reflect all adjustments (consisting primarily of normal recurring accruals) considered necessary for a fair statement of the Bank's financial position and results of operations as at the end of and for the periods presented. The Bank's results for interim periods are not necessarily indicative of results for the full year.

The preparation of financial statements in conformity with GAAP requires Management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the unaudited consolidated financial statements and the reported amounts of revenues and expenses during the reporting period, and actual results could differ from those estimates. Management believes that the most critical accounting policies upon which the financial condition depends and which involve the most complex or subjective decisions or assessments, are as follows:

- Allowance for credit losses
- Fair value and impairment of financial instruments
- Impairment of long-lived assets
- Impairment of goodwill
- Employee benefit plans
- Share-based payments
- Business combinations

### **New Accounting Standards**

#### **Accounting for Financial Instruments - Credit losses**

Starting on January 1, 2020 the Bank adopted Accounting Standards Update ("ASU") 2016-13 Financial Instruments – Credit Losses (Topic 326). Accordingly, from the date of adoption, the Bank uses a current expected credit loss model ("CECL") which is based on expected losses. The model used by the Bank up to December 31, 2019 to estimate credit losses was based on incurred losses. The CECL model is applied by the Bank to the measurement of credit losses on financial instruments at amortized cost, including loan receivables and held-to-maturity ("HTM") debt securities. The Bank also applies the CECL model to certain off-balance sheet credit exposures such as undrawn loan commitments, standby letters of credit, financial guarantees, and other similar instruments. In line with Topic 326, the Bank will present credit losses on available-for-sale ("AFS") securities as a valuation allowance rather than as a direct write-down. Changes in expected credit losses are recorded through the respective credit loss allowances on the consolidated balance sheets as well as in the provision for credit losses (or recoveries) in the consolidated statements of operations.

The Bank's purchased credit-impaired ("PCI") loans outstanding as at January 1, 2020 are now classified as purchased credit deteriorated ("PCD") loans and both the amortized cost and an allowance for expected credit losses are disclosed and included with other non-PCD loans' figures. The Bank will continue to recognize the amortization of the noncredit discount, if any, as interest income based on the yield of such assets.

The Bank has not restated comparative information previously accounted for under the incurred loss and the PCI models. The total adjustment resulting from the adoption of this methodology on the opening balance of the Bank's accumulated deficit as at January 1, 2020 was a negative adjustment of \$7.8 million relating to the Bank's loan portfolio.

Under the CECL model, the Bank collects and maintains attributes as they relate to its financial instruments that are within scope of CECL including fair value of collateral, expected performance over the lifetime of the instruments and reasonable and supportable assumptions about future economic conditions. The Bank's measurement of expected losses takes into account historical loss information and is primarily based on the product of: the respective instrument's probability of default ("PD"), loss given default ("LGD") and exposure at default ("EAD"). For AFS securities, any allowance for credit losses is based on an impairment assessment.

The Bank made the accounting policy election to write off accrued interest receivable on loans that are placed on non-accrual status by reversing the then accrued interest balance against interest income revenue.

#### **Allowance for Current Expected Credit Losses**

The Bank maintains allowances for credit losses, which in management's opinion is adequate to absorb all estimated credit-related losses that are expected in its lending and off-balance sheet credit-related arrangements at the balance sheet date.

Management measures expected credit losses on **held-to-maturity** and **available-for-sale debt securities** on a collective basis by major security type when similar risk characteristics exist, or failing that, on an individual basis.

For **available-for-sale debt securities** in an unrealized loss position, the Bank first assesses whether it intends to sell, or it is more likely than not that it will be required to sell the security before recovery of its amortized cost basis. If either of the criteria regarding intent or requirement to sell is met, the security's amortized cost basis is written down to fair value through income. For debt securities available-for-sale that do not meet the aforementioned criteria, the Bank evaluates whether the decline in fair value has resulted



from credit losses or other factors. In making this assessment, management considers the extent to which fair value is less than amortized cost, any changes to the rating of the security by a rating agency, and adverse conditions specifically related to the security, among other factors. If this assessment indicates that a credit loss exists, the present value of cash flows expected to be collected from the security are compared to the amortized cost basis of the security. If the present value of cash flows expected to be collected is less than the amortized cost basis, a credit loss exists and an allowance for credit losses is recorded for the credit loss, limited by the amount that the fair value is less than the amortized cost basis. Any impairment that has not been recorded through an allowance for credit losses is recognized in other comprehensive income.

Losses are charged against the allowance when management believes the uncollectibility of an available-for-sale security is confirmed or when either of the criteria regarding intent or requirement to sell is met.

The allowance for credit losses on **loans** is a valuation account that is deducted from the loans' amortized cost basis to present the net amount expected to be collected on the loans. Loans are charged off against the allowance when management believes the uncollectibility of a loan balance is confirmed. Expected recoveries do not exceed the aggregate of amounts previously charged-off and expected to be charged-off.

Management estimates the allowance balance using relevant available information, from internal and external sources, relating to past events, current conditions, and reasonable and supportable forecasts. Historical credit loss experience provides the basis for the estimation of expected credit losses. Adjustments to historical loss information are made for differences in the current-loan specific risk characteristics such as differences in underwriting practices, vintage, portfolio mix, delinquency level, term as well as changes in environmental conditions, such as changes in macroeconomic factors and collateral values for periods beyond the reasonable and supportable forecast period.

The allowance for credit losses is measured on a collective pool basis when similar risk characteristics exist. The Bank has identified the following portfolio segments: Residential mortgages, Consumers loans (including overdrafts), Commercial loans, Commercial overdrafts, Commercial real estate loans and Credit cards. For Loans and overdrafts, Management uses a probability of default and loss-given-default model to estimate the allowance for credit losses and a loss-rate. Loans that do not share risk characteristics are evaluated on an individual basis. Loans evaluated individually are not also included in the collective evaluation. For Credit cards, Management uses a loss rate to estimate expected credit losses.

Expected credit losses are estimated over the contractual term of the loans. The contractual term excludes potential extensions, renewals and modifications unless management has a reasonable expectation at the reporting date that the extension or renewal options included in the original contract will occur or that a troubled debt restructuring will be executed. Credit card receivables do not have stated maturities, therefore establishing a contractual term is performed by using analytical approximation behavior.

#### **New Accounting Pronouncements**

The following accounting developments were issued during the three months ended March 31, 2020 or are accounting standards pending adoption:

In January 2020, the Financial Accounting Standards Board ("FASB") published ASU 2020-01-Investments-Equity Securities (Topic 321), Investments-Equity Method and Joint Ventures (Topic 323), and Derivatives and Hedging (Topic 815)-Clarifying the Interactions between Topic 321, Topic 323, and Topic 815 (a consensus of the Emerging Issues Task Force). For public business entities, the amendments in this Update are effective for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. Early adoption is permitted, including early adoption in an interim period for public business entities for periods for which financial statements have not yet been issued. The Bank does not anticipate this ASU to have a material impact on the Bank.

In February 2020, the FASB published ASU 2020-02- Financial Instrument - Credit Losses (Topic 326) and Leases (Topic 842). Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 119 and Update to SEC Section on Effective Date Related to Accounting Standards Update No. 2016-02, Leases (Topic 842) (SEC Update). The amendments are effective immediately. The Bank does not anticipate this ASU to have a material impact on the Bank.

In March 2020, the FASB published ASU 2020-03-Codification Improvements to Financial Instruments. Issue 1: Fair value option Disclosures. The amendments clarify that all entities are required to provide the fair value option disclosures in par 825-10-50-24 through 50-32. Issue 2: Applicability of Portfolio Exception in Topic 820 to Nonfinancial Items. Paragraph 820-10-35-2(g) and 820-10-35-18L are amended to include the phrase nonfinancial items accounted for as derivatives under Topic 815 to be consistent with the previous amendments to Section 820-10-35 that were made by Accounting Standards Update No. 2018-09, Codification Improvements. Issue 3: Disclosures for Depository and Lending Institutions. The amendments clarify that the disclosure requirements in Topic 320 apply to the disclosure requirements in Topic 942 for depository and lending institutions. Issue 4: Cross-reference to Line-of-credit or revolving-Debt arrangements Guidance in Subtopic 470-50. The amendments improve the understandability of the guidance. Issue 5: Cross-reference to Net Asset Value Practical Expedient in Subtopic 820-10. The amendments improve the understandability of the guidance. Issue 6: Interaction of Topic 842 and Topic 326. The amendments clarify that the contractual term of a net investment in a lease determined in accordance with Topic 842 should be the contractual term used to measure expected credit losses under Topic 326. Issue 7: Interaction of Topic 326 and Subtopic 860-20. The amendments to Subtopic 860-20, Transfers and Servicing - Sales of Financial Assets, clarify that when an entity regains control of financial assets sold, an allowance for credit losses should be recorded in accordance with Topic 326. The amendments related to Issue 1, Issue 2, Issue 4, and Issue 5 are conforming amendments. For public business entities, the amendments are effective upon issuance of this final Update. The amendment related to Issue 3 is a conforming amendment that affects the guidance in the amendments in Accounting Standards Update 2019-04, Codification Improvements to Topic 326, Financial Instruments-Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments. That guidance relates to the amendments in 2016-01, Financial Instruments-Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities. The effective date of Update 2019-04 for the amendments to Update 2016-01 is for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. For amendments to Issues 6 and 7, for entities that have adopted the guidance in Update 2016-13, the amendments are effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. The amendments should be applied on a modified-retrospective basis by means of a cumulative-effect adjustment to opening retained earnings in the statement of financial position as of the date that an entity adopted the amendments in Update 2016-13. The Bank does not anticipate this ASU to have a material impact on the Bank.

In March 2020, the FASB published ASU 2020-04-Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting. The amendments in this Update provide optional expedients and exceptions for applying GAAP to contracts, hedging relationships and other transactions affected by reference rate reform if certain criteria are met. The amendments in this Update apply only to contracts, hedging relationships, and other transactions that reference London Inter Bank Offer Rate ("LIBOR") or another reference rate expected to be discontinued because of reference rate reform. The expedients and exceptions provide by the amendments do not apply to contract modifications made and hedging relationships. The amendments in this Update are effective for all entities upon issuance (March 12, 2020) through December 31, 2022. The Bank does not anticipate this ASU to have a material impact on the Bank.

**The Bank of N.T. Butterfield & Son Limited**  
**Notes to the Consolidated Financial Statements (unaudited) (continued)**  
*(In thousands of US dollars, unless otherwise stated)*

**Note 3: Cash due from banks**

	March 31, 2020	December 31, 2019
<b>Non-interest bearing</b>		
Cash and demand deposits with banks	116,241	88,031
<b>Interest bearing<sup>1</sup></b>		
Demand deposits with banks	824,451	839,320
Cash equivalents	1,037,534	1,622,719
<b>Sub-total - Interest bearing</b>	<b>1,861,985</b>	<b>2,462,039</b>
<b>Total cash due from banks</b>	<b>1,978,226</b>	<b>2,550,070</b>

<sup>1</sup> Interest bearing cash due from banks includes certain demand deposits with banks as at March 31, 2020 in the amount of \$398.7 million (December 31, 2019: \$439.5 million) that are earning interest at a negligible rate.

**Note 4: Short-term investments**

	March 31, 2020	December 31, 2019
<b>Unrestricted</b>		
Maturing within three months	701,023	594,749
Maturing between three to six months	331,838	591,212
Maturing between six to twelve months	1,532	2,584
<b>Total unrestricted short-term investments</b>	<b>1,034,393</b>	<b>1,188,545</b>
<b>Affected by drawing restrictions related to minimum reserve and derivative margin requirements</b>		
Non-interest earning demand deposits	—	2,270
Interest earning demand and term deposits	13,235	27,565
<b>Total restricted short-term investments</b>	<b>13,235</b>	<b>29,835</b>
<b>Total short-term investments</b>	<b>1,047,628</b>	<b>1,218,380</b>

**Note 5: Investment in securities**

**Amortized Cost, Carrying Amount and Fair Value**

On the consolidated balance sheets, equity securities and available-for-sale ("AFS") investments are carried at fair value and held-to-maturity ("HTM") investments are carried at amortized cost.

	March 31, 2020				December 31, 2019			
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
<b>Equity securities</b>								
Mutual funds	5,724	1,544	(502)	6,766	5,724	2,142	(447)	7,419
<b>Total equity securities</b>	<b>5,724</b>	<b>1,544</b>	<b>(502)</b>	<b>6,766</b>	<b>5,724</b>	<b>2,142</b>	<b>(447)</b>	<b>7,419</b>
<b>Available-for-sale</b>								
US government and federal agencies	2,192,206	59,130	(6,687)	2,244,649	2,040,171	18,617	(6,342)	2,052,446
Non-US governments debt securities	26,126	—	(720)	25,406	26,118	82	(524)	25,676
Asset-backed securities - Student loans	13,290	—	(665)	12,625	13,290	—	(399)	12,891
Residential mortgage-backed securities	117,836	259	(964)	117,131	128,952	654	(278)	129,328
<b>Total available-for-sale</b>	<b>2,349,458</b>	<b>59,389</b>	<b>(9,036)</b>	<b>2,399,811</b>	<b>2,208,531</b>	<b>19,353</b>	<b>(7,543)</b>	<b>2,220,341</b>
<b>Held-to-maturity<sup>1</sup></b>								
US government and federal agencies	2,131,084	103,589	—	2,234,673	2,208,663	47,814	(490)	2,255,987
<b>Total held-to-maturity</b>	<b>2,131,084</b>	<b>103,589</b>	<b>—</b>	<b>2,234,673</b>	<b>2,208,663</b>	<b>47,814</b>	<b>(490)</b>	<b>2,255,987</b>

<sup>1</sup> For the three months ended March 31, 2020, and the three months ended March 31, 2019, impairments recognized in other comprehensive loss for HTM investments were nil.

