

FINANCIAL REPORT FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2021
THE BANK OF N.T. BUTTERFIELD & SON LIMITED



INDEX TO FINANCIAL STATEMENTS

| Unaudited Consolidated Financial Statements | Page |
|--|-------------|
| Consolidated Balance Sheets (unaudited) as of September 30, 2021 and December 31, 2020 | 2 |
| Consolidated Statements of Operations (unaudited) for the Three and Nine Months Ended September 30, 2021 and 2020 | 3 |
| Consolidated Statements of Comprehensive Income (unaudited) for the Three and Nine Months Ended September 30, 2021 and 2020 | 4 |
| Consolidated Statements of Changes in Shareholders' Equity (unaudited) for the Three and Nine Months Ended September 30, 2021 and 2020 | 5 |
| Consolidated Statements of Cash Flows (unaudited) for the Nine Months Ended September 30, 2021 and 2020 | 6 |
| Notes to the Consolidated Financial Statements (unaudited) | 7 |

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, 2021 December 31, 2020

| Assets | September 30, 2021 | December 31, 2020 |
|---|---------------------------|-------------------|
| Cash and demand deposits with banks - Non-interest bearing | 203,784 | 133,363 |
| Demand deposits with banks - Interest bearing | 449,984 | 433,511 |
| Cash equivalents - Interest bearing | 1,655,734 | 2,722,718 |
| Cash due from banks | 2,309,502 | 3,289,592 |
| Securities purchased under agreements to resell | 169,524 | 197,039 |
| Short-term investments | 1,276,562 | 823,039 |
| Investment in securities | | |
| Equity securities at fair value | 222 | 7,317 |
| Available-for-sale at fair value (amortized cost: \$3,222,560 (2020: \$2,588,335)) | 3,227,944 | 2,661,116 |
| Held-to-maturity (fair value: \$2,803,129 (2020: \$2,304,756)) | 2,755,527 | 2,194,371 |
| Total investment in securities | 5,983,693 | 4,862,804 |
| Loans | | |
| Loans | 5,232,463 | 5,194,908 |
| Allowance for credit losses | (28,675) | (34,098) |
| Loans, net of allowance for credit losses | 5,203,788 | 5,160,810 |
| Premises, equipment and computer software, net of accumulated depreciation | 137,559 | 150,752 |
| Goodwill | 25,235 | 25,627 |
| Other intangible assets, net | 62,025 | 67,192 |
| Equity method investments | 12,690 | 12,933 |
| Other real estate owned, net | 691 | 4,052 |
| Accrued interest and other assets | 150,897 | 144,794 |
| Total assets | 15,332,166 | 14,738,634 |
| Liabilities | | |
| Deposits | | |
| Non-interest bearing | 2,955,760 | 3,012,360 |
| Interest bearing | 10,905,394 | 10,237,724 |
| Total deposits | 13,861,154 | 13,250,084 |
| Employee benefit plans | 129,439 | 131,279 |
| Accrued interest and other liabilities | 195,914 | 203,861 |
| Total other liabilities | 325,353 | 335,140 |
| Long-term debt | 171,773 | 171,462 |
| Total liabilities | 14,358,280 | 13,756,686 |
| 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: 50,108,040 (2020: 50,010,948) | 501 | 500 |
| Additional paid-in capital | 1,018,231 | 1,013,326 |
| Retained earnings (Accumulated deficit) | 86,652 | 33,918 |
| Less: treasury common shares, at cost: 619,212 (2020: 619,212) | (18,634) | (16,116) |
| Accumulated other comprehensive income (loss) | (112,864) | (49,680) |
| Total shareholders' equity | 973,886 | 981,948 |
| Total liabilities and shareholders' equity | 15,332,166 | 14,738,634 |

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, 2021 | September 30, 2020 | September 30, 2021 | September 30, 2020 |
| Non-interest income | | | | |
| Asset management | 7,431 | 6,804 | 22,293 | 21,988 |
| Banking | 12,603 | 13,352 | 36,549 | 33,710 |
| Foreign exchange revenue | 10,809 | 9,021 | 32,543 | 27,890 |
| Trust | 12,895 | 12,907 | 38,698 | 37,393 |
| Custody and other administration services | 3,737 | 3,550 | 11,372 | 10,415 |
| Other non-interest income | 1,542 | 1,243 | 3,978 | 4,701 |
| Total non-interest income | 49,017 | 46,877 | 145,433 | 136,097 |
| Interest income | | | | |
| Interest and fees on loans | 55,845 | 56,379 | 166,939 | 174,505 |
| <i>Investments (none of the investment securities are intrinsically tax-exempt)</i> | | | | |
| Available-for-sale | 12,083 | 11,196 | 36,214 | 38,968 |
| Held-to-maturity | 13,715 | 13,780 | 39,628 | 45,099 |
| Deposits with banks and other | 359 | 1,003 | 1,163 | 11,499 |
| Total interest income | 82,002 | 82,358 | 243,944 | 270,071 |
| Interest expense | | | | |
| Deposits | 3,921 | 4,306 | 11,453 | 21,378 |
| Long-term debt | 2,400 | 2,739 | 7,201 | 6,674 |
| Total interest expense | 6,321 | 7,045 | 18,654 | 28,052 |
| Net interest income before provision for credit losses | 75,681 | 75,313 | 225,290 | 242,019 |
| Provision for credit recoveries (losses) | (4) | (1,355) | 2,521 | (10,891) |
| Net interest income after provision for credit losses | 75,677 | 73,958 | 227,811 | 231,128 |
| Net gains (losses) on equity securities | — | 200 | 85 | 139 |
| Net realized gains (losses) on available-for-sale investments | (239) | 1,116 | (239) | 1,116 |
| Net gains (losses) on other real estate owned | 37 | — | (26) | 71 |
| Net other gains (losses) | 476 | 196 | 384 | 290 |
| Total other gains (losses) | 274 | 1,512 | 204 | 1,616 |
| Total net revenue | 124,968 | 122,347 | 373,448 | 368,841 |
| Non-interest expense | | | | |
| Salaries and other employee benefits | 41,011 | 48,306 | 121,219 | 132,902 |
| Technology and communications | 16,336 | 16,345 | 48,095 | 49,021 |
| Professional and outside services | 5,699 | 5,202 | 15,822 | 15,990 |
| Property | 7,819 | 7,543 | 22,877 | 22,032 |
| Indirect taxes | 5,375 | 5,764 | 16,616 | 16,188 |
| Non-service employee benefits expense | 971 | 509 | 2,914 | 1,988 |
| Marketing | 919 | 630 | 3,323 | 2,880 |
| Amortization of intangible assets | 1,500 | 1,468 | 4,522 | 4,339 |
| Other expenses | 4,781 | 5,495 | 14,703 | 16,037 |
| Total non-interest expense | 84,411 | 91,262 | 250,091 | 261,377 |
| Net income before income taxes | 40,557 | 31,085 | 123,357 | 107,464 |
| Income tax benefit (expense) | (774) | (542) | (2,344) | (2,310) |
| Net income | 39,783 | 30,543 | 121,013 | 105,154 |
| Earnings per common share | | | | |
| Basic earnings per share | 0.80 | 0.61 | 2.44 | 2.07 |
| Diluted earnings per share | 0.80 | 0.61 | 2.42 | 2.06 |

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, 2021 | September 30, 2020 | September 30, 2021 | September 30, 2020 |
| Net income | 39,783 | 30,543 | 121,013 | 105,154 |
| Other comprehensive income (loss), net of taxes | | | | |
| Net change in unrealized gains and losses on translation of net investment in foreign operations | (667) | 528 | 226 | (969) |
| Accretion of net unrealized gains and losses on held-to-maturity investments transferred from available-for-sale investments | 18 | 228 | 165 | 397 |
| Net change in unrealized gains and losses on available-for-sale investments | (12,050) | 2,788 | (67,542) | 60,800 |
| Employee benefit plans adjustments | 1,719 | 471 | 3,967 | 3,100 |
| Other comprehensive income (loss), net of taxes | (10,980) | 4,015 | (63,184) | 63,328 |
| Total comprehensive income (loss) | 28,803 | 34,558 | 57,829 | 168,482 |

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

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

| | Three months ended | | | | Nine months ended | | | |
|--|--------------------|----------------------------|--------------------|----------------------------|--------------------|----------------------------|--------------------|----------------------------|
| | September 30, 2021 | | September 30, 2020 | | September 30, 2021 | | September 30, 2020 | |
| | 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 | 50,207,357 | 502 | 50,822,338 | 508 | 50,010,948 | 500 | 53,005,177 | 530 |
| Retirement of shares | (122,000) | (1) | (741,700) | (7) | (330,828) | (3) | (3,249,200) | (32) |
| Issuance of common shares | 22,683 | — | 26,976 | — | 427,920 | 4 | 351,637 | 3 |
| Balance at end of period | 50,108,040 | 501 | 50,107,614 | 501 | 50,108,040 | 501 | 50,107,614 | 501 |
| Additional paid-in capital | | | | | | | | |
| Balance at beginning of period | | 1,016,327 | | 1,019,859 | | 1,013,326 | | 1,081,569 |
| Share-based compensation | | 3,796 | | 3,978 | | 11,003 | | 11,331 |
| Share-based settlements | | 577 | | 630 | | 595 | | 630 |
| Retirement of shares | | (2,469) | | (11,565) | | (6,689) | | (81,123) |
| Issuance of common shares, net of underwriting discounts and commissions | | — | | — | | (4) | | 495 |
| Balance at end of period | | 1,018,231 | | 1,012,902 | | 1,018,231 | | 1,012,902 |
| Retained earnings (Accumulated deficit) | | | | | | | | |
| Balance at beginning of period | | 69,833 | | 12,250 | | 33,918 | | (9,237) |
| Cumulative effect from change in accounting policy (Note 2 of the December 31, 2020 Audited Consolidated Financial Statements) | | — | | — | | — | | (7,841) |
| Net Income for the period | | 39,783 | | 30,543 | | 121,013 | | 105,154 |
| Common share cash dividends declared and paid, \$0.44 and \$1.32 per share (2020: \$0.44 and \$1.32 per share) | | (21,802) | | (21,879) | | (65,549) | | (67,162) |
| Retirement of shares | | (1,162) | | (6,286) | | (2,730) | | (6,286) |
| Balance at end of period | | 86,652 | | 14,628 | | 86,652 | | 14,628 |
| Treasury common shares | | | | | | | | |
| Balance at beginning of period | 619,212 | (18,159) | 619,212 | (14,517) | 619,212 | (16,116) | 619,212 | (22,022) |
| Purchase of treasury common shares | 122,000 | (4,107) | 741,700 | (18,693) | 330,828 | (11,940) | 3,249,200 | (80,771) |
| Retirement of shares | (122,000) | 3,632 | (741,700) | 17,858 | (330,828) | 9,422 | (3,249,200) | 87,441 |
| Balance at end of period | 619,212 | (18,634) | 619,212 | (15,352) | 619,212 | (18,634) | 619,212 | (15,352) |
| Accumulated other comprehensive income (loss) | | | | | | | | |
| Balance at beginning of period | | (101,884) | | (27,784) | | (49,680) | | (87,097) |
| Other comprehensive income (loss), net of taxes | | (10,980) | | 4,015 | | (63,184) | | 63,328 |
| Balance at end of period | | (112,864) | | (23,769) | | (112,864) | | (23,769) |
| Total shareholders' equity | | 973,886 | | 988,910 | | 973,886 | | 988,910 |

