
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 6-K

**REPORT OF FOREIGN PRIVATE ISSUER
PURSUANT TO RULE 13A-16 OR 15D-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934**

For the month of October, 2023

Commission File Number: 001-37877

The Bank of N.T. Butterfield & Son Limited

(Translation of registrant's name into English)

65 Front Street
Hamilton, HM 12
Bermuda

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

DOCUMENTS INCLUDED AS PART OF THIS FORM 6-K

Attached hereto (i) as Exhibit 99.1 is the earnings release, (ii) as Exhibit 99.2 is the financial statements, and (iii) as Exhibit 99.3 is the earnings call presentation, all for The Bank of N.T. Butterfield & Son Limited for the three months ended September 30, 2023.

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: October 24, 2023

THE BANK OF N.T. BUTTERFIELD & SON LIMITED

By: /s/ Shaun Morris
Name: Shaun Morris
Title: General Counsel and Group Chief Legal Officer

EXHIBIT INDEX

Exhibit	Description
99.1	Earnings release - Third quarter 2023 results
99.2	Financial Statements - Third quarter 2023 results
99.3	Earnings call presentation - Third quarter 2023 results

News Release, by BUTTERFIELD.



The Bank of N.T. Butterfield & Son Limited
65 Front Street, Hamilton HM 12 Bermuda
P.O. Box HM 195, Hamilton HM AX Bermuda
Tel: (441) 295 1111 Fax: (441) 295 3878
www.butterfieldgroup.com

Butterfield Reports Third Quarter 2023 Results

Financial highlights for the third quarter of 2023:

- Net income of \$48.7 million, or \$0.99 per share, and core net income¹ of \$57.0 million, or \$1.16 per share
- Return on average common equity of 20.6% and core return on average tangible common equity¹ of 26.1%
- Net interest margin of 2.76%, cost of deposits of 1.52%
- Board declares dividend for the quarter ended September 30, 2023 of \$0.44 per share

Hamilton, Bermuda - October 24, 2023: The Bank of N.T. Butterfield & Son Limited ("Butterfield" or the "Bank") (BSX: NTB.BH; NYSE: NTB) today announced financial results for the quarter ended September 30, 2023.

Net income for the third quarter of 2023 was \$48.7 million, or \$0.99 per diluted common share, compared to net income of \$61.0 million, or \$1.22 per diluted common share, for the previous quarter and \$57.4 million, or \$1.15 per diluted common share, for the third quarter of 2022. Core net income¹ for the third quarter of 2023 was \$57.0 million, or \$1.16 per diluted common share, compared to \$57.0 million, or \$1.14 per diluted common share, for the previous quarter and \$57.6 million, or \$1.16 per diluted common share, for the third quarter of 2022.

The return on average common equity for the third quarter of 2023 was 20.6% compared to 25.9% for the previous quarter and 28.5% for the third quarter of 2022. The core return on average tangible common equity¹ for the third quarter of 2023 was 26.1%, compared to 26.3% for the previous quarter and 31.6% for the third quarter of 2022. The efficiency ratio for the third quarter of 2023 was 64.1%, compared to 57.6% for the previous quarter and 57.1% for the third quarter of 2022. The core efficiency ratio¹ for the third quarter of 2023 was 58.3% compared with 57.6% in the previous quarter and 57.0% for the third quarter of 2022.

Michael Collins, Butterfield's Chairman and Chief Executive Officer, commented, "The Bank continues to produce earnings and a return on equity that reflect its overall financial strength and operational effectiveness. Our strong results demonstrate the continued focus on low risk density asset classes, while delivering consistent non-interest income and controlling expenses. As higher-for-longer interest rates have developed as the most likely scenario in the near term, competition for deposits has increased across our island jurisdictions, particularly in the Channel Islands. We continue to work closely with clients on both the loan and deposit product sets to ensure their financial services needs are met and that each relationship is appropriately managed.

"Reducing compensation-related expense is one of the key levers available to us as we navigate the current interest rate cycle, increasing competition, and inflation. In the third quarter, we made the difficult decision to initiate a group-wide restructuring program, which will reduce Butterfield's global workforce by 9% in several phases. We expect annual cost savings of approximately \$13 million once the restructuring is fully implemented in the first half of 2024, and we will continue to operate across all of our jurisdictions without changes to our products and services.

(1) See table "Reconciliation of US GAAP Results to Core Earnings" below for reconciliation of US GAAP results to non-GAAP measures. 1

Our efforts remain focused on navigating the various economic cycles for the success of the Bank and for the long-term benefit of all stakeholders.”

Net income was down in the third quarter of 2023 versus the prior quarter primarily due to \$8.2 million of non-core costs associated with the group-wide restructuring program that was implemented in the quarter and resulted in the recognition of redundancy expenses. Core net income¹ was flat compared to the prior quarter as lower net interest income comprised of increasing interest income offset by higher interest-bearing deposit costs, and increased core expenses, were moderated by higher non-interest income and a lower provision for credit losses.

