FINANCIAL REPORT FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2019

The Bank of N.T. Butterfield & Son Limited

Butterfield

**INDEX TO FINANCIAL STATEMENTS**

**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 | |
|---|---|---|
| | **September 30, 2019** | December 31, 2018 |
| **Assets** | | |
| Cash and demand deposits with banks - Non-interest bearing | **398,568** | 124,182 |
| Demand deposits with banks - Interest bearing | **1,109,284** | 487,588 |
| Cash equivalents - Interest bearing | **2,097,196** | 1,442,113 |
| Cash due from banks | **3,605,048** | 2,053,883 |
| Securities purchased under agreement to resell | **61,921** | 27,341 |
| Short-term investments | **793,348** | 52,336 |
| Investment in securities | | |
| Trading | **7,206** | 6,495 |
| Available-for-sale | **2,356,325** | 2,182,749 |
| Held-to-maturity (fair value: $2,355,098 (2018: $2,036,214)) | **2,298,820** | 2,066,120 |
| Total investment in securities | **4,662,351** | 4,255,364 |
| Loans | | |
| Loans | **4,697,212** | 4,068,991 |
| Allowance for credit losses | **(23,906)** | (25,102) |
| Loans, net of allowance for credit losses | **4,673,306** | 4,043,889 |
| Premises, equipment and computer software, net of accumulated depreciation | **157,488** | 158,060 |
| Accrued interest | **22,214** | 20,870 |
| Goodwill | **23,197** | 23,991 |
| Intangible assets | **70,192** | 50,751 |
| Equity method investments | **14,479** | 14,660 |
| Other real estate owned | **3,908** | 5,346 |
| Other assets | **128,843** | 66,687 |
| **Total assets** | **14,216,295** | 10,773,178 |
| **Liabilities** | | |
| Customer deposits | | |
| Bermuda | | |
| Non-interest bearing | **1,375,352** | 1,378,539 |
| Interest bearing | **2,786,086** | 3,117,063 |
| Non-Bermuda | | |
| Non-interest bearing | **679,549** | 732,957 |
| Interest bearing | **7,786,548** | 4,189,860 |
| Total customer deposits | **12,627,535** | 9,418,419 |
| Bank deposits | | |
| Bermuda | **6,201** | 8,100 |
| Non-Bermuda | **28,809** | 25,722 |
| Total deposits | **12,662,545** | 9,452,241 |
| Employee benefit plans | **117,652** | 117,203 |
| Accrued interest | **10,233** | 5,072 |
| Other liabilities | **317,855** | 172,997 |
| Total other liabilities | **445,740** | 295,272 |
| Long-term debt | **143,456** | 143,322 |
| **Total liabilities** | **13,251,741** | 9,890,835 |
| **Commitments, contingencies and guarantees (Note 10)** | | |
| **Shareholders' equity** | | |
| 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: 53,788,054 (2018: 55,359,218) | **538** | 554 |
| Additional paid-in capital | **1,106,551** | 1,171,435 |
| Accumulated deficit | **(29,793)** | (92,676) |
| Less: treasury common shares, at cost: 619,212 (2018: 1,254,212) | **(23,069)** | (48,443) |
| Accumulated other comprehensive loss | **(89,673)** | (148,527) |
| **Total shareholders' equity** | **964,554** | 882,343 |
| **Total liabilities and shareholders' equity** | **14,216,295** | 10,773,178 |

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 | | Nine months ended | |
|---|---|---|---|---|
| | **September 30, 2019** | September 30, 2018 | **September 30, 2019** | September 30, 2018 |
| **Non-interest income** | | | | |
| Asset management | **7,370** | 6,489 | **20,961** | 19,056 |
| Banking | **12,130** | 10,564 | **35,351** | 32,193 |
| Foreign exchange revenue | **10,026** | 7,842 | **27,155** | 24,301 |
| Trust | **12,698** | 13,128 | **38,269** | 37,230 |
| Custody and other administration services | **3,645** | 2,243 | **9,392** | 6,880 |
| Other non-interest income | **777** | 1,007 | **3,137** | 3,313 |
| **Total non-interest income** | **46,646** | 41,273 | **134,265** | 122,973 |
| **Interest income** | | | | |
| Interest and fees on loans | **59,629** | 56,567 | **173,083** | 160,839 |
| *Investments (none of the investment securities are intrinsically tax-exempt)* | | | | |
| Available-for-sale | **15,429** | 17,988 | **45,998** | 53,383 |
| Held-to-maturity | **17,444** | 14,662 | **51,767** | 38,919 |
| Deposits with banks | **12,532** | 5,788 | **30,709** | 18,748 |
| Total interest income | **105,034** | 95,005 | **301,557** | 271,889 |
| **Interest expense** | | | | |
| Deposits | **16,747** | 4,811 | **36,130** | 11,336 |
| Long-term debt | **1,959** | 1,918 | **5,965** | 4,968 |
| Securities sold under agreement to resell | **—** | — | **—** | 18 |
| Total interest expense | **18,706** | 6,729 | **42,095** | 16,322 |
| **Net interest income before provision for credit losses** | **86,328** | 88,276 | **259,462** | 255,567 |
| Provision for credit recoveries (losses) | **(411)** | 2,811 | **552** | 5,277 |
| **Net interest income after provision for credit losses** | **85,917** | 91,087 | **260,014** | 260,844 |
| Net trading gains (losses) | **54** | 161 | **710** | 124 |
| Net realized gains (losses) on available-for-sale investments | **537** | 458 | **1,509** | 1,352 |
| Net gains (losses) on other real estate owned | **(67)** | 9 | **61** | (251) |
| Net other gains (losses) | **(1)** | 26 | **187** | (1,795) |
| Total other gains (losses) | **523** | 654 | **2,467** | (570) |
| **Total net revenue** | **133,086** | 133,014 | **396,746** | 383,247 |
| **Non-interest expense** | | | | |
| Salaries and other employee benefits | **44,272** | 42,425 | **136,503** | 117,635 |
| Technology and communications | **16,320** | 15,569 | **46,119** | 45,368 |
| Professional and outside services | **9,473** | 5,092 | **21,272** | 19,909 |
| Property | **6,060** | 5,281 | **17,169** | 15,709 |
| Indirect taxes | **5,296** | 4,836 | **15,839** | 14,748 |
| Non-service employee benefits expense | **1,339** | 1,332 | **3,999** | 3,970 |
| Marketing | **1,580** | 1,470 | **4,915** | 3,848 |
| Amortization of intangible assets | **1,494** | 1,358 | **3,997** | 3,751 |
| Other expenses | **4,577** | 4,854 | **13,213** | 12,912 |
| **Total non-interest expense** | **90,411** | 82,217 | **263,026** | 237,850 |
| **Net income before income taxes** | **42,675** | 50,797 | **133,720** | 145,397 |
| Income tax expense | **(238)** | (428) | **(534)** | (1,119) |
| **Net income** | **42,437** | 50,369 | **133,186** | 144,278 |
| | | | | |
| **Earnings per common share** | | | | |
| Basic earnings per share | **0.80** | 0.91 | **2.50** | 2.62 |
| Diluted earnings per share | **0.79** | 0.90 | **2.48** | 2.58 |

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 | | Nine months ended | |
|---|---|---|---|---|
| | **September 30, 2019** | September 30, 2018 | **September 30, 2019** | September 30, 2018 |
| **Net income** | **42,437** | 50,369 | **133,186** | 144,278 |
| **Other comprehensive income (loss), net of taxes** | | | | |
| Net change in unrealized gains and losses on translation of net investment in foreign operations | **(1,345)** | (479) | **(1,608)** | (1,501) |
| Accretion of net unrealized (gains) losses on held-to-maturity investments transferred from available-for-sale investments | **12** | 7 | **38** | 31 |
| Net change in unrealized gains and losses on available-for-sale investments | **13,528** | (11,732) | **57,597** | (46,193) |
| Employee benefit plans adjustments | **1,211** | 1,345 | **2,827** | 2,417 |
| Other comprehensive income (loss), net of taxes | **13,406** | (10,859) | **58,854** | (45,246) |
| Total comprehensive income | **55,843** | 39,510 | **192,040** | 99,032 |

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

| | Three months ended | | | | Nine months ended | | | |
|---|---|---|---|---|---|---|---|---|
| | September 30, 2019 | | September 30, 2018 | | September 30, 2019 | | September 30, 2018 | |
| | Number of shares | In thousands of US dollars | Number of shares | In thousands of US dollars | Number of shares | In thousands of US dollars | Number of shares | In thousands of US dollars |
| **Common share capital issued and outstanding** | | | | | | | | |
| Balance at beginning of period | 54,606,982 | 546 | 55,172,295 | 552 | 55,359,218 | 554 | 54,692,630 | 547 |
| Retirement of shares | (1,000,000) | (10) | — | — | (2,120,000) | (21) | — | — |
| Issuance of common shares | 181,072 | 2 | 166,536 | 1 | 548,836 | 5 | 646,201 | 6 |
| **Balance at end of period** | 53,788,054 | 538 | 55,338,831 | 553 | 53,788,054 | 538 | 55,338,831 | 553 |
| **Additional paid-in capital** | | | | | | | | |
| Balance at beginning of period | | 1,140,393 | | 1,163,673 | | 1,171,435 | | 1,155,542 |
| Share-based compensation | | 3,358 | | 3,282 | | 13,906 | | 8,558 |
| Share-based settlements | | — | | — | | 240 | | 918 |
| Retirement of common shares | | (37,245) | | — | | (79,082) | | — |
| Issuance of common shares, net of underwriting discounts and commissions | | 45 | | 1,219 | | 52 | | 3,156 |
| **Balance at end of period** | | 1,106,551 | | 1,168,174 | | 1,106,551 | | 1,168,174 |
| **Accumulated deficit** | | | | | | | | |
| Balance at beginning of period | | (48,855) | | (152,148) | | (92,676) | | (204,156) |
| Net income for period | | 42,437 | | 50,369 | | 133,186 | | 144,278 |
| Common share cash dividends declared and paid, $0.44 and $1.32 per share (2018: $0.38 and $1.14 per share) | | (23,375) | | (20,994) | | (70,303) | | (62,895) |
| **Balance at end of period** | | (29,793) | | (122,773) | | (29,793) | | (122,773) |
| **Treasury common shares** | | | | | | | | |
| Balance at beginning of period | 1,619,212 | (60,324) | — | — | 1,254,212 | (48,443) | — | — |
| Purchase of treasury common shares | — | — | — | — | 1,485,000 | (53,729) | — | — |
| Retirement of shares | (1,000,000) | 37,255 | — | — | (2,120,000) | 79,103 | — | — |
| **Balance at end of period** | 619,212 | (23,069) | — | — | 619,212 | (23,069) | — | — |
| **Accumulated other comprehensive income (loss)** | | | | | | | | |
| Balance at beginning of period | | (103,079) | | (163,439) | | (148,527) | | (129,052) |
| Other comprehensive income (loss), net of taxes | | 13,406 | | (10,859) | | 58,854 | | (45,246) |
| **Balance at end of period** | | (89,673) | | (174,298) | | (89,673) | | (174,298) |
| **Total shareholders' equity** | | 964,554 | | 871,656 | | 964,554 | | 871,656 |

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)*

| | Nine months ended | |
|---|---|---|
| | **September 30, 2019** | September 30, 2018 |
| **Cash flows from operating activities** | | |
| **Net income** | **133,186** | 144,278 |
| **Adjustments to reconcile net income to operating cash flows** | | |
| Depreciation and amortization | **35,337** | 34,814 |
| Provision for credit (recovery) losses | **(552)** | (5,277) |
| Share-based payments and settlements | **14,146** | 9,476 |
| Net realized (gains) losses on available-for-sale investments | **(1,509)** | (1,352) |
| Net (gains) losses on other real estate owned | **(61)** | 251 |
| (Increase) decrease in carrying value of equity method investments | **(314)** | (281) |
| Dividends received from equity method investments | **495** | 48 |
| **Changes in operating assets and liabilities** | | |
| (Increase) decrease in accrued interest receivable | **(795)** | (2,393) |
| (Increase) decrease in other assets | **(340)** | (11,989) |
| Increase (decrease) in accrued interest payable | **5,323** | 2,741 |
| Increase (decrease) in employee benefit plans and other liabilities | **115,776** | 42,847 |
| **Cash provided by (used in) operating activities** | **300,692** | 213,163 |
| **Cash flows from investing activities** | | |
| (Increase) decrease in securities purchased under agreement to resell | **(34,580)** | 107,076 |
| Short-term investments other than restricted cash: proceeds from maturities and sales | **233,928** | 228,113 |
| Short-term investments other than restricted cash: purchases | **(974,828)** | (57,448) |
| Net change in trading investments | **(710)** | (124) |
| Available-for-sale investments: proceeds from sale | **189,940** | 646,104 |
| Available-for-sale investments: proceeds from maturities and pay downs | **249,440** | 400,440 |
| Available-for-sale investments: purchases | **(563,007)** | (242,087) |
| Held-to-maturity investments: proceeds from maturities and pay downs | **184,374** | 119,787 |
| Held-to-maturity investments: purchases | **(420,018)** | (845,921) |
| Net (increase) decrease in loans | **(26,064)** | (346,701) |
| Additions to premises, equipment and computer software | **(16,351)** | (11,886) |
| Proceeds from sale of other real estate owned | **1,102** | 5,538 |
| Gross cash received (disbursed for) from business acquisition | **2,815,752** | (20,722) |
| **Cash provided by (used in) investing activities** | **1,638,978** | (17,831) |
| **Cash flows from financing activities** | | |
| Net increase (decrease) in demand and term deposit liabilities | **(154,754)** | (440,665) |
| Issuance of subordinated capital, net of underwriting fees | **—** | 73,218 |
| Repayment of long-term debt | **—** | (47,000) |
| Common shares repurchased | **(53,729)** | — |
| Proceeds from stock option exercises | **57** | 3,162 |
| Cash dividends paid on common shares | **(70,303)** | (62,895) |
| **Cash provided by (used in) financing activities** | **(278,729)** | (474,180) |
| Net effect of exchange rates on cash, cash equivalent and restricted cash | **(106,812)** | 1,311 |
| **Net increase (decrease) in cash, cash equivalent and restricted cash** | **1,554,129** | (277,537) |
| **Cash, cash equivalent and restricted cash: beginning of period** | **2,070,120** | 1,557,733 |
| **Cash, cash equivalent and restricted cash: end of period** | **3,624,249** | 1,280,196 |

| | | |
|---|---|---|
| **Components of cash, cash equivalent and restricted cash at end of period** | | |
| Cash due from banks | **3,605,048** | 1,259,098 |
| Restricted cash included in short-term investments on the consolidated balance sheets | **19,201** | 21,098 |
| **Total cash, cash equivalent and restricted cash at end of period** | **3,624,249** | 1,280,196 |

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.