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, 2021 | September 30, 2020 |
|---|--------------------|--------------------|
| Cash flows from operating activities | | |
| Net income | 121,013 | 105,154 |
| Adjustments to reconcile net income to operating cash flows | | |
| Depreciation and amortization | 54,454 | 45,127 |
| Provision for credit (recoveries) losses | (2,521) | 10,891 |
| Share-based payments and settlements | 11,598 | 11,961 |
| Net change in equity securities at fair value | 7,094 | (139) |
| Net realized (gains) losses on available-for-sale investments | 239 | (1,116) |
| Net (gains) losses on other real estate owned | 26 | (71) |
| (Increase) decrease in carrying value of equity method investments | (158) | (1,374) |
| Dividends received from equity method investments | 401 | 2,812 |
| Changes in operating assets and liabilities | | |
| (Increase) decrease in accrued interest receivable and other assets | (5,945) | 15,814 |
| Increase (decrease) in employee benefit plans, accrued interest payable and other liabilities | (6,523) | (35,644) |
| Cash provided by (used in) operating activities | 179,678 | 153,415 |
| Cash flows from investing activities | | |
| (Increase) decrease in securities purchased under agreements to resell | 27,515 | (184,594) |
| Short-term investments other than restricted cash: proceeds from maturities and sales | 1,815,393 | 1,695,099 |
| Short-term investments other than restricted cash: purchases | (2,285,207) | (1,311,306) |
| Available-for-sale investments: proceeds from sale | 189,417 | 349,699 |
| Available-for-sale investments: proceeds from maturities and pay downs | 513,551 | 401,858 |
| Available-for-sale investments: purchases | (1,354,984) | (796,758) |
| Held-to-maturity investments: proceeds from maturities and pay downs | 504,036 | 372,398 |
| Held-to-maturity investments: purchases | (1,077,803) | (518,356) |
| Net (increase) decrease in loans | (73,085) | 32,503 |
| Additions to premises, equipment and computer software | (8,521) | (20,910) |
| Proceeds from sale of other real estate owned | 4,430 | — |
| Cash provided by (used in) investing activities | (1,745,258) | 19,633 |
| Cash flows from financing activities | | |
| Net increase (decrease) in deposits | 662,316 | (448,926) |
| Issuance of subordinated capital, net of underwriting fees | — | 97,647 |
| Repayment of long-term debt | — | (45,000) |
| Common shares repurchased | (11,940) | (80,771) |
| Proceeds from stock option exercises | — | 498 |
| Cash dividends paid on common shares | (65,549) | (67,162) |
| Cash provided by (used in) financing activities | 584,827 | (543,714) |
| Net effect of exchange rates on cash, cash equivalents and restricted cash | (70) | (22,696) |
| Net increase (decrease) in cash, cash equivalents and restricted cash | (980,823) | (393,362) |
| Cash, cash equivalents and restricted cash: beginning of period | 3,314,498 | 2,578,902 |
| Cash, cash equivalents and restricted cash: end of period | 2,333,675 | 2,185,540 |
| Components of cash, cash equivalents and restricted cash at end of period | | |
| Cash due from banks | 2,309,502 | 2,160,903 |
| Restricted cash included in short-term investments on the consolidated balance sheets | 24,173 | 24,637 |
| Total cash, cash equivalents and restricted cash at end of period | 2,333,675 | 2,185,540 |
| Supplemental disclosure of non-cash items | | |
| Transfer to (out of) other real estate owned | 704 | 314 |
| Reduction in net loans due to initial adoption of a current expected credit loss model | — | 7,841 |

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

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

Note 1: Nature of business

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

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

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

Note 2: Significant accounting policies

The accompanying unaudited interim consolidated financial statements of the Bank have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and should be read in conjunction with the Bank's audited financial statements for the year ended December 31, 2020.

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

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

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

New Accounting Pronouncements

The following accounting developments were issued during the nine months ended September 30, 2021 or are accounting standards pending adoption:

In August 2021, the Financial Accounting Standards Board ("FASB") published ASU 2021-06 - Presentation of Financial Statements (Topic 205), Financial Services—Depository and Lending (Topic 942), and Financial Services—Investment Companies (Topic 946): Amendments to SEC Paragraphs Pursuant to SEC Final Rule Releases No. 33-10786, Amendments to Financial Disclosures about Acquired and Disposed Businesses, and No. 33-10835, Update of Statistical Disclosures for Bank and Savings and Loan Registrants (SEC Update). The amendments are effective for fiscal years ending on or after December 15, 2021. This ASU did not have a material impact on the Bank's consolidated financial statements.

Note 3: Cash due from banks

| | September 30, 2021 | December 31, 2020 |
|-------------------------------------|---------------------------|-------------------|
| Non-interest bearing | | |
| Cash and demand deposits with banks | 203,784 | 133,363 |
| Interest bearing¹ | | |
| Demand deposits with banks | 449,984 | 433,511 |
| Cash equivalents | 1,655,734 | 2,722,718 |
| Sub-total - Interest bearing | 2,105,718 | 3,156,229 |
| Total cash due from banks | 2,309,502 | 3,289,592 |

¹ Interest bearing cash due from banks includes certain demand deposits with banks as at September 30, 2021 in the amount of \$249.2 million (December 31, 2020: \$156.2 million) that are earning interest at a negligible rate.

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

Note 4: Short-term investments

| | September 30, 2021 | December 31, 2020 |
|---|--------------------|-------------------|
| Unrestricted | | |
| Maturing within three months | 546,326 | 469,580 |
| Maturing between three to six months | 706,063 | 326,836 |
| Maturing between six to twelve months | — | 1,717 |
| Total unrestricted short-term investments | 1,252,389 | 798,133 |
| Affected by drawing restrictions related to minimum reserve and derivative margin requirements | | |
| Non-interest earning demand deposits | 8,160 | 260 |
| Interest earning demand and term deposits | 16,013 | 24,646 |
| Total restricted short-term investments | 24,173 | 24,906 |
| Total short-term investments | 1,276,562 | 823,039 |

Note 5: Investment in securities

Amortized Cost, Carrying Amount and Fair Value

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

| | September 30, 2021 | | | | December 31, 2020 | | | |
|---|--------------------|------------------------|-------------------------|------------------|-------------------|------------------------|-------------------------|------------------|
| | Amortized cost | Gross unrealized gains | Gross unrealized losses | Fair value | Amortized cost | Gross unrealized gains | Gross unrealized losses | Fair value |
| Equity securities | | | | | | | | |
| Mutual funds | 724 | — | (502) | 222 | 5,274 | 2,531 | (488) | 7,317 |
| Total equity securities | 724 | — | (502) | 222 | 5,274 | 2,531 | (488) | 7,317 |
| Available-for-sale | | | | | | | | |
| US government and federal agencies | 3,155,286 | 43,460 | (37,692) | 3,161,054 | 2,493,659 | 72,713 | (306) | 2,566,066 |
| Non-US governments debt securities | 22,790 | — | (398) | 22,392 | 22,797 | — | (389) | 22,408 |
| Asset-backed securities - Student loans | 13,290 | — | (415) | 12,875 | 13,290 | — | (345) | 12,945 |
| Residential mortgage-backed securities | 31,194 | 446 | (17) | 31,623 | 58,589 | 1,108 | — | 59,697 |
| Total available-for-sale | 3,222,560 | 43,906 | (38,522) | 3,227,944 | 2,588,335 | 73,821 | (1,040) | 2,661,116 |
| Held-to-maturity¹ | | | | | | | | |
| US government and federal agencies | 2,755,527 | 74,674 | (27,072) | 2,803,129 | 2,194,371 | 110,526 | (141) | 2,304,756 |
| Total held-to-maturity | 2,755,527 | 74,674 | (27,072) | 2,803,129 | 2,194,371 | 110,526 | (141) | 2,304,756 |

¹ For the nine months ended September 30, 2021, and the nine months ended September 30, 2020, impairments recognized in other comprehensive loss for HTM investments were nil.

Investments with Unrealized Loss Positions

The Bank does not believe that the AFS debt securities that were in an unrealized loss position as of September 30, 2021, comprising 58 securities representing 64.8% of the AFS portfolios' carrying value (December 31, 2020: 13 and 5.9%), represent credit losses. Total gross unrealized AFS losses were 1.8% of the fair value of the affected securities (December 31, 2020: 0.7%).

The Bank's HTM debt securities are comprised of US government and federal agencies securities and have a zero credit loss assumption under the CECL model. HTM debt securities that were in an unrealized loss position as of September 30, 2021, were comprised of 49 securities representing 53.8% of the HTM portfolios' carrying value (December 31, 2020: 3 and 1.7%). Total gross unrealized HTM losses were 1.9% of the fair value of affected securities (December 31, 2020: 0.4%).

Management does not intend to sell and it is likely that management will not be required to sell the securities prior to the anticipated recovery of the cost of these securities. Unrealized losses were attributable primarily to changes in market interest rates, relative to when the investment securities were purchased, and not due to a decrease in the credit quality of the investment securities. The issuers continue to make timely principal and interest payments on the securities. The following describes the processes for identifying credit impairment in security types with the most significant unrealized losses as shown in the preceding tables.

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

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

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

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

Investments in **Residential mortgage-backed securities** relates to 2 securities (December 31, 2020: none) which are rated AAA and possess similar significant credit enhancement as described above. No credit losses were recognized on these securities as the weighted average credit support and the weighted average loan-to-value ratios range from 15% - 32% and 51% - 57% , respectively. Current credit support is significantly greater than any delinquencies experienced on the underlying mortgages.