Net interest income (“NII”) for the third quarter of 2023 was \$90.2 million, a decrease of \$2.3 million, compared with NII of \$92.5 million in the previous quarter and down \$1.0 million from \$91.2 million in the third quarter of 2022. NII decreased during the third quarter of 2023 compared to the prior quarter, primarily due to increased interest-bearing deposit costs in all three banking jurisdictions, partially offset by increased loan and treasury margins and lower subordinated debt interest payments following the redemption of the Bank’s \$75 million 2018 series subordinated debt in the second quarter of 2023. Compared to the third quarter of 2022, NII was down due to a decrease in the size of the Bank’s balance sheet following post-Covid normalization, which offset improved net asset margins.

Net interest margin (“NIM”) for the third quarter of 2023 was 2.76%, a decrease of 7 basis points from 2.83% in the previous quarter and up 17 basis points from 2.59% in the third quarter of 2022. NIM in the third quarter of 2023 was lower than the prior quarter due to increased deposit costs, which were partially offset by higher loan yields and treasury margins. Compared to the third quarter of 2022, NIM improved primarily due to higher yields on treasury assets and loans, partially offset by increased deposit costs.

Non-interest income for the third quarter of 2023 of \$52.0 million, an increase of \$1.8 million against the previous quarter of \$50.2 million and \$2.1 million higher than \$49.9 million in the third quarter of 2022. Non-interest income for the third quarter of 2023 increased compared to the prior quarter due to higher banking income that benefited from increased card volumes in Bermuda and Cayman, as well as loan pre-payment fees. Trust fees also increased in the third quarter of 2023 following the onboarding of new clients from the previously announced acquisition of Credit Suisse trust assets. Non-interest income in the third quarter of 2023 was higher than the third quarter of 2022 primarily due to increased trust income mostly attributable to new clients, including organic growth, and additional activity-based fees.

Non-interest expenses were \$92.5 million in the third quarter of 2023, compared to \$83.5 million in the previous quarter and \$82.0 million in the third quarter of 2022. Core non-interest expenses¹ of \$84.3 million in the third quarter of 2023 were higher than the \$83.6 million incurred in the previous quarter, primarily due to higher staff-related expenses as well as higher technology and communications costs related to the Bank’s upgraded core banking system in Bermuda. Core non-interest expenses¹ in the third quarter of 2023 were higher than the \$81.8 million incurred in the third quarter of 2022 due to inflationary increases in salaries and benefits, as well as the increased technology and communications costs associated with the core banking system and IT infrastructure investments.

Period end deposit balances were \$11.9 billion, a decrease of 8.7% compared to \$13.0 billion at December 31, 2022, primarily due to deposit movements in the Channel Islands and UK, and Cayman Islands segments as customers activated their funds and sought higher yielding products. Average deposits were \$12.1 billion in the quarter ended September 30, 2023, compared to \$12.2 billion in the second quarter of 2023.

The Bank maintained its balanced capital return policy. The Board again declared a quarterly dividend of \$0.44 per common share to be paid on November 22, 2023 to shareholders of record on November 8, 2023. During the third quarter of 2023, Butterfield repurchased 1.1 million common shares under the Bank’s share repurchase plan.

The current total regulatory capital ratio as at September 30, 2023 was 25.8% as calculated under Basel III, compared to 24.1% as at December 31, 2022. Both of these ratios remain significantly above the minimum Basel III regulatory requirements applicable to the Bank.

(1) See table “Reconciliation of US GAAP Results to Core Earnings” below for reconciliation of US GAAP results to non-GAAP measures. 2

ANALYSIS AND DISCUSSION OF THIRD QUARTER RESULTS

Income statement (in \$ millions)	Three months ended (Unaudited)		
	September 30, 2023	June 30, 2023	September 30, 2022
Non-interest income	52.0	50.2	49.9
Net interest income before provision for credit losses	90.2	92.5	91.2
Total net revenue before provision for credit losses and other gains (losses)	142.2	142.6	141.1
Provision for credit (losses) recoveries	(0.5)	(1.5)	(0.8)
Total other gains (losses)	—	4.0	0.1
Total net revenue	141.7	145.1	140.4
Non-interest expenses	(92.5)	(83.5)	(82.0)
Total net income before taxes	49.1	61.5	58.4
Income tax benefit (expense)	(0.4)	(0.5)	(0.9)
Net income	48.7	61.0	57.4
Net earnings per share			
Basic	1.00	1.23	1.16
Diluted	0.99	1.22	1.15
Per diluted share impact of other non-core items ¹	0.17	(0.08)	0.01
Core earnings per share on a fully diluted basis ¹	1.16	1.14	1.16
Adjusted weighted average number of participating shares on a fully diluted basis (in thousands of shares)	49,140	49,890	49,847
Key financial ratios			
Return on common equity	20.6 %	25.9 %	28.5 %
Core return on average tangible common equity ¹	26.1 %	26.3 %	31.6 %
Return on average assets	1.4 %	1.8 %	1.6 %
Net interest margin	2.76 %	2.83 %	2.59 %
Core efficiency ratio ¹	58.3 %	57.6 %	57.0 %

(1) See table "Reconciliation of US GAAP Results to Core Earnings" below for reconciliation of US GAAP results to non-GAAP measures.