The Bank's common shares trade on the New York Stock Exchange under the symbol "NTB".

## 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 ("US GAAP") for interim financial information and should be read in conjunction with the Bank's audited financial statements for the year ended December 31, 2018.

In the opinion of Management, these unaudited interim consolidated financial statements reflect all adjustments (consisting principally 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 US GAAP requires Management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. While Management believes that the amounts included in the unaudited interim consolidated financial statements reflect its best estimates and assumptions, 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

### Leases

In the normal course of operation, the Bank enters into leasing agreements either as the lessee or the lessor. Starting on January 1, 2019 (the adoption date of the new lease accounting guidance ASU 2016-02 Leases (Topic 842)), the Bank recognizes a right-of-use asset and a lease liability for operating leases and for finance leases. Lease liabilities are measured as the present value of future lease payments, including term renewals that are reasonably certain to occur, discounted using the Bank's incremental borrowing interest rate. Right-of-use assets are measured as the carrying amount of the related lease liabilities adjusted for: prepaid or accrued lease payments, unamortized lease incentive received, unamortized initial direct costs and any impairment of the right-of-use asset.

On January 1, 2019 the Bank elected the practical expedient: 1) not to reassess whether any expired or existing contracts are or contain leases; 2) not to reassess the lease classification for any expired or existing leases and 3) not to reassess initial direct costs for any existing leases.

The Bank also elected the practical expedient not to separate lease components from non-lease components for all classes of underlying assets.

The Bank also elected the practical expedient not to recognize a right-of-use asset and a lease liability for leases with a term at inception of 12 months or less, including renewal options that are reasonably certain to be exercised (referred to as "short term leases").

### New Accounting Pronouncements

The following accounting developments were issued during the nine months ended September 30, 2019 or are accounting standards pending adoption:

In June 2016, the FASB published Accounting Standards Update No. 2016-13 Financial Instruments – Credit Losses. The amendments in this update provide a new impairment model, known as the current expected credit loss model that is based on expected losses rather than incurred losses. The amendments in this update are also intended to reduce the complexity and reduce the number of impairment models entities use to account for debt instruments. For public business entities that meet the GAAP definition of an SEC filer, the effective date for this update for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. The Bank is evaluating ASU No. 2016-13 and has initiated a working group with multiple members from applicable departments to evaluate the requirements of the new standard, planning for loss modeling requirements consistent with lifetime expected loss estimates, and assessing the impact it will have on current processes. The extent of the impact upon adoption will likely depend on the characteristics of the Bank's loan portfolio and economic conditions at that date, as well as forecasted conditions thereafter.

In April 2019, the FASB published Accounting Standards Update No. 2019-04 Codification Improvements to Topic 326, Financial Instruments—Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments. The amendments in this update clarify, correct and improve various aspects of the guidance in the following ASU's related to financial instruments: ASU 2016-01 Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Liabilities, ASU 2016-13, Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, and ASU 2017-12, Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities. The amendments in this ASU relating to ASU 2016-01 are effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years, early adoption is permitted and it should be applied on a modified-retrospective transition basis. The amendments in this ASU relating to ASU 2016-13 are effective as noted in ASU 2016-13. The amendments in this ASU relating to ASU 2017-12 are effective as noted in ASU 2017-12. The Bank is assessing the impact of the adoption of this guidance but does not expect it to be material.

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

In May 2019, the FASB published Accounting Standards Update No. 2019-05 Financial Instruments - Credit Losses (Topic 326) - Targeted Transition Relief. The amendments in this update provide targeted transition relief that is an option for, and will be available to, all reporting entities within the scope of Topic 326. It provides entities with an option to irrevocably elect the fair value option in Subtopic 825-10, applied on an instrument-by-instrument basis for eligible instruments that are within the scope of Subtopic 326-20 upon adoption of Topic 326. The fair value option election does not apply to held-to-maturity debt securities. The effective date and transition methodology for the amendments in this update are the same as in ASU 2016-13. The Bank is currently evaluating whether to elect the adoption of this guidance but does not expect it to be material.

In March 2019, the FASB published Accounting Standards Update No. 2019-01 Leases (Topic 842) - Codification Improvements. The amendments in this update provide clarification on three issues relating to ASU 2016-02 Leases (Topic 842): 1) determining the fair value of the underlying asset by lessors that are not manufactures or dealers; 2) presentation on the statement of cash flows - sales-type and direct financing leases for all lessors that are depository and lending entities within the scope of Topic 942; and 3) transition disclosures related to Topic 250, Accounting Changes and Error Corrections. The transition and effective date provisions for this update apply to Issue 1 and Issue 2 and are effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years, for public business entities. Issue 3 amendments are to the original transition requirements in Topic 842 to clarify that the transition disclosures for Topic 250, paragraphs 250-10-50-1(b)(2) and paragraph 250-10-50-3 are excluded from interim disclosure requirements for Topic 842. The Bank does not anticipate this ASU to have an impact on the Bank.

## Note 3: Cash due from banks

| | September 30, 2019 | | | December 31, 2018 | | |
|---|---|---|---|---|---|---|
| | **Bermuda** | **Non-Bermuda** | **Total** | Bermuda | Non-Bermuda | Total |
| **Non-interest bearing** | | | | | | |
| Cash and demand deposits with banks | **25,197** | **373,371** | **398,568** | 21,677 | 102,505 | 124,182 |
| **Interest bearing[1]** | | | | | | |
| Demand deposits with banks | **291,186** | **818,098** | **1,109,284** | 335,841 | 151,747 | 487,588 |
| Cash equivalents | **243,722** | **1,853,474** | **2,097,196** | 364,714 | 1,077,399 | 1,442,113 |
| **Sub-total - Interest bearing** | **534,908** | **2,671,572** | **3,206,480** | 700,555 | 1,229,146 | 1,929,701 |
| **Total cash due from banks** | **560,105** | **3,044,943** | **3,605,048** | 722,232 | 1,331,651 | 2,053,883 |

[1] Interest bearing cash due from banks includes certain demand deposits with banks as at September 30, 2019 in the amount of $809.7 million (December 31, 2018: $204.2 million) that are earning interest at a negligible rate.

## Note 4: Short-term investments

| | September 30, 2019 | | | December 31, 2018 | | |
|---|---|---|---|---|---|---|
| | **Bermuda** | **Non-Bermuda** | **Total** | Bermuda | Non-Bermuda | Total |
| **Unrestricted** | | | | | | |
| Maturing within three months | **—** | **318,158** | **318,158** | — | 25,459 | 25,459 |
| Maturing between three to six months | **—** | **451,254** | **451,254** | — | 9,641 | 9,641 |
| Maturing between six to twelve months | **—** | **4,735** | **4,735** | — | — | — |
| **Total unrestricted short-term investments** | **—** | **774,147** | **774,147** | — | 35,100 | 35,100 |
| **Affected by drawing restrictions related to minimum reserve and derivative margin requirements** | | | | | | |
| Non-interest earning demand deposits | **—** | **1,697** | **1,697** | — | 2,401 | 2,401 |
| Interest earning demand and term deposits | **13,585** | **3,919** | **17,504** | 13,836 | 999 | 14,835 |
| **Total restricted short-term investments** | **13,585** | **5,616** | **19,201** | 13,836 | 3,400 | 17,236 |
| **Total short-term investments** | **13,585** | **779,763** | **793,348** | 13,836 | 38,500 | 52,336 |

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

## Note 5: Investment in securities

### Amortized Cost, Carrying Amount and Fair Value

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

| | September 30, 2019 | | | | December 31, 2018 | | | |
|---|---|---|---|---|---|---|---|---|
| | Amortized cost | Gross unrealized gains | Gross unrealized losses | Fair value | Amortized cost | Gross unrealized gains | Gross unrealized losses | Fair value |
| **Trading** | | | | | | | | |
| Mutual funds | 5,724 | 1,915 | (433) | 7,206 | 5,724 | 1,176 | (405) | 6,495 |
| **Total trading** | 5,724 | 1,915 | (433) | 7,206 | 5,724 | 1,176 | (405) | 6,495 |
| **Available-for-sale** | | | | | | | | |
| US government and federal agencies | 2,162,741 | 21,031 | (6,362) | 2,177,410 | 1,820,808 | 3,355 | (37,656) | 1,786,507 |
| Non-US governments debt securities | 25,770 | 27 | (521) | 25,276 | 25,804 | 19 | (398) | 25,425 |
| Corporate debt securities | — | — | — | — | 80,177 | — | (1,464) | 78,713 |
| Asset-backed securities - Student loans | 13,290 | — | (465) | 12,825 | 13,290 | — | (664) | 12,626 |
| Commercial mortgage-backed securities | — | — | — | — | 125,806 | 6 | (2,603) | 123,209 |
| Residential mortgage-backed securities | 140,555 | 756 | (497) | 140,814 | 160,492 | — | (4,223) | 156,269 |
| **Total available-for-sale** | 2,342,356 | 21,814 | (7,845) | 2,356,325 | 2,226,377 | 3,380 | (47,008) | 2,182,749 |
| **Held-to-maturity**[1] | | | | | | | | |
| US government and federal agencies | 2,298,820 | 56,736 | (458) | 2,355,098 | 2,066,120 | 5,012 | (34,918) | 2,036,214 |
| **Total held-to-maturity** | 2,298,820 | 56,736 | (458) | 2,355,098 | 2,066,120 | 5,012 | (34,918) | 2,036,214 |

[1] For the nine months ended September 30, 2019 and the year ended December 31, 2018, non-credit impairments recognized in accumulated other comprehensive loss ("AOCL") for HTM investments were nil.

### 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 September 30, 2019 (and December 31, 2018), which were composed of 60 securities representing 20% of the AFS and HTM portfolios' carrying value (December 31, 2018: 198 and 75%, respectively), represent an other-than-temporary impairment ("OTTI"). Total gross unrealized losses were 0.9% of the fair value of affected securities (December 31, 2018: 2.6%) and 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 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 seven securities 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 LTV ratios range from 10% - 22% and 54% - 64%, respectively. Current credit support is significantly greater than any delinquencies experienced on the underlying mortgages.