In the following tables, debt securities with unrealized losses that are not deemed to be credit impaired and for which an allowance for credit losses has not been recorded 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 | | Total fair value | Total gross unrealized losses |
|---|---------------------|-------------------------|-------------------|-------------------------|------------------|-------------------------------|
| | Fair value | Gross unrealized losses | Fair value | Gross unrealized losses | | |
| September 30, 2021 | | | | | | |
| Available-for-sale securities with unrealized losses | | | | | | |
| US government and federal agencies | 2,017,450 | (36,559) | 33,636 | (1,133) | 2,051,086 | (37,692) |
| Non-US governments debt securities | — | — | 22,392 | (398) | 22,392 | (398) |
| Asset-backed securities - Student loans | — | — | 12,875 | (415) | 12,875 | (415) |
| Residential mortgage-backed securities | 5,396 | (17) | — | — | 5,396 | (17) |
| Total available-for-sale securities with unrealized losses | 2,022,846 | (36,576) | 68,903 | (1,946) | 2,091,749 | (38,522) |
| Held-to-maturity securities with unrealized losses | | | | | | |
| US government and federal agencies | 1,430,637 | (26,442) | 24,407 | (630) | 1,455,044 | (27,072) |

| | Less than 12 months | | 12 months or more | | Total fair value | Total gross unrealized losses |
|---|---------------------|-------------------------|-------------------|-------------------------|------------------|-------------------------------|
| | Fair value | Gross unrealized losses | Fair value | Gross unrealized losses | | |
| December 31, 2020 | | | | | | |
| Available-for-sale securities with unrealized losses | | | | | | |
| US government and federal agencies | 120,599 | (279) | 236 | (27) | 120,835 | (306) |
| Non-US governments debt securities | 15 | — | 22,393 | (389) | 22,408 | (389) |
| Asset-backed securities - Student loans | — | — | 12,945 | (345) | 12,945 | (345) |
| Total available-for-sale securities with unrealized losses | 120,614 | (279) | 35,574 | (761) | 156,188 | (1,040) |
| Held-to-maturity securities with unrealized losses | | | | | | |
| US government and federal agencies | 36,079 | (141) | — | — | 36,079 | (141) |

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 | | | | | Carrying amount |
|---|----------------------------|----------------|----------------|----------------|--------------------------------|------------------|
| | Within 3 months | 3 to 12 months | 1 to 5 years | 5 to 10 years | No specific or single maturity | |
| September 30, 2021 | | | | | | |
| Available-for-sale | | | | | | |
| US government and federal agencies | — | — | 501,307 | 184,446 | 2,475,301 | 3,161,054 |
| Non-US governments debt securities | — | — | 22,392 | — | — | 22,392 |
| Asset-backed securities - Student loans | — | — | — | — | 12,875 | 12,875 |
| Residential mortgage-backed securities | — | — | — | — | 31,623 | 31,623 |
| Total available-for-sale | — | — | 523,699 | 184,446 | 2,519,799 | 3,227,944 |
| Held-to-maturity | | | | | | |
| US government and federal agencies | — | — | — | — | 2,755,527 | 2,755,527 |

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, 2021 | | December 31, 2020 | |
|----------------------------|--------------------|------------|-------------------|------------|
| | Amortized cost | Fair value | Amortized cost | Fair value |
| Pledged Investments | | | | |
| Available-for-sale | 861 | 907 | 1,387 | 1,456 |
| Held-to-maturity | 34,344 | 33,193 | 2,460 | 2,623 |

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

Sale Proceeds and Realized Gains and Losses of Equity Securities

| | Nine months ended | | | | | |
|--------------|--------------------|----------------------|-------------------------|--------------------|----------------------|-------------------------|
| | September 30, 2021 | | | September 30, 2020 | | |
| | Sale proceeds | Gross realized gains | Gross realized (losses) | Sale proceeds | Gross realized gains | Gross realized (losses) |
| Mutual Funds | 7,179 | 124 | (26) | — | — | — |

Sale Proceeds and Realized Gains and Losses of AFS Securities

| | Nine months ended | | | | | |
|------------------------------------|--------------------|----------------------|-------------------------|--------------------|----------------------|-------------------------|
| | September 30, 2021 | | | September 30, 2020 | | |
| | Sale proceeds | Gross realized gains | Gross realized (losses) | Sale proceeds | Gross realized gains | Gross realized (losses) |
| US government and federal agencies | 189,417 | 1,563 | (1,802) | 349,699 | 1,171 | (55) |

Taxability of Interest Income

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

Note 6: Loans

The principal means of securing residential mortgages, personal, credit card and business loans are entitlements over assets and guarantees. Mortgage loans are generally repayable over periods of up to thirty years and personal and business loans are generally repayable over terms not exceeding five years. Government loans are repayable over a variety of terms which are individually negotiated. Amounts owing on credit cards are revolving and typically a minimum amount is due within 30 days from billing. The effective yield on total loans as at September 30, 2021 is 4.01% (December 31, 2020: 4.13%). The interest receivable on total loans as at September 30, 2021 is \$8.1 million (December 31, 2020: \$8.7 million). The interest receivable is included in Accrued interest and other assets on the consolidated balance sheets and is excluded from all loan amounts disclosed in this note.

Loans' Credit Quality

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

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

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

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

A **non-accrual** loan shall mean either management is of the opinion full payment of principal or interest is in doubt or when principal or interest is 90 days past due unless it is a residential mortgage loan which is well secured and collection efforts are reasonably expected to result in amounts due. Loans in this category are under close monitoring by the Bank's management on at least a quarterly basis.

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

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

| September 30, 2021 | Pass | Special mention | Substandard | Non-accrual | Total amortized cost | Allowance for expected credit losses | Total net loans |
|---|------------------|--------------------|---------------|---------------|----------------------------|--|--------------------|
| Commercial loans | | | | | | | |
| Government | 252,051 | — | — | — | 252,051 | (1,396) | 250,655 |
| Commercial and industrial | 363,544 | 7,994 | 1,042 | 18,654 | 391,234 | (9,978) | 381,256 |
| Commercial overdrafts | 94,726 | 2,561 | 441 | 7 | 97,735 | (12) | 97,723 |
| Total commercial loans | 710,321 | 10,555 | 1,483 | 18,661 | 741,020 | (11,386) | 729,634 |
| Commercial real estate loans | | | | | | | |
| Commercial mortgage | 636,844 | 61,887 | 3,090 | 4,807 | 706,628 | (863) | 705,765 |
| Construction | 9,448 | 20,674 | — | — | 30,122 | (420) | 29,702 |
| Total commercial real estate loans | 646,292 | 82,561 | 3,090 | 4,807 | 736,750 | (1,283) | 735,467 |
| Consumer loans | | | | | | | |
| Automobile financing | 22,160 | 22 | — | 163 | 22,345 | (91) | 22,254 |
| Credit card | 68,436 | — | 233 | — | 68,669 | (1,305) | 67,364 |
| Overdrafts | 39,281 | 808 | — | 11 | 40,100 | (179) | 39,921 |
| Other consumer ¹ | 73,846 | 733 | 76 | 1,004 | 75,659 | (1,257) | 74,402 |
| Total consumer loans | 203,723 | 1,563 | 309 | 1,178 | 206,773 | (2,832) | 203,941 |
| Residential mortgage loans | 3,367,650 | 55,403 | 85,728 | 39,139 | 3,547,920 | (13,174) | 3,534,746 |
| Total | 4,927,986 | 150,082 | 90,610 | 63,785 | 5,232,463 | (28,675) | 5,203,788 |

¹ Other consumer loans' amortized cost includes \$10 million of cash and portfolio secured lending and \$58 million of lending secured by buildings in construction or other collateral.

| December 31, 2020 | Pass | Special mention | Substandard | Non-accrual | Total amortized cost | Allowance for expected credit losses | Total net loans |
|---|------------------|--------------------|---------------|---------------|----------------------------|--|--------------------|
| Commercial loans | | | | | | | |
| Government | 279,417 | — | — | — | 279,417 | (1,453) | 277,964 |
| Commercial and industrial | 422,616 | 5,841 | 1,082 | 18,226 | 447,765 | (9,926) | 437,839 |
| Commercial overdrafts | 70,324 | 1,686 | 451 | 1 | 72,462 | (230) | 72,232 |
| Total commercial loans | 772,357 | 7,527 | 1,533 | 18,227 | 799,644 | (11,609) | 788,035 |
| Commercial real estate loans | | | | | | | |
| Commercial mortgage | 627,512 | 79,168 | 2,362 | 6,300 | 715,342 | (847) | 714,495 |
| Construction | 4,950 | 39,870 | — | — | 44,820 | (1,257) | 43,563 |
| Total commercial real estate loans | 632,462 | 119,038 | 2,362 | 6,300 | 760,162 | (2,104) | 758,058 |
| Consumer loans | | | | | | | |
| Automobile financing | 22,491 | 52 | — | 127 | 22,670 | (103) | 22,567 |
| Credit card | 68,025 | — | 234 | — | 68,259 | (2,795) | 65,464 |
| Overdrafts | 23,934 | 1,127 | — | 2 | 25,063 | (162) | 24,901 |
| Other consumer ¹ | 112,466 | 1,031 | 215 | 1,048 | 114,760 | (1,416) | 113,344 |
| Total consumer loans | 226,916 | 2,210 | 449 | 1,177 | 230,752 | (4,476) | 226,276 |
| Residential mortgage loans | 3,212,218 | 61,499 | 83,846 | 46,787 | 3,404,350 | (15,909) | 3,388,441 |
| Total | 4,843,953 | 190,274 | 88,190 | 72,491 | 5,194,908 | (34,098) | 5,160,810 |

¹ Other consumer loans' amortized cost includes \$54 million of cash and portfolio secured lending and \$45 million of lending secured by buildings in construction or other collateral.

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

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

| September 30, 2021 | Pass | Special mention | Substandard | Non-accrual | Total amortized cost |
|------------------------------------|------------------|--------------------|---------------|---------------|----------------------------|
| Loans by origination year | | | | | |
| 2021 | 690,490 | 3,441 | — | 539 | 694,470 |
| 2020 | 635,566 | 20,797 | — | 36 | 656,399 |
| 2019 | 913,758 | 26,529 | 476 | 31 | 940,794 |
| 2018 | 522,149 | 38,001 | 450 | 695 | 561,295 |
| 2017 | 494,640 | 2,053 | 10,337 | 11,913 | 518,943 |
| Prior | 1,444,602 | 54,922 | 78,569 | 50,554 | 1,628,647 |
| Overdrafts and credit cards | 226,781 | 4,339 | 778 | 17 | 231,915 |
| Total amortized cost | 4,927,986 | 150,082 | 90,610 | 63,785 | 5,232,463 |

| December 31, 2020 | Pass | Special mention | Substandard | Non-accrual | Total amortized cost |
|------------------------------------|------------------|--------------------|---------------|---------------|----------------------------|
| Loans by origination year | | | | | |
| 2020 | 683,821 | 18,789 | — | 70 | 702,680 |
| 2019 | 1,026,634 | 27,575 | 181 | 4 | 1,054,394 |
| 2018 | 684,716 | 65,570 | 559 | 1,407 | 752,252 |
| 2017 | 624,332 | 2,381 | 3,245 | 11,910 | 641,868 |
| 2016 | 447,293 | 2,073 | 7,993 | 4,939 | 462,298 |
| Prior | 1,183,869 | 69,934 | 75,466 | 52,174 | 1,381,443 |
| Overdrafts and credit cards | 193,288 | 3,952 | 746 | 1,987 | 199,973 |
| Total amortized cost | 4,843,953 | 190,274 | 88,190 | 72,491 | 5,194,908 |

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

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

| September 30, 2021 | 30 - 59 days | 60 - 89 days | More than 90 days | Total past due loans | Total current | Total amortized cost |
|---|-----------------|-----------------|----------------------|-------------------------|------------------|----------------------------|
| Commercial loans | | | | | | |
| Government | — | — | — | — | 252,051 | 252,051 |
| Commercial and industrial | 347 | 249 | 18,411 | 19,007 | 372,227 | 391,234 |
| Commercial overdrafts | — | — | 7 | 7 | 97,728 | 97,735 |
| Total commercial loans | 347 | 249 | 18,418 | 19,014 | 722,006 | 741,020 |
| Commercial real estate loans | | | | | | |
| Commercial mortgage | 570 | — | 4,807 | 5,377 | 701,251 | 706,628 |
| Construction | — | — | — | — | 30,122 | 30,122 |
| Total commercial real estate loans | 570 | — | 4,807 | 5,377 | 731,373 | 736,750 |
| Consumer loans | | | | | | |
| Automobile financing | 91 | 5 | 163 | 259 | 22,086 | 22,345 |
| Credit card | 442 | 152 | 233 | 827 | 67,842 | 68,669 |
| Overdrafts | — | — | 11 | 11 | 40,089 | 40,100 |
| Other consumer | 156 | 12 | 1,005 | 1,173 | 74,486 | 75,659 |
| Total consumer loans | 689 | 169 | 1,412 | 2,270 | 204,503 | 206,773 |
| Residential mortgage loans | 19,872 | 10,321 | 50,085 | 80,278 | 3,467,642 | 3,547,920 |
| Total amortized cost | 21,478 | 10,739 | 74,722 | 106,939 | 5,125,524 | 5,232,463 |