**The Bank of N.T. Butterfield & Son Limited**  
**Notes to the Consolidated Financial Statements (unaudited) (continued)**  
*(In thousands of US dollars, unless otherwise stated)*

**Investments with Unrealized Loss Positions**

The Bank does not believe that the AFS and HTM investment securities that were in an unrealized loss position as of March 31, 2020 (and December 31, 2019), which were composed of 52 securities representing 28% of the AFS and HTM portfolios' carrying value (December 31, 2019: 68 and 23%, respectively), represent an other-than-temporary impairment ("OTTI"). Total gross unrealized losses were 1.7% of the fair value of affected securities (December 31, 2019: 0.8%). Management does not intend to sell and it is likely that management will not be required to sell the securities prior to their anticipated recovery. Unrealized losses were attributable primarily to changes in market interest rates, relative to when the investment securities were purchased, and not due to the credit quality of the investment securities. The issuers continue to make timely principal and interest payments on the securities. The following describes the processes for identifying credit impairment in security types with the most significant unrealized losses as shown in the preceding tables.

Management believes that all the **US government and federal agencies securities** do not have any credit losses, given the explicit and implicit guarantees provided by the US federal government.

Management believes that all the **Non-US governments debt securities** do not have any credit losses, given the explicit guarantee provided by the issuing government.

Investments in **Asset-backed securities - Student loans** are composed primarily of securities collateralized by Federal Family Education Loan Program loans ("FFELP loans"). FFELP loans benefit from a US federal government guarantee of at least 97% of defaulted principal and accrued interest, with additional credit support provided in the form of over-collateralization, subordination and excess spread, which collectively total in excess of 100%. Accordingly, the vast majority of FFELP loan-backed securities are not exposed to traditional consumer credit risk.

Investments in **Residential mortgage-backed securities** relate to 13 securities (December 31, 2019: 7) which are rated AAA and possess similar significant credit enhancement as described above. No credit losses were recognized on these securities as the weighted average credit support and the weighted average loan-to-value ratios range from 6% - 24% and 52% - 62%, respectively. Current credit support is significantly greater than any delinquencies experienced on the underlying mortgages.

In the following tables, debt securities with unrealized losses that are not deemed to be OTTI are categorized as being in a loss position for "less than 12 months" or "12 months or more" based on the point in time that the fair value most recently declined below the amortized cost basis.

	<u>Less than 12 months</u>		<u>12 months or more</u>		Total fair value	Total gross unrealized losses
	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses		
<b>March 31, 2020</b>						
<b>Available-for-sale securities with unrealized losses</b>						
US government and federal agencies	115,974	(1,406)	285,910	(5,281)	401,884	(6,687)
Non-US governments debt securities	3,159	(193)	22,246	(527)	25,405	(720)
Asset-backed securities - Student loans	—	—	12,625	(665)	12,625	(665)
Residential mortgage-backed securities	78,695	(698)	13,912	(266)	92,607	(964)
<b>Total available-for-sale securities with unrealized losses</b>	<b>197,828</b>	<b>(2,297)</b>	<b>334,693</b>	<b>(6,739)</b>	<b>532,521</b>	<b>(9,036)</b>
<b>Held-to-maturity securities with unrealized losses</b>						
US government and federal agencies	—	—	—	—	—	—

	<u>Less than 12 months</u>		<u>12 months or more</u>		Total fair value	Total gross unrealized losses
	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses		
<b>December 31, 2019</b>						
<b>Available-for-sale securities with unrealized losses</b>						
US government and federal agencies	376,262	(1,786)	435,999	(4,556)	812,261	(6,342)
Non-US governments debt securities	202	(1)	22,246	(523)	22,448	(524)
Asset-backed securities - Student loans	—	—	12,891	(399)	12,891	(399)
Residential mortgage-backed securities	6,038	(30)	50,254	(248)	56,292	(278)
<b>Total available-for-sale securities with unrealized losses</b>	<b>382,502</b>	<b>(1,817)</b>	<b>521,390</b>	<b>(5,726)</b>	<b>903,892</b>	<b>(7,543)</b>
<b>Held-to-maturity securities with unrealized losses</b>						
US government and federal agencies	47,038	(214)	46,411	(276)	93,449	(490)

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**Investment Maturities**

The following table presents the remaining term to contractual maturity of the Bank's securities. The actual maturities may differ as certain securities offer prepayment options to the borrowers.

March 31, 2020	Remaining term to maturity					Carrying amount
	Within 3 months	3 to 12 months	1 to 5 years	5 to 10 years	No specific or single maturity	
<b>Equity securities</b>						
Mutual funds	—	—	—	—	6,766	6,766
<b>Available-for-sale</b>						
US government and federal agencies	—	—	—	—	2,244,649	2,244,649
Non-US governments debt securities	—	197	22,247	2,962	—	25,406
Asset-backed securities - Student loans	—	—	—	—	12,625	12,625
Residential mortgage-backed securities	—	—	—	—	117,131	117,131
<b>Total available-for-sale</b>	—	197	22,247	2,962	2,374,405	2,399,811
<b>Held-to-maturity</b>						
US government and federal agencies	—	—	—	—	2,131,084	2,131,084
<b>Total investments</b>	—	197	22,247	2,962	4,512,255	4,537,661
<b>Total by currency</b>						
US dollars	—	197	22,247	2,962	4,512,034	4,537,440
Other	—	—	—	—	221	221
<b>Total investments</b>	—	197	22,247	2,962	4,512,255	4,537,661

**Pledged Investments**

The Bank pledges certain US government and federal agencies investment securities to further secure the Bank's issued customer deposit products. The secured party does not have the right to sell or repledge the collateral.

Pledged Investments	March 31, 2020		December 31, 2019	
	Amortized cost	Fair value	Amortized cost	Fair value
Available-for-sale	4,435	4,478	3,848	3,912
Held-to-maturity	4,921	5,204	5,449	5,552

**Sale Proceeds and Realized Gains and Losses of AFS Securities**

	Three months ended March 31, 2020			Three months ended March 31, 2019		
	Sale proceeds	Gross realized gains	Gross realized (losses)	Sale proceeds	Gross realized gains	Gross realized (losses)
Pass-through note	—	—	—	972	972	—

**Taxability of Interest Income**

None of the investments' interest income have received a specific preferential income tax treatment in any of the jurisdictions in which the Bank owns investments.

**Note 6: Loans**

The principal means of securing residential mortgages, personal, credit card and business loans are entitlements over assets and guarantees. Mortgage loans are generally repayable over periods of up to thirty years and personal and business loans are generally repayable over terms not exceeding five years. Government loans are repayable over a variety of terms which are individually negotiated. Amounts owing on credit cards are revolving and typically a minimum amount is due within 30 days from billing. The effective yield on total loans as at March 31, 2020 is 4.47% (December 31, 2019: 4.73%). The interest receivable on total loans as at March 31, 2020 is \$9.2 million (December 31, 2019: \$9.2 million). The interest receivable is included in Accrued interest and other assets on the balance sheet and is excluded from all loan amounts disclosed in the present note to the financial statements.

**Loans' Credit Quality**

The four credit quality classifications set out in the following tables are defined below and describe the credit quality of the Bank's lending portfolio. These classifications each encompass a range of more granular internal credit rating grades. Loans' internal credit ratings are assigned by the Bank's customer relationship managers as well as members of the Bank's jurisdictional and group Credit Committees. The borrowers' financial condition is documented at loan origination and maintained periodically thereafter at a frequency which can be up to monthly for certain loans. The loans' performing status, as well as current economic trends, are continuously monitored. The Bank's jurisdictional and group Credit Committees meet on a monthly basis. The Bank also has a Group Provisions and Impairments Committee which is responsible for approving significant provisions and other impairment charges.

A **pass** loan shall mean a loan that is expected to be repaid as agreed. A loan is classified as pass where the Bank is not expected to face repayment difficulties because the present and projected cash flows are sufficient to repay the debt and the repayment schedule as established by the agreement is being followed. Loans in this category are reviewed by the Bank's management on at least an annual basis.

A **special mention** loan shall mean a loan under close monitoring by the Bank's management on at least a quarterly basis. Loans in this category are currently protected and still performing (current with respect to interest and principal payments), but are potentially weak and present an undue credit risk exposure, but not to the point of justifying a classification of substandard.

A **substandard** loan shall mean a loan whose evident unreliability makes repayment doubtful and there is a threat of loss to the Bank unless the unreliability is averted. Loans in this category are under close monitoring by the Bank's management on at least a quarterly basis.

A **non-accrual** loan shall mean either management is of the opinion full payment of principal or interest is in doubt or when principal or interest is 90 days past due and for residential mortgage loans which are not well secured and in the process of collection. Loans in this category are under close monitoring by the Bank's management on at least a quarterly basis.

The amortized cost of loans by credit quality classifications and allowance for expected credit losses by class of loans is as follows:

March 31, 2020	Pass	Special mention	Substandard	Non-accrual	Total amortized cost	Allowance for expected credit losses	Total net loans
<b>Commercial loans</b>							
Government	368,786	—	—	—	368,786	(1,754)	367,032
Commercial and industrial	423,366	44,048	1,107	7,512	476,033	(13,232)	462,801
Commercial overdrafts	34,571	7,543	479	—	42,593	(548)	42,045
<b>Total commercial loans</b>	<b>826,723</b>	<b>51,591</b>	<b>1,586</b>	<b>7,512</b>	<b>887,412</b>	<b>(15,534)</b>	<b>871,878</b>
<b>Commercial real estate loans</b>							
Commercial mortgage	604,224	81,847	2,904	3,851	692,826	(1,240)	691,586
Construction	58,943	—	—	—	58,943	(1,311)	57,632
<b>Total commercial real estate loans</b>	<b>663,167</b>	<b>81,847</b>	<b>2,904</b>	<b>3,851</b>	<b>751,769</b>	<b>(2,551)</b>	<b>749,218</b>
<b>Consumer loans</b>							
Automobile financing	21,492	68	—	184	21,744	(81)	21,663
Credit card	75,509	—	346	—	75,855	(2,912)	72,943
Overdrafts	3,472	623	50	2	4,147	(194)	3,953
Other consumer <sup>1</sup>	124,910	3,334	—	1,147	129,391	(1,443)	127,948
<b>Total consumer loans</b>	<b>225,383</b>	<b>4,025</b>	<b>396</b>	<b>1,333</b>	<b>231,137</b>	<b>(4,630)</b>	<b>226,507</b>
<b>Residential mortgage loans</b>	<b>2,989,085</b>	<b>56,330</b>	<b>81,008</b>	<b>40,444</b>	<b>3,166,867</b>	<b>(13,502)</b>	<b>3,153,365</b>
<b>Total</b>	<b>4,704,358</b>	<b>193,793</b>	<b>85,894</b>	<b>53,140</b>	<b>5,037,185</b>	<b>(36,217)</b>	<b>5,000,968</b>

<sup>1</sup> Other consumer loans' amortized cost comprises \$65 million of cash and portfolio secured lending and \$46 million of lending secured by buildings in construction or other collateral.

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December 31, 2019	Pass	Special mention	Substandard	Non-accrual	Total amortized cost	General and specific allowances	Total net loans	Evaluation of gross loans for impairment	
								Individually evaluated	Collectively evaluated
<b>Commercial loans</b>									
Government	370,753	—	—	—	370,753	—	370,753	—	370,753
Commercial and industrial	469,591	57,438	1,119	7,567	535,715	(7,195)	528,520	48,386	487,329
Commercial overdrafts	23,529	4,565	451	2	28,547	(86)	28,461	2	28,545
<b>Total commercial loans</b>	<b>863,873</b>	<b>62,003</b>	<b>1,570</b>	<b>7,569</b>	<b>935,015</b>	<b>(7,281)</b>	<b>927,734</b>	<b>48,388</b>	<b>886,627</b>
<b>Commercial real estate loans</b>									
Commercial mortgage	581,450	71,638	2,955	3,250	659,293	(1,496)	657,797	9,871	649,422
Construction	91,812	—	3,128	—	94,940	—	94,940	3,128	91,812
<b>Total commercial real estate loans</b>	<b>673,262</b>	<b>71,638</b>	<b>6,083</b>	<b>3,250</b>	<b>754,233</b>	<b>(1,496)</b>	<b>752,737</b>	<b>12,999</b>	<b>741,234</b>
<b>Consumer loans</b>									
Automobile financing	21,229	78	—	155	21,462	(102)	21,360	155	21,307
Credit card	87,250	—	424	—	87,674	(445)	87,229	—	87,674
Overdrafts	5,270	2,504	50	34	7,858	(28)	7,830	34	7,824
Other consumer <sup>1</sup>	135,534	3,550	—	1,063	140,147	(926)	139,221	1,070	139,077
<b>Total consumer loans</b>	<b>249,283</b>	<b>6,132</b>	<b>474</b>	<b>1,252</b>	<b>257,141</b>	<b>(1,501)</b>	<b>255,640</b>	<b>1,259</b>	<b>255,882</b>
<b>Residential mortgage loans</b>	<b>3,019,105</b>	<b>80,135</b>	<b>82,251</b>	<b>38,330</b>	<b>3,219,821</b>	<b>(13,310)</b>	<b>3,206,511</b>	<b>115,535</b>	<b>3,104,285</b>
<b>Total</b>	<b>4,805,523</b>	<b>219,908</b>	<b>90,378</b>	<b>50,401</b>	<b>5,166,210</b>	<b>(23,588)</b>	<b>5,142,622</b>	<b>178,181</b>	<b>4,988,028</b>

<sup>1</sup> Other consumer loans' amortized cost comprises \$74 million of cash and portfolio secured lending and \$48 million of lending secured by buildings in construction or other collateral.