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

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.

| | Less than 12 months | | 12 months or more | | | |
|---|---|---|---|---|---|---|
| **September 30, 2019** | **Fair value** | **Gross unrealized losses** | **Fair value** | **Gross unrealized losses** | **Total fair value** | **Total gross unrealized losses** |
| **Available-for-sale securities with unrealized losses** | | | | | | |
| US government and federal agencies | 309,010 | (1,501) | 446,100 | (4,861) | 755,110 | (6,362) |
| Non-US governments debt securities | — | — | 22,246 | (521) | 22,246 | (521) |
| Asset-backed securities - Student loans | — | — | 12,825 | (465) | 12,825 | (465) |
| Residential mortgage-backed securities | 6,360 | (2) | 57,579 | (495) | 63,939 | (497) |
| **Total available-for-sale securities with unrealized losses** | 315,370 | (1,503) | 538,750 | (6,342) | 854,120 | (7,845) |
| **Held-to-maturity securities with unrealized losses** | | | | | | |
| US government and federal agencies | 31,270 | (46) | 48,289 | (412) | 79,559 | (458) |

| | Less than 12 months | | 12 months or more | | | |
|---|---|---|---|---|---|---|
| December 31, 2018 | Fair value | Gross unrealized losses | Fair value | Gross unrealized losses | Total fair value | Total gross unrealized losses |
| **Available-for-sale securities with unrealized losses** | | | | | | |
| US government and federal agencies | 372,283 | (1,586) | 1,027,638 | (36,070) | 1,399,921 | (37,656) |
| Non-US governments debt securities | — | — | 22,360 | (398) | 22,360 | (398) |
| Corporate debt securities | 14,914 | (114) | 63,799 | (1,350) | 78,713 | (1,464) |
| Asset-backed securities - Student loans | — | — | 12,626 | (664) | 12,626 | (664) |
| Commercial mortgage-backed securities | 812 | — | 117,379 | (2,603) | 118,191 | (2,603) |
| Residential mortgage-backed securities | 49,804 | (1,313) | 106,465 | (2,910) | 156,269 | (4,223) |
| **Total available-for-sale securities with unrealized losses** | 437,813 | (3,013) | 1,350,267 | (43,995) | 1,788,080 | (47,008) |
| **Held-to-maturity securities with unrealized losses** | | | | | | |
| US government and federal agencies | 647,484 | (11,468) | 724,974 | (23,450) | 1,372,458 | (34,918) |

### 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.

| | Remaining term to maturity | | | | | |
|---|---|---|---|---|---|---|
| **September 30, 2019** | **Within 3 months** | **3 to 12 months** | **1 to 5 years** | **5 to 10 years** | **No specific or single maturity** | **Carrying amount** |
| **Trading** | | | | | | |
| Mutual funds | — | — | — | — | 7,206 | 7,206 |
| **Available-for-sale** | | | | | | |
| US government and federal agencies | — | — | 34,929 | — | 2,142,481 | 2,177,410 |
| Non-US governments debt securities | 3,030 | — | 22,246 | — | — | 25,276 |
| Asset-backed securities - Student loans | — | — | — | — | 12,825 | 12,825 |
| Residential mortgage-backed securities | — | — | — | — | 140,814 | 140,814 |
| **Total available-for-sale** | 3,030 | — | 57,175 | — | 2,296,120 | 2,356,325 |
| **Held-to-maturity** | | | | | | |
| US government and federal agencies | — | — | — | — | 2,298,820 | 2,298,820 |
| **Total investments** | 3,030 | — | 57,175 | — | 4,602,146 | 4,662,351 |
| **Total by currency** | | | | | | |
| US dollars | 3,030 | — | 57,175 | — | 4,601,854 | 4,662,059 |
| Other | — | — | — | — | 292 | 292 |
| **Total investments** | 3,030 | — | 57,175 | — | 4,602,146 | 4,662,351 |

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

### 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.

| | September 30, 2019 | | December 31, 2018 | |
|---|---|---|---|---|
| **Pledged Investments** | **Amortized cost** | **Fair value** | Amortized cost | Fair value |
| Available-for-sale | **6,888** | **7,017** | 42,531 | 42,400 |
| Held-to-maturity | **6,464** | **6,605** | 70,818 | 69,030 |

| **Sale Proceeds and Realized Gains and Losses of AFS Securities** | Nine months ended September 30, 2019 | | | Nine months ended September 30, 2018 | | |
|---|---|---|---|---|---|---|
| | **Sale proceeds** | **Gross realized gains** | **Gross realized (losses)** | Sale proceeds | Gross realized gains | Gross realized (losses) |
| US government and federal agencies | **—** | **—** | **—** | 621,467 | 1,271 | (1,037) |
| Corporate debt securities | **64,787** | **49** | **(141)** | 24,975 | — | (87) |
| Commercial mortgage-backed securities | **124,545** | **901** | **(272)** | — | — | — |
| Pass-through note | **972** | **972** | **—** | 1,205 | 1,205 | — |
| **Total** | **190,304** | **1,922** | **(413)** | 647,647 | 2,476 | (1,124) |

### 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.

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

## Note 6: Loans

The "Bermuda" and "Non-Bermuda" classifications purpose is to reflect management segment reporting as described in Note 12: Segmented information.

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, business and government loans are generally repayable over terms not exceeding five years. 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 September 30, 2019 is 4.93% (December 31, 2018: 5.53%).

| | September 30, 2019 | | | December 31, 2018 | | |
|---|---|---|---|---|---|---|
| | Bermuda | Non-Bermuda | Total | Bermuda | Non-Bermuda | Total |
| **Commercial loans** | | | | | | |
| Government | 145,973 | 12,298 | 158,271 | 92,994 | 12,670 | 105,664 |
| Commercial and industrial | 287,707 | 224,043 | 511,750 | 291,470 | 222,393 | 513,863 |
| Commercial overdrafts | 19,643 | 13,340 | 32,983 | 16,342 | 16,752 | 33,094 |
| Total gross commercial loans | 453,323 | 249,681 | 703,004 | 400,806 | 251,815 | 652,621 |
| Less specific allowance for credit losses | (4,207) | (1,687) | (5,894) | (2,766) | (1,687) | (4,453) |
| **Net commercial loans** | 449,116 | 247,994 | 697,110 | 398,040 | 250,128 | 648,168 |
| | | | | | | |
| **Commercial real estate loans** | | | | | | |
| Commercial mortgage | 296,854 | 297,989 | 594,843 | 304,519 | 192,456 | 496,975 |
| Construction | 30,000 | 45,210 | 75,210 | 29,760 | 48,909 | 78,669 |
| Total gross commercial real estate loans | 326,854 | 343,199 | 670,053 | 334,279 | 241,365 | 575,644 |
| Less specific allowance for credit losses | (515) | — | (515) | (600) | — | (600) |
| **Net commercial real estate loans** | 326,339 | 343,199 | 669,538 | 333,679 | 241,365 | 575,044 |
| | | | | | | |
| **Consumer loans** | | | | | | |
| Automobile financing | 13,498 | 7,144 | 20,642 | 13,249 | 6,975 | 20,224 |
| Credit card | 60,003 | 24,706 | 84,709 | 60,466 | 23,623 | 84,089 |
| Overdrafts | 2,267 | 6,924 | 9,191 | 10,511 | 2,375 | 12,886 |
| Other consumer | 32,980 | 99,503 | 132,483 | 28,415 | 35,076 | 63,491 |
| Total gross consumer loans | 108,748 | 138,277 | 247,025 | 112,641 | 68,049 | 180,690 |
| Less specific allowance for credit losses | (683) | — | (683) | (274) | — | (274) |
| **Net consumer loans** | 108,065 | 138,277 | 246,342 | 112,367 | 68,049 | 180,416 |
| | | | | | | |
| **Residential mortgage loans** | 1,113,530 | 1,963,600 | 3,077,130 | 1,121,288 | 1,538,748 | 2,660,036 |
| Less specific allowance for credit losses | (9,659) | (984) | (10,643) | (8,575) | (1,013) | (9,588) |
| **Net residential mortgage loans** | 1,103,871 | 1,962,616 | 3,066,487 | 1,112,713 | 1,537,735 | 2,650,448 |
| | | | | | | |
| **Total gross loans** | 2,002,455 | 2,694,757 | 4,697,212 | 1,969,014 | 2,099,977 | 4,068,991 |
| Less specific allowance for credit losses | (15,064) | (2,671) | (17,735) | (12,215) | (2,700) | (14,915) |
| Less general allowance for credit losses | (5,004) | (1,167) | (6,171) | (7,098) | (3,089) | (10,187) |
| **Net loans** | 1,982,387 | 2,690,919 | 4,673,306 | 1,949,701 | 2,094,188 | 4,043,889 |

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

### Age Analysis of Past Due Loans (Including Non-Accrual Loans)

The following tables summarize the past due status of the loans as at September 30, 2019 and December 31, 2018. 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.

| September 30, 2019 | 30 - 59 days | 60 - 89 days | More than 90 days | Total past due loans | Total current | Total loans |
|---|---|---|---|---|---|---|
| **Commercial loans** | | | | | | |
| Government | — | — | 3,750 | 3,750 | 154,521 | 158,271 |
| Commercial and industrial | 1,398 | 181 | 7,492 | 9,071 | 502,679 | 511,750 |
| Commercial overdrafts | — | — | 74 | 74 | 32,909 | 32,983 |
| **Total commercial loans** | 1,398 | 181 | 11,316 | 12,895 | 690,109 | 703,004 |
| **Commercial real estate loans** | | | | | | |
| Commercial mortgage | 450 | — | 2,792 | 3,242 | 591,601 | 594,843 |
| Construction | — | — | — | — | 75,210 | 75,210 |
| **Total commercial real estate loans** | 450 | — | 2,792 | 3,242 | 666,811 | 670,053 |
| **Consumer loans** | | | | | | |
| Automobile financing | 11 | 15 | 172 | 198 | 20,444 | 20,642 |
| Credit card | 690 | 392 | 350 | 1,432 | 83,277 | 84,709 |
| Overdrafts | — | — | 24 | 24 | 9,167 | 9,191 |
| Other consumer | 24 | 72 | 1,078 | 1,174 | 131,309 | 132,483 |
| **Total consumer loans** | 725 | 479 | 1,624 | 2,828 | 244,197 | 247,025 |
| **Residential mortgage loans** | 33,001 | 5,528 | 45,714 | 84,243 | 2,992,887 | 3,077,130 |
| **Total gross loans** | 35,574 | 6,188 | 61,446 | 103,208 | 4,594,004 | 4,697,212 |

| December 31, 2018 | 30 - 59 days | 60 - 89 days | More than 90 days | Total past due loans | Total current | Total loans |
|---|---|---|---|---|---|---|
| **Commercial loans** | | | | | | |
| Government | — | — | 3,750 | 3,750 | 101,914 | 105,664 |
| Commercial and industrial | 231 | — | 7,379 | 7,610 | 506,253 | 513,863 |
| Commercial overdrafts | — | — | 2 | 2 | 33,092 | 33,094 |
| **Total commercial loans** | 231 | — | 11,131 | 11,362 | 641,259 | 652,621 |
| **Commercial real estate loans** | | | | | | |
| Commercial mortgage | 837 | 1,282 | 4,062 | 6,181 | 490,794 | 496,975 |
| Construction | — | — | — | — | 78,669 | 78,669 |
| **Total commercial real estate loans** | 837 | 1,282 | 4,062 | 6,181 | 569,463 | 575,644 |
| **Consumer loans** | | | | | | |
| Automobile financing | 125 | 29 | 162 | 316 | 19,908 | 20,224 |
| Credit card | 351 | 313 | 126 | 790 | 83,299 | 84,089 |
| Overdrafts | — | — | 4 | 4 | 12,882 | 12,886 |
| Other consumer | 456 | 183 | 577 | 1,216 | 62,275 | 63,491 |
| **Total consumer loans** | 932 | 525 | 869 | 2,326 | 178,364 | 180,690 |
| **Residential mortgage loans** | 31,015 | 8,859 | 36,394 | 76,268 | 2,583,768 | 2,660,036 |
| **Total gross loans** | 33,015 | 10,666 | 52,456 | 96,137 | 3,972,854 | 4,068,991 |

### Loans' Credit Quality

The four credit quality classifications set out in the following tables (which exclude purchased credit-impaired loans) 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 assigned.

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.

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

A **special mention** loan shall mean a loan under close monitoring by the Bank's management. 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.

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.

| September 30, 2019 | Pass | Special mention | Substandard | Non-accrual | Total gross recorded loans |
|---|---|---|---|---|---|
| **Commercial loans** | | | | | |
| Government | 154,521 | — | — | 3,750 | 158,271 |
| Commercial and industrial | 498,335 | 4,705 | 1,125 | 7,585 | 511,750 |
| Commercial overdrafts | 29,196 | 3,197 | 516 | 74 | 32,983 |
| **Total commercial loans** | 682,052 | 7,902 | 1,641 | 11,409 | 703,004 |
| **Commercial real estate loans** | | | | | |
| Commercial mortgage | 517,096 | 72,008 | 2,947 | 2,792 | 594,843 |
| Construction | 75,210 | — | — | — | 75,210 |
| **Total commercial real estate loans** | 592,306 | 72,008 | 2,947 | 2,792 | 670,053 |
| **Consumer loans** | | | | | |
| Automobile financing | 20,352 | 96 | — | 194 | 20,642 |
| Credit card | 84,359 | — | 350 | — | 84,709 |
| Overdrafts | 4,817 | 4,350 | — | 24 | 9,191 |
| Other consumer | 127,744 | 3,494 | 139 | 1,106 | 132,483 |
| **Total consumer loans** | 237,272 | 7,940 | 489 | 1,324 | 247,025 |
| **Residential mortgage loans** | 2,909,538 | 46,753 | 84,499 | 36,340 | 3,077,130 |
| **Total gross recorded loans** | 4,421,168 | 134,603 | 89,576 | 51,865 | 4,697,212 |

| December 31, 2018 | Pass | Special mention | Substandard | Non-accrual | Total gross recorded loans |
|---|---|---|---|---|---|
| **Commercial loans** | | | | | |
| Government | 101,914 | — | — | 3,750 | 105,664 |
| Commercial and industrial | 501,241 | 4,097 | 1,146 | 7,379 | 513,863 |
| Commercial overdrafts | 29,896 | 2,705 | 491 | 2 | 33,094 |
| **Total commercial loans** | 633,051 | 6,802 | 1,637 | 11,131 | 652,621 |
| **Commercial real estate loans** | | | | | |
| Commercial mortgage | 444,397 | 45,390 | 3,126 | 4,062 | 496,975 |
| Construction | 78,669 | — | — | — | 78,669 |
| **Total commercial real estate loans** | 523,066 | 45,390 | 3,126 | 4,062 | 575,644 |
| **Consumer loans** | | | | | |
| Automobile financing | 19,927 | 119 | 16 | 162 | 20,224 |
| Credit card | 83,963 | — | 126 | — | 84,089 |
| Overdrafts | 12,650 | 232 | — | 4 | 12,886 |
| Other consumer | 60,766 | 1,869 | 10 | 846 | 63,491 |
| **Total consumer loans** | 177,306 | 2,220 | 152 | 1,012 | 180,690 |
| **Residential mortgage loans** | 2,501,814 | 47,039 | 78,697 | 32,486 | 2,660,036 |
| **Total gross recorded loans** | 3,835,237 | 101,451 | 83,612 | 48,691 | 4,068,991 |