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

| December 31, 2020 | 30 - 59 days | 60 - 89 days | More than 90 days | Total past due loans | Total current | Total amortized cost |
|---|-----------------|-----------------|----------------------|-------------------------|------------------|----------------------------|
| Commercial loans | | | | | | |
| Government | — | — | — | — | 279,417 | 279,417 |
| Commercial and industrial | 109 | 50 | 18,176 | 18,335 | 429,430 | 447,765 |
| Commercial overdrafts | — | — | 90 | 90 | 72,372 | 72,462 |
| Total commercial loans | 109 | 50 | 18,266 | 18,425 | 781,219 | 799,644 |
| Commercial real estate loans | | | | | | |
| Commercial mortgage | 710 | 1,552 | 4,748 | 7,010 | 708,332 | 715,342 |
| Construction | — | — | — | — | 44,820 | 44,820 |
| Total commercial real estate loans | 710 | 1,552 | 4,748 | 7,010 | 753,152 | 760,162 |
| Consumer loans | | | | | | |
| Automobile financing | 55 | 35 | 127 | 217 | 22,453 | 22,670 |
| Credit card | 480 | 224 | 234 | 938 | 67,321 | 68,259 |
| Overdrafts | — | — | 2 | 2 | 25,061 | 25,063 |
| Other consumer | 56 | 3 | 1,043 | 1,102 | 113,658 | 114,760 |
| Total consumer loans | 591 | 262 | 1,406 | 2,259 | 228,493 | 230,752 |
| Residential mortgage loans | 6,304 | 4,023 | 59,957 | 70,284 | 3,334,066 | 3,404,350 |
| Total amortized cost | 7,714 | 5,887 | 84,377 | 97,978 | 5,096,930 | 5,194,908 |

Changes in Allowances For Credit Losses

The decrease in the provision for credit losses during the nine months ended September 30, 2021 was primarily attributable to changes in macroeconomic factors, such as GDP forecasts, and the repayment of some commercial facilities. As per the Bank's accounting policy, as disclosed in Note 2 of the December 31, 2020 Audited Consolidated Financial Statements, the Bank continuously collects and maintains attributes related to financial instruments within the scope of CECL, including current conditions, and reasonable and supportable assumptions about future economic conditions.

| | Nine months ended September 30, 2021 | | | | |
|---|--------------------------------------|---------------------------|--------------|-------------------------|---------------|
| | Commercial | Commercial real estate | Consumer | Residential mortgage | Total |
| Balance at the beginning of period | 11,609 | 2,104 | 4,476 | 15,909 | 34,098 |
| Provision increase (decrease) | (171) | (820) | (1,710) | (245) | (2,946) |
| Recoveries of previous charge-offs | 65 | — | 994 | 191 | 1,250 |
| Charge-offs | (108) | — | (928) | (2,657) | (3,693) |
| Other | (9) | (1) | — | (24) | (34) |
| Allowances for expected credit losses at end of period | 11,386 | 1,283 | 2,832 | 13,174 | 28,675 |

| | Nine months ended September 30, 2020 | | | | |
|--|--------------------------------------|---------------------------|--------------|-------------------------|---------------|
| | Commercial | Commercial real estate | Consumer | Residential mortgage | Total |
| Balance at the beginning of period, before change in accounting policy | 7,281 | 1,496 | 1,502 | 13,309 | 23,588 |
| Cumulative effect from change in accounting policy (Note 2 of the December 31, 2020 Audited Consolidated Financial Statements) | 4,109 | 1,026 | 2,506 | 200 | 7,841 |
| Provision increase (decrease) | 4,953 | (274) | 1,954 | 4,081 | 10,714 |
| Recoveries of previous charge-offs | 6 | — | 850 | 290 | 1,146 |
| Charge-offs | (16) | — | (1,574) | (789) | (2,379) |
| Other | (21) | (1) | 5 | 153 | 136 |
| Allowances for expected credit losses at end of period | 16,312 | 2,247 | 5,243 | 17,244 | 41,046 |

Collateral-dependent loans

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

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

Loan Deferral Program

In response to the COVID-19 pandemic, effective April 1, 2020, the Bank implemented a residential mortgage and consumer loan deferral program for qualified borrowers in the Bermuda and Cayman segments under which principal and interest payments on performing loans were automatically deferred for three months from April 1, 2020 to June 30, 2020 and the loan term extended. Borrowers had the option to notify the Bank if they preferred to continue with regular, scheduled payments (i.e. to opt-out). Commercial customers had the option to pay interest only on their monthly loan payments with no penalties. The Bank subsequently extended the residential mortgage and personal loan deferral program for a further three months from July 1, 2020 to September 30, 2020, however, borrowers had to notify the Bank of their intention to defer principal and interest payments (i.e. to opt-in). Loans that meet the requirements for deferral under the above programs or as a result of COVID-19 specific factors are not considered troubled debt restructurings ("TDRs") or past due as the borrowers were current on their payments and were not experiencing financial difficulty at the time of modifications.

In addition, the Bank also introduced deferrals on credit card payments for April and May 2020 in the Bermuda segment and May and June 2020 in the Cayman segment.

Non-Performing Loans

During the nine months ended September 30, 2021, no interest was recognized on non-accrual loans. Non-performing loans at September 30, 2021 include PCD loans, which have all been on non-accrual status since their acquisition. No credit deteriorated loans were purchased during the period.

| | September 30, 2021 | | | | December 31, 2020 | | | |
|---|---|--|--|-----------------------------------|---|--|--|-----------------------------------|
| | Non-accrual loans with an allowance | Non-accrual loans without an allowance | Past due more than 90 days and accruing | Total non- performing loans | Non-accrual loans with an allowance | Non-accrual loans without an allowance | Past due more than 90 days and accruing | Total non- performing loans |
| Commercial loans | | | | | | | | |
| Commercial and industrial | 18,635 | 19 | — | 18,654 | 18,207 | 19 | — | 18,226 |
| Commercial overdrafts | — | 7 | — | 7 | — | 1 | 89 | 90 |
| Total commercial loans | 18,635 | 26 | — | 18,661 | 18,207 | 20 | 89 | 18,316 |
| Commercial real estate loans | | | | | | | | |
| Commercial mortgage | 896 | 3,911 | — | 4,807 | 952 | 5,348 | — | 6,300 |
| Total commercial real estate loans | 896 | 3,911 | — | 4,807 | 952 | 5,348 | — | 6,300 |
| Consumer loans | | | | | | | | |
| Automobile financing | 163 | — | — | 163 | 126 | 1 | — | 127 |
| Credit card | — | — | 233 | 233 | — | — | 234 | 234 |
| Overdrafts | — | 11 | — | 11 | — | 2 | — | 2 |
| Other consumer | 833 | 171 | — | 1,004 | 869 | 179 | — | 1,048 |
| Total consumer loans | 996 | 182 | 233 | 1,411 | 995 | 182 | 234 | 1,411 |
| Residential mortgage loans | 27,503 | 11,636 | 16,605 | 55,744 | 36,897 | 9,890 | 18,788 | 65,575 |
| Total non-performing loans | 48,030 | 15,755 | 16,838 | 80,623 | 57,051 | 15,440 | 19,111 | 91,602 |

Loans modified in a TDR

As at September 30, 2021, the Bank had no loans that were modified in a TDR during the preceding 12 months that subsequently defaulted (December 31, 2020: nil).

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

TDRs entered into during the period

| | Nine months ended September 30, 2021 | | | |
|----------------------------|--------------------------------------|---------------------------------|---------------------------------------|----------------------------------|
| | Number of contracts | Pre-modification recorded loans | Modification: interest capitalization | Post-modification recorded loans |
| Residential mortgage loans | 2 | 1,070 | 68 | 1,138 |

| | Nine months ended September 30, 2020 | | | |
|----------------------------|--------------------------------------|---------------------------------|---------------------------------------|----------------------------------|
| | Number of contracts | Pre-modification recorded loans | Modification: interest capitalization | Post-modification recorded loans |
| Residential mortgage loans | 1 | 352 | — | 352 |

TDRs Outstanding

| | September 30, 2021 | | December 31, 2020 | |
|-------------------------------|--------------------|---------------|-------------------|-------------|
| | Accrual | Non-accrual | Accrual | Non-accrual |
| Commercial loans | 861 | — | 901 | — |
| Commercial real estate loans | 1,601 | 2,452 | 2,362 | 1,811 |
| Residential mortgage loans | 60,483 | 13,693 | 61,937 | 17,129 |
| Total TDRs outstanding | 62,945 | 16,145 | 65,200 | 18,940 |

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 table summarizes the credit exposure of the Bank by geographic region. The exposure amounts disclosed below do not include accrued interest and are gross of allowances for credit losses and gross of collateral held.

| Geographic region | September 30, 2021 | | | | December 31, 2020 | | | |
|-----------------------------|---|------------------|-------------------|-----------------------|---|-----------|-------------------|-----------------------|
| | 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 | — | — | — | — | 220,871 | — | — | 220,871 |
| Belgium | 5,800 | — | — | 5,800 | 4,271 | — | — | 4,271 |
| Bermuda | 55,268 | 2,128,923 | 296,068 | 2,480,259 | 51,329 | 2,225,401 | 323,097 | 2,599,827 |
| Canada | 734,948 | — | — | 734,948 | 996,213 | — | — | 996,213 |
| Cayman | 27,436 | 1,040,626 | 392,568 | 1,460,630 | 29,480 | 948,290 | 396,654 | 1,374,424 |
| France | 34,691 | — | — | 34,691 | — | — | — | — |
| Germany | 67,732 | — | — | 67,732 | 107,412 | — | — | 107,412 |
| Guernsey | 1 | 721,675 | 203,388 | 925,064 | 1 | 779,915 | 213,461 | 993,377 |
| Ireland | 72,935 | — | — | 72,935 | 83,842 | — | — | 83,842 |
| Japan | 3,058 | — | — | 3,058 | 6,029 | — | — | 6,029 |
| Jersey | — | 70,092 | 36,155 | 106,247 | — | 26,773 | 35,224 | 61,997 |
| New Zealand | — | — | — | — | 23,463 | — | — | 23,463 |
| Norway | 147,326 | — | — | 147,326 | 57,900 | — | — | 57,900 |
| Switzerland | 2,820 | — | — | 2,820 | 4,510 | — | — | 4,510 |
| The Bahamas | 1,517 | 9,869 | — | 11,386 | 1,516 | 12,024 | — | 13,540 |
| United Kingdom | 1,360,576 | 1,261,278 | 158,865 | 2,780,719 | 1,291,655 | 1,202,505 | 140,663 | 2,634,823 |
| United States | 1,238,549 | — | — | 1,238,549 | 1,428,090 | — | — | 1,428,090 |
| Other | 2,931 | — | — | 2,931 | 3,088 | — | — | 3,088 |
| Total gross exposure | 3,755,588 | 5,232,463 | 1,087,044 | 10,075,095 | 4,309,670 | 5,194,908 | 1,109,099 | 10,613,677 |