Based on the most recent analysis performed, the amortized cost of loans by year of origination and credit quality indicator is as follows:

March 31, 2020	Pass	Special mention	Substandard	Non-accrual	Total amortized cost
<b>Loans by origination year</b>					
2020	224,095	101	—	—	224,196
2019	1,313,117	31,407	181	6	1,344,711
2018	767,172	39,439	4,925	935	812,471
2017	579,138	41,930	3,200	959	625,227
2016	339,354	11,016	3,825	3,915	358,110
Prior	1,363,498	60,823	72,888	45,579	1,542,788
<b>Overdrafts and credit cards</b>	<b>117,984</b>	<b>9,077</b>	<b>875</b>	<b>1,746</b>	<b>129,682</b>
<b>Total amortized cost</b>	<b>4,704,358</b>	<b>193,793</b>	<b>85,894</b>	<b>53,140</b>	<b>5,037,185</b>



**The Bank of N.T. Butterfield & Son Limited**  
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**Age Analysis of Past Due Loans (Including Non-Accrual Loans)**

The following tables summarize the past due status of the loans. The aging of past due amounts are determined based on the contractual delinquency status of payments under the loan and this aging may be affected by the timing of the last business day at period end. Loans less than 30 days past due are included in current loans.

March 31, 2020	30 - 59 days	60 - 89 days	More than 90 days	Total past due loans	Total current	Total amortized cost
<b>Commercial loans</b>						
Government	—	—	—	—	368,786	368,786
Commercial and industrial	266	—	7,484	7,750	468,283	476,033
Commercial overdrafts	—	—	—	—	42,593	42,593
<b>Total commercial loans</b>	<b>266</b>	<b>—</b>	<b>7,484</b>	<b>7,750</b>	<b>879,662</b>	<b>887,412</b>
<b>Commercial real estate loans</b>						
Commercial mortgage	1,124	—	3,851	4,975	687,851	692,826
Construction	—	—	—	—	58,943	58,943
<b>Total commercial real estate loans</b>	<b>1,124</b>	<b>—</b>	<b>3,851</b>	<b>4,975</b>	<b>746,794</b>	<b>751,769</b>
<b>Consumer loans</b>						
Automobile financing	16	33	163	212	21,532	21,744
Credit card	635	369	346	1,350	74,505	75,855
Overdrafts	—	—	2	2	4,145	4,147
Other consumer	105	103	1,136	1,344	128,047	129,391
<b>Total consumer loans</b>	<b>756</b>	<b>505</b>	<b>1,647</b>	<b>2,908</b>	<b>228,229</b>	<b>231,137</b>
<b>Residential mortgage loans</b>	<b>21,214</b>	<b>10,336</b>	<b>46,213</b>	<b>77,763</b>	<b>3,089,104</b>	<b>3,166,867</b>
<b>Total amortized cost</b>	<b>23,360</b>	<b>10,841</b>	<b>59,195</b>	<b>93,396</b>	<b>4,943,789</b>	<b>5,037,185</b>

December 31, 2019	30 - 59 days	60 - 89 days	More than 90 days	Total past due loans	Total current	Total amortized cost
<b>Commercial loans</b>						
Government	—	—	—	—	370,753	370,753
Commercial and industrial	276	—	7,487	7,763	527,952	535,715
Commercial overdrafts	—	—	2	2	28,545	28,547
<b>Total commercial loans</b>	<b>276</b>	<b>—</b>	<b>7,489</b>	<b>7,765</b>	<b>927,250</b>	<b>935,015</b>
<b>Commercial real estate loans</b>						
Commercial mortgage	445	—	3,250	3,695	655,598	659,293
Construction	—	—	3,128	3,128	91,812	94,940
<b>Total commercial real estate loans</b>	<b>445</b>	<b>—</b>	<b>6,378</b>	<b>6,823</b>	<b>747,410</b>	<b>754,233</b>
<b>Consumer loans</b>						
Automobile financing	53	58	135	246	21,216	21,462
Credit card	630	221	424	1,275	86,399	87,674
Overdrafts	—	—	34	34	7,824	7,858
Other consumer	994	139	1,028	2,161	137,986	140,147
<b>Total consumer loans</b>	<b>1,677</b>	<b>418</b>	<b>1,621</b>	<b>3,716</b>	<b>253,425</b>	<b>257,141</b>
<b>Residential mortgage loans</b>	<b>31,931</b>	<b>9,487</b>	<b>47,132</b>	<b>88,550</b>	<b>3,131,271</b>	<b>3,219,821</b>
<b>Total amortized cost</b>	<b>34,329</b>	<b>9,905</b>	<b>62,620</b>	<b>106,854</b>	<b>5,059,356</b>	<b>5,166,210</b>

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**Changes in Allowances For Credit Losses**

The increase in the provision for credit losses during the three months ended March 31, 2020 was primarily attributable to changes in macroeconomic factors, such as GDP forecasts, and changes in the credit ratings of some commercial customers. As per the Bank's accounting policy, as disclosed in Note 2, the Bank continuously collects and maintains attributes related to financial instruments within the scope of CECL, including current conditions, and reasonable and supportable assumptions about future economic conditions.

	Three months ended March 31, 2020				Total
	Commercial	Commercial real estate	Consumer	Residential mortgage	
Balance at the beginning of period, before change in accounting policy	7,281	1,496	1,502	13,309	23,588
Cumulative effect from change in accounting policy (Note 2)	4,109	1,026	2,506	200	7,841
Provision increase (decrease)	4,204	30	702	62	4,998
Recoveries of previous charge-offs	4	—	258	172	434
Charge-offs	(16)	—	(325)	(353)	(694)
Other	(48)	(1)	(13)	112	50
<b>Allowances for expected credit losses at end of period</b>	<b>15,534</b>	<b>2,551</b>	<b>4,630</b>	<b>13,502</b>	<b>36,217</b>

	Three months ended March 31, 2019				Total
	Commercial	Commercial real estate	Consumer	Residential mortgage	
Balance at beginning of period	6,913	4,092	802	13,295	25,102
Provision increase (decrease)	(646)	(112)	156	563	(39)
Recoveries of previous charge-offs	10	1	277	56	344
Charge-offs	—	—	(421)	(18)	(439)
Other	—	1	—	42	43
<b>General and specific allowances at end of period</b>	<b>6,277</b>	<b>3,982</b>	<b>814</b>	<b>13,938</b>	<b>25,011</b>
Allowances at end of period: individually evaluated for impairment	(4,447)	(600)	(274)	(10,588)	(15,909)
Allowances at end of period: collectively evaluated for impairment	(1,830)	(3,382)	(540)	(3,350)	(9,102)

**Collateral-dependent loans**

Management identified that the repayment of certain commercial and consumer mortgage loans is expected to be provided substantially through the operation or the sale of the collateral pledged to the Bank ("collateral-dependent loans"). The Bank believes that for the vast majority of loans identified as collateral-dependent, the sale of the collateral will be sufficient to fully reimburse the loan's carrying amount.

**The Bank of N.T. Butterfield & Son Limited**  
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**Non-Performing Loans**

During the three months ended March 31, 2020, no interest was recognized on non-accrual loans. Non-performing loans at March 31, 2020 include PCD loans, which have all been on non-accrual status since their acquisition. The balances at December 31, 2019 have not been restated to include the \$1.8 million amortized cost of PCD loans as at that date. No credit deteriorated loans were purchased during the period.

	March 31, 2020				December 31, 2019			
	Non-accrual loans with an allowance	Non-accrual loans without an allowance	Past due more than 90 days and accruing	Total non- performing loans	Non-accrual loans with an allowance	Non-accrual loans without an allowance	Past due more than 90 days and accruing	Total non- performing loans
<b>Commercial loans</b>								
Commercial and industrial	7,512	—	—	7,512	7,487	80	—	7,567
Commercial overdrafts	—	—	—	—	—	2	—	2
<b>Total commercial loans</b>	<b>7,512</b>	<b>—</b>	<b>—</b>	<b>7,512</b>	<b>7,487</b>	<b>82</b>	<b>—</b>	<b>7,569</b>
<b>Commercial real estate loans</b>								
Commercial mortgage	986	2,865	—	3,851	1,019	2,231	—	3,250
Construction	—	—	—	—	—	—	3,128	3,128
<b>Total commercial real estate loans</b>	<b>986</b>	<b>2,865</b>	<b>—</b>	<b>3,851</b>	<b>1,019</b>	<b>2,231</b>	<b>3,128</b>	<b>6,378</b>
<b>Consumer loans</b>								
Automobile financing	141	43	—	184	—	155	—	155
Credit card	—	—	346	346	—	—	424	424
Overdrafts	—	2	—	2	—	34	—	34
Other consumer	851	296	—	1,147	676	387	—	1,063
<b>Total consumer loans</b>	<b>992</b>	<b>341</b>	<b>346</b>	<b>1,679</b>	<b>676</b>	<b>576</b>	<b>424</b>	<b>1,676</b>
<b>Residential mortgage loans</b>	<b>30,202</b>	<b>10,242</b>	<b>10,494</b>	<b>50,938</b>	<b>29,016</b>	<b>9,314</b>	<b>12,008</b>	<b>50,338</b>
<b>Total non-performing loans</b>	<b>39,692</b>	<b>13,448</b>	<b>10,840</b>	<b>63,980</b>	<b>38,198</b>	<b>12,203</b>	<b>15,560</b>	<b>65,961</b>

**Loans modified in a TDR**

As at March 31, 2020 and December 31, 2019, the Bank had no loans that were modified in a TDR during the preceding 12 months that subsequently defaulted (i.e. 90 days or more past due following a modification).

**TDRs entered into during the period**

	Three months ended March 31, 2020			
	Number of contracts	Pre- modification recorded loans	Modification: interest capitalization	Post- modification recorded loans
Residential mortgage loans	1	352	—	352

  

	Three months ended March 31, 2019			
	Number of contracts	Pre- modification recorded loans	Modification: interest capitalization	Post- modification recorded loans
Residential mortgage loans	1	364	—	364

**TDRs Outstanding**

	March 31, 2020		December 31, 2019	
	Accrual	Non-accrual	Accrual	Non-accrual
Commercial loans	926	—	939	—
Commercial real estate loans	2,904	1,303	2,954	1,315
Residential mortgage loans	64,079	10,491	65,275	9,576
<b>Total TDRs outstanding</b>	<b>67,909</b>	<b>11,794</b>	<b>69,168</b>	<b>10,891</b>

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**Note 7: Credit risk concentrations**

Concentrations of credit risk in the lending and off-balance sheet credit-related arrangements portfolios arise when a number of customers are engaged in similar business activities, are in the same geographic region, or when they have similar economic features that would cause their ability to meet contractual obligations to be similarly affected by changes in economic conditions. The Bank regularly monitors various segments of its credit risk portfolio to assess potential concentrations of risks and to obtain collateral when deemed necessary. In the Bank's commercial portfolio, risk concentrations are evaluated primarily by industry and by geographic region of loan origination. In the consumer portfolio, concentrations are evaluated primarily by products. Credit exposures include loans, guarantees and acceptances, letters of credit and commitments for undrawn lines of credit. Unconditionally cancellable credit cards and overdraft lines of credit are excluded from the tables below.

The following tables summarize the credit exposure of the Bank by business sector and by geographic region. The exposures amounts disclosed below do not include accrued interest and are gross of specific allowances for credit losses and collateral held.