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

| Evaluation of Loans For Impairment | September 30, 2019 | | December 31, 2018 | |
|---|---|---|---|---|
| | Individually evaluated | Collectively evaluated | Individually evaluated | Collectively evaluated |
| Commercial | 12,352 | 690,652 | 12,096 | 640,525 |
| Commercial real estate | 5,739 | 664,314 | 7,188 | 568,456 |
| Consumer | 1,333 | 245,692 | 1,023 | 179,667 |
| Residential mortgage | 104,399 | 2,972,731 | 102,127 | 2,557,909 |
| **Total gross loans** | 123,823 | 4,573,389 | 122,434 | 3,946,557 |

**Changes in General and Specific Allowances For Credit Losses**

| | Nine months ended September 30, 2019 | | | | |
|---|---|---|---|---|---|
| | Commercial | Commercial real estate | Consumer | Residential mortgage | Total |
| Allowances at beginning of period | 6,913 | 4,092 | 802 | 13,295 | 25,102 |
| Provision taken (released) | 652 | (1,637) | 1,278 | (845) | (552) |
| Recoveries | 6 | — | 929 | 407 | 1,342 |
| Charge-offs | — | — | (1,662) | (288) | (1,950) |
| Other | — | (1) | 4 | (39) | (36) |
| **Allowances at end of period** | 7,571 | 2,454 | 1,351 | 12,530 | 23,906 |
| Allowances at end of period: individually evaluated for impairment | 5,894 | 515 | 683 | 10,643 | 17,735 |
| Allowances at end of period: collectively evaluated for impairment | 1,677 | 1,939 | 668 | 1,887 | 6,171 |

| | Nine months ended September 30, 2018 | | | | |
|---|---|---|---|---|---|
| | Commercial | Commercial real estate | Consumer | Residential mortgage | Total |
| Allowances at beginning of period | 6,309 | 10,360 | 888 | 17,910 | 35,467 |
| Provision taken (released) | 1,282 | (4,228) | 137 | (2,468) | (5,277) |
| Recoveries | 8 | 28 | 439 | 177 | 652 |
| Charge-offs | — | — | (589) | (1,942) | (2,531) |
| Other | (7) | (3) | — | (36) | (46) |
| **Allowances at end of period** | 7,592 | 6,157 | 875 | 13,641 | 28,265 |
| Allowances at end of period: individually evaluated for impairment | 4,516 | 600 | 295 | 8,601 | 14,012 |
| Allowances at end of period: collectively evaluated for impairment | 3,076 | 5,557 | 580 | 5,040 | 14,253 |

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

| Non-Performing Loans (excluding purchased credit-impaired loans) | September 30, 2019 | | | December 31, 2018 | | |
|---|---|---|---|---|---|---|
| | Non-accrual | Past due more than 90 days and accruing | Total non-performing loans | Non-accrual | Past due more than 90 days and accruing | Total non-performing loans |
| **Commercial loans** | | | | | | |
| Government | 3,750 | — | 3,750 | 3,750 | — | 3,750 |
| Commercial and industrial | 7,585 | — | 7,585 | 7,379 | — | 7,379 |
| Commercial overdrafts | 74 | — | 74 | 2 | — | 2 |
| **Total commercial loans** | 11,409 | — | 11,409 | 11,131 | — | 11,131 |
| **Commercial real estate loans** | | | | | | |
| Commercial mortgage | 2,792 | — | 2,792 | 4,062 | — | 4,062 |
| **Consumer loans** | | | | | | |
| Automobile financing | 194 | — | 194 | 162 | — | 162 |
| Credit card | — | 350 | 350 | — | 126 | 126 |
| Overdrafts | 24 | — | 24 | 4 | — | 4 |
| Other consumer | 1,106 | 131 | 1,237 | 846 | — | 846 |
| **Total consumer loans** | 1,324 | 481 | 1,805 | 1,012 | 126 | 1,138 |
| **Residential mortgage loans** | 36,340 | 12,514 | 48,854 | 32,486 | 6,332 | 38,818 |
| **Total non-performing loans** | 51,865 | 12,995 | 64,860 | 48,691 | 6,458 | 55,149 |

**Impaired Loans (excluding purchased credit-impaired loans)**

A loan is considered to be impaired when, based on current information and events, the Bank determines that it will not be able to collect all amounts due according to the original loan contract, including scheduled interest payments. Impaired loans include all non-accrual loans and all loans modified in a troubled debt restructuring ("TDR") even if full collectability is expected following the restructuring. During the nine months ended September 30, 2019, the amount of gross interest income that would have been recorded had impaired loans been current was $2.6 million (September 30, 2018: $2.0 million).

| | Impaired loans with an allowance | | | | Total impaired loans | | |
|---|---|---|---|---|---|---|---|
| September 30, 2019 | Gross recorded loans | Specific allowance | Net loans | Gross recorded impaired loans without an allowance | Gross recorded loans | Specific allowance | Net loans |
| **Commercial loans** | | | | | | | |
| Government | 3,750 | (1,687) | 2,063 | — | 3,750 | (1,687) | 2,063 |
| Commercial and industrial | 7,492 | (4,207) | 3,285 | 1,036 | 8,528 | (4,207) | 4,321 |
| Commercial overdrafts | — | — | — | 74 | 74 | — | 74 |
| **Total commercial loans** | 11,242 | (5,894) | 5,348 | 1,110 | 12,352 | (5,894) | 6,458 |
| **Commercial real estate loans** | | | | | | | |
| Commercial mortgage | 1,029 | (515) | 514 | 4,710 | 5,739 | (515) | 5,224 |
| **Consumer loans** | | | | | | | |
| Automobile financing | — | — | — | 194 | 194 | — | 194 |
| Overdrafts | — | — | — | 24 | 24 | — | 24 |
| Other consumer | 683 | (683) | — | 423 | 1,106 | (683) | 423 |
| **Total consumer loans** | 683 | (683) | — | 641 | 1,324 | (683) | 641 |
| **Residential mortgage loans** | 53,014 | (10,643) | 42,371 | 49,581 | 102,595 | (10,643) | 91,952 |
| **Total impaired loans** | 65,968 | (17,735) | 48,233 | 56,042 | 122,010 | (17,735) | 104,275 |

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

| | Impaired loans with an allowance | | | | Total impaired loans | | |
|---|---|---|---|---|---|---|---|
| December 31, 2018 | Gross recorded loans | Specific allowance | Net loans | Gross recorded impaired loans without an allowance | Gross recorded loans | Specific allowance | Net loans |
| **Commercial loans** | | | | | | | |
| Government | 3,750 | (1,687) | 2,063 | — | 3,750 | (1,687) | 2,063 |
| Commercial and industrial | 7,379 | (2,766) | 4,613 | 965 | 8,344 | (2,766) | 5,578 |
| Commercial overdrafts | — | — | — | 2 | 2 | — | 2 |
| **Total commercial loans** | 11,129 | (4,453) | 6,676 | 967 | 12,096 | (4,453) | 7,643 |
| **Commercial real estate loans** | | | | | | | |
| Commercial mortgage | 1,081 | (600) | 481 | 6,108 | 7,189 | (600) | 6,589 |
| **Consumer loans** | | | | | | | |
| Automobile financing | 130 | (75) | 55 | 32 | 162 | (75) | 87 |
| Overdrafts | — | — | — | 4 | 4 | — | 4 |
| Other consumer | 199 | (199) | — | 647 | 846 | (199) | 647 |
| **Total consumer loans** | 329 | (274) | 55 | 683 | 1,012 | (274) | 738 |
| **Residential mortgage loans** | 49,431 | (9,422) | 40,009 | 49,571 | 99,002 | (9,422) | 89,580 |
| **Total impaired loans** | 61,970 | (14,749) | 47,221 | 57,329 | 119,299 | (14,749) | 104,550 |

Specific allowance excludes $0.2 million recognized relating to purchased credit-impaired loans.

### Average Impaired Loan Balances and Related Recognized Interest Income

| | September 30, 2019 | | December 31, 2018 | |
|---|---|---|---|---|
| | Average gross recorded loans | Interest income recognized[1] | Average gross recorded loans | Interest income recognized[1] |
| **Commercial loans** | | | | |
| Government | 3,750 | — | 3,750 | — |
| Commercial and industrial | 8,436 | 53 | 8,415 | 68 |
| Commercial overdrafts | 38 | — | 2 | — |
| **Total commercial loans** | 12,224 | 53 | 12,167 | 68 |
| **Commercial real estate loans** | | | | |
| Commercial mortgage | 6,464 | 197 | 7,539 | 287 |
| **Consumer loans** | | | | |
| Automobile financing | 178 | — | 194 | — |
| Overdrafts | 14 | — | 4 | — |
| Other consumer | 976 | — | 665 | — |
| **Total consumer loans** | 1,168 | — | 863 | — |
| **Residential mortgage loans** | 100,799 | 3,489 | 97,378 | 4,568 |
| **Total impaired loans** | 120,655 | 3,739 | 117,947 | 4,923 |

[1] All interest income recognized on impaired loans relate to loans previously modified in a TDR.

### Loans Modified in a TDR

As at September 30, 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). As at December 31, 2018, the Bank had two loans which were formerly residential mortgages that were modified in a TDR during the preceding 12 months that subsequently defaulted with a combined recorded carrying value of $0.8 million.

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

**TDRs entered into during the period**

| | Nine months ended September 30, 2019 | | | |
|---|---|---|---|---|
| | Number of contracts | Pre-modification recorded loans | Modification: interest capitalization | Post-modification recorded loans |
| Residential mortgage loans | 3 | 1,381 | 101 | 1,482 |
| **Total loans modified in a TDR** | 3 | 1,381 | 101 | 1,482 |

| | Nine months ended September 30, 2018 | | | |
|---|---|---|---|---|
| | Number of contracts | Pre-modification recorded loans | Modification: interest capitalization | Post-modification recorded loans |
| Residential mortgage loans | 16 | 7,106 | 750 | 7,856 |
| **Total loans modified in a TDR** | 16 | 7,106 | 750 | 7,856 |

| | September 30, 2019 | | December 31, 2018 | |
|---|---|---|---|---|
| **TDRs outstanding** | Accrual | Non-accrual | Accrual | Non-accrual |
| Commercial loans | 943 | — | 965 | — |
| Commercial real estate loans | 2,947 | 1,325 | 3,127 | 1,336 |
| Residential mortgage loans | 66,255 | 9,217 | 66,516 | 8,154 |
| **Total TDRs outstanding** | 70,145 | 10,542 | 70,608 | 9,490 |

### Purchased Credit-Impaired Loans

The Bank acquired certain credit-impaired loans as part of the November 7, 2014 acquisition of substantially all retail loans of HSBC Bank (Cayman) Limited. The accretable difference (or "accretable yield") represents the excess of a loan's cash flows expected to be collected over the loan's carrying amount.

| | Nine months ended September 30, 2019 | | | |
|---|---|---|---|---|
| | Contractual principal | Non-accretable difference | Accretable difference | Carrying amount |
| Balance at beginning of period | 4,531 | (901) | (661) | 2,969 |
| Advances and increases in cash flows expected to be collected | 40 | (10) | 10 | 40 |
| Reductions resulting from repayments | (1,548) | 247 | 170 | (1,131) |
| Increase (reduction) resulting from changes in allowances for credit losses | — | 166 | — | 166 |
| Reductions resulting from charge-offs | (495) | 262 | — | (233) |
| **Balance at end of period** | 2,528 | (236) | (481) | 1,811 |

| | Year ended December 31, 2018 | | | |
|---|---|---|---|---|
| | Contractual principal | Non-accretable difference | Accretable difference | Carrying amount |
| Balance at beginning of period | 6,001 | (1,239) | (711) | 4,051 |
| Advances and increases in cash flows expected to be collected | 25 | 42 | (42) | 25 |
| Reductions resulting from repayments | (1,495) | 191 | 92 | (1,212) |
| Increase (reduction) resulting from changes in allowances for credit losses | — | 105 | — | 105 |
| **Balance at end of period** | 4,531 | (901) | (661) | 2,969 |

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

## 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 on-balance sheet exposure amounts disclosed are net of specific allowances and the off-balance sheet exposure amounts disclosed are gross of collateral held.