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

Note 8: Deposits

By Maturity

| | Demand | | Total demand deposits | Term | | | | Total term deposits | Total deposits |
|---|----------------------|------------------|-----------------------|------------------|----------------|----------------|-----------------|---------------------|-------------------|
| | Non-interest bearing | Interest bearing | | Within 3 months | 3 to 6 months | 6 to 12 months | After 12 months | | |
| September 30, 2021 | | | | | | | | | |
| Demand or less than \$100k ¹ | 2,955,760 | 8,028,540 | 10,984,300 | 27,968 | 11,169 | 11,775 | 13,448 | 64,360 | 11,048,660 |
| Term - \$100k or more | N/A | N/A | — | 1,620,483 | 603,443 | 504,230 | 84,338 | 2,812,494 | 2,812,494 |
| Total deposits | 2,955,760 | 8,028,540 | 10,984,300 | 1,648,451 | 614,612 | 516,005 | 97,786 | 2,876,854 | 13,861,154 |

| | Demand | | Total demand deposits | Term | | | | Total term deposits | Total deposits |
|---|----------------------|------------------|-----------------------|------------------|----------------|----------------|-----------------|---------------------|-------------------|
| | Non-interest bearing | Interest bearing | | Within 3 months | 3 to 6 months | 6 to 12 months | After 12 months | | |
| December 31, 2020 | | | | | | | | | |
| Demand or less than \$100k ¹ | 3,012,360 | 7,577,642 | 10,590,002 | 30,551 | 8,402 | 13,138 | 14,875 | 66,966 | 10,656,968 |
| Term - \$100k or more | N/A | N/A | — | 1,553,178 | 625,533 | 330,773 | 83,632 | 2,593,116 | 2,593,116 |
| Total deposits | 3,012,360 | 7,577,642 | 10,590,002 | 1,583,729 | 633,935 | 343,911 | 98,507 | 2,660,082 | 13,250,084 |

¹ The weighted-average interest rate on interest-bearing demand deposits as at September 30, 2021 is -0.03% (December 31, 2020: -0.04%).

By Type and Segment

| | September 30, 2021 | | | December 31, 2020 | | |
|----------------------------|--------------------|-------------------------|-------------------|-------------------|-------------------------|-------------------|
| | Payable on demand | Payable on a fixed date | Total | Payable on demand | Payable on a fixed date | Total |
| Bermuda | 3,961,929 | 644,066 | 4,605,995 | 4,107,156 | 705,490 | 4,812,646 |
| Cayman | 3,952,826 | 567,187 | 4,520,013 | 3,577,120 | 531,602 | 4,108,722 |
| Channel Islands and the UK | 3,069,545 | 1,665,601 | 4,735,146 | 2,905,726 | 1,422,990 | 4,328,716 |
| Total deposits | 10,984,300 | 2,876,854 | 13,861,154 | 10,590,002 | 2,660,082 | 13,250,084 |

Note 9: Employee benefit plans

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

The Bank includes an estimate of the 2021 Bank contribution and estimated benefit payments for the next ten years under the pension and post-retirement plans in its audited financial statements for the year-ended December 31, 2020. During the nine months ended September 30, 2021, there have been no material revisions to these estimates.

| Line item in the consolidated statements of operations | Three months ended | | Nine months ended | | |
|---|---------------------------------------|--------------------|--------------------|--------------------|--------------|
| | September 30, 2021 | September 30, 2020 | September 30, 2021 | September 30, 2020 | |
| Defined benefit pension expense (income) | | | | | |
| Service cost | Salaries and other employee benefits | — | 44 | 67 | 44 |
| Interest cost | Non-service employee benefits expense | 682 | 995 | 2,052 | 2,955 |
| Expected return on plan assets | Non-service employee benefits expense | (1,608) | (1,898) | (4,838) | (5,639) |
| Amortization of net actuarial (gains) losses | Non-service employee benefits expense | 691 | 604 | 2,077 | 1,806 |
| Amortization of prior service (credit) cost | Non-service employee benefits expense | 7 | (34) | (41) | (24) |
| Settlement (gain) loss | Net other gains (losses) | — | 367 | — | 518 |
| Total defined benefit pension expense (income) | | (228) | 78 | (683) | (340) |
| Post-retirement medical benefit expense (income) | | | | | |
| Service cost | Salaries and other employee benefits | 21 | 17 | 62 | 50 |
| Interest cost | Non-service employee benefits expense | 649 | 818 | 1,945 | 2,453 |
| Amortization of net actuarial (gains) losses | Non-service employee benefits expense | 419 | — | 1,259 | — |
| Amortization of prior service (credit) cost | Non-service employee benefits expense | 131 | 131 | 393 | 393 |
| Total post-retirement medical benefit expense (income) | | 1,220 | 966 | 3,659 | 2,896 |

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

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

Note 10: Credit related arrangements, repurchase agreements and commitments

Commitments

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

The Bank has a facility with one of its custodians, whereby the Bank may offer up to US\$200 million of standby letters of credit to its customers on a fully secured basis. Under the standard terms of the facility, the custodian has the right to set-off against securities held of 110% of the utilized facility. At September 30, 2021, \$137.0 million (December 31, 2020: \$153.2 million) of standby letters of credit were issued under this facility.

| Outstanding unfunded commitments to extend credit | September 30, 2021 | December 31, 2020 |
|--|---------------------------|-------------------|
| Commitments to extend credit | 814,331 | 836,710 |
| Documentary and commercial letters of credit | 1,103 | 981 |
| Total unfunded commitments to extend credit | 815,434 | 837,691 |
| Allowance for credit losses | (604) | (179) |

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.

| Outstanding financial guarantees | September 30, 2021 | | | December 31, 2020 | | |
|---|---------------------------|-------------------|--------------|-------------------|------------|-------|
| | Gross | Collateral | Net | Gross | Collateral | Net |
| Standby letters of credit | 267,922 | 260,662 | 7,260 | 265,959 | 258,699 | 7,260 |
| Letters of guarantee | 3,688 | 3,652 | 36 | 5,449 | 5,413 | 36 |
| Total | 271,610 | 264,314 | 7,296 | 271,408 | 264,112 | 7,296 |

Repurchase agreements

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

As at September 30, 2021, the Bank had 17 open positions (December 31, 2020: 5) 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 \$169.5 million (December 31, 2020: \$197.0 million) and are included in securities purchased under agreements to resell on the consolidated balance sheets. As at September 30, 2021, there were no positions (December 31, 2020: no positions) which were offset on the consolidated balance sheets 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 paragraph.

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 in connection with a US cross border tax investigation. On August 3, 2021, the Bank announced it had reached a resolution with the United States Department of Justice concerning this inquiry. The resolution is in the form of a non-prosecution agreement with a three-year term. The Bank paid \$5.6 million in respect of Forfeiture and Tax Restitution Amounts which is consistent with that previously provisioned for.

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

Note 11: Leases

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

| | Three months ended | | Nine months ended | |
|---|--------------------|--------------------|---------------------------|--------------------|
| | September 30, 2021 | September 30, 2020 | September 30, 2021 | September 30, 2020 |
| Lease costs | | | | |
| Operating lease costs | 2,061 | 1,933 | 6,260 | 6,030 |
| Short-term lease costs | 352 | 454 | 998 | 968 |
| Sublease income | (322) | (290) | (970) | (849) |
| Total net lease cost | 2,091 | 2,097 | 6,288 | 6,149 |
| Operating lease income | 315 | 206 | 968 | 711 |
| Other information for the period | | | | |
| Right-of-use assets related to new operating lease liabilities | 529 | 323 | 570 | 323 |
| Operating cash flows from operating leases | 1,970 | 2,219 | 6,366 | 6,200 |
| Other information at end of period | | | | |
| | | | September 30, 2021 | December 31, 2020 |
| Operating leases right-of-use assets (included in other assets on the balance sheets) | | | 40,064 | 46,244 |
| Operating lease liabilities (included in other liabilities on the balance sheets) | | | 39,476 | 44,940 |
| Weighted average remaining lease term for operating leases (in years) | | | 9.94 | 10.14 |
| Weighted average discount rate for operating leases | | | 5.25 % | 5.25 % |

The following table summarizes the maturity analysis of the Bank's commitments for long-term leases as at December 31, 2020:

| Year ending December 31 | Operating Leases |
|---|------------------|
| 2021 | 8,319 |
| 2022 | 8,111 |
| 2023 | 6,980 |
| 2024 | 6,247 |
| 2025 | 3,870 |
| 2026 & thereafter | 24,793 |
| Total commitments | 58,320 |
| Less: effect of discounting cash flows to their present value | (13,380) |
| Operating lease liabilities | 44,940 |

Note 12: Segmented information

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

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

Accounting policies of the reportable segments are the same as those described in Note 2 of the Bank's audited financial statements for the year ended December 31, 2020. 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 expenses. Loan participation revenue and expenses are allocated pro-rata based upon the percentage of the total loan funded by each jurisdiction participating in the loan.

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

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

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

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

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

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

| Total Assets by Segment | September 30, 2021 | December 31, 2020 |
|---|---------------------------|-------------------|
| Bermuda | 5,771,173 | 5,924,779 |
| Cayman | 4,869,414 | 4,479,937 |
| Channel Islands and the UK | 5,236,764 | 4,826,671 |
| Other | 32,393 | 32,928 |
| Total assets before inter-segment eliminations | 15,909,744 | 15,264,315 |
| Less: inter-segment eliminations | (577,578) | (525,681) |
| Total | 15,332,166 | 14,738,634 |

| Three months ended September 30, 2021 | 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 | 37,001 | (418) | 261 | 21,458 | 58,302 | 37 | 58,339 | 47,437 | 10,902 |
| Cayman | 22,711 | 306 | (297) | 14,270 | 36,990 | 188 | 37,178 | 14,912 | 22,266 |
| Channel Islands and the UK | 15,969 | 112 | 32 | 11,027 | 27,140 | 49 | 27,189 | 20,262 | 6,927 |
| Other | — | — | — | 6,406 | 6,406 | — | 6,406 | 6,718 | (312) |
| Total before eliminations | 75,681 | — | (4) | 53,161 | 128,838 | 274 | 129,112 | 89,329 | 39,783 |
| Inter-segment eliminations | — | — | — | (4,144) | (4,144) | — | (4,144) | (4,144) | — |
| Total | 75,681 | — | (4) | 49,017 | 124,694 | 274 | 124,968 | 85,185 | 39,783 |