Business sector	March 31, 2020			December 31, 2019		
	Loans	Off-balance sheet	Total credit exposure	Loans	Off-balance sheet	Total credit exposure
Banks and financial services	776,537	353,471	1,130,008	767,684	324,388	1,092,072
Commercial and merchandising	529,641	197,986	727,627	563,494	189,060	752,554
Governments	371,105	6,307	377,412	372,544	8,807	381,351
Individuals	2,476,640	126,699	2,603,339	2,483,334	148,519	2,631,853
Primary industry and manufacturing	296,659	188,201	484,860	383,395	110,947	494,342
Real estate	381,827	3,725	385,552	371,758	6,312	378,070
Hospitality industry	199,018	73	199,091	200,603	73	200,676
Transport and communication	5,758	75	5,833	5,720	75	5,795
<b>Total gross exposure</b>	<b>5,037,185</b>	<b>876,537</b>	<b>5,913,722</b>	<b>5,148,532</b>	<b>788,181</b>	<b>5,936,713</b>

Geographic region	March 31, 2020				December 31, 2019			
	Cash due from banks, resell agreements and short-term investments	Loans	Off-balance sheet	Total credit exposure	Cash due from banks, resell agreements and short-term investments	Loans	Off-balance sheet	Total credit exposure
Australia	9,897	—	—	9,897	170,956	—	—	170,956
Barbados	—	—	—	—	784	—	—	784
Belgium	4,395	—	—	4,395	3,554	—	—	3,554
Bermuda	46,720	2,283,867	317,854	2,648,441	38,059	2,237,372	347,802	2,623,233
Canada	222,926	—	—	222,926	553,941	—	—	553,941
Cayman	105,013	929,916	194,538	1,229,467	55,360	931,254	208,404	1,195,018
Guernsey	2	713,043	218,315	931,360	4	855,553	123,376	978,933
Japan	16,482	—	—	16,482	16,183	—	—	16,183
Jersey	—	8,120	—	8,120	—	7,219	—	7,219
Netherlands	227,904	—	—	227,904	410,461	—	—	410,461
New Zealand	1,401	—	—	1,401	6,174	—	—	6,174
Norway	1,179	—	—	1,179	1,204	—	—	1,204
Saint Lucia	—	29,325	—	29,325	—	29,400	—	29,400
Switzerland	8,400	—	—	8,400	8,015	—	—	8,015
The Bahamas	1,532	12,533	—	14,065	1,607	12,859	—	14,466
United Kingdom	1,794,208	1,060,381	145,830	3,000,419	1,742,676	1,074,875	108,599	2,926,150
United States	775,817	—	—	775,817	898,262	—	—	898,262
Other	2,274	—	—	2,274	3,493	—	—	3,493
<b>Total gross exposure</b>	<b>3,218,150</b>	<b>5,037,185</b>	<b>876,537</b>	<b>9,131,872</b>	<b>3,910,733</b>	<b>5,148,532</b>	<b>788,181</b>	<b>9,847,446</b>

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**Note 8: Customer deposits and deposits from banks**

**By Maturity**

March 31, 2020	Demand		Total demand deposits	Term				Total term deposits	Total deposits
	Non-interest bearing	Interest bearing		Within 3 months	3 to 6 months	6 to 12 months	After 12 months		
Demand or less than \$100k <sup>1</sup>	2,136,503	6,756,739	8,893,242	26,805	9,318	15,606	16,404	68,133	8,961,375
Term - \$100k or more	N/A	N/A	—	2,119,127	287,977	295,187	89,181	2,791,472	2,791,472
<b>Total deposits</b>	<b>2,136,503</b>	<b>6,756,739</b>	<b>8,893,242</b>	<b>2,145,932</b>	<b>297,295</b>	<b>310,793</b>	<b>105,585</b>	<b>2,859,605</b>	<b>11,752,847</b>

December 31, 2019	Demand		Total demand deposits	Term				Total term deposits	Total deposits
	Non-interest bearing	Interest bearing		Within 3 months	3 to 6 months	6 to 12 months	After 12 months		
Demand or less than \$100k <sup>1</sup>	2,238,256	7,152,063	9,390,319	31,666	9,355	13,497	16,478	70,996	9,461,315
Term - \$100k or more	N/A	N/A	—	2,402,619	224,945	291,020	61,726	2,980,310	2,980,310
<b>Total deposits</b>	<b>2,238,256</b>	<b>7,152,063</b>	<b>9,390,319</b>	<b>2,434,285</b>	<b>234,300</b>	<b>304,517</b>	<b>78,204</b>	<b>3,051,306</b>	<b>12,441,625</b>

<sup>1</sup> The weighted-average interest rate on interest-bearing demand deposits as at March 31, 2020 is (0.03)% (December 31, 2019: 0.20%).

**By Type and Segment**

	March 31, 2020			December 31, 2019		
	Payable on demand	Payable on a fixed date	Total	Payable on demand	Payable on a fixed date	Total
Bermuda	3,188,481	1,217,043	4,405,524	3,145,859	1,265,679	4,411,538
Cayman	2,747,740	491,618	3,239,358	2,995,119	479,848	3,474,967
Channel Islands and the UK	2,957,021	1,150,944	4,107,965	3,249,341	1,305,779	4,555,120
<b>Total deposits</b>	<b>8,893,242</b>	<b>2,859,605</b>	<b>11,752,847</b>	<b>9,390,319</b>	<b>3,051,306</b>	<b>12,441,625</b>

**Note 9: Employee benefit plans**

The Bank maintains trustee pension plans including non-contributory defined benefit plans and a number of defined contribution plans, and provides post-retirement medical benefits to its qualifying retirees. The defined benefit provisions under the pension plans are generally based upon years of service and average salary during the relevant years of employment. The defined benefit and post-retirement medical plans are not open to new participants and are non-contributory and the funding required is provided by the Bank, based upon the advice of independent actuaries. The defined benefit pension plans are in the Bermuda, Guernsey and United Kingdom jurisdictions and the defined benefit post-retirement medical plan is in Bermuda.

The Bank includes an estimate of the 2020 Bank contribution and estimated benefit payments for the next ten years under the pension and post-retirement plans in its financial statements for the year-ended December 31, 2019. During the three months ended March 31, 2020, there have been no material revisions to these estimates.

Line item in the consolidated statements of operations	Three months ended	
	March 31, 2020	March 31, 2019
<b>Defined benefit pension expense (income)</b>		
Interest cost	986	1,271
Expected return on plan assets	(1,881)	(1,909)
Amortization of net actuarial (gains) losses	602	614
Amortization of prior service (credit) cost	5	5
<b>Total defined benefit pension expense (income)</b>	<b>(288)</b>	<b>(19)</b>
<b>Post-retirement medical benefit expense (income)</b>		
Service cost	16	15
Interest cost	818	1,185
Amortization of net actuarial (gains) losses	—	68
Amortization of prior service (credit) cost	131	94
<b>Total post-retirement medical benefit expense (income)</b>	<b>965</b>	<b>1,362</b>

The components of defined benefit pension expense (income) and post-retirement benefit expense (income) other than the service cost component are included in the line item non-service employee benefits expense in the consolidated statements of income.

**Note 10: Credit related arrangements, repurchase agreements and commitments**

**Commitments**

The Bank enters into contractual commitments to extend credit, normally with fixed expiration dates or termination clauses, at specified rates and for specific purposes. Substantially all of the Bank's commitments to extend credit are contingent upon customers maintaining specific credit standards at the time of loan funding. Management assesses the credit risk associated with certain commitments to extend credit in determining the level of the allowance for expected credit losses.

The Bank has a facility with one of its custodians, whereby the Bank may offer up to US\$200 million of standby letters of credit to its customers on a fully secured basis. Under the standard terms of the facility, the custodian has the right to set-off against securities held of 110% of the utilized facility. At March 31, 2020, \$141.7 million (December 31, 2019: \$143.6 million) of standby letters of credit were issued under this facility.

<b>Outstanding unfunded commitments to extend credit</b>	<b>March 31, 2020</b>	December 31, 2019
Commitments to extend credit	<b>643,207</b>	549,049
Documentary and commercial letters of credit	<b>1,850</b>	355
<b>Total unfunded commitments to extend credit</b>	<b>645,057</b>	549,404
Allowance for credit losses	<b>(179)</b>	—

**Credit-Related Arrangements**

Standby letters of credit and letters of guarantee are issued at the request of a Bank customer in order to secure the customer's payment or performance obligations to a third party. These guarantees represent an irrevocable obligation of the Bank to pay the third party beneficiary upon presentation of the guarantee and satisfaction of the documentary requirements stipulated therein, without investigation as to the validity of the beneficiary's claim against the customer. Generally, the term of the standby letters of credit does not exceed one year, while the term of the letters of guarantee does not exceed four years. The types and amounts of collateral security held by the Bank for these standby letters of credit and letters of guarantee is generally represented by deposits with the Bank or a charge over assets held in mutual funds.

The Bank considers the fees collected in connection with the issuance of standby letters of credit and letters of guarantee to be representative of the fair value of its obligation undertaken in issuing the guarantee. In accordance with applicable accounting standards related to guarantees, the Bank defers fees collected in connection with the issuance of standby letters of credit and letters of guarantee. The fees are then recognized in income proportionately over the life of the credit agreements. The following table presents the outstanding financial guarantees. Collateral is shown at estimated market value less selling cost. Where the collateral is cash, it is shown gross including accrued income.

<b>Outstanding financial guarantees</b>	<b>March 31, 2020</b>			December 31, 2019		
	<b>Gross</b>	<b>Collateral</b>	<b>Net</b>	Gross	Collateral	Net
Standby letters of credit	<b>228,846</b>	<b>221,586</b>	<b>7,260</b>	230,971	223,711	7,260
Letters of guarantee	<b>2,634</b>	<b>2,598</b>	<b>36</b>	7,806	7,672	134
<b>Total</b>	<b>231,480</b>	<b>224,184</b>	<b>7,296</b>	238,777	231,383	7,394

**Repurchase agreements**

The Bank utilizes repurchase agreements and resell agreements (reverse repurchase agreements) to manage liquidity. The risks of these transactions include changes in the fair value in the securities posted or received as collateral and other credit related events. The Bank manages these risks by ensuring that the collateral involved are appropriate and by monitoring the value of the securities posted or received as collateral on a daily basis.

As at March 31, 2020, the Bank had 9 open positions (December 31, 2019: 13) in resell agreements with a remaining maturity of less than 30 days involving pools of mortgages issued by US federal agencies. The amortized cost of these resell agreements is \$192.3 million (December 31, 2019: \$142.3 million) and are included in securities purchased under agreement to resell on the consolidated balance sheets. As at March 31, 2020, there were no positions (December 31, 2019: no positions) which were offset on the balance sheet to arrive at the carrying value, and there was no collateral amount which was available to offset against the future settlement amount.

**Legal Proceedings**

There are actions and legal proceedings pending against the Bank and its subsidiaries which arose in the normal course of its business. Management, after reviewing all actions and proceedings pending against or involving the Bank and its subsidiaries, considers that the resolution of these matters would in the aggregate not be material to the consolidated financial position of the Bank, except as noted in the following paragraphs.

As publicly announced, in November 2013, the US Attorney's Office for the Southern District of New York applied for and secured the issuance of so-called John Doe Summonses to six US financial institutions with which the Bank had correspondent bank relationships. The Bank has been fully cooperating with the US authorities in their ongoing investigation. Specifically, the Bank has conducted an extensive review and account remediation exercise to determine the US tax compliance status of US person account holders. The review process and results have been shared with the US authorities.

Management believes that as at March 31, 2020, a provision of \$5.5 million (December 31, 2019: \$5.5 million), which has been recorded, is appropriate. As the investigation remains ongoing at this time, the timing and terms of the final resolution, including any fines or penalties, remain uncertain and the financial impact to the Bank could exceed the amount of the provision. In this regard, we note that the US authorities have not approved or commented on the adequacy or reasonableness of the estimate. The provision is included on the consolidated balance sheets under other liabilities.



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**Note 11: Leases**

The Bank enters into operating lease agreements either as the lessee or the lessor, mostly for office and parking spaces as well as for small office equipment. The terms of the existing leases, including renewal options that are reasonably certain to be exercised, extend up to the year 2035. Certain lease payments will be adjusted during the related lease's term based on movements in the relevant consumer price index.

	Three months ended	
	March 31, 2020	March 31, 2019
<b>Lease costs</b>		
Operating lease costs	2,005	1,226
Short-term lease costs	332	196
Sublease income	(284)	(5)
<b>Total net lease cost</b>	<b>2,053</b>	1,417
<b>Operating lease income</b>	<b>274</b>	307
<b>Other information for the period</b>		
Right-of-use assets related to new operating lease liabilities	—	338
Operating cash flows from operating leases	2,054	1,349
<b>Other information at end of period</b>	<b>March 31, 2020</b>	December 31, 2019
Operating leases right-of-use assets (included in other assets on the balance sheets)	47,682	47,947
Operating lease liabilities (included in other liabilities on the balance sheets)	46,488	48,334
Weighted average remaining lease term for operating leases (in years)	10.18	10.37
Weighted average discount rate for operating leases	5.25%	5.25%

The following table summarizes the maturity analysis of the Bank's commitments for long-term leases as at December 31, 2019:

Year ending December 31	Operating Leases
2020	8,570
2021	8,312
2022	7,923
2023	7,004
2024	4,324
2025 & thereafter	27,194
<b>Total commitments</b>	<b>63,327</b>
Less: effect of discounting cash flows to their present value	(14,993)
<b>Operating lease liabilities</b>	<b>48,334</b>

**Note 12: Segmented information**

The Bank is managed by the Chairman and Chief Executive Officer ("CEO") on a geographic basis. The Bank presents four reportable segments, three geographical and one other: Bermuda, Cayman, Channel Islands and the UK, and Other. The Other segment is composed of several non-reportable operating segments that have been aggregated in accordance with GAAP. Each reportable segment has a managing director who reports to the Chairman and CEO. The Chairman and CEO and the segment managing director have final authority over resource allocation decisions and performance assessment.