| | **September 30, 2019** | | | December 31, 2018 | | |
|---|---|---|---|---|---|---|
| **Business sector** | **Loans** | **Off-balance sheet** | **Total credit exposure** | Loans | Off-balance sheet | Total credit exposure |
| Banks and financial services | **659,582** | **403,694** | **1,063,276** | 611,404 | 415,124 | 1,026,528 |
| Commercial and merchandising | **613,855** | **229,200** | **843,055** | 316,349 | 182,440 | 498,789 |
| Governments | **157,877** | **59,164** | **217,041** | 104,857 | — | 104,857 |
| Individuals | **2,368,197** | **138,762** | **2,506,959** | 2,339,854 | 89,931 | 2,429,785 |
| Primary industry and manufacturing | **340,621** | **76,073** | **416,694** | 120,088 | 1,003 | 121,091 |
| Real estate | **359,241** | **3,972** | **363,213** | 395,086 | 1,547 | 396,633 |
| Hospitality industry | **170,710** | **432** | **171,142** | 160,680 | 3,497 | 164,177 |
| Transport and communication | **9,394** | **75** | **9,469** | 5,758 | 75 | 5,833 |
| Sub-total | **4,679,477** | **911,372** | **5,590,849** | 4,054,076 | 693,617 | 4,747,693 |
| General allowance | **(6,171)** | **—** | **(6,171)** | (10,187) | — | (10,187) |
| **Total** | **4,673,306** | **911,372** | **5,584,678** | 4,043,889 | 693,617 | 4,737,506 |

| | **September 30, 2019** | | | | December 31, 2018 | | | |
|---|---|---|---|---|---|---|---|---|
| **Geographic region** | **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 | **170,191** | **—** | **—** | **170,191** | 145,675 | — | — | 145,675 |
| Barbados | **784** | **2,063** | **—** | **2,847** | — | 2,063 | — | 2,063 |
| Belgium | **2,373** | **—** | **—** | **2,373** | 3,007 | — | — | 3,007 |
| Bermuda | **25,125** | **2,144,941** | **361,124** | **2,531,190** | 36,827 | 2,133,859 | 333,845 | 2,504,531 |
| Canada | **618,104** | **—** | **—** | **618,104** | 759,437 | — | — | 759,437 |
| Cayman | **21,714** | **729,920** | **235,776** | **987,410** | 18,138 | 730,418 | 222,189 | 970,745 |
| Guernsey | **4** | **915,453** | **142,024** | **1,057,481** | 6 | 290,578 | 22,619 | 313,203 |
| Japan | **12,931** | **—** | **—** | **12,931** | 14,271 | — | — | 14,271 |
| Jersey | **—** | **1,665** | **9,806** | **11,471** | — | 9,083 | 449 | 9,532 |
| Netherlands | **508,846** | **—** | **—** | **508,846** | — | — | — | — |
| New Zealand | **942** | **—** | **—** | **942** | 1,082 | — | — | 1,082 |
| Norway | **1,113** | **—** | **—** | **1,113** | 8,750 | — | — | 8,750 |
| Saint Lucia | **—** | **29,475** | **—** | **29,475** | — | 90,000 | — | 90,000 |
| Switzerland | **8,882** | **—** | **—** | **8,882** | 6,637 | — | — | 6,637 |
| The Bahamas | **1,600** | **13,332** | **—** | **14,932** | 1,534 | 14,367 | — | 15,901 |
| United Kingdom | **1,840,486** | **842,628** | **162,642** | **2,845,756** | 725,634 | 783,708 | 114,515 | 1,623,857 |
| United States | **1,245,276** | **—** | **—** | **1,245,276** | 411,248 | — | — | 411,248 |
| Other | **1,946** | **—** | **—** | **1,946** | 1,314 | — | — | 1,314 |
| Sub-total | **4,460,317** | **4,679,477** | **911,372** | **10,051,166** | 2,133,560 | 4,054,076 | 693,617 | 6,881,253 |
| General allowance | **—** | **(6,171)** | **—** | **(6,171)** | — | (10,187) | — | (10,187) |
| **Total** | **4,460,317** | **4,673,306** | **911,372** | **10,044,995** | 2,133,560 | 4,043,889 | 693,617 | 6,871,066 |

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

## Note 8: Customer deposits and deposits from banks

### By Maturity

| | Demand | | | Term | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| September 30, 2019 | Non-interest bearing | Interest bearing | Total demand deposits | Within 3 months | 3 to 6 months | 6 to 12 months | After 12 months | Total term deposits | Total deposits |
| **Customers** | | | | | | | | | |
| **Bermuda** | | | | | | | | | |
| Demand or less than $100k[1] | 1,375,352 | 1,793,452 | 3,168,804 | 10,244 | 6,916 | 6,839 | 15,309 | 39,308 | 3,208,112 |
| Term - $100k or more | N/A | N/A | — | 603,553 | 111,015 | 157,596 | 81,162 | 953,326 | 953,326 |
| **Total Bermuda** | 1,375,352 | 1,793,452 | 3,168,804 | 613,797 | 117,931 | 164,435 | 96,471 | 992,634 | 4,161,438 |
| **Non-Bermuda** | | | | | | | | | |
| Demand or less than $100k[1] | 679,549 | 5,756,416 | 6,435,965 | 20,835 | 4,713 | 6,410 | 804 | 32,762 | 6,468,727 |
| Term and $100k or more | N/A | N/A | — | 1,451,209 | 162,988 | 377,249 | 5,924 | 1,997,370 | 1,997,370 |
| **Total non-Bermuda** | 679,549 | 5,756,416 | 6,435,965 | 1,472,044 | 167,701 | 383,659 | 6,728 | 2,030,132 | 8,466,097 |
| **Total customer deposits** | 2,054,901 | 7,549,868 | 9,604,769 | 2,085,841 | 285,632 | 548,094 | 103,199 | 3,022,766 | 12,627,535 |
| **Banks** | | | | | | | | | |
| **Bermuda** | | | | | | | | | |
| Demand or less than $100k | 6,201 | — | 6,201 | — | — | — | — | — | 6,201 |
| **Non-Bermuda** | | | | | | | | | |
| Demand or less than $100k | — | 24,891 | 24,891 | — | — | — | — | — | 24,891 |
| Term and $100k or more | N/A | N/A | — | 3,815 | — | 103 | — | 3,918 | 3,918 |
| **Total non-Bermuda** | — | 24,891 | 24,891 | 3,815 | — | 103 | — | 3,918 | 28,809 |
| **Total bank deposits** | 6,201 | 24,891 | 31,092 | 3,815 | — | 103 | — | 3,918 | 35,010 |
| **Total deposits** | 2,061,102 | 7,574,759 | 9,635,861 | 2,089,656 | 285,632 | 548,197 | 103,199 | 3,026,684 | 12,662,545 |

| | Demand | | | Term | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| December 31, 2018 | Non-interest bearing | Interest bearing | Total demand deposits | Within 3 months | 3 to 6 months | 6 to 12 months | After 12 months | Total term deposits | Total deposits |
| **Customers** | | | | | | | | | |
| **Bermuda** | | | | | | | | | |
| Demand or less than $100k[1] | 1,378,539 | 2,158,971 | 3,537,510 | 12,387 | 4,306 | 8,049 | 14,644 | 39,386 | 3,576,896 |
| Term - $100k or more | N/A | N/A | — | 598,528 | 92,427 | 184,337 | 43,414 | 918,706 | 918,706 |
| **Total Bermuda** | 1,378,539 | 2,158,971 | 3,537,510 | 610,915 | 96,733 | 192,386 | 58,058 | 958,092 | 4,495,602 |
| **Non-Bermuda** | | | | | | | | | |
| Demand or less than $100k[1] | 732,957 | 3,179,376 | 3,912,333 | 18,714 | 5,386 | 4,705 | 507 | 29,312 | 3,941,645 |
| Term and $100k or more | N/A | N/A | — | 608,390 | 126,022 | 235,278 | 11,482 | 981,172 | 981,172 |
| **Total non-Bermuda** | 732,957 | 3,179,376 | 3,912,333 | 627,104 | 131,408 | 239,983 | 11,989 | 1,010,484 | 4,922,817 |
| **Total customer deposits** | 2,111,496 | 5,338,347 | 7,449,843 | 1,238,019 | 228,141 | 432,369 | 70,047 | 1,968,576 | 9,418,419 |
| **Banks** | | | | | | | | | |
| **Bermuda** | | | | | | | | | |
| Demand or less than $100k | 8,100 | — | 8,100 | — | — | — | — | — | 8,100 |
| **Non-Bermuda** | | | | | | | | | |
| Demand or less than $100k | — | 18,965 | 18,965 | — | — | — | — | — | 18,965 |
| Term and $100k or more | N/A | N/A | — | 6,656 | — | 101 | — | 6,757 | 6,757 |
| **Total non-Bermuda** | — | 18,965 | 18,965 | 6,656 | — | 101 | — | 6,757 | 25,722 |
| **Total bank deposits** | 8,100 | 18,965 | 27,065 | 6,656 | — | 101 | — | 6,757 | 33,822 |
| **Total deposits** | 2,119,596 | 5,357,312 | 7,476,908 | 1,244,675 | 228,141 | 432,470 | 70,047 | 1,975,333 | 9,452,241 |

[1] The weighted-average interest rate on interest-bearing demand deposits as at September 30, 2019 is 0.20% (December 31, 2018: 0.13%).

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

| By Type and Segment | September 30, 2019 | | | December 31, 2018 | | |
|---|---|---|---|---|---|---|
| | Payable on demand | Payable on a fixed date | Total | Payable on demand | Payable on a fixed date | Total |
| **Bermuda** | | | | | | |
| Customers | 3,168,803 | 992,635 | 4,161,438 | 3,537,510 | 958,092 | 4,495,602 |
| Banks | 6,200 | — | 6,200 | 8,100 | — | 8,100 |
| **Cayman** | | | | | | |
| Customers | 2,792,033 | 541,283 | 3,333,316 | 2,847,793 | 472,442 | 3,320,235 |
| Banks | 20,665 | 3,918 | 24,583 | 17,564 | 6,757 | 24,321 |
| **Channel Islands and the UK** | | | | | | |
| Customers | 3,643,933 | 1,488,848 | 5,132,781 | 1,064,540 | 538,042 | 1,602,582 |
| Banks | 4,227 | — | 4,227 | 1,401 | — | 1,401 |
| Total Customers | 9,604,769 | 3,022,766 | 12,627,535 | 7,449,843 | 1,968,576 | 9,418,419 |
| Total Banks | 31,092 | 3,918 | 35,010 | 27,065 | 6,757 | 33,822 |
| **Total deposits** | 9,635,861 | 3,026,684 | 12,662,545 | 7,476,908 | 1,975,333 | 9,452,241 |

## Note 9: Employee benefit plans

The Bank maintains trusteed 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 2019 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, 2018. During the nine months ended September 30, 2019, there have been no material revisions to these estimates.

| | Line item in the consolidated statements of operations | Three months ended September 30, 2019 | Three months ended September 30, 2018 | Nine months ended September 30, 2019 | Nine months ended September 30, 2018 |
|---|---|---|---|---|---|
| **Defined benefit pension expense (income)** | | | | | |
| Interest cost | Non-service employee benefits expense | 1,236 | 1,232 | 3,766 | 3,750 |
| Expected return on plan assets | Non-service employee benefits expense | (1,857) | (2,163) | (5,657) | (6,574) |
| Amortization of net actuarial (gains) losses | Non-service employee benefits expense | 608 | 524 | 1,834 | 1,575 |
| Amortization of prior service (credit) cost | Non-service employee benefits expense | 5 | — | 15 | — |
| Settlement (gain) loss | Net other gains (losses) | — | — | — | 1,548 |
| **Total defined benefit pension expense (income)** | | (8) | (407) | (42) | 299 |
| **Post-retirement medical benefit expense (income)** | | | | | |
| Service cost | Salaries and other employee benefits | 15 | 16 | 44 | 47 |
| Interest cost | Non-service employee benefits expense | 1,185 | 1,076 | 3,555 | 3,229 |
| Amortization of net actuarial (gains) losses | Non-service employee benefits expense | 68 | 654 | 204 | 1,961 |
| Amortization of prior service (credit) cost | Non-service employee benefits expense | 94 | 9 | 282 | 29 |
| **Total post-retirement medical benefit expense (income)** | | 1,362 | 1,755 | 4,085 | 5,266 |

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 possible loan losses.

The Bank has a facility by 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 September 30, 2019, $134.1 million (December 31, 2018: $137.4 million) of standby letters of credit were issued under this facility.

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

| Outstanding unfunded commitments to extend credit | September 30, 2019 | December 31, 2018 |
|---|---|---|
| Commitments to extend credit | 673,790 | 445,215 |
| Documentary and commercial letters of credit | 800 | 561 |
| **Total unfunded commitments to extend credit** | **674,590** | **445,776** |

**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.

| | September 30, 2019 | | | December 31, 2018 | | |
|---|---|---|---|---|---|---|
| **Outstanding financial guarantees** | Gross | Collateral | Net | Gross | Collateral | Net |
| Standby letters of credit | 222,797 | 215,519 | 7,278 | 245,156 | 237,051 | 8,105 |
| Letters of guarantee | 13,985 | 13,767 | 218 | 2,685 | 2,599 | 86 |
| **Total** | **236,782** | **229,286** | **7,496** | **247,841** | **239,650** | **8,191** |

**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 collaterals involved are appropriate and by monitoring the value of the securities posted or received as collateral on a daily basis.

As at September 30, 2019, the Bank had 3 open positions (December 31, 2018: 2) 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 $61.9 million (December 31, 2018: $27.3 million) and are included in securities purchased under agreement to resell on the consolidated balance sheets. As at September 30, 2019, there were no positions (December 31, 2018: 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 of September 30, 2019, a provision of $5.5 million (December 31, 2018: $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.