| Three months ended September 30, 2020 | Net interest income | | Provision for credit recoveries (losses) | Non-interest income | Net revenue before gains and losses | Gains and losses | Total net revenue | Total expenses | Net income |
|--|---------------------|-------------------|---|------------------------|---|---------------------|----------------------|-------------------|---------------|
| | Customer | Inter- segment | | | | | | | |
| Bermuda | 38,275 | 135 | (1,604) | 21,838 | 58,644 | 1,613 | 60,257 | 51,399 | 8,858 |
| Cayman | 21,691 | 301 | 40 | 12,520 | 34,552 | 414 | 34,966 | 17,213 | 17,753 |
| Channel Islands and the UK | 15,347 | (436) | 209 | 10,425 | 25,545 | (515) | 25,030 | 20,796 | 4,234 |
| Other | — | — | — | 3,722 | 3,722 | — | 3,722 | 4,024 | (302) |
| Total before eliminations | 75,313 | — | (1,355) | 48,505 | 122,463 | 1,512 | 123,975 | 93,432 | 30,543 |
| Inter-segment eliminations | — | — | — | (1,628) | (1,628) | — | (1,628) | (1,628) | — |
| Total | 75,313 | — | (1,355) | 46,877 | 120,835 | 1,512 | 122,347 | 91,804 | 30,543 |

| Nine months ended September 30, 2021 | 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 | 111,392 | (836) | 1,823 | 62,272 | 174,651 | 921 | 175,572 | 139,716 | 35,856 |
| Cayman | 67,005 | 927 | 802 | 42,202 | 110,936 | 185 | 111,121 | 44,181 | 66,940 |
| Channel Islands and the UK | 46,892 | (91) | (104) | 33,986 | 80,683 | (902) | 79,781 | 61,565 | 18,216 |
| Other | 1 | — | — | 20,381 | 20,382 | — | 20,382 | 20,381 | 1 |
| Total before eliminations | 225,290 | — | 2,521 | 158,841 | 386,652 | 204 | 386,856 | 265,843 | 121,013 |
| Inter-segment eliminations | — | — | — | (13,408) | (13,408) | — | (13,408) | (13,408) | — |
| Total | 225,290 | — | 2,521 | 145,433 | 373,244 | 204 | 373,448 | 252,435 | 121,013 |

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

| Nine months ended September 30, 2020 | Net interest income | | Provision for credit recoveries (losses) | Non-interest income | Net revenue before gains and losses | Gains and losses | Total net revenue | Total expenses | Net income |
|---|---------------------|-------------------|---|------------------------|---|---------------------|----------------------|-------------------|----------------|
| | Customer | Inter- segment | | | | | | | |
| Bermuda | 120,745 | 632 | (11,113) | 63,406 | 173,670 | 1,626 | 175,296 | 147,367 | 27,929 |
| Cayman | 72,094 | 835 | 238 | 36,257 | 109,424 | 416 | 109,840 | 47,910 | 61,930 |
| Channel Islands and the UK | 49,173 | (1,467) | (16) | 29,930 | 77,620 | (425) | 77,195 | 61,446 | 15,749 |
| Other | 7 | — | — | 11,446 | 11,453 | (1) | 11,452 | 11,906 | (454) |
| Total before eliminations | 242,019 | — | (10,891) | 141,039 | 372,167 | 1,616 | 373,783 | 268,629 | 105,154 |
| Inter-segment eliminations | — | — | — | (4,942) | (4,942) | — | (4,942) | (4,942) | — |
| Total | 242,019 | — | (10,891) | 136,097 | 367,225 | 1,616 | 368,841 | 263,687 | 105,154 |

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 include designated currency swaps that are used to minimize the Bank's exposure to variability in the fair value of available-for-sale investments due to movements in foreign exchange rates. The effective portion of changes in the fair value of the hedging instrument is recognized in current year earnings consistent with the related change in fair value of the hedged items attributable to foreign exchange rates. For fair value hedges, hedging effectiveness of the hedged item and the hedging instrument are assessed and managed at inception and on an ongoing basis using a partial-term method.

Net investment hedges include 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 AOCIL 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 AOCIL (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 AOCIL are reclassified to earnings only upon the sale or substantial liquidation of an investment in a foreign subsidiary.

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

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 AOCIL 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 AOCIL during the current period from translation gain or loss.

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

Client service derivatives

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

The 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, 2021 | Derivative instrument | Number of contracts | Notional amounts | Gross positive fair value | Gross negative fair value | Net fair value |
|------------------------------------|--|----------------------------|-------------------------|----------------------------------|----------------------------------|-----------------------|
| Risk management derivatives | | | | | | |
| | Net investment hedges | 3 | 52,379 | 1,323 | (7) | 1,316 |
| | Fair value hedges | 4 | 182,933 | — | (3,989) | (3,989) |
| | Derivatives not formally designated as hedging instruments | 23 | 951,815 | 14,960 | (1,106) | 13,854 |
| | Subtotal risk management derivatives | | 1,187,127 | 16,283 | (5,102) | 11,181 |
| | Client services derivatives | 259 | 680,303 | 4,307 | (4,122) | 185 |
| | Total derivative instruments | | 1,867,430 | 20,590 | (9,224) | 11,366 |
| December 31, 2020 | | | | | | |
| | Risk management derivatives | | | | | |
| | Net investment hedges | 4 | 68,231 | — | (4,586) | (4,586) |
| | Fair value hedges | 5 | 197,987 | 4,039 | — | 4,039 |
| | Derivatives not formally designated as hedging instruments | 42 | 1,471,632 | 2,678 | (21,239) | (18,561) |
| | Subtotal risk management derivatives | | 1,737,850 | 6,717 | (25,825) | (19,108) |
| | Client services derivatives | 241 | 770,113 | 7,128 | (6,862) | 266 |
| | Total derivative instruments | | 2,507,963 | 13,845 | (32,687) | (18,842) |

In addition to the above, as at September 30, 2021 foreign denominated deposits of £199.3 million (December 31, 2020: £192.8 million) and CHF 0.4 million (December 31, 2020: CHF 0.4 million) were designated as a hedge of foreign exchange risk associated with the net investment in foreign operations.

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

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

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

| September 30, 2021 | Gross fair value recognized | Less: offset applied under master netting agreements | Net fair value presented in the consolidated balance sheets | Less: positions not offset in the consolidated balance sheets | | Net exposures |
|--|-----------------------------|--|---|---|---------------------------------|---------------|
| | | | | Gross fair value of derivatives | Cash collateral received / paid | |
| Derivative assets | | | | | | |
| Spot and forward foreign exchange and currency swaps | 20,590 | (5,374) | 15,216 | — | (3,137) | 12,079 |
| Derivative liabilities | | | | | | |
| Spot and forward foreign exchange and currency swaps | 9,224 | (5,374) | 3,850 | — | (2,884) | 966 |
| Net positive fair value | | | 11,366 | | | |

| December 31, 2020 | Gross fair value recognized | Less: offset applied under master netting agreements | Net fair value presented in the consolidated balance sheets | Less: positions not offset in the consolidated balance sheets | | Net exposures |
|--|-----------------------------|--|---|---|---------------------------------|---------------|
| | | | | Gross fair value of derivatives | Cash collateral received / paid | |
| Derivative assets | | | | | | |
| Spot and forward foreign exchange and currency swaps | 13,845 | (7,153) | 6,692 | — | (3) | 6,689 |
| Derivative liabilities | | | | | | |
| Spot and forward foreign exchange and currency swaps | 32,687 | (7,153) | 25,534 | — | (3,042) | 22,492 |
| Net negative fair value | | | (18,842) | | | |

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

| Derivative instrument | Consolidated statements of operations line item | Three months ended | | Nine months ended | |
|---|---|-----------------------------------|--------------------------|--------------------|--------------------|
| | | September 30, 2021 | September 30, 2020 | September 30, 2021 | September 30, 2020 |
| | | Spot and forward foreign exchange | Foreign exchange revenue | (106) | 436 |
| Currency swaps, not designated as hedge | Foreign exchange revenue | 10,090 | (18,056) | 32,416 | (10,297) |
| Currency swaps - fair value hedges | Foreign exchange revenue | (3,983) | — | (8,028) | — |
| Total net gains (losses) recognized in net income | | 6,001 | (17,620) | 24,306 | (9,889) |

| Derivative instrument | Consolidated statements of comprehensive income line item | Three months ended | | Nine months ended | |
|---|---|---------------------------------------|--|--------------------|--------------------|
| | | September 30, 2021 | September 30, 2020 | September 30, 2021 | September 30, 2020 |
| | | Currency swaps - net investment hedge | Net change in unrealized gains and (losses) on translation of net investment in foreign operations | 4,246 | (873) |
| Total net gains (losses) recognized in comprehensive income | | 4,246 | (873) | 5,902 | (888) |

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, 2020.

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 and US Government Treasury notes.

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

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

There were no transfers between Level 1 and Level 2 or Level 2 and Level 3 during the nine months ended September 30, 2021 and the year ended December 31, 2020.

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

| | September 30, 2021 | | | | December 31, 2020 | | | Total carrying amount / fair value |
|--|--------------------|------------------|---------------|------------------------------------|-------------------|------------------|---------------|------------------------------------|
| | Fair value | | | Total carrying amount / fair value | 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 | | | | | | | | |
| Equity securities | | | | | | | | |
| Mutual funds | — | 222 | — | 222 | 7,081 | 236 | — | 7,317 |
| Total equity securities | — | 222 | — | 222 | 7,081 | 236 | — | 7,317 |
| Available-for-sale investments | | | | | | | | |
| US government and federal agencies | 685,752 | 2,475,302 | — | 3,161,054 | — | 2,566,066 | — | 2,566,066 |
| Non-US governments debt securities | — | 22,392 | — | 22,392 | — | 22,408 | — | 22,408 |
| Asset-backed securities - Student loans | — | — | 12,875 | 12,875 | — | — | 12,945 | 12,945 |
| Residential mortgage-backed securities | — | 31,623 | — | 31,623 | — | 59,697 | — | 59,697 |
| Total available-for-sale | 685,752 | 2,529,317 | 12,875 | 3,227,944 | — | 2,648,171 | 12,945 | 2,661,116 |
| Other assets - Derivatives | — | 15,216 | — | 15,216 | — | 6,692 | — | 6,692 |
| Financial liabilities | | | | | | | | |
| Other liabilities - Derivatives | — | 3,850 | — | 3,850 | — | 25,534 | — | 25,534 |

Level 3 Reconciliation

The Level 3 financial instrument, 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 quote from an external security pricing service.