The geographic segments reflect this management structure and the manner in which financial information is currently evaluated by the Chairman and CEO. Segment results are determined based on the Bank's management reporting system, which assigns balance sheet and income statement items to each of the geographic segments. The process is designed around the Bank's organizational and management structure and, accordingly, the results derived are not necessarily comparable with similar information published by other financial institutions. A description of each reportable segment and table of financial results is presented below.

Accounting policies of the reportable segments are the same as those described in Note 2 of the Bank's audited financial statements for the year ended December 31, 2019. Transactions between segments are accounted for on an accrual basis and are all eliminated upon consolidation. The Bank generally does not allocate assets, revenues and expenses among its business segments, with the exception of certain corporate overhead expenses and loan participation revenue and expense. Loan participation revenue and expenses are allocated pro-rata based upon the percentage of the total loan funded by each jurisdiction participating in the loan.

The **Bermuda** segment provides a full range of retail, commercial and private banking services. Retail services are offered to individuals and small to medium-sized businesses through three branch locations and through internet banking, mobile banking, automated teller machines ("ATMs") and debit cards. Retail services include deposit services, consumer and mortgage lending, credit cards and personal insurance products. Commercial banking includes commercial lending and mortgages, cash management, payroll services, remote banking and letters of credit. Treasury services include money market and foreign exchange activities. Bermuda's wealth management offering consists of Butterfield Asset Management Limited, which provides investment management, advisory and brokerage services and Butterfield Trust (Bermuda) Limited, which provides trust,

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estate, company management and custody services. Bermuda is also the location of the Bank's head offices and accordingly, retains the unallocated corporate overhead expenses.

The **Cayman** segment provides a comprehensive range of retail, commercial and private banking services. Retail services are offered to individuals and small to medium-sized businesses through three branch locations and through internet banking, mobile banking, ATMs and debit cards. Retail services include deposit services, consumer and mortgage lending, credit cards and property/auto insurance. Commercial banking includes commercial lending and mortgages, cash management, payroll services, remote banking and letters of credit. Treasury services include money market and foreign exchange activities. Cayman's wealth management offering comprises investment management, advisory and brokerage services and Butterfield Trust (Cayman) Limited, which provides trust, estate and company management.

The **Channel Islands and the UK** segment includes the jurisdictions of Guernsey and Jersey (Channel Islands), and the UK. In the Channel Islands, a broad range of services are provided to private clients and financial intermediaries including private banking and treasury services, internet banking, wealth management and fiduciary services. The UK jurisdiction provides mortgage services for high-value residential properties.

The **Other** segment includes the jurisdictions of The Bahamas, Canada, Mauritius, Singapore and Switzerland. These operating segments individually and collectively do not meet the quantitative threshold for segmented reporting and are therefore aggregated as non-reportable operating segments.

<b>Total Assets by Segment</b>	<b>March 31, 2020</b>	December 31, 2019
Bermuda	5,261,066	5,220,016
Cayman	3,710,683	3,839,074
Channel Islands and the UK	4,618,271	5,108,357
Other	36,691	35,148
<b>Total assets before inter-segment eliminations</b>	<b>13,626,711</b>	14,202,595
Less: inter-segment eliminations	(429,324)	(281,020)
<b>Total</b>	<b>13,197,387</b>	13,921,575

Three months ended March 31, 2020	Net interest income		Provision for credit recoveries (losses)	Non-interest income	Net revenue before gains and losses	Gains and losses	Total net revenue	Total expenses	Net income
	Customer	Inter- segment							
Bermuda	43,510	213	(4,822)	21,866	60,767	(582)	60,185	50,522	9,663
Cayman	27,146	253	(186)	13,311	40,524	2	40,526	15,567	24,959
Channel Islands and the UK	16,928	(466)	(169)	10,247	26,540	—	26,540	20,678	5,862
Other	7	—	—	3,835	3,842	—	3,842	4,049	(207)
<b>Total before eliminations</b>	<b>87,591</b>	—	(5,177)	49,259	131,673	(580)	131,093	90,816	40,277
Inter-segment eliminations	—	—	—	(1,689)	(1,689)	—	(1,689)	(1,689)	—
<b>Total</b>	<b>87,591</b>	—	(5,177)	47,570	129,984	(580)	129,404	89,127	40,277

Three months ended March 31, 2019	Net interest income		Provision for credit recoveries (losses)	Non-interest income	Net revenue before gains and losses	Gains and losses	Total net revenue	Total expenses	Net income
	Customer	Inter- segment							
Bermuda	47,422	486	153	21,655	69,716	1,746	71,462	47,803	23,659
Cayman	30,551	159	(27)	13,062	43,745	5	43,750	14,644	29,106
Channel Islands and the UK	9,993	(645)	(87)	6,663	15,924	—	15,924	15,660	264
Other	12	—	—	5,117	5,129	—	5,129	6,051	(922)
<b>Total before eliminations</b>	<b>87,978</b>	—	39	46,497	134,514	1,751	136,265	84,158	52,107
Inter-segment eliminations	—	—	—	(3,117)	(3,117)	—	(3,117)	(3,117)	—
<b>Total</b>	<b>87,978</b>	—	39	43,380	131,397	1,751	133,148	81,041	52,107

**Note 13: Derivative instruments and risk management**

The Bank uses derivatives for risk management purposes and to meet the needs of its customers. The Bank's derivative contracts principally involve over-the-counter ("OTC") transactions that are negotiated privately between the Bank and the counterparty to the contract and include interest rate contracts and foreign exchange contracts.

The Bank may pursue opportunities to reduce its exposure to credit losses on derivatives by entering into International Swaps and Derivatives Association master agreements ("ISDAs"). Depending on the nature of the derivative transaction, bilateral collateral arrangements may be used as well. When the Bank is engaged in more than one outstanding derivative transaction with the same counterparty, and also has a legally enforceable master netting agreement with that counterparty, the net marked to market exposure represents the netting of the positive and negative exposures with that counterparty. When there is a net negative exposure, the Bank regards its credit exposure to the counterparty as being zero. The net marked to market position with a particular counterparty represents a reasonable measure of credit risk when there is a legally enforceable master netting agreement between the Bank and that counterparty.

Certain of these agreements contain credit risk-related contingent features in which the counterparty has the option to accelerate cash settlement of the Bank's net derivative liabilities with the counterparty in the event the Bank's credit rating falls below specified levels or the liabilities reach certain levels.

All derivative financial instruments, whether designated as hedges or not, are recorded on the consolidated balance sheets at fair value within other assets or other liabilities. These amounts include the effect of netting. The accounting for changes in the fair value of a derivative in the consolidated statements of operations depends on whether the contract has been designated as a hedge and qualifies for hedge accounting.

#### **Notional Amounts**

The notional amounts are not recorded as assets or liabilities on the consolidated balance sheets as they represent the face amount of the contract to which a rate or price is applied to determine the amount of cash flows to be exchanged. Notional amounts represent the volume of outstanding transactions and do not represent the potential gain or loss associated with market risk or credit risk of such instruments. Credit risk is limited to the positive fair value of the derivative instrument, which is significantly less than the notional amount.

#### **Fair Value**

Derivative instruments, in the absence of any compensating up-front cash payments, generally have no market value at inception. They obtain value, positive or negative, as relevant interest rates, exchange rates, equity or commodity prices or indices change. The potential for derivatives to increase or decrease in value as a result of the foregoing factors is generally referred to as market risk. Market risk is managed within clearly defined parameters as prescribed by senior management of the Bank. The fair value is defined as the profit or loss associated with replacing the derivative contracts at prevailing market prices.

#### **Risk Management Derivatives**

The Bank enters into interest derivative contracts as part of its overall interest rate risk management strategy to minimize significant unplanned fluctuations in earnings that are caused by interest rate volatility. The Bank's goal is to manage interest rate sensitivity by modifying the repricing or maturity characteristics of certain consolidated balance sheet assets and liabilities so that movements in interest rates do not adversely affect the net interest margin. Derivative instruments that are used as part of the Bank's risk management strategy include interest rate swap contracts that have indices related to the pricing of specific consolidated balance sheet assets and liabilities. Interest rate swaps generally involve the exchange of fixed and variable-rate interest payments between two parties, based on a common notional principal amount and maturity date. The Bank uses foreign currency derivative instruments to hedge its exposure to foreign currency risk. Certain hedging relationships are formally designated and qualify for hedge accounting as fair value or net investment hedges. Risk management derivatives comprise fair value hedges, net investment hedges and derivatives not formally designated as hedges as described below.

**Fair value hedges** consist of designated interest rate swaps and are used to minimize the Bank's exposure to changes in the fair value of assets and liabilities due to movements in interest rates. The Bank previously entered into interest rate swaps to convert its fixed-rate long-term loans to floating-rate loans, and convert fixed-rate deposits to floating-rate deposits. During the year ended December 31, 2011, the Bank canceled its interest rate swaps designated as fair value hedges of loans receivable and therefore discontinued hedge accounting for these financial instruments. The fair value attributable to the hedged loans are accounted for prospectively and are being amortized to net income over the remaining life of each individual loan, which could extend to year 2029, using the effective interest method.

**Net investment hedges** includes designated currency swaps and qualifying non-derivative instruments and are used to minimize the Bank's exposure to variability in the foreign currency translation of net investments in foreign operations. The effective portion of changes in the fair value of the hedging instrument is recognized in AOCL consistent with the related translation gains and losses of the hedged net investment. For net investment hedges, all critical terms of the hedged item and the hedging instrument are matched at inception and on an ongoing basis to minimize the risk of hedge ineffectiveness.

For derivatives designated as net investment hedges, the Bank follows the method based on changes in spot exchange rates. Accordingly:

- The change in the fair value of the derivative instrument that is reported in AOCL (i.e., the effective portion) is determined by the changes in spot exchange rates.
- The change in the fair value of the derivative instrument attributable to changes in the difference between the forward rate and spot rate are excluded from the measure of the hedge ineffectiveness and that difference is reported directly in the consolidated statements of operations under foreign exchange revenue.

Amounts recorded in AOCL are reclassified to earnings only upon the sale or substantial liquidation of an investment in a foreign subsidiary.

For foreign-currency-denominated debt instruments that are designated as hedges of net investments in foreign operations, the translation gain or loss that is recorded in AOCL is based on the spot exchange rate between the reporting currency of the Bank and the functional currency of the respective subsidiary. See Note 20: Accumulated other comprehensive loss for details on the amount recognized into AOCL during the current period from translation gain or loss.

**Derivatives not formally designated as hedges** are entered into to manage the interest rate risk of fixed rate deposits and foreign exchange risk of the Bank's exposure. Changes in the fair value of derivative instruments not formally designated as hedges are recognized in foreign exchange income.

#### **Client service derivatives**

The Bank enters into foreign exchange contracts and interest rate caps primarily to meet the foreign exchange needs of its customers. Foreign exchange contracts are agreements to exchange specific amounts of currencies at a future date at a specified rate of exchange. Changes in the fair value of client services derivative instruments are recognized in foreign exchange income.

**The Bank of N.T. Butterfield & Son Limited**  
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The following table shows the aggregate notional amounts of derivative contracts outstanding listed by type and respective gross positive or negative fair values and classified by those used for risk management (sub-classified as hedging and those that do not qualify for hedge accounting), client services and credit derivatives. Fair value of derivatives is recorded in the consolidated balance sheets in other assets and other liabilities. Gross positive fair values are recorded in other assets and gross negative fair values are recorded in other liabilities, subject to netting when master netting agreements are in place.

March 31, 2020	Derivative instrument	Number of contracts	Notional amounts	Gross positive fair value	Gross negative fair value	Net fair value
<b>Risk management derivatives</b>						
Net investment hedges	Currency swaps	1	8,989	388	—	388
Derivatives not formally designated as hedging instruments	Currency swaps	4	140,901	1,188	(1,115)	73
Subtotal risk management derivatives			149,890	1,576	(1,115)	461
<b>Client services derivatives</b>						
	Spot and forward foreign exchange	469	2,712,537	34,799	(15,108)	19,691
<b>Total derivative instruments</b>			<b>2,862,427</b>	<b>36,375</b>	<b>(16,223)</b>	<b>20,152</b>
December 31, 2019	Derivative instrument	Number of contracts	Notional amounts	Gross positive fair value	Gross negative fair value	Net fair value
<b>Risk management derivatives</b>						
Net investment hedges	Currency swaps	1	9,502	—	(118)	(118)
Derivatives not formally designated as hedging instruments	Currency swaps	9	207,032	1,632	(1,339)	293
Subtotal risk management derivatives			216,534	1,632	(1,457)	175
<b>Client services derivatives</b>						
	Spot and forward foreign exchange	352	3,280,636	31,060	(30,602)	458
<b>Total derivative instruments</b>			<b>3,497,170</b>	<b>32,692</b>	<b>(32,059)</b>	<b>633</b>

In addition to the above, as at March 31, 2020 foreign denominated deposits of £251.4 million (December 31, 2019: £251.4 million) and CHF 0.4 million (December 31, 2019: CHF 0.4 million) were designated as a hedge of foreign exchange risk associated with the net investment in foreign operations.