Balance Sheet (in \$ millions)	As at	
	September 30, 2023	December 31, 2022
Cash and cash equivalents	1,750	2,101
Securities purchased under agreements to resell	154	60
Short-term investments	739	884
Investments in securities	5,319	5,727
Loans, net of allowance for credit losses	4,750	5,096
Premises, equipment and computer software, net	154	146
Goodwill and intangibles, net	71	74
Accrued interest and other assets	244	217
Total assets	13,180	14,306
Total deposits	11,861	12,991
Accrued interest and other liabilities	297	278
Long-term debt	98	172
Total liabilities	12,257	13,441
Common shareholders' equity	923	865
Total shareholders' equity	923	865
Total liabilities and shareholders' equity	13,180	14,306

Key Balance Sheet Ratios:	September 30, 2023	December 31, 2022
Common equity tier 1 capital ratio ²	23.4 %	20.3 %
Tier 1 capital ratio ²	23.4 %	20.3 %
Total capital ratio ²	25.8 %	24.1 %
Leverage ratio ²	7.8 %	6.7 %
Risk-Weighted Assets (in \$ millions)	4,522	4,843
Risk-Weighted Assets / total assets	34.3 %	33.9 %
Tangible common equity ratio	6.5 %	5.6 %
Book value per common share (in \$)	19.20	17.42
Tangible book value per share (in \$)	17.73	15.92
Non-accrual loans/gross loans	1.2 %	1.2 %
Non-performing assets/total assets	0.8 %	0.5 %
Allowance for credit losses/total loans	0.5 %	0.5 %

⁽²⁾ In accordance with regulatory capital guidance, the Bank has elected to make use of transitional arrangements which allow the deferral of the January 1, 2020 Current Expected Credit Loss ("CECL") impact of \$7.8 million on its regulatory capital over a period of 5 years.

QUARTER ENDED SEPTEMBER 30, 2023 COMPARED WITH THE QUARTER ENDED JUNE 30, 2023

Net Income

Net income for the quarter ended September 30, 2023 was \$48.7 million, down \$12.3 million from \$61.0 million in the prior quarter (see also discussion of non-core items below).

The \$12.3 million change in net income in the quarter ended September 30, 2023 compared to the previous quarter was due principally to the following:

- \$9.0 million increase in non-interest expenses, driven by staff-related and indirect tax costs due to expenses associated with the group-wide restructuring and higher technology and communications costs as the core banking system upgrade in Bermuda came into operation;
- \$1.8 million increase in non-interest income primarily due to higher banking fees as a result of increased card volumes and day count and an increase in loan prepayment fees;
- \$2.3 million decrease in net interest income before provision for credit losses primarily due to increasing deposit costs outpacing increases in yields on loans and treasury assets;
- \$4.0 million decrease in total other gains (losses) due to a gain realized on the liquidation settlement from a legacy investment written-off in the previous quarter that did not recur in the current quarter; and
- \$1.0 million decrease in provision from credit losses as a result of losses recognized on a small number of loan facilities in Bermuda in the prior quarter and a decrease in loan balances.

Non-Core Items¹

Non-core items resulted in expenses, net of gains, of \$8.2 million in the third quarter of 2023. Non-core items for the quarter relates mainly to the group-wide restructuring that resulted in the recognition of redundancy expenses.

Management does not believe that comparative period expenses, gains or losses identified as non-core are indicative of the results of operations of the Bank in the ordinary course of business.

(1) See table "Reconciliation of US GAAP Results to Core Earnings" below for reconciliation of US GAAP results to non-GAAP measures.

BALANCE SHEET COMMENTARY AT SEPTEMBER 30, 2023 COMPARED WITH DECEMBER 31, 2022

Total Assets

Total assets of the Bank were \$13.2 billion at September 30, 2023, a decrease of \$1.1 billion from December 31, 2022. The Bank maintained a highly liquid position at September 30, 2023, with \$8.0 billion of cash, bank deposits, reverse repurchase agreements and liquid investments representing 60.4% of total assets, compared with 61.3% at December 31, 2022.