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

| | Nine months ended September 30, 2021 | Year ended December 31, 2020 |
|--|---|------------------------------------|
| | Available- for-sale investments | Available- for-sale investments |
| Carrying amount at beginning of period | 12,945 | 12,891 |
| Change in unrealized gains (losses) recognized in other comprehensive income | (70) | 54 |
| Carrying amount at end of period | 12,875 | 12,945 |
| Cumulative gain (loss) recognized in other comprehensive income | (415) | (345) |

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

| | Level | September 30, 2021 | | | December 31, 2020 | | |
|---|---------|--------------------|------------|-------------------------------|-------------------|------------|-------------------------------|
| | | Carrying amount | Fair value | Appreciation / (depreciation) | Carrying amount | Fair value | Appreciation / (depreciation) |
| Financial assets | | | | | | | |
| Cash due from banks | Level 1 | 2,309,502 | 2,309,502 | — | 3,289,592 | 3,289,592 | — |
| Securities purchased under agreements to resell | Level 2 | 169,524 | 169,524 | — | 197,039 | 197,039 | — |
| Short-term investments | Level 1 | 1,276,562 | 1,276,562 | — | 823,039 | 823,039 | — |
| Investments held-to-maturity | Level 2 | 2,755,527 | 2,803,129 | 47,602 | 2,194,371 | 2,304,756 | 110,385 |
| Loans, net of allowance for credit losses | Level 2 | 5,203,788 | 5,233,947 | 30,159 | 5,160,810 | 5,193,240 | 32,430 |
| Other real estate owned ¹ | Level 2 | 691 | 691 | — | 4,052 | 4,052 | — |
| Financial liabilities | | | | | | | |
| Term deposits | Level 2 | 2,876,854 | 2,880,764 | (3,910) | 2,660,082 | 2,665,463 | (5,381) |
| Long-term debt | Level 2 | 171,773 | 161,534 | 10,239 | 171,462 | 170,086 | 1,376 |

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

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

Note 15: Interest rate risk

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

| September 30, 2021 | 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 | 2,106 | — | — | — | — | 204 | 2,310 |
| Securities purchased under agreement to resell | 170 | — | — | — | — | — | 170 |
| Short-term investments | 563 | 706 | — | — | — | 8 | 1,277 |
| Investments | 16 | 4 | 18 | 766 | 5,180 | — | 5,984 |
| Loans | 4,175 | 50 | 68 | 686 | 188 | 35 | 5,202 |
| Other assets | — | — | — | — | — | 389 | 389 |
| Total assets | 7,030 | 760 | 86 | 1,452 | 5,368 | 636 | 15,332 |
| Liabilities and shareholders' equity | | | | | | | |
| Shareholders' equity | — | — | — | — | — | 974 | 974 |
| Demand deposits | 8,001 | — | 27 | — | — | 2,956 | 10,984 |
| Term deposits | 1,648 | 615 | 516 | 98 | — | — | 2,877 |
| Other liabilities | — | — | — | — | — | 325 | 325 |
| Long-term debt | — | — | — | 172 | — | — | 172 |
| Total liabilities and shareholders' equity | 9,649 | 615 | 543 | 270 | — | 4,255 | 15,332 |
| Interest rate sensitivity gap | (2,619) | 145 | (457) | 1,182 | 5,368 | (3,619) | — |
| Cumulative interest rate sensitivity gap | (2,619) | (2,474) | (2,931) | (1,749) | 3,619 | — | — |

| December 31, 2020 | 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 | 3,156 | — | — | — | — | 134 | 3,290 |
| Securities purchased under agreement to resell | 197 | — | — | — | — | — | 197 |
| Short-term investments | 494 | 327 | 2 | — | — | — | 823 |
| Investments | 13 | 13 | 27 | 92 | 4,711 | 7 | 4,863 |
| Loans | 4,170 | 39 | 71 | 652 | 187 | 42 | 5,161 |
| Other assets | — | — | — | — | — | 405 | 405 |
| Total assets | 8,030 | 379 | 100 | 744 | 4,898 | 588 | 14,739 |
| Liabilities and shareholders' equity | | | | | | | |
| Shareholders' equity | — | — | — | — | — | 982 | 982 |
| Demand deposits | 7,578 | — | — | — | — | 3,012 | 10,590 |
| Term deposits | 1,584 | 634 | 344 | 99 | — | — | 2,661 |
| Other liabilities | — | — | — | — | — | 335 | 335 |
| Long-term debt | — | — | — | 171 | — | — | 171 |
| Total liabilities and shareholders' equity | 9,162 | 634 | 344 | 270 | — | 4,329 | 14,739 |
| Interest rate sensitivity gap | (1,132) | (255) | (244) | 474 | 4,898 | (3,741) | — |
| Cumulative interest rate sensitivity gap | (1,132) | (1,387) | (1,631) | (1,157) | 3,741 | — | — |

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

Note 16: Long-term debt

On June 27, 2005, the Bank issued US \$150 million of Subordinated Lower Tier II capital notes. The notes were issued at par in two tranches, namely US \$90 million in Series A notes due 2015, which were redeemed at face value in January 2014, and US \$60 million in Series B notes due 2020. The issuance was by way of private placement with US institutional investors. The notes were listed on the BSX in the specialist debt securities category. The Series B notes paid a fixed coupon of 5.11% until July 2, 2015 when they became redeemable in whole at the Bank's option. The Series B notes were priced at a spread of 1.10% over the 10-year US Treasury yield. During September 2011, the Bank repurchased \$15 million of the outstanding 5.11% 2005 Series B Subordinated notes with the balance of \$45 million matured on July 2, 2020.

On May 27, 2008, the Bank issued US \$78 million of Subordinated Lower Tier II capital notes. The notes were issued at par and in two tranches, namely US \$53 million in Series A notes due 2018, which were redeemed at face value in May 2013, and US \$25 million in Series B notes due 2023. The issuance was by way of private placement with US institutional investors. The notes were listed on the BSX in the specialist debt securities category. The proceeds of the issue were used to repay the entire amount of the US \$78 million outstanding subordinated notes redeemed in May 2008. The Series B notes pay a fixed coupon of 8.44% until May 27, 2018 when they became redeemable in whole at the Bank's option. The Series B notes were priced at a spread of 4.51% over the 10-year US Treasury yield and were redeemed at face value in November 2020.

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 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.

On June 11, 2020, the Bank issued US \$100 million of Subordinated Lower Tier II capital notes. The notes were issued at par and due on June 15, 2030. The issuance was by way of a registered offering with US institutional investors. The notes are listed on the BSX in the specialist debt securities category. The proceeds of the issue were used, among other, to repay the entire amount of the US \$45 million outstanding subordinated notes series 2005-B which matured on July 2, 2020. The notes issued pay a fixed coupon of 5.25% until June 15, 2025 when they become redeemable in whole at the option of the Bank. The notes were priced at a spread of 4.43% over the 10-year US Treasury yield. The Bank incurred \$2.3 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, 2021 and the year ended December 31, 2020.

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, 2021. The interest payments are calculated until contractual maturity using the current London Inter-bank Offered Rate ("LIBOR") and Secured Overnight Financing Rate ("SOFR").

| Long-term debt | Earliest date redeemable at the Bank's option | Contractual maturity date | Interest rate until date redeemable | Interest rate from earliest date redeemable to contractual maturity | Principal Outstanding | Interest payments until contractual maturity | | |
|--|---|---------------------------|-------------------------------------|---|-----------------------|--|---------------|---------------|
| | | | | | | Within 1 year | 1 to 5 years | After 5 years |
| Bermuda | | | | | | | | |
| 2018 issuance | June 1, 2023 | June 1, 2028 | 5.25 % | 3 months US\$ LIBOR + 2.255% | 75,000 | 3,938 | 9,841 | 3,175 |
| 2020 issuance | June 15, 2025 | June 15, 2030 | 5.25 % | 3 months US\$ SOFR + 5.060% | 100,000 | 5,250 | 22,237 | 19,432 |
| Total | | | | | 175,000 | 9,188 | 32,078 | 22,607 |
| Unamortized debt issuance costs | | | | | (3,227) | | | |
| Long-term debt less unamortized debt issuance costs | | | | | 171,773 | | | |

Note 17: Earnings per share

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

During the nine months ended September 30, 2021, there were no options to purchase common shares outstanding (September 30, 2020: 0.1 million). During the nine months ended September 30, 2021, the average number of outstanding awards of unvested common shares was 0.9 million (September 30, 2020: 0.9 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.

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

| | Three months ended | | Nine months ended | |
|--|--------------------|--------------------|--------------------|--------------------|
| | September 30, 2021 | September 30, 2020 | September 30, 2021 | September 30, 2020 |
| Net income | 39,783 | 30,543 | 121,013 | 105,154 |
| Basic Earnings Per Share | | | | |
| Weighted average number of common shares issued | 50,159 | 50,366 | 50,195 | 51,459 |
| Weighted average number of common shares held as treasury stock | (619) | (619) | (619) | (619) |
| Weighted average number of common shares (in thousands) | 49,540 | 49,747 | 49,576 | 50,840 |
| Basic Earnings Per Share | 0.80 | 0.61 | 2.44 | 2.07 |
| Diluted Earnings Per Share | | | | |
| Weighted average number of common shares | 49,540 | 49,747 | 49,576 | 50,840 |
| Net dilution impact related to options to purchase common shares | — | 49 | — | 67 |
| Net dilution impact related to awards of unvested common shares | 343 | 245 | 327 | 257 |
| Weighted average number of diluted common shares (in thousands) | 49,883 | 50,041 | 49,903 | 51,164 |
| Diluted Earnings Per Share | 0.80 | 0.61 | 2.42 | 2.06 |

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 share awards. Both types of awards are detailed below. In 2012 and 2016, the Board of Directors approved an increase to the equivalent number of shares allowed to be granted under the 2010 Plan to 5.0 million and 7.5 million shares, respectively.

In May 2020, the Board of Directors approved the 2020 Omnibus Plan (the "2020 Plan") which replaces the 2010 Plan. Under the 2020 Plan, 3.0 million shares are initially available for grant to employees in the form of stock options or unvested share awards. Both types of awards are detailed below.

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 and 2020 Plans

Under the 2010 and 2020 Plans, 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 and 2020 Plans 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.

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

Changes in Outstanding Stock Option Plans

| | Number of shares transferable upon exercise (thousands) | Weighted average exercise price (\$) | Weighted average remaining life (years) | Aggregate intrinsic value (\$ thousands) |
|--|---|--------------------------------------|---|--|
| | | | | |
| Nine months ended September 30, 2020 | | | | |
| Outstanding at beginning of period | 159 | 12.07 | | |
| Exercised | (43) | 11.50 | | 263 |
| Forfeitures and cancellations | (15) | 11.50 | | |
| Outstanding at end of period | 101 | 12.40 | 0.22 | 988 |
| Vested and exercisable at end of period | 101 | 12.40 | 0.22 | |

There were no stock options outstanding as at September 30, 2021 and December 31, 2020.

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 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, 2021 was \$33.26 per share (December 31, 2020: \$33.35 per share). The Bank expects to settle these awards by issuing new shares.

Employee Deferred Incentive Plan ("EDIP")

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

Executive Long-Term Incentive Share Plan ("ELTIP") - Years 2013 - 2021

The 2021 ELTIP was approved on February 10, 2021. Under the Bank's ELTIP plans for the years 2013 through 2021, 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, 2021 | | September 30, 2020 | |
| | EDIP | ELTIP | EDIP | ELTIP |
| Outstanding at beginning of period | 364 | 658 | 251 | 618 |
| Granted | 115 | 275 | 196 | 200 |
| Vested (fair value in 2021: \$13.7 million, 2020: \$9.5 million) | (176) | (237) | (123) | (162) |
| Resignation | (2) | — | (3) | (6) |
| Outstanding at end of period | 301 | 696 | 321 | 650 |

Share-based Compensation Cost Recognized in Net Income

| | Nine months ended | |
|-------------------------------|---------------------------------|--------------------------|
| | September 30, 2021 | September 30, 2020 |
| Cost recognized in net income | EDIP and ELTIP 11,003 | EDIP and ELTIP 11,331 |

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

Unrecognized Share-based Compensation Cost

| | September 30, 2021 | | December 31, 2020 | |
|-----------------------------------|--------------------|---|-------------------|---|
| | 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 | 6,124 | 1.62 | 6,588 | 1.91 |
| ELTIP | | | | |
| Time vesting shares | 51 | 0.37 | 156 | 1.09 |
| Performance vesting shares | 10,752 | 1.89 | 8,187 | 1.60 |
| Total unrecognized expense | 16,927 | | 14,931 | |

Note 19: Share buy-back plans

From time to time, the Bank, may seek to repurchase and retire equity securities of the Bank, through cash purchase, privately negotiated transactions, or otherwise. Such transactions, if any, depend on prevailing market conditions, liquidity and capital requirements, contractual restrictions, and other factors.