## 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.

| | Three months ended September 30, 2019 | Nine months ended September 30, 2019 |
|---|---|---|
| **Lease costs** | | |
| Operating lease costs | 1,873 | 4,453 |
| Variable lease costs | — | — |
| Short-term lease costs | 236 | 648 |
| Sublease (income) | (231) | (239) |
| **Total net lease cost** | **1,878** | **4,862** |
| **Operating lease income** | **285** | **873** |

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

| | Three months ended September 30, 2019 | Nine months ended September 30, 2019 |
|---|---|---|
| **Other information for the period** | | |
| Right-of-use assets related to new operating lease liabilities | 26,093 | 29,486 |
| Operating cash flows from operating leases | 1,925 | 4,612 |

| **Other information at end of period** | As at September 30, 2019 |
|---|---|
| Operating leases right-of-use assets (included in other assets on the balance sheets) | 47,010 |
| Operating leases liabilities (included in other liabilities on the balance sheets) | 47,109 |
| Weighted average remaining lease term for operating leases (in years) | 10.64 years |
| Weighted average discount rate for operating leases | 5.25% |

The following table summarizes the Bank's commitments for long-term leases as at December 31, 2018:

| **Year ending December 31** | Leases |
|---|---|
| 2019 | 5,448 |
| 2020 | 5,524 |
| 2021 | 4,696 |
| 2022 | 4,317 |
| 2023 | 3,609 |
| 2024 & thereafter | 3,583 |
| **Total commitments** | 27,177 |

## Note 12: Segmented information

The Bank is managed by the CEO on a geographic basis. In 2017, the Bank presented six segments which included Bermuda, Cayman, Guernsey, Switzerland, The Bahamas and the United Kingdom. In 2018, the Bank reassessed the segment reporting as a result of acquisitions which were announced in 2017 and early 2018 and concluded on the following three geographic segments: Bermuda, Cayman, and Channel Islands and the UK. The Other segment is composed of several non-reportable operating segments that have been aggregated in accordance with US GAAP. Each region has a managing director who reports to the CEO. The CEO and the region 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 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, 2018. 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 four 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, 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 institutions 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.

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

| Total Assets by Segment | September 30, 2019 | December 31, 2018 |
|---|---|---|
| Bermuda | 5,249,687 | 5,387,347 |
| Cayman | 4,009,620 | 3,705,468 |
| Channel Islands and the UK | 5,651,620 | 1,966,547 |
| Other | 33,632 | 30,035 |
| **Total assets before inter-segment eliminations** | 14,944,559 | 11,089,397 |
| Less: inter-segment eliminations | (728,264) | (316,219) |
| **Total** | 14,216,295 | 10,773,178 |

| Three months ended September 30, 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 | 45,279 | 177 | (591) | 22,391 | 67,256 | (47) | 67,209 | 51,186 | 16,023 |
| Cayman | 27,660 | 280 | 228 | 12,548 | 40,716 | 570 | 41,286 | 15,230 | 26,056 |
| Channel Islands and the UK | 13,376 | (457) | (48) | 9,495 | 22,366 | — | 22,366 | 21,691 | 675 |
| Other | 13 | — | — | 5,439 | 5,452 | — | 5,452 | 5,769 | (317) |
| **Total before eliminations** | 86,328 | — | (411) | 49,873 | 135,790 | 523 | 136,313 | 93,876 | 42,437 |
| Inter-segment eliminations | — | — | — | (3,227) | (3,227) | — | (3,227) | (3,227) | — |
| **Total** | 86,328 | — | (411) | 46,646 | 132,563 | 523 | 133,086 | 90,649 | 42,437 |

| Three months ended September 30, 2018 | 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 | 52,861 | 631 | 2,928 | 21,220 | 77,640 | 629 | 78,269 | 51,052 | 27,217 |
| Cayman | 25,705 | 133 | 188 | 11,635 | 37,661 | — | 37,661 | 15,576 | 22,085 |
| Channel Islands and the UK | 9,707 | (764) | (305) | 6,667 | 15,305 | 25 | 15,330 | 13,061 | 2,269 |
| Other | 3 | — | — | 3,647 | 3,650 | — | 3,650 | 4,852 | (1,202) |
| **Total before eliminations** | 88,276 | — | 2,811 | 43,169 | 134,256 | 654 | 134,910 | 84,541 | 50,369 |
| Inter-segment eliminations | — | — | — | (1,896) | (1,896) | — | (1,896) | (1,896) | — |
| **Total** | 88,276 | — | 2,811 | 41,273 | 132,360 | 654 | 133,014 | 82,645 | 50,369 |

| Nine months ended September 30, 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 | 138,595 | 1,156 | (1,328) | 66,424 | 204,847 | 1,909 | 206,756 | 157,372 | 49,384 |
| Cayman | 87,040 | 609 | 521 | 38,231 | 126,401 | 575 | 126,976 | 45,043 | 81,933 |
| Channel Islands and the UK | 33,787 | (1,765) | 1,359 | 23,177 | 56,558 | — | 56,558 | 53,136 | 3,422 |
| Other | 40 | — | — | 15,927 | 15,967 | (17) | 15,950 | 17,503 | (1,553) |
| **Total before eliminations** | 259,462 | — | 552 | 143,759 | 403,773 | 2,467 | 406,240 | 273,054 | 133,186 |
| Inter-segment eliminations | — | — | — | (9,494) | (9,494) | — | (9,494) | (9,494) | — |
| **Total** | 259,462 | — | 552 | 134,265 | 394,279 | 2,467 | 396,746 | 263,560 | 133,186 |

| Nine months ended September 30, 2018 | 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 | 153,585 | 1,877 | 5,736 | 64,264 | 225,462 | 744 | 226,206 | 150,547 | 75,659 |
| Cayman | 74,642 | 134 | (347) | 34,814 | 109,243 | 349 | 109,592 | 45,472 | 64,120 |
| Channel Islands and the UK | 27,326 | (2,011) | (112) | 20,160 | 45,363 | (1,663) | 43,700 | 36,817 | 6,883 |
| Other | 14 | — | — | 10,285 | 10,299 | — | 10,299 | 12,683 | (2,384) |
| **Total before eliminations** | 255,567 | — | 5,277 | 129,523 | 390,367 | (570) | 389,797 | 245,519 | 144,278 |
| Inter-segment eliminations | — | — | — | (6,550) | (6,550) | — | (6,550) | (6,550) | — |
| **Total** | 255,567 | — | 5,277 | 122,973 | 383,817 | (570) | 383,247 | 238,969 | 144,278 |

## 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.

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

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.

| **September 30, 2019** | **Derivative instrument** | **Number of contracts** | **Notional amounts** | **Gross positive fair value** | **Gross negative fair value** | **Net fair value** |
|---|---|---|---|---|---|---|
| **Risk management derivatives** | | | | | | |
| Net investment hedges | Currency swaps | 3 | 62,002 | 335 | (1) | 334 |
| Derivatives not formally designated as hedging instruments | Currency swaps | 9 | 224,007 | 208 | (752) | (544) |
| Subtotal risk management derivatives | | | 286,009 | 543 | (753) | (210) |
| **Client services derivatives** | Spot and forward foreign exchange | 455 | 2,771,885 | 17,172 | (16,479) | 693 |
| **Total derivative instruments** | | | 3,057,894 | 17,715 | (17,232) | 483 |

| December 31, 2018 | Derivative instrument | Number of contracts | Notional amounts | Gross positive fair value | Gross negative fair value | Net fair value |
|---|---|---|---|---|---|---|
| **Risk management derivatives** | | | | | | |
| Net investment hedges | Currency swaps | 1 | 2,935 | — | (32) | (32) |
| Derivatives not formally designated as hedging instruments | Currency swaps | 8 | 235,875 | 269 | (569) | (300) |
| Subtotal risk management derivatives | | | 238,810 | 269 | (601) | (332) |
| **Client services derivatives** | Spot and forward foreign exchange | 288 | 2,064,762 | 13,331 | (12,671) | 660 |
| **Total derivative instruments** | | | 2,303,572 | 13,600 | (13,272) | 328 |

In addition to the above, as at September 30, 2019 foreign denominated deposits of £231.8 million (December 31, 2018: £124.5 million) and CHF 0.4 million (December 31, 2018: 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.

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

The Bank also elected not to offset certain derivative assets or liabilities and all collaterals 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.

| | | | | Less: positions not offset in the consolidated balance sheets | | |
|---|---|---|---|---|---|---|
| **September 30, 2019** | **Gross fair value recognized** | **Less: offset applied under master netting agreements** | **Net fair value presented in the consolidated balance sheets** | **Gross fair value of derivatives** | **Cash collateral received / paid** | **Net exposures** |
| **Derivative assets** | | | | | | |
| Spot and forward foreign exchange and currency swaps | **17,715** | **(1,888)** | **15,827** | **(50)** | **(5,519)** | **10,258** |
| **Derivative liabilities** | | | | | | |
| Spot and forward foreign exchange and currency swaps | **17,232** | **(1,888)** | **15,344** | **(50)** | **(272)** | **15,022** |
| **Net positive fair value** | | | **483** | | | |

| | | | | Less: positions not offset in the consolidated balance sheets | | |
|---|---|---|---|---|---|---|
| December 31, 2018 | Gross fair value recognized | Less: offset applied under master netting agreements | Net fair value presented in the consolidated balance sheets | Gross fair value of derivatives | Cash collateral received / paid | Net exposures |
| **Derivative assets** | | | | | | |
| Spot and forward foreign exchange and currency swaps | 13,600 | (2,036) | 11,564 | — | (3,216) | 8,348 |
| **Derivative liabilities** | | | | | | |
| Spot and forward foreign exchange and currency swaps | 13,272 | (2,036) | 11,236 | — | (1,861) | 9,375 |
| **Net positive fair value** | | | 328 | | | |

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.

| | | Three months ended | | Nine months ended | |
|---|---|---|---|---|---|
| **Derivative instrument** | **Consolidated statements of operations line item** | **September 30, 2019** | September 30, 2018 | **September 30, 2019** | September 30, 2018 |
| Spot and forward foreign exchange | Foreign exchange revenue | **321** | (33) | **33** | (458) |
| Currency swaps, not designated as hedge | Foreign exchange revenue | **(900)** | (15,098) | **(244)** | 2,099 |
| Total net gains (losses) recognized in net income | | **(579)** | (15,131) | **(211)** | 1,641 |

| **Derivative instrument** | **Consolidated statements of comprehensive income line item** | **September 30, 2019** | September 30, 2018 | **September 30, 2019** | September 30, 2018 |
|---|---|---|---|---|---|
| Currency swaps - net investment hedge | Net change in unrealized gains and (losses) on translation of net investment in foreign operations | **339** | — | **366** | — |
| Total net gains (losses) recognized in comprehensive income | | **339** | — | **366** | — |

## 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, 2018.

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 corporate bonds, 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 nine months ended September 30, 2019 and the year ended December 31, 2018.

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

| | September 30, 2019 | | | | December 31, 2018 | | | |
|---|---|---|---|---|---|---|---|---|
| | Fair value | | | Total carrying amount / fair value | Fair value | | | Total carrying amount / fair value |
| | Level 1 | Level 2 | Level 3 | | Level 1 | Level 2 | Level 3 | |
| **Items that are recognized at fair value on a recurring basis:** | | | | | | | | |
| **Financial assets** | | | | | | | | |
| **Trading investments** | | | | | | | | |
| Mutual funds | 6,914 | 292 | — | 7,206 | 6,176 | 319 | — | 6,495 |
| **Total trading** | 6,914 | 292 | — | 7,206 | 6,176 | 319 | — | 6,495 |
| **Available-for-sale investments** | | | | | | | | |
| US government and federal agencies | — | 2,177,410 | — | 2,177,410 | — | 1,786,507 | — | 1,786,507 |
| Non-US governments debt securities | — | 25,276 | — | 25,276 | — | 25,425 | — | 25,425 |
| Corporate debt securities | — | — | — | — | — | 78,713 | — | 78,713 |
| Asset-backed securities - Student loans | — | — | 12,825 | 12,825 | — | — | 12,626 | 12,626 |
| Commercial mortgage-backed securities | — | — | — | — | — | 123,209 | — | 123,209 |
| Residential mortgage-backed securities | — | 140,814 | — | 140,814 | — | 156,269 | — | 156,269 |
| **Total available-for-sale** | — | 2,343,500 | 12,825 | 2,356,325 | — | 2,170,123 | 12,626 | 2,182,749 |
| Other assets - Derivatives | — | 15,827 | — | 15,827 | — | 11,564 | — | 11,564 |
| **Financial liabilities** | | | | | | | | |
| Other liabilities - Derivatives | — | 15,344 | — | 15,344 | — | 11,236 | — | 11,236 |

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

### Level 3 Reconciliation

The Level 3, 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.

| | Nine months ended September 30, 2019 | Year ended December 31, 2018 |
|---|---|---|
| | **Available-for-sale investments** | Available-for-sale investments |
| Carrying amount at beginning of period | **12,626** | 12,493 |
| Realized and unrealized gains (losses) recognized in other comprehensive income | **199** | 133 |
| **Carrying amount at end of period** | **12,825** | 12,626 |

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

| | | **September 30, 2019** | | | December 31, 2018 | | |
|---|---|---|---|---|---|---|---|
| | **Level** | **Carrying amount** | **Fair value** | **Appreciation / (depreciation)** | Carrying amount | Fair value | Appreciation / (depreciation) |
| **Financial assets** | | | | | | | |
| Cash due from banks | Level 1 | **3,605,048** | **3,605,048** | **—** | 2,053,883 | 2,053,883 | — |
| Securities purchased under agreement to resell | Level 2 | **61,921** | **61,921** | **—** | 27,341 | 27,341 | — |
| Short-term investments | Level 1 | **793,348** | **793,348** | **—** | 52,336 | 52,336 | — |
| Investments held-to-maturity | Level 2 | **2,298,820** | **2,355,098** | **56,278** | 2,066,120 | 2,036,214 | (29,906) |
| Loans, net of allowance for credit losses | Level 2 | **4,673,306** | **4,690,994** | **17,688** | 4,043,889 | 4,047,262 | 3,373 |
| Other real estate owned[1] | Level 2 | **3,908** | **3,908** | **—** | 5,346 | 5,346 | — |
| **Financial liabilities** | | | | | | | |
| Customer deposits | | | | | | | |
| Demand deposits | Level 2 | **9,604,769** | **9,604,769** | **—** | 7,449,843 | 7,449,843 | — |
| Term deposits | Level 2 | **3,022,766** | **3,026,433** | **(3,667)** | 1,968,576 | 1,970,004 | (1,428) |
| Deposits from banks | Level 2 | **35,010** | **35,010** | **—** | 33,822 | 33,822 | — |
| Long-term debt | Level 2 | **143,456** | **150,084** | **(6,628)** | 143,322 | 146,261 | (2,939) |

[1] The current carrying value of OREO is adjusted to fair value only when there is devaluation below carrying value.