We manage derivative exposure by monitoring the credit risk associated with each counterparty using counterparty specific credit risk limits, using master netting arrangements where appropriate and obtaining collateral. The Bank elected to offset in the consolidated balance sheets certain gross derivative assets and liabilities subject to netting agreements.

The Bank also elected not to offset certain derivative assets or liabilities and all collateral received or paid that the Bank or the counterparties could legally offset in the event of default. In the tables below, these positions are deducted from the net fair value presented in the consolidated balance sheets in order to present the net exposures. The collateral values presented in the following table are limited to the related net derivative asset or liability balance and, accordingly, do not include excess collateral received or paid.

March 31, 2020	Gross fair value recognized	Less: offset applied under master netting agreements	Net fair value presented in the consolidated balance sheets	Less: positions not offset in the consolidated balance sheets		Net exposures
				Gross fair value of derivatives	Cash collateral received / paid	
<b>Derivative assets</b>						
Spot and forward foreign exchange and currency swaps	36,375	(3,137)	33,238	(15)	(3,612)	29,611
<b>Derivative liabilities</b>						
Spot and forward foreign exchange and currency swaps	16,223	(3,137)	13,086	(15)	(471)	12,600
<b>Net positive fair value</b>			<b>20,152</b>			
December 31, 2019	Gross fair value recognized	Less: offset applied under master netting agreements	Net fair value presented in the consolidated balance sheets	Less: positions not offset in the consolidated balance sheets		Net exposures
				Gross fair value of derivatives	Cash collateral received / paid	
<b>Derivative assets</b>						
Spot and forward foreign exchange and currency swaps	32,692	(2,233)	30,459	—	(3,224)	27,235
<b>Derivative liabilities</b>						
Spot and forward foreign exchange and currency swaps	32,059	(2,233)	29,826	—	(997)	28,829
<b>Net positive fair value</b>			<b>633</b>			

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The following tables show the location and amount of gains (losses) recorded in either the consolidated statements of operations or consolidated statements of comprehensive income on derivative instruments outstanding.

Derivative instrument	Consolidated statements of operations line item	Three months ended	
		March 31, 2020	March 31, 2019
Spot and forward foreign exchange	Foreign exchange revenue	19,234	(110)
Currency swaps, not designated as hedge	Foreign exchange revenue	(220)	3,005
<b>Total net gains (losses) recognized in net income</b>		<b>19,014</b>	<b>2,895</b>

Derivative instrument	Consolidated statements of comprehensive income line item	Three months ended	
		March 31, 2020	March 31, 2019
Currency swaps - net investment hedge	Net change in unrealized gains and (losses) on translation of net investment in foreign operations	505	—
<b>Total net gains (losses) recognized in comprehensive income</b>		<b>505</b>	<b>—</b>

**Note 14: Fair value measurements**

The following table presents the financial assets and liabilities that are measured at fair value on a recurring basis. Management classifies these items based on the type of inputs used in their respective fair value determination as described in Note 2 of the Bank's audited financial statements for the year ended December 31, 2019.

Management reviews the price of each security monthly, comparing market values to expectations and to the prior month's price. Management's expectations are based upon knowledge of prevailing market conditions and developments relating to specific issuers and/or asset classes held in the investment portfolio. Where there are unusual or significant price movements, or where a certain asset class has performed out-of-line with expectations, the matter is reviewed by management.

Financial instruments in Level 1 include actively traded redeemable mutual funds.

Financial instruments in Level 2 include government debt securities, corporate debt securities, mortgage-backed securities and other asset-backed securities, forward foreign exchange contracts and mutual funds not actively traded.

Financial instruments in Level 3 include asset-backed securities for which the market is relatively illiquid and for which information about actual trading prices is not readily available.

There were no transfers between Level 1 and Level 2 or Level 2 and Level 3 during the three months ended March 31, 2020 and the year ended December 31, 2019.

	March 31, 2020			Total carrying amount / fair value	December 31, 2019			Total carrying amount / fair value
	Fair value				Fair value			
	Level 1	Level 2	Level 3		Level 1	Level 2	Level 3	
<b>Items that are recognized at fair value on a recurring basis:</b>								
<b>Financial assets</b>								
<b>Equity securities</b>								
Mutual funds	6,544	222	—	6,766	7,141	278	—	7,419
<b>Total equity securities</b>	<b>6,544</b>	<b>222</b>	<b>—</b>	<b>6,766</b>	<b>7,141</b>	<b>278</b>	<b>—</b>	<b>7,419</b>
<b>Available-for-sale investments</b>								
US government and federal agencies	—	2,244,649	—	2,244,649	—	2,052,446	—	2,052,446
Non-US governments debt securities	—	25,406	—	25,406	—	25,676	—	25,676
Asset-backed securities - Student loans	—	—	12,625	12,625	—	—	12,891	12,891
Residential mortgage-backed securities	—	117,131	—	117,131	—	129,328	—	129,328
<b>Total available-for-sale</b>	<b>—</b>	<b>2,387,186</b>	<b>12,625</b>	<b>2,399,811</b>	<b>—</b>	<b>2,207,450</b>	<b>12,891</b>	<b>2,220,341</b>
Other assets - Derivatives	—	33,238	—	33,238	—	30,459	—	30,459
<b>Financial liabilities</b>								
Other liabilities - Derivatives	—	13,086	—	13,086	—	29,826	—	29,826

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**Level 3 Reconciliation**

The Level 3 financial instruments, shown as Asset-backed securities - Student loans in the above table, is a federal family education loan program guaranteed student loan security and is valued using a non-binding broker quote. The fair value provided by the broker is based on the last trading price of similar securities but as the market for the security is illiquid, a Level 2 classification is not supported.

The table below summarizes realized and unrealized gains and losses for Level 3 assets still held at the reporting date.

	<b>Three months ended March 31, 2020</b>	Year ended December 31, 2019
	<b>Available- for-sale investments</b>	Available- for-sale investments
Carrying amount at beginning of period	<b>12,891</b>	12,626
Realized and unrealized gains (losses) recognized in other comprehensive income	<b>(266)</b>	265
<b>Carrying amount at end of period</b>	<b>12,625</b>	12,891

**Items Other Than Those Recognized at Fair Value on a Recurring Basis:**

	Level	March 31, 2020			December 31, 2019		
		Carrying amount	Fair value	Appreciation / (depreciation)	Carrying amount	Fair value	Appreciation / (depreciation)
<b>Financial assets</b>							
Cash due from banks	Level 1	<b>1,978,226</b>	<b>1,978,226</b>	—	2,550,070	2,550,070	—
Securities purchased under agreements to resell	Level 2	<b>192,296</b>	<b>192,296</b>	—	142,283	142,283	—
Short-term investments	Level 1	<b>1,047,628</b>	<b>1,047,628</b>	—	1,218,380	1,218,380	—
Investments held-to-maturity	Level 2	<b>2,131,084</b>	<b>2,234,673</b>	<b>103,589</b>	2,208,663	2,255,987	47,324
Loans, net of allowance for credit losses	Level 2	<b>5,000,968</b>	<b>5,044,658</b>	<b>43,690</b>	5,142,622	5,161,257	18,635
Other real estate owned <sup>1</sup>	Level 2	<b>4,227</b>	<b>4,227</b>	—	3,842	3,842	—
<b>Financial liabilities</b>							
Term deposits	Level 2	<b>2,859,605</b>	<b>2,868,661</b>	<b>(9,056)</b>	3,051,306	3,054,813	(3,507)
Long-term debt	Level 2	<b>143,545</b>	<b>146,250</b>	<b>(2,705)</b>	143,500	147,574	(4,074)

<sup>1</sup> The current carrying value of OREO is adjusted to fair value only when there is devaluation below carrying value.



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**Note 15: Interest rate risk**

The following tables set out the assets, liabilities and shareholders' equity on the date of the earlier of contractual maturity, expected maturity or repricing date. Use of these tables to derive information about the Bank's interest rate risk position is limited by the fact that customers may choose to terminate their financial instruments at a date earlier than the contractual maturity or repricing date. Examples of this include fixed-rate mortgages, which are shown at contractual maturity but which may pre-pay earlier, and certain term deposits, which are shown at contractual maturity but which may be withdrawn before their contractual maturity subject to prepayment penalties. Investments are shown based on remaining contractual maturities. The remaining contractual principal maturities for mortgage-backed securities (primarily US government agencies) do not consider prepayments. Remaining expected maturities will differ from contractual maturities because borrowers may have the right to prepay obligations before the underlying mortgages mature.

March 31, 2020	Earlier of contractual maturity or repricing date						Total
(in \$ millions)	Within 3 months	3 to 6 months	6 to 12 months	1 to 5 years	After 5 years	Non-interest bearing funds	Total
<b>Assets</b>							
Cash due from banks	1,862	—	—	—	—	116	1,978
Securities purchased under agreement to resell	192	—	—	—	—	—	192
Short-term investments	714	332	2	—	—	—	1,048
Investments	403	2	22	123	3,981	7	4,538
Loans	3,752	140	123	292	666	28	5,001
Other assets	—	—	—	—	—	440	440
<b>Total assets</b>	<b>6,923</b>	<b>474</b>	<b>147</b>	<b>415</b>	<b>4,647</b>	<b>591</b>	<b>13,197</b>
<b>Liabilities and shareholders' equity</b>							
Shareholders' equity	—	—	—	—	—	981	981
Demand deposits	6,757	—	—	—	—	2,136	8,893
Term deposits	2,146	297	311	106	—	—	2,860
Other liabilities	—	—	—	—	—	320	320
Long-term debt	69	—	—	74	—	—	143
<b>Total liabilities and shareholders' equity</b>	<b>8,972</b>	<b>297</b>	<b>311</b>	<b>180</b>	<b>—</b>	<b>3,437</b>	<b>13,197</b>
Interest rate sensitivity gap	(2,049)	177	(164)	235	4,647	(2,846)	—
Cumulative interest rate sensitivity gap	(2,049)	(1,872)	(2,036)	(1,801)	2,846	—	—

December 31, 2019	Earlier of contractual maturity or repricing date						Total
(in \$ millions)	Within 3 months	3 to 6 months	6 to 12 months	1 to 5 years	After 5 years	Non-interest bearing funds	Total
<b>Assets</b>							
Cash due from banks	2,462	—	—	—	—	88	2,550
Securities purchased under agreement to resell	142	—	—	—	—	—	142
Short-term investments	622	591	3	—	—	2	1,218
Investments	415	23	11	102	3,878	7	4,436
Loans	4,025	16	148	292	648	14	5,143
Other assets	—	—	—	—	—	433	433
<b>Total assets</b>	<b>7,666</b>	<b>630</b>	<b>162</b>	<b>394</b>	<b>4,526</b>	<b>544</b>	<b>13,922</b>
<b>Liabilities and shareholders' equity</b>							
Shareholders' equity	—	—	—	—	—	964	964
Demand deposits	7,151	—	—	—	—	2,239	9,390
Term deposits	2,435	234	305	78	—	—	3,052
Other liabilities	—	—	—	—	—	373	373
Long-term debt	70	—	—	73	—	—	143
<b>Total liabilities and shareholders' equity</b>	<b>9,656</b>	<b>234</b>	<b>305</b>	<b>151</b>	<b>—</b>	<b>3,576</b>	<b>13,922</b>
Interest rate sensitivity gap	(1,990)	396	(143)	243	4,526	(3,032)	—
Cumulative interest rate sensitivity gap	(1,990)	(1,594)	(1,737)	(1,494)	3,032	—	—

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**Note 16: Long-term debt**

On June 27, 2005, the Bank issued US \$150 million of Subordinated Lower Tier II capital notes. The notes were issued at par in two tranches, namely US \$90 million in Series A notes due 2015, which were redeemed at face value in January 2014, and US \$60 million in Series B notes due 2020. The issuance was by way of private placement with US institutional investors. The notes are listed on the BSX in the specialist debt securities category. The Series B notes paid a fixed coupon of 5.11% until July 2, 2015 when they became redeemable in whole at the Bank's option. The Series B notes were priced at a spread of 1.10% over the 10-year US Treasury yield. During September 2011, the Bank repurchased a portion of the outstanding 5.11% 2005 Series B Subordinated notes ("the Note"). The face value of the portion of the Note repurchased was \$15 million and the purchase price paid for the repurchase was \$13.875 million, which realized a gain of \$1.125 million.

On May 27, 2008, the Bank issued US \$78 million of Subordinated Lower Tier II capital notes. The notes were issued at par and in two tranches, namely US \$53 million in Series A notes due 2018, which were redeemed at face value in May 2013, and US \$25 million in Series B notes due 2023. The issuance was by way of private placement with US institutional investors. The notes are listed on the BSX in the specialist debt securities category. The proceeds of the issue were used to repay the entire amount of the US \$78 million outstanding subordinated notes redeemed in May 2008. The Series B notes pay a fixed coupon of 8.44% until May 27, 2018 when they became redeemable in whole at the Bank's option. The Series B notes were priced at a spread of 4.51% over the 10-year US Treasury yield.