Common Share Buy-Back Program

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

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

On February 10, 2021, the Board approved a new common share repurchase program, authorizing the purchase for treasury of up to 2 million common shares through to February 28, 2022.

In the nine months ended September 30, 2021, the Bank repurchased and retired 330,828 shares.

| | Nine months ended | Year ended December 31 | |
|--|--------------------|------------------------|------------|
| | September 30, 2021 | 2020 | 2019 |
| Common share buy-backs | | | |
| Acquired number of shares (to the nearest 1) | 330,828 | 3,452,000 | 2,293,788 |
| Average cost per common share | 36.09 | 25.10 | 35.55 |
| Total cost (in US dollars) | 11,939,348 | 86,639,889 | 81,534,076 |

Note 20: Accumulated other comprehensive income (loss)

| | Unrealized (losses) on translation of net investment in foreign operations | Unrealized gains (losses) | | Employee benefit plans | | | Total AOCIL |
|---|--|---------------------------|-----------------|------------------------|----------------------------|------------------------------------|------------------|
| | | HTM investments | AFS Investments | Pension | Post-retirement healthcare | Subtotal - employee benefits plans | |
| Nine months ended September 30, 2021 | | | | | | | |
| Balance at beginning of period | (21,065) | (60) | 72,779 | (72,255) | (29,079) | (101,334) | (49,680) |
| Other comprehensive income (loss), net of taxes | 226 | 165 | (67,542) | 2,315 | 1,652 | 3,967 | (63,184) |
| Balance at end of period | (20,839) | 105 | 5,237 | (69,940) | (27,427) | (97,367) | (112,864) |

| | Unrealized (losses) on translation of net investment in foreign operations | Unrealized gains (losses) | | Employee benefit plans | | | Total AOCIL |
|---|--|---------------------------|-----------------|------------------------|----------------------------|------------------------------------|-----------------|
| | | HTM investments | AFS investments | Pension | Post-retirement healthcare | Subtotal - employee benefits plans | |
| Nine months ended September 30, 2020 | | | | | | | |
| Balance at beginning of period | (20,818) | (725) | 11,808 | (66,312) | (11,050) | (77,362) | (87,097) |
| Other comprehensive income (loss), net of taxes | (969) | 397 | 60,800 | 2,707 | 393 | 3,100 | 63,328 |
| Balance at end of period | (21,787) | (328) | 72,608 | (63,605) | (10,657) | (74,262) | (23,769) |

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

Net Change of AOCIL Components

| | Line item in the consolidated statements of operations, if any | Three months ended | | Nine months ended | |
|---|--|--------------------|--------------------|--------------------|--------------------|
| | | September 30, 2021 | September 30, 2020 | September 30, 2021 | September 30, 2020 |
| Net unrealized gains (losses) on translation of net investment in foreign operations adjustments | | | | | |
| Foreign currency translation adjustments | N/A | (8,409) | 528 | (4,453) | (969) |
| Gains (loss) on net investment hedge | N/A | 7,742 | — | 4,679 | — |
| Net change | | (667) | 528 | 226 | (969) |
| Held-to-maturity investment adjustments | | | | | |
| Amortization of net gains (losses) to net income | Interest income on investments | 18 | 228 | 165 | 397 |
| Net change | | 18 | 228 | 165 | 397 |
| Available-for-sale investment adjustments | | | | | |
| Gross unrealized gains (losses) | N/A | (12,365) | 3,904 | (67,741) | 61,916 |
| Transfer of realized (gains) losses to net income | Net realized gains (losses) on AFS investments | 239 | (1,116) | 239 | (1,116) |
| Foreign currency translation adjustments of related balances | N/A | 76 | — | (40) | — |
| Net change | | (12,050) | 2,788 | (67,542) | 60,800 |
| Employee benefit plans adjustments | | | | | |
| Defined benefit pension plan | | | | | |
| Net loss (gain) on settlement reclassified to net income | Net other gains (losses) | — | 367 | — | 518 |
| Amortization of net actuarial (gains) losses | Non-service employee benefits expense | 691 | 604 | 2,077 | 1,806 |
| Amortization of prior service (credit) cost | Non-service employee benefits expense | 7 | (34) | (41) | (24) |
| Foreign currency translation adjustments of related balances | N/A | 471 | (597) | 279 | 407 |
| Net change | | 1,169 | 340 | 2,315 | 2,707 |
| Post-retirement healthcare plan | | | | | |
| Amortization of net actuarial (gains) losses | Non-service employee benefits expense | 419 | — | 1,259 | — |
| Amortization of prior service (credit) cost | Non-service employee benefits expense | 131 | 131 | 393 | 393 |
| Net change | | 550 | 131 | 1,652 | 393 |
| Other comprehensive income (loss), net of taxes | | (10,980) | 4,015 | (63,184) | 63,328 |

Note 21: Capital structure

Authorized Capital

The Bank trades on the New York Stock Exchange under the ticker symbol "NTB" and on the BSX under the symbol "NTB.BH".

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

Dividends Declared

During the nine months ended September 30, 2021, the Bank declared and paid cash dividends of \$1.32 (September 30, 2020: \$1.32) for each common share as of the related record date.

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

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

Regulatory Capital

The Bank's regulatory capital is determined in accordance with current Basel III guidelines as issued by the BMA. The Bank is fully compliant with all regulatory capital requirements to which it is subject, and it maintains capital ratios in excess of regulatory minimums as at September 30, 2021 and December 31, 2020. The following table sets forth the Bank's capital adequacy in accordance with the Basel III framework:

| | September 30, 2021 | | December 31, 2020 | |
|--|--------------------|--------------------|-------------------|--------------------|
| | Actual | Regulatory minimum | Actual | Regulatory minimum |
| Capital | | | | |
| CET 1 capital | 875,856 | N/A | 816,009 | N/A |
| Tier 1 capital | 875,856 | N/A | 816,009 | N/A |
| Tier 2 capital | 184,274 | N/A | 187,090 | N/A |
| Total capital | 1,060,130 | N/A | 1,003,099 | N/A |
| Risk Weighted Assets | 5,185,105 | N/A | 5,068,590 | N/A |
| Leverage Ratio Exposure Measure | 15,937,977 | N/A | 15,349,363 | N/A |
| Capital Ratios (%) | | | | |
| CET 1 capital | 16.9 % | 10.0 % | 16.1 % | 10.0 % |
| Tier 1 capital | 16.9 % | 11.5 % | 16.1 % | 11.5 % |
| Total capital | 20.4 % | 13.5 % | 19.8 % | 13.5 % |
| Leverage ratio | 5.5 % | 5.0 % | 5.3 % | 5.0 % |

Note 22: Related party transactions

Financing Transactions

Certain directors and executives of the Bank, companies in which they are principal owners and/or members of the board, and trusts in which they are involved, have loans, and/or are guarantors for loans, deposits with the Bank. Loans to directors were made in the ordinary course of business at normal credit terms, including interest rate and collateral requirements. Loans to executives may be eligible for preferential rates. All of these loans were considered performing loans as at September 30, 2021 and December 31, 2020. Loan balances with directors and executives of the Bank, companies in which they are principal owners and/or members of the board, and trusts in which they are involved were as follows:

| | |
|---|---------------|
| Balance at December 31, 2019 | 38,641 |
| Loans issued during the year | 37,073 |
| Loan repayments and the effect of changes in the composition of related parties | (33,323) |
| Balance at December 31, 2020 | 42,391 |
| Loans issued during the period | 9,146 |
| Loan repayments and the effect of changes in the composition of related parties | (41,434) |
| Balance at September 30, 2021 | 10,103 |

| Consolidated balance sheets | September 30, 2021 | December 31, 2020 |
|-----------------------------|--------------------|-------------------|
| Deposits | 14,834 | 19,591 |

| Consolidated statement of operations | Three months ended | | Nine months ended | |
|--------------------------------------|--------------------|--------------------|--------------------|--------------------|
| | September 30, 2021 | September 30, 2020 | September 30, 2021 | September 30, 2020 |
| Interest and fees on loans | 80 | 384 | 1,306 | 2,335 |

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

| Consolidated balance sheets | September 30, 2021 | December 31, 2020 |
|-----------------------------|--------------------|-------------------|
| Loans | 10,686 | 12,939 |
| Deposits | 182 | 423 |

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

| Consolidated statement of operations | Three months ended | | Nine months ended | |
|---|---------------------------|--------------------|---------------------------|--------------------|
| | September 30, 2021 | September 30, 2020 | September 30, 2021 | September 30, 2020 |
| Interest and fees on loans | 149 | 244 | 472 | 498 |
| Other gains/losses | — | 712 | 99 | 712 |
| Total non-interest expense | 345 | 390 | 1,025 | 1,060 |

Investments

The Bank held seed investments in Butterfield mutual funds, which were managed by a wholly-owned subsidiary of the Bank. These investments were sold during the nine months ended September 30, 2021 and were included in equity securities at their fair value as follows:

| Consolidated balance sheets | September 30, 2021 | December 31, 2020 |
|------------------------------------|---------------------------|-------------------|
| Equity securities | | |
| Fair value | — | 7,081 |
| Unrealized gain | — | 2,531 |

As at September 30, 2021, several Butterfield mutual funds which are managed by a wholly owned subsidiary of the Bank, had loan balances and deposit balances held with the Bank. The Bank also earned asset management revenue and custody and other administration services revenue from funds managed by a wholly-owned subsidiary of the Bank and from directors and executives, companies in which they are principal owners and/or members of the board and trusts in which they are involved, as well as other income from other related parties.

| Consolidated balance sheets | September 30, 2021 | December 31, 2020 |
|------------------------------------|---------------------------|-------------------|
| Loans | 5 | 2,518 |
| Deposits | 18,633 | 26,541 |

| Consolidated statement of operations | Three months ended | | Nine months ended | |
|---|---------------------------|--------------------|---------------------------|--------------------|
| | September 30, 2021 | September 30, 2020 | September 30, 2021 | September 30, 2020 |
| Asset management | 1,334 | 1,264 | 2,641 | 5,900 |
| Custody and other administration services | 125 | 245 | 506 | 881 |
| Other non-interest income | — | — | 6 | 729 |

Note 23: Subsequent events

On October 26, 2021, the Board of Directors declared an interim dividend of \$0.44 per common share to be paid on November 24, 2021 to shareholders of record on November 10, 2021.