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

## Note 15: Interest rate risk

The following tables set out the assets, liabilities and shareholders' equity and off-balance sheet instruments 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.

| September 30, 2019 | Earlier of contractual maturity or repricing date | | | | | | |
|---|---|---|---|---|---|---|---|
| **(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** |
| **Assets** | | | | | | | |
| Cash due from banks | 3,206 | — | — | — | — | 399 | 3,605 |
| Securities purchased under agreement to resell | 62 | — | — | — | — | — | 62 |
| Short-term investments | 335 | 451 | 5 | — | — | 2 | 793 |
| Investments | 436 | — | 28 | 152 | 4,039 | 7 | 4,662 |
| Loans | 3,784 | 40 | 75 | 275 | 470 | 29 | 4,673 |
| Other assets | — | — | — | — | — | 421 | 421 |
| **Total assets** | 7,823 | 491 | 108 | 427 | 4,509 | 858 | 14,216 |
| **Liabilities and shareholders' equity** | | | | | | | |
| Shareholders' equity | — | — | — | — | — | 965 | 965 |
| Demand deposits | 7,575 | — | — | — | — | 2,061 | 9,636 |
| Term deposits | 2,090 | 286 | 548 | 103 | — | — | 3,027 |
| Other liabilities | — | — | — | — | — | 445 | 445 |
| Long-term debt | 70 | — | — | 73 | — | — | 143 |
| **Total liabilities and shareholders' equity** | 9,735 | 286 | 548 | 176 | — | 3,471 | 14,216 |
| Interest rate sensitivity gap | (1,912) | 205 | (440) | 251 | 4,509 | (2,613) | — |
| Cumulative interest rate sensitivity gap | (1,912) | (1,707) | (2,147) | (1,896) | 2,613 | — | — |

| December 31, 2018 | Earlier of contractual maturity or repricing date | | | | | | |
|---|---|---|---|---|---|---|---|
| **(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 |
| **Assets** | | | | | | | |
| Cash due from banks | 1,930 | — | — | — | — | 124 | 2,054 |
| Securities purchased under agreement to resell | 27 | — | — | — | — | — | 27 |
| Short-term investments | 40 | 10 | — | — | — | 2 | 52 |
| Investments | 488 | 35 | 8 | 245 | 3,473 | 6 | 4,255 |
| Loans | 3,160 | 278 | 38 | 223 | 330 | 15 | 4,044 |
| Other assets | — | — | — | — | — | 341 | 341 |
| **Total assets** | 5,645 | 323 | 46 | 468 | 3,803 | 488 | 10,773 |
| **Liabilities and shareholders' equity** | | | | | | | |
| Shareholders' equity | — | — | — | — | — | 882 | 882 |
| Demand deposits | 5,357 | — | — | — | — | 2,120 | 7,477 |
| Term deposits | 1,245 | 228 | 432 | 70 | — | — | 1,975 |
| Other liabilities | — | — | — | — | — | 296 | 296 |
| Long-term debt | 70 | — | — | 73 | — | — | 143 |
| **Total liabilities and shareholders' equity** | 6,672 | 228 | 432 | 143 | — | 3,298 | 10,773 |
| Interest rate sensitivity gap | (1,027) | 95 | (386) | 325 | 3,803 | (2,810) | — |
| Cumulative interest rate sensitivity gap | (1,027) | (932) | (1,318) | (993) | 2,810 | — | — |

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

## Note 16: Long-term debt

On May 28, 2003, the Bank issued US $125 million of Subordinated Lower Tier II capital notes. The notes were issued at par and in two tranches, namely US $78 million in Series A notes due 2013 and US $47 million in Series B notes due 2018. The issuance was by way of private placement with US institutional investors. The notes are listed on the Bermuda Stock Exchange ("BSX") in the specialist debt securities category. Part of the proceeds of the issue were used to repay the entire amount of the US $75 million outstanding subordinated notes redeemed in July 2003. The notes issued under Series A paid a fixed coupon of 3.94% until May 27, 2008 when it was redeemed in whole by the Bank. The Series B notes paid a fixed coupon of 5.15% until May 27, 2013 when they became redeemable in whole at the Bank's option. The Series B notes were priced at a spread of 1.35% over the 10-year US Treasury yield. In May 2018, the Bank fully redeemed the 2003 issuance Series B for its nominal value of $47 million.

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 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 notes issued under Series A paid a fixed coupon of 4.81% until July 2, 2010 after which the coupon rate became floating and the principal became redeemable in whole at the Bank's option. The Series B notes paid a fixed coupon of 5.11% until July 2, 2015 when they also became redeemable in whole at the Bank's option. The Series A notes were priced at a spread of 1.00% over the five-year US Treasury yield and 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. During January 2014, the Bank fully redeemed the 2005 issuance Series A subordinated debt for its nominal value of $90 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 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 notes issued under Series A paid a fixed coupon of 7.59% until May 27, 2013 when they became redeemable in whole at the option of the Bank. In May 2013, the Bank exercised its option to redeem the Series A note outstanding at face value. 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 nine months ended September 30, 2019 and the year ended December 31, 2018.

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 September 30, 2019. The interest payments are calculated until contractual maturity using the current LIBOR rates.

| | | | | | | Interest payments until contractual maturity | | |
|---|---|---|---|---|---|---|---|---|
| **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** | **Within 1 year** | **1 to 5 years** | **After 5 years** |
| **Bermuda** | | | | | | | | |
| 2005 issuance - Series B | July 2, 2015 | July 2, 2020 | 5.11% | 3 months US$ LIBOR + 1.695% | 45,000 | 1,742 | — | — |
| 2008 issuance - Series B | May 27, 2018 | May 27, 2023 | 8.44% | 3 months US$ LIBOR + 4.929% | 25,000 | 1,790 | 4,905 | — |
| 2018 issuance | June 1, 2023 | June 1, 2028 | 5.25% | 3 months US$ LIBOR + 2.255% | 75,000 | 3,938 | 15,980 | 12,458 |
| **Total** | | | | | 145,000 | 7,470 | 20,885 | 12,458 |
| Unamortized debt issuance costs | | | | | (1,544) | | | |
| **Long-term debt less unamortized debt issuance costs** | | | | | 143,456 | | | |

## 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 year. Numbers of shares are expressed in thousands.

During the nine months ended September 30, 2019, options to purchase an average of 0.2 million (September 30, 2018: 0.4 million) common shares were outstanding. During the nine months ended September 30, 2019, the average number of outstanding awards of unvested common shares was 1.0 million (September 30, 2018: 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.

| | Three months ended | | Nine months ended | |
|---|---|---|---|---|
| | **September 30, 2019** | September 30, 2018 | **September 30, 2019** | September 30, 2018 |
| Net income | **42,437** | 50,369 | **133,186** | 144,278 |
| **Basic Earnings Per Share** | | | | |
| Weighted average number of common shares issued | **53,972** | 55,250 | **54,646** | 55,099 |
| Weighted average number of common shares held as treasury stock | **(869)** | — | **(1,330)** | — |
| **Weighted average number of common shares (in thousands)** | **53,103** | 55,250 | **53,316** | 55,099 |
| **Basic Earnings Per Share** | **0.80** | 0.91 | **2.50** | 2.62 |
| **Diluted Earnings Per Share** | | | | |
| Weighted average number of common shares | **53,103** | 55,250 | **53,316** | 55,099 |
| Net dilution impact related to options to purchase common shares | **117** | 193 | **123** | 249 |
| Net dilution impact related to awards of unvested common shares | **334** | 586 | **365** | 573 |
| **Weighted average number of diluted common shares (in thousands)** | **53,554** | 56,029 | **53,804** | 55,921 |
| **Diluted Earnings Per Share** | **0.79** | 0.90 | **2.48** | 2.58 |

## 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 respectively 5.0 million and 7.5 million shares.

### 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.

**Changes in Outstanding Stock Options**

| | Number of shares transferable upon exercise (thousands) | | | Weighted average exercise price ($) | | Weighted average remaining life (years) | | |
|---|---|---|---|---|---|---|---|---|
| **Nine months ended September 30, 2019** | **1997 Stock Option Plan** | **2010 Stock Option Plan** | **Total** | **1997 Stock Option Plan** | **2010 Stock Option Plan** | **1997 Stock Option Plan** | **2010 Stock Option Plan** | **Aggregate intrinsic value ($ thousands)** |
| Outstanding at beginning of period | **25** | **189** | **214** | **64.51** | **11.98** | | | |
| Exercised | **—** | **(5)** | **(5)** | **—** | **11.50** | | | **88** |
| Expiration at end of plan life | **(25)** | **—** | **(25)** | **64.51** | **—** | | | |
| **Outstanding at end of period** | **—** | **184** | **184** | **—** | **11.99** | **—** | **0.93** | **3,251** |
| **Vested and exercisable at end of period** | **—** | **184** | **184** | **—** | **11.99** | **—** | **0.93** | |

| | Number of shares transferable upon exercise (thousands) | | | Weighted average exercise price ($) | | Weighted average remaining life (years) | | |
|---|---|---|---|---|---|---|---|---|
| Nine months ended September 30, 2018 | 1997 Stock Option Plan | 2010 Stock Option Plan | Total | 1997 Stock Option Plan | 2010 Stock Option Plan | 1997 Stock Option Plan | 2010 Stock Option Plan | Aggregate intrinsic value ($ thousands) |
| Outstanding at beginning of period | 58 | 476 | 534 | 113.46 | 11.73 | | | |
| Exercised | — | (273) | (273) | — | 11.56 | | | 9,791 |
| Forfeitures and cancellations | (33) | — | (33) | 150.46 | — | | | |
| **Outstanding at end of period** | 25 | 203 | 228 | 64.51 | 11.94 | 0.45 | 1.89 | 8,093 |
| **Vested and exercisable at end of period** | 25 | 203 | 228 | 64.51 | 11.94 | 0.45 | 1.89 | |

**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 nine months ended September 30, 2019 was $35.96 (December 31, 2018: $39.25). The Bank expects to settle these awards by issuing new shares.

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

Under the Bank's EDIP Plan, shares were 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 - 2019**

The 2019 ELTIP was approved on January 14, 2019. Under the Bank's ELTIP plans for the years 2013 through 2019, 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)**

| | Nine months ended | | | |
|---|---|---|---|---|
| | **September 30, 2019** | | September 30, 2018 | |
| | **EDIP** | **ELTIP** | EDIP | ELTIP |
| Outstanding at beginning of period | **234** | **697** | 244 | 679 |
| Granted | **166** | **298** | 127 | 235 |
| Vested (fair value in 2019: $18.0 million, 2018: $16.0 million) | **(149)** | **(389)** | (130) | (219) |
| Resignations, retirements, redundancies | **(3)** | **(7)** | (2) | (24) |
| **Outstanding at end of period** | **248** | **599** | 239 | 671 |

(In thousands of US dollars, unless otherwise stated)

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

| | Nine months ended | | | | | |
|---|---|---|---|---|---|---|
| | September 30, 2019 | | | September 30, 2018 | | |
| | Stock option plans | EDIP and ELTIP | Total | Stock option plans | EDIP and ELTIP | Total |
| Cost recognized in net income | — | 13,906 | 13,906 | — | 8,558 | 8,558 |

### Unrecognized Share-based Compensation Cost

| | September 30, 2019 | | December 31, 2018 | |
|---|---|---|---|---|
| | 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 |
| **EDIP** | 5,798 | 1.84 | 4,442 | 1.73 |
| **ELTIP** | | | | |
| Time vesting shares | 255 | 0.59 | 1,746 | 1.03 |
| Performance vesting shares | 11,120 | 1.97 | 7,880 | 1.85 |
| **Total unrecognized expense** | 17,173 | | 14,068 | |

## 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.

In the nine months ended September 30, 2019, the Bank canceled 2,120,000 shares which were previously held as Treasury Shares resulting from these buybacks.

| | Nine months ended | Year ended December 31 | | | | |
|---|---|---|---|---|---|---|
| **Common share buy-backs** | September 30, 2019 | 2018 | 2017 | 2016 | 2015 | Total |
| Acquired number of shares (to the nearest 1) | 1,485,000 | 1,254,212 | — | 97,053 | 250,371 | 3,086,636 |
| Average cost per common share | 36.18 | 38.62 | — | 16.36 | 19.42 | 35.19 |
| **Total cost (in US dollars)** | 53,729,102 | 48,442,768 | — | 1,588,189 | 4,862,248 | 108,622,307 |