On May 24, 2018, the Bank issued US \$75 million of Subordinated Lower Tier II capital notes. The notes were issued at par and due on June 1, 2028. The issuance was by way of a registered offering with US institutional investors. The notes are listed on the Bermuda Stock Exchange (BSX) in the specialist debt securities category. The proceeds of the issue were used, among other, to repay the entire amount of the US \$47 million outstanding subordinated notes series 2003-B. The notes issued pay a fixed coupon of 5.25% until June 1, 2023 when they become redeemable in whole at the option of the Bank. The notes were priced at a spread of 2.27% over the 10-year US Treasury yield. The Bank incurred \$1.8 million of costs directly related to the issuance of these capital notes. These costs have been capitalized directly against the carrying value of these notes on the balance sheet, and will be amortized over the life of the notes.

No interest was capitalized during the three months ended March 31, 2020 and the year ended December 31, 2019.

In the event the Bank would be in a position to redeem long-term debt, priority would go to the redemption of the higher interest-bearing Series, subject to availability relative to the earliest date the Series is redeemable at the Bank's option.

The following table presents the contractual maturity and interest payments for long-term debt issued by the Bank as at March 31, 2020. The interest payments are calculated until contractual maturity using the current London Inter-bank Offered Rate ("LIBOR") rates.

Long-term debt	Earliest date redeemable at the Bank's option	Contractual maturity date	Interest rate until date redeemable	Interest rate from earliest date redeemable to contractual maturity	Principal Outstanding	Interest payments until contractual maturity		
						Within 1 year	1 to 5 years	After 5 years
<b>Bermuda</b>								
2005 issuance - Series B	July 2, 2015	July 2, 2020	5.11%	3 months US\$ LIBOR + 1.695%	45,000	716	—	—
2008 issuance - Series B	May 27, 2018	May 27, 2023	8.44%	3 months US\$ LIBOR + 4.929%	25,000	1,621	3,628	—
2018 issuance	June 1, 2023	June 1, 2028	5.25%	3 months US\$ LIBOR + 2.255%	75,000	3,938	14,777	9,171
<b>Total</b>					<b>145,000</b>	<b>6,275</b>	<b>18,405</b>	<b>9,171</b>
Unamortized debt issuance costs					(1,455)			
<b>Long-term debt less unamortized debt issuance costs</b>					<b>143,545</b>			

**Note 17: Earnings per share**

Earnings per share have been calculated using the weighted average number of common shares outstanding during the period after deduction of the shares held as treasury stock. The dilutive effect of share-based compensation plans was calculated using the treasury stock method, whereby the proceeds received from the exercise of share-based awards are assumed to be used to repurchase outstanding shares, using the average market price of the Bank's shares for the period. Numbers of shares are expressed in thousands.

During the three months ended March 31, 2020, options to purchase an average of 0.2 million (March 31, 2019: 0.2 million) common shares were outstanding. During the three months ended March 31, 2020, the average number of outstanding awards of unvested common shares was 0.8 million (March 31, 2019: 1.0 million). Only awards for which the sum of 1) the expense that will be recognized in the future (i.e., the unrecognized expense) and 2) its exercise price, if any, was lower than the average market price of the Bank's common shares were considered dilutive and, therefore, included in the computation of diluted earnings per share. An award's unrecognized expense is also considered to be the proceeds the employees would need to pay to purchase accelerated vesting of the awards. For purposes of calculating dilution, such proceeds are assumed to be used by the Bank to buy back common shares at the average market price. The weighted-average number of outstanding awards, net of the assumed weighted-average number of common shares bought back, is included in the number of diluted participating shares.

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Three months ended

**March 31, 2020**      March 31, 2019

Net income	40,277	52,107
<b>Basic Earnings Per Share</b>		
Weighted average number of common shares issued	52,592	55,343
Weighted average number of common shares held as treasury stock	(619)	(1,647)
<b>Weighted average number of common shares (in thousands)</b>	<b>51,973</b>	<b>53,696</b>
<b>Basic Earnings Per Share</b>	<b>0.77</b>	<b>0.97</b>
<b>Diluted Earnings Per Share</b>		
Weighted average number of common shares	51,973	53,696
Net dilution impact related to options to purchase common shares	99	127
Net dilution impact related to awards of unvested common shares	333	406
<b>Weighted average number of diluted common shares (in thousands)</b>	<b>52,405</b>	<b>54,229</b>
<b>Diluted Earnings Per Share</b>	<b>0.77</b>	<b>0.96</b>

**Note 18: Share-based payments**

The common shares transferred to employees under all share-based payments are either taken from the Bank's common treasury shares or from newly issued shares. All share-based payments are settled by the ultimate parent company which, pursuant to Bermuda law, is not taxed on income. There are no income tax benefits in relation to the issue of such shares as a form of compensation.

In conjunction with the 2010 capital raise, the Board of Directors approved the 2010 Omnibus Plan (the "2010 Plan"). Under the 2010 Plan, 5% of the Bank's fully diluted common shares, equal to approximately 2.95 million shares, were initially available for grant to certain officers in the form of stock options or unvested shares awards. Both types of awards are detailed below. In 2012 and 2016, the Board of Directors approved an increase to the equivalent number of shares allowed to be granted under the 2010 Plan to 5.0 million and 7.5 million shares, respectively.

**Stock Option Awards**

**1997 Stock Option Plan**

Prior to the capital raise on March 2, 2010, the Bank granted stock options to employees and Directors of the Bank that entitle the holder to purchase one common share at a subscription price equal to the market price on the effective date of the grant. Generally, the options granted vest 25 percent at the end of each year for four years, however as a result of the 2010 capital raise, the options granted under the Bank's 1997 Stock Option Plan to employees became fully vested and options awarded to certain executives were surrendered.

**2010 Plan**

Under the 2010 Plan, options are awarded to Bank employees and executive management, based on predetermined vesting conditions that entitle the holder to purchase one common share at a subscription price usually equal to the price of the most recently traded common share when granted and have a term of 10 years. The subscription price is reduced for all special dividends declared by the Bank. Stock option awards granted under the 2010 Plan vest based on two specific types of vesting conditions i.e., time and performance conditions, as detailed below:

**Time vesting condition**

50% of each option award was granted in the form of time vested options and vested 25% on each of the second, third, fourth and fifth anniversaries of the effective grant date.

In addition to the time vesting conditions noted above, the options will generally vest immediately:

- by reason of the employee's death or disability,
- upon termination, by the Bank, of the holder's employment, unless if in relation with the holder's misconduct, or
- in limited circumstances and specifically approved by the Board, as stipulated in the holder's employment contract.

In the event of the employee's resignation, any unvested portion of the awards shall generally be forfeited and any vested portion of the options shall generally remain exercisable during the 90-day period following the termination date or, if earlier, until the expiration date, and any vested portion of the options not exercised as of the expiration of such period shall be forfeited without any consideration therefore.

**Performance vesting condition**

50% of each option award was granted in the form of performance options and would vest (partially or fully) on a "valuation event" date (the date that any of the March 2, 2010 new investors transfers at least 5% of the total number of common shares or the date that there is a change in control and any of the new investors realize a predetermined multiple of invested capital ("MOIC")). On September 21, 2016, it was determined that a valuation event occurred during which a new investor realized a MOIC of more than 200% of the original invested capital of \$12.09 per share and accordingly, all outstanding unvested performance options vested.

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*(In thousands of US dollars, unless otherwise stated)*

**Changes in Outstanding Stock Option Plans**

	Number of shares transferable upon exercise (thousands)			Weighted average exercise price (\$)		Weighted average remaining life (years)		Aggregate intrinsic value (\$ thousands)
	1997 Stock Option Plan	2010 Stock Option Plan	Total	1997 Stock Option Plan	2010 Stock Option Plan	1997 Stock Option Plan	2010 Stock Option Plan	
<b>Three months ended March 31, 2020</b>								
Outstanding at beginning of period	—	159	159	—	12.07	—	—	—
Exercised	—	(3)	(3)	—	(11.50)	—	—	17
<b>Outstanding at end of period</b>	<b>—</b>	<b>156</b>	<b>156</b>	<b>—</b>	<b>12.08</b>	<b>—</b>	<b>0.49</b>	<b>773</b>
<b>Vested and exercisable at end of period</b>	<b>—</b>	<b>156</b>	<b>156</b>	<b>—</b>	<b>12.08</b>	<b>—</b>	<b>0.49</b>	<b>—</b>

  

	Number of shares transferable upon exercise (thousands)			Weighted average exercise price (\$)		Weighted average remaining life (years)		Aggregate intrinsic value (\$ thousands)
	1997 Stock Option Plan	2010 Stock Option Plan	Total	1997 Stock Option Plan	2010 Stock Option Plan	1997 Stock Option Plan	2010 Stock Option Plan	
<b>Three months ended March 31, 2019</b>								
Outstanding at beginning of period	25	189	214	64.51	11.98	—	—	—
Exercised	—	(1)	(1)	—	11.50	—	—	19
Expiration at end of plan life	(25)	—	(25)	64.51	—	—	—	—
<b>Outstanding at end of period</b>	<b>—</b>	<b>188</b>	<b>188</b>	<b>—</b>	<b>11.98</b>	<b>—</b>	<b>1.42</b>	<b>4,469</b>
<b>Vested and exercisable at end of period</b>	<b>—</b>	<b>188</b>	<b>188</b>	<b>—</b>	<b>11.98</b>	<b>—</b>	<b>1.42</b>	<b>—</b>

**Share Based Plans**

Recipients of unvested share awards are entitled to the related common shares at no cost, at the time the award vests. Recipients of unvested shares may be entitled to receive additional unvested shares having a value equal to the cash dividends that would have been paid had the unvested shares been issued and vested. Such additional unvested shares granted as dividend equivalents are subject to the same vesting schedule and conditions as the underlying unvested shares.

Unvested shares subject only to the time vesting condition generally vest upon retirement, death, disability or upon termination, by the Bank, of the holder's employment unless if in connection with the holder's misconduct. Unvested shares subject to both time vesting and performance vesting conditions remain outstanding and unvested upon retirement and will vest only if the performance conditions are met. Unvested shares can also vest in limited circumstances and if specifically approved by the Board, as stipulated in the holder's employment contract. In all other circumstances, unvested shares are generally forfeited when employment ends.

The grant date weighted average fair value of unvested share awards granted in the three months ended March 31, 2020 was \$34.51 (December 31, 2019: \$35.96). The Bank expects to settle these awards by issuing new shares.

**Employee Deferred Incentive Plan ("EDIP")**

Under the Bank's EDIP Plan, shares are awarded to Bank employees and executive management based on the time vesting condition, which states that the shares will vest equally over a three-year period from the effective grant date.

**Executive Long-Term Incentive Share Plan ("ELTIP") - Years 2013 - 2020**

The 2020 ELTIP was approved on February 12, 2020. Under the Bank's ELTIP plans for the years 2013 through 2020, performance shares as well as time-vested shares were awarded to executive management. The performance shares will generally vest upon the achievement of certain performance targets in the three-year period from the effective grant date. The time-vested shares will generally vest over the three-year period from the effective grant date.

**Changes in Outstanding ELTIP and EDIP awards (in thousands of shares transferable upon vesting)**

	Three months ended			
	March 31, 2020		March 31, 2019	
	EDIP	ELTIP	EDIP	ELTIP
Outstanding at beginning of period	251	618	234	697
Granted	181	174	156	272
Vested (fair value in 2020: \$9.4 million, 2019: \$12.9 million)	(120)	(162)	(115)	(242)
<b>Outstanding at end of period</b>	<b>312</b>	<b>630</b>	<b>275</b>	<b>727</b>

**Share-based Compensation Cost Recognized in Net Income**

	Three months ended					
	March 31, 2020			March 31, 2019		
	Stock option plans	EDIP and ELTIP	Total	Stock option plans	EDIP and ELTIP	Total
Cost recognized in net income	—	4,077	4,077	—	3,911	3,911

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**Unrecognized Share-based Compensation Cost**

	March 31, 2020		December 31, 2019	
	Unrecognized cost	Weighted average years over which it is expected to be recognized	Unrecognized cost	Weighted average years over which it is expected to be recognized
<b>EDIP</b>	<b>9,121</b>	2.25	4,744	1.71
<b>ELTIP</b>				
Time vesting shares	238	1.74	121	0.48
Performance vesting shares	13,513	2.11	9,765	1.80
<b>Total unrecognized expense</b>	<b>22,872</b>		14,630	

**Note 19: Share buy-back plans**

The Bank initially introduced two share buy-back programs on May 1, 2012 as a means to improve shareholder liquidity and facilitate growth in share value. Each program was approved by the Board of Directors for a period of 12 months, in accordance with the regulations of the BSX. The BSX must be advised monthly of shares purchased pursuant to each program.

From time to time the Bank's associates, insiders and insiders' associates as defined by the BSX regulations may sell shares which may result in such shares being repurchased pursuant to each program, provided no more than any such person's pro-rata share of the listed securities is repurchased. Pursuant to the BSX regulations, all repurchases made by any issuer pursuant to a securities repurchase program must be made: (1) in the open market and not by private agreement; and (2) for a price not higher than the last independent trade for a round lot of the relevant class of securities.

**Common Share Buy-Back Program**

On February 15, 2018, the Board approved, with effect on April 1, 2018, the 2018 common share buy-back program, authorizing the purchase for treasury of up to 1.0 million common shares.

On December 6, 2018, the Board approved, with effect from December 10, 2018 to February 29, 2020, a common share buy-back program, authorizing the purchase for treasury of up to 2.5 million common shares.

On December 2, 2019, the Board approved a new \$125 million common share repurchase program, authorizing the purchase for treasury of up to 3.5 million common shares through to February 28, 2021. The new program came into effect on December 20, 2019 following the completion of the previous program.

In the three months ended March 31, 2020, the Bank repurchased and retired 1,295,000 shares.

	Three months ended	Year ended December 31		Total
	March 31, 2020	2019	2018	
<b>Common share buy-backs</b>				
Acquired number of shares (to the nearest 1)	1,295,000	2,293,788	1,254,212	4,843,000
Average cost per common share	27.71	35.55	38.62	34.25
<b>Total cost (in US dollars)</b>	<b>35,886,518</b>	81,534,076	48,442,768	165,863,362

**Note 20: Accumulated other comprehensive loss**

	Unrealized (losses) on translation of net investment in foreign operations	HTM investments	Unrealized gains (losses) on AFS investments	Employee benefit plans			Total AOCL
				Pension	Post-retirement healthcare	Subtotal - employee benefits plans	
<b>Three months ended March 31, 2020</b>							
Balance at beginning of period	(20,818)	(725)	11,808	(66,312)	(11,050)	(77,362)	(87,097)
Other comprehensive income (loss), net of taxes	(1,225)	44	38,543	1,556	131	1,687	39,049
<b>Balance at end of period</b>	<b>(22,043)</b>	<b>(681)</b>	<b>50,351</b>	<b>(64,756)</b>	<b>(10,919)</b>	<b>(75,675)</b>	<b>(48,048)</b>
<b>Three months ended March 31, 2019</b>							
Balance at beginning of period	(19,866)	(796)	(43,630)	(64,892)	(19,343)	(84,235)	(148,527)
Other comprehensive income (loss), net of taxes	814	7	21,284	342	162	504	22,609
<b>Balance at end of period</b>	<b>(19,052)</b>	<b>(789)</b>	<b>(22,346)</b>	<b>(64,550)</b>	<b>(19,181)</b>	<b>(83,731)</b>	<b>(125,918)</b>

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**Net Change of AOCL Components**

Three months ended

	Line item in the consolidated statements of operations, if any	March 31, 2020	March 31, 2019
<b>Net unrealized gains (losses) on translation of net investment in foreign operations adjustments</b>			
Foreign currency translation adjustments	N/A	(21,970)	3,994
Gains (loss) on net investment hedge	N/A	20,745	(3,180)
<b>Net change</b>		<b>(1,225)</b>	<b>814</b>
<b>Held-to-maturity investment adjustments</b>			
Amortization of net gains (losses) to net income	Interest income on investments	44	7
<b>Net change</b>		<b>44</b>	<b>7</b>
<b>Available-for-sale investment adjustments</b>			
Gross unrealized gains (losses)	N/A	38,543	22,256
Transfer of realized (gains) losses to net income	Net realized gains (losses) on AFS investments	—	(972)
<b>Net change</b>		<b>38,543</b>	<b>21,284</b>
<b>Employee benefit plans adjustments</b>			
<b>Defined benefit pension plan</b>			
Amortization of net actuarial (gains) losses	Non-service employee benefits expense	602	614
Amortization of prior service (credit) cost	Non-service employee benefits expense	5	5
Foreign currency translation adjustments of related balances	N/A	949	(277)
<b>Net change</b>		<b>1,556</b>	<b>342</b>
<b>Post-retirement healthcare plan</b>			
Amortization of net actuarial (gains) losses	Non-service employee benefits expense	—	68
Amortization of prior service (credit) cost	Non-service employee benefits expense	131	94
<b>Net change</b>		<b>131</b>	<b>162</b>
<b>Other comprehensive income (loss), net of taxes</b>		<b>39,049</b>	<b>22,609</b>

**Note 21: Capital structure**

**Authorized Capital**

On September 16, 2016, the Bank began trading on the New York Stock Exchange under the ticker symbol "NTB". The offering of 12,234,042 common shares consisted of 5,957,447 newly issued common shares sold by Butterfield and 6,276,595 common shares sold by certain selling shareholders, including 1,595,744 common shares sold by certain of the selling shareholders pursuant to the underwriters' option to purchase additional shares, which was exercised in full prior to the closing.

The par value of each issued common share and each authorized but unissued common share is BM\$0.01 and the authorized share capital of the Bank comprises 2,000,000,000 common shares of par value BM\$0.01 each, 6,000,000,000 non-voting ordinary shares of par value BM\$0.01 each, 110,200,001 preference shares of par value US\$0.01 each and 50,000,000 preference shares of par value £0.01 each.

**Dividends Declared**

During the three months ended March 31, 2020, the Bank paid cash dividends of \$0.44 (March 31, 2019: \$0.44) for each common share as of the related record dates. On April 30, 2020, the Board of Directors declared an interim dividend of \$0.44 per common share to be paid on May 28, 2020 to shareholders of record on May 14, 2020.

The Bank is required to comply with Section 54 of the Companies Act 1981 issued by the Government of Bermuda (the "Companies Act") each time a dividend is declared or paid by the Bank and also obtain a letter of no objection from the BMA pursuant to the Banks and Deposit Companies Act 1999 for any dividends declared. The Bank has complied with Section 54 and has obtained the BMA's letter of no objection for all dividends declared during the periods presented.

**Regulatory Capital**

The Bank's regulatory capital is determined in accordance with current Basel III guidelines as issued by the BMA. Basel III adopts Common Equity Tier 1 ("CET1") as the predominant form of regulatory capital with the CET1 ratio as a new metric. Basel III also adopts the new Leverage Ratio regime, which is calculated by dividing Tier 1 capital by an exposure measure. The Leverage Ratio Exposure Measure consists of total assets (excluding items deducted from Tier 1 capital) and certain off-balance sheet items converted into credit exposure equivalents as well as adjustments for derivatives to reflect credit risk and other risks.

The Bank is fully compliant with all regulatory capital requirements to which it is subject, and it maintains capital ratios in excess of regulatory minimums as at March 31, 2020 and December 31, 2019. The following table sets forth the Bank's capital adequacy in accordance with the Basel III framework:



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	March 31, 2020		December 31, 2019	
	Actual	Regulatory minimum	Actual	Regulatory minimum
<b>Capital</b>				
CET 1 capital	837,255	N/A	848,821	N/A
Tier 1 capital	837,255	N/A	848,821	N/A
Tier 2 capital	110,693	N/A	103,243	N/A
Total capital	947,948	N/A	952,064	N/A
<b>Risk Weighted Assets</b>				
	4,781,899	N/A	4,897,851	N/A
<b>Leverage Ratio Exposure Measure</b>				
	13,699,131	N/A	14,377,474	N/A
<b>Capital Ratios (%)</b>				
CET 1 capital	17.5%	10.0%	17.3%	10.0%
Tier 1 capital	17.5%	11.5%	17.3%	11.5%
Total capital	19.8%	16.3%	19.4%	16.3%
Leverage ratio	6.1%	5.0%	5.9%	5.0%

**Note 22: Business combinations**

**ABN AMRO (Channel Islands) Limited Acquisition**

On April 25, 2019, the Bank announced that it entered into an agreement to acquire all the outstanding shares of ABN AMRO (Channel Islands) Limited ("ABN AMRO Channel Islands"), the Channel Islands-based banking subsidiary of ABN AMRO Bank N.V. via one of the Bank's subsidiaries, Butterfield Bank (Guernsey) Limited. ABN AMRO Channel Islands offers banking, investment management and custody products to three distinct client groups, including trusts, private clients, and funds.

This agreement is part of the Bank's strategy to grow through acquisitions in offshore markets where the Bank already has scale and expertise in order to create an organization with a widened and diversified offering.

On July 15, 2019, the transaction completed as planned and the aggregate purchase price of £160.7 million (\$201.1 million) was paid in cash. During 2020, it is expected that ABN AMRO Channel Islands' business and employees will be integrated with the existing Butterfield Guernsey operations and operate under the Butterfield name. In addition to the figures noted below, on July 15, 2019, ABN AMRO Channel Islands had estimated clients' assets under management and custody of \$4.7 billion.

The fair value of the net assets acquired and allocation of purchase price is summarized as follows:

	<b>As at July 15, 2019</b>
<b>Total consideration transferred</b>	<b>201,107</b>
<b>Assets acquired</b>	
Cash due from banks	3,016,859
Loans	654,503
Intangible assets - Customer relationships	24,371
Other assets	31,674
<b>Total assets acquired</b>	<b>3,727,407</b>
<b>Liabilities assumed</b>	
Deposits	(3,493,239)
Other liabilities	(33,061)
<b>Total liabilities assumed</b>	<b>(3,526,300)</b>
<b>Excess purchase price (Goodwill)</b>	<b>—</b>

The acquired customer relationships intangible assets have an estimated finite useful life of 15 years.

The Bank incurred legal and professional transaction expenses related to this acquisition in the amount of \$5.4 million all of which were incurred and expensed during the year ended December 31, 2019.

For the period beginning on July 15, 2019 (i.e. acquisition date) to December 31, 2019, the amount of revenues and earnings relating to the acquired ABN AMRO Channel Islands operations that were not inextricably merged into the Bank's operations were \$13.7 million and a net income of \$1.5 million respectively.

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The following selected unaudited pro forma financial information has been provided to present a summary of the combined results of the Bank and the acquired ABN AMRO Channel Islands operations, assuming the transaction had been effected on January 1, 2018. The unaudited pro forma data is for informational purposes only and does not necessarily represent results that would have occurred if the transaction had taken place on the basis assumed above. The pro forma financial information has been prepared based on the actual results realized by ABN AMRO Channel Islands from January 1, 2019 to July 15, 2019, and results estimated at the time of the acquisition.

<b>Unaudited pro forma financial information</b>	<b>Three months ended March 31, 2019</b>
<b>Total net revenue</b>	<b>143,631</b>
Total non-interest operating (expense)	<b>(88,999)</b>
<b>Pro forma net income post business combination</b>	<b>54,632</b>

**Note 23: Related party transactions**

**Financing Transactions**

Certain directors and executives of the Bank, companies in which they are principal owners and/or members of the board, and trusts in which they are involved, have loans and deposits with the Bank. Loans to directors were made in the ordinary course of business at normal credit terms, including interest rate and collateral requirements. Loans to executives may be eligible for preferential rates. All of these loans were considered performing loans as at March 31, 2020 and March 31, 2019. Loan balances with directors and executives of the Bank, companies in which they are principal owners and/or members of the board, and trusts in which they are involved were as follows:

<b>Balance at December 31, 2018</b>	97,195
Loans issued during the year	45,602
Loan repayments and the effect of changes in the composition of related parties	(104,156)
<b>Balance at December 31, 2019</b>	<b>38,641</b>
Loans issued during the period	<b>5,645</b>
Loan repayments and the effect of changes in the composition of related parties	<b>(1,848)</b>
<b>Balance at March 31, 2020</b>	<b>42,438</b>

<b>Consolidated balance sheets</b>	<b>March 31, 2020</b>	December 31, 2019
Deposits	<b>17,100</b>	12,838

<b>Consolidated statement of operations</b>	<b>Three months ended</b>	
	<b>March 31, 2020</b>	March 31, 2019
Interest and fees on loans	<b>1,181</b>	1,396

Certain affiliates of the Bank have loans and deposits with the Bank which were made and are maintained in the ordinary course of business on normal commercial terms. Balances with these parties were as follows:

<b>Consolidated balance sheets</b>	<b>March 31, 2020</b>	December 31, 2019
Loans	<b>11,244</b>	9,888
Deposits	<b>315</b>	342

<b>Consolidated statement of operations</b>	<b>Three months ended</b>	
	<b>March 31, 2020</b>	March 31, 2019
Interest and fees on loans	<b>173</b>	169
Total non-interest expense	<b>394</b>	433

**Investments**

The Bank holds seed investments in several Butterfield mutual funds, which are managed by a wholly-owned subsidiary of the Bank. These investments are included in equity securities at their fair value and are as follows:

<b>Consolidated balance sheets</b>	<b>March 31, 2020</b>	December 31, 2019
Equity securities		
Fair value	<b>6,544</b>	7,142
Unrealized gain	<b>1,544</b>	2,142

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As at March 31, 2020, several Butterfield mutual funds which are managed by a wholly owned subsidiary of the Bank, had loan balances and deposit balances held with the Bank. The Bank also earned asset management revenue and custody and other administration services revenue from funds managed by a wholly-owned subsidiary of the Bank and from directors and executives, companies in which they are principal owners and/or members of the board and trusts in which they are involved, as well as other income from other related parties.

<b>Consolidated balance sheets</b>	<b>March 31, 2020</b>	December 31, 2019
Loans	<b>38</b>	16
Deposits	<b>21,262</b>	3,492

  

<b>Consolidated statement of operations</b>	Three months ended	
	<b>March 31, 2020</b>	March 31, 2019
Asset management	<b>2,547</b>	2,740
Custody and other administration services	<b>356</b>	339
Other non-interest income	<b>486</b>	243

**Note 24: Subsequent events**

On April 30, 2020, the Board of Directors declared an interim dividend of \$0.44 per common share to be paid on May 28, 2020 to shareholders of record on May 14, 2020.