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

## Note 20: Accumulated other comprehensive loss

| Nine months ended September 30, 2019 | Unrealized (losses) on translation of net investment in foreign operations | HTM investments | Unrealized gains (losses) on AFS investments | Employee benefit plans: Pension | Employee benefit plans: Post-retirement healthcare | Employee benefit plans: Subtotal - employee benefits plans | Total AOCL |
|---|---|---|---|---|---|---|---|
| **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 | (1,608) | 38 | 57,597 | 2,341 | 486 | 2,827 | 58,854 |
| **Balance at end of period** | (21,474) | (758) | 13,967 | (62,551) | (18,857) | (81,408) | (89,673) |

| Nine months ended September 30, 2018 | Unrealized (losses) on translation of net investment in foreign operations | HTM investments | Unrealized gains (losses) on AFS investments | Employee benefit plans: Pension | Employee benefit plans: Post-retirement healthcare | Employee benefit plans: Subtotal - employee benefits plans | Total AOCL |
|---|---|---|---|---|---|---|---|
| **Balance at beginning of period** | (17,549) | (839) | (15,737) | (61,341) | (33,586) | (94,927) | (129,052) |
| Other comprehensive income (loss), net of taxes | (1,501) | 31 | (46,193) | 427 | 1,990 | 2,417 | (45,246) |
| **Balance at end of period** | (19,050) | (808) | (61,930) | (60,914) | (31,596) | (92,510) | (174,298) |

### Net Change of AOCL Components

| | Line item in the consolidated statements of operations, if any | Three months ended September 30, 2019 | Three months ended September 30, 2018 | Nine months ended September 30, 2019 | Nine months ended September 30, 2018 |
|---|---|---|---|---|---|
| **Net unrealized gains (losses) on translation of net investment in foreign operations adjustments** | | | | | |
| Foreign currency translation adjustments | N/A | (9,154) | (2,325) | (10,016) | (9,358) |
| Gains (loss) on net investment hedge | N/A | 7,809 | 1,846 | 8,408 | 7,857 |
| **Net change** | | (1,345) | (479) | (1,608) | (1,501) |
| **Held-to-maturity investment adjustments** | | | | | |
| Amortization of net gains (losses) to net income | Interest income on investments | 12 | 7 | 38 | 31 |
| **Net change** | | 12 | 7 | 38 | 31 |
| **Available-for-sale investment adjustments** | | | | | |
| Gross unrealized gains (losses) | N/A | 14,065 | (11,274) | 59,106 | (44,841) |
| Transfer of realized (gains) losses to net income | Net realized gains (losses) on AFS investments | (537) | (458) | (1,509) | (1,352) |
| **Net change** | | 13,528 | (11,732) | 57,597 | (46,193) |
| **Employee benefit plans adjustments** | | | | | |
| **Defined benefit pension plan** | | | | | |
| Net actuarial gain (loss) | N/A | — | — | — | (3,236) |
| Net loss (gain) on settlement reclassified to net income | Net other gains (losses) | — | — | — | 1,554 |
| Amortization of net actuarial (gains) losses | Non-service employee benefits expense | 608 | 524 | 1,834 | 1,575 |
| Amortization of prior service (credit) cost | Non-service employee benefits expense | 5 | — | 15 | — |
| Foreign currency translation adjustments of related balances | N/A | 436 | 158 | 492 | 534 |
| **Net change** | | 1,049 | 682 | 2,341 | 427 |
| **Post-retirement healthcare plan** | | | | | |
| Amortization of net actuarial (gains) losses | Non-service employee benefits expense | 68 | 654 | 204 | 1,961 |
| Amortization of prior service (credit) cost | Non-service employee benefits expense | 94 | 9 | 282 | 29 |
| **Net change** | | 162 | 663 | 486 | 1,990 |
| **Other comprehensive income (loss), net of taxes** | | 13,406 | (10,859) | 58,854 | (45,246) |

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

## 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.

On July 25, 2016, the Bank's board of directors approved a consolidation of the existing common shares on the basis of a 10 to 1 ratio, subject to shareholder approval. As a result of this consolidation, effective September 6, 2016 upon shareholder approval, every 10 common shares of par value BM$0.01 were consolidated into 1 common share of par value BM$0.10 (the "Share Consolidation").

In addition, as of September 6, 2016, the par value of each issued common share and each authorized but unissued common share was reduced from BM$0.10 to BM$0.01 and the authorized share capital of the Bank was correspondingly reduced from 2,000,000,000 common shares of par value BM$0.10 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 to 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, without any payment by the Bank to the holders of the voting ordinary shares in respect thereof (the "Reduction in Par Value" and together with the Share Consolidation, the "Reverse Share Split").

Immediately following the Reduction in Par Value, the Bank repurchased any and all fractions of common shares issued and outstanding from the holders thereof. All share, share-based payments and dividend information presented in these consolidated financial statements and accompanying footnotes has been retroactively adjusted to reflect the decreased number of shares resulting from this action.

Prior to the Reverse Share Split, the Bank's total authorized share capital consisted of (i) 20 billion common shares of par value BM$0.01, (ii) 6 billion non-voting ordinary shares of par value BM$0.01; (iii) 110,200,001 preference shares of par value US$0.01 and (iv) 50 million preference shares of par value £0.01.

### Dividends Declared

During the nine months ended September 30, 2019, the Bank paid cash dividends of $1.32 (September 30, 2018: $1.14) for each common share as of the related record dates.

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 BMA's letter of no objection for all dividends declared during the periods presented.

### Regulatory Capital

Effective January 1, 2016, 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. Prior to January 1, 2016, the Bank's regulatory capital was determined in accordance with Basel II guidelines as issued by the BMA.

The Bank is fully compliant with all regulatory capital requirements and maintains capital ratios in excess of regulatory minimums as at September 30, 2019 and December 31, 2018. The following table sets forth the Bank's capital adequacy in accordance with the Basel III framework:

| | September 30, 2019 | | December 31, 2018 | |
|---|---|---|---|---|
| | Actual | Regulatory minimum | Actual | Regulatory minimum |
| **Capital** | | | | |
| CET 1 capital | 850,118 | N/A | 846,043 | N/A |
| Tier 1 capital | 850,118 | N/A | 846,043 | N/A |
| Tier 2 capital | 107,005 | N/A | 121,521 | N/A |
| Total capital | 957,123 | N/A | 967,564 | N/A |
| **Risk Weighted Assets** | 4,876,752 | N/A | 4,321,354 | N/A |
| **Leverage Ratio Exposure Measure** | 14,686,500 | N/A | 11,139,677 | N/A |
| **Capital Ratios (%)** | | | | |
| CET 1 capital | 17.4% | 10.0% | 19.6% | 9.4% |
| Tier 1 capital | 17.4% | 11.5% | 19.6% | 10.9% |
| Total capital | 19.6% | 16.3% | 22.4% | 15.6% |
| Leverage ratio | 5.8% | 5.0% | 7.6% | 5.0% |

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

## Note 22: Business combinations

### Deutsche Bank's Global Trust Solutions Acquisition

On March 29, 2018, the Bank concluded the acquisition of Deutsche Bank's Global Trust Solutions ("GTS") business, excluding its US operations, for net cash payments of $24.7 million (composed of an initial cash payment of $30.2 million followed by a refund of $5.5 million on May 29, 2018). The refund was received based upon the movement in the number of clients in the GTS portfolio between the time the acquisition was agreed upon and the conclusion of the acquisition, together with an adjustment based upon the net asset values of the companies transferred. Butterfield has taken over the ongoing management and administration of the GTS portfolio, comprising approximately 1,000 trust structures for some 900 private clients. Butterfield has also offered positions to all employees who are fully dedicated to GTS in the Cayman Islands, Guernsey, Switzerland, Singapore and Mauritius. The acquisition was undertaken to enhance the Bank's market presence in the global trust service market.

The Bank incurred transaction expenses related to this acquisition in the amount of $3.8 million, of which $1.9 million were expensed during the year ended December 31, 2018 (including $1.0 million of legal and professional fees) and $1.9 million were expensed during the year ended December 31, 2017 (including $1.6 million of legal and professional fees).

For the year ended December 31, 2018, the amount of revenues and net deficit relating to the acquired GTS operations that were not inextricably merged into the Bank's operations were $6.5 million and $2.9 million respectively.

The assets acquired consist mainly of: customer relationships intangible assets, goodwill and accounts receivable. The liabilities assumed consist mainly of deferred revenues and accounts payable. Goodwill is made up of expected cash flows to be derived from new business and expected synergies resulting from leveraging existing support services and infrastructure within the Bank. The goodwill arising from the acquisition was allocated to reportable segments as per Note 9 in the Bank's audited financial statements for the year ended December 31, 2018.

| | As at March 29, 2018 |
|---|---|
| **Total consideration transferred** | **24,680** |
| | |
| **Assets acquired** | |
| Cash due from banks | 3,958 |
| Intangible assets (estimated useful life of 15 years) | 16,932 |
| Other assets | 4,548 |
| **Total assets acquired** | **25,438** |
| | |
| **Liabilities acquired (included in Other liabilities on the balance sheet)** | **4,626** |
| | |
| **Excess purchase price (Goodwill)** | **3,868** |

Disclosure of the unaudited pro forma financial information to present a summary of the combined results of the Bank and GTS acquisition is impracticable for the year ended December 31, 2018. The disclosure is impracticable as the Bank does not have access to the complete historical revenue and expense data as it relates to GTS for the period preceding the acquisition.

### Asset Acquisition

On February 15, 2018, the Bank announced that it had entered into an agreement to acquire Deutsche Bank's banking and custody business in the Cayman Islands, Guernsey and Jersey. During the year ended December 31, 2018, the Bank began to onboard certain customer deposits relating to the acquisition and this activity was completed in the first half of 2019.

### ABN AMRO (Channel Islands) Limited

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. Over the coming 12 months following the acquisition, 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. Management is still in the process of finalizing the allocation of the purchase price to the various assets acquired and liabilities assumed (including intangible assets and goodwill). In addition to the provisional figures noted below, on July 15, 2019, ABN AMRO Channel Islands had estimated clients' assets under management and custody of $8.2 billion.

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

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

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

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 $5.3 million all of which incurred and expensed during the nine months ended September 30, 2019.

For the period beginning on July 15, 2019 (i.e. acquisition date) to September 30, 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 $5.8 million and a net loss of $0.7 million respectively.

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 have been prepared based on the actual results realized by ABN AMRO Channel Islands from January 1, 2018 to July 15, 2019.

| | Three months ended | | Nine months ended | |
|---|---|---|---|---|
| **Unaudited pro forma financial information** | **September 30, 2019** | September 30, 2018 | **September 30, 2019** | September 30, 2018 |
| **Total net revenue** | **134,833** | 144,508 | **419,459** | 417,728 |
| Total non-interest operating (expense) | **91,975** | 89,818 | **280,803** | 260,489 |
| **Pro forma net income post business combination** | **42,858** | 54,690 | **138,656** | 157,239 |

## 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 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 to preferential rates. As at September 30, 2019, related party director and executive loan balances were $34.4 million (December 31, 2018: $97.2 million). During the nine months ended September 30, 2019, new issuance of loans to related parties were $38.7 million and repayments and change in directorships were $101.6 million (year ended December 31, 2018: $77.3 million and $11.0 million, respectively). All of these loans were considered performing loans as at September 30, 2019 and December 31, 2018. For the nine months ended September 30, 2019, the Bank has recognized $3.3 million (September 30, 2018: $4.0 million) of loan interest revenue in the consolidated statement of operations relating to directors and executives, companies in which they are principal owners and/or members of the board and trusts in which they are involved.

Certain directors and executives of the Bank, companies in which they are principal owners, and trusts in which they are involved, have deposits with the Bank. As at September 30, 2019, related party director and executive deposit balances were $12.0 million (December 31, 2018: $17.2 million).

Certain affiliates of the Bank have loans and deposits with the Bank. The loans were made and the deposits are maintained in the ordinary course of business on normal commercial terms. At September 30, 2019, affiliates had loan balances of $10.0 million (December 31, 2018: $10.2 million) and deposit balances of $0.4 million (December 31, 2018: $0.4 million). For the nine months ended September 30, 2019, the Bank has recognized $1.3 million (September 30, 2018: $1.3 million) of non-interest expenses and $0.5 million (September 30, 2018: $0.5 million) of loan interest revenue in the consolidated statement of operations relating to affiliates which the Bank holds investments in.

**Financial Transactions With Related Parties**

The Bank holds seed investments in several Butterfield mutual funds, which are managed by a wholly-owned subsidiary of the Bank. As at September 30, 2019, these investments have a fair value of $6.9 million with an unrealized gain of $1.9 million (December 31, 2018: $6.2 million and $1.2 million, respectively) and were included in trading investments at their fair value. As at September 30, 2019, several Butterfield mutual funds which are managed by a wholly owned subsidiary of the Bank, had loan balances of $2.1 million (December 31, 2018: $1.8 million) and deposit balances of $13.3 million (December 31, 2018: $36.7 million). During the nine months ended September 30, 2019, the Bank earned $7.8 million (September 30, 2018: $7.0 million) in asset management revenue from funds managed by a wholly-owned subsidiary of the Bank. During the nine months ended September 30, 2019, the Bank earned $1.1 million (September 30, 2018: $1.0 million) in custody and other administration services revenue from funds managed by a wholly-owned subsidiary of the Bank and directors and executives, companies in which they are principal owners and/or members of the board and trusts in which they are involved. During the nine months ended September 30, 2019, the Bank earned $0.7 million (September 30, 2018: $0.7 million) in other income from other related parties.

**Note 24: Subsequent events**

On October 22, 2019, the Board of Directors declared an interim dividend of $0.44 per common share to be paid on November 15, 2019 to shareholders of record on November 4, 2019.