Loans Receivable

The loan portfolio totaled \$4.7 billion at September 30, 2023, which was \$0.3 billion lower than December 31, 2022 balances. The decrease was driven primarily by scheduled paydowns in the portfolio as well as prepayments in the Channel Islands and UK residential mortgage portfolio.

The allowance for credit losses at September 30, 2023 totaled \$26.0 million, an increase of \$1.1 million from \$25.0 million at December 31, 2022. The movement was driven by an increase in credit card provisions, specific provisions on a small number of loan facilities in Bermuda and updated forward-looking economic forecasts. This was partially offset by net paydowns.

The loan portfolio represented 36.0% of total assets at September 30, 2023 (December 31, 2022: 35.6%), while loans as a percentage of total deposits was 40.0% at September 30, 2023 (December 31, 2022: 39.2%). The increase in both ratios was attributable principally to a decrease in deposit balances at September 30, 2023.

As of September 30, 2023, the Bank had gross non-accrual loans of \$59.4 million, representing 1.2% of total gross loans, a decrease of \$3.7 million from \$63.1 million, or 1.2% of total loans, at December 31, 2022. The decrease in non-accrual loans was driven by the settlement of a residential mortgage in the Channel Islands and UK segment and partially offset by a number of net new Bermuda residential mortgages.

Other real estate owned ("OREO") remained stable compared to December 31, 2022 at \$0.8 million.

Investment in Securities

The investment portfolio was \$5.3 billion at September 30, 2023, which was \$0.4 billion lower versus December 31, 2022 balances. The changes were attributable to paydowns and maturities in the portfolio, the majority of which were invested into short-term treasury assets.

The investment portfolio is made up of high quality assets with 100% invested in A-or-better-rated securities. The investment book yield was 2.06% during the quarter ended September 30, 2023 versus 2.07% during the previous quarter. Total net unrealized losses on the available-for-sale portfolio increased to \$238.0 million, compared with total net unrealized losses of \$220.2 million at December 31, 2022, as a result of an increase in long-term US dollar interest rates.

Deposits

Average total deposit balances were \$12.1 billion for the quarter ended September 30, 2023, a decrease of \$0.1 billion compared to the previous quarter, while period end balances as at September 30, 2023 were \$11.9 billion, a decrease of \$1.1 billion compared to December 31, 2022, as customers activated their funds and also sought higher yielding financial investments.

Average Balance Sheet²

(in \$ millions)	For the three months ended									
	September 30, 2023			June 30, 2023			September 30, 2022			
	Average balance (\$)	Interest (\$)	Average rate (%)	Average balance (\$)	Interest (\$)	Average rate (%)	Average balance (\$)	Interest (\$)	Average rate (%)	
Assets										
Cash and cash equivalents and short-term investments	2,559.2	28.8	4.47	2,488.2	25.2	4.06	2,818.4	10.0	1.40	
Investment in securities	5,494.9	28.5	2.06	5,614.7	28.9	2.07	6,007.3	29.4	1.94	
Available-for-sale	1,926.0	8.8	1.81	1,970.7	8.8	1.78	2,140.1	8.5	1.58	
Held-to-maturity	3,568.9	19.7	2.19	3,644.0	20.2	2.22	3,867.3	20.9	2.14	
Loans	4,897.5	80.4	6.51	4,984.1	79.8	6.42	5,123.1	65.3	5.05	
Commercial	1,394.9	23.2	6.60	1,396.7	23.0	6.59	1,523.3	20.8	5.41	
Consumer	3,502.6	57.2	6.47	3,587.4	56.8	6.35	3,599.8	44.5	4.90	
Interest earning assets	12,951.6	137.7	4.22	13,087.0	133.9	4.10	13,948.9	104.6	2.98	
Other assets	416.7			402.0			369.1			
Total assets	13,368.3			13,489.0			14,317.9			
Liabilities										
Deposits - interest bearing	9,340.4	(46.1)	(1.96)	9,308.0	(38.5)	(1.66)	9,939.5	(11.1)	(0.44)	
Securities sold under agreement to repurchase	—	—	—	0.4	—	(5.45)	—	—	—	
Long-term debt	98.4	(1.4)	(5.53)	147.4	(2.9)	(8.02)	172.1	(2.4)	(5.53)	
Interest bearing liabilities	9,438.8	(47.5)	(2.00)	9,455.8	(41.4)	(1.76)	10,111.7	(13.5)	(0.53)	
Non-interest bearing current accounts	2,739.3			2,863.2			3,074.6			
Other liabilities	279.3			243.6			256.2			
Total liabilities	12,457.4			12,562.6			13,442.4			
Shareholders' equity	910.9			926.4			875.5			
Total liabilities and shareholders' equity	13,368.3			13,489.0			14,317.9			
Non-interest bearing funds net of non-interest earning assets (free balance)	3,512.8			3,631.2			3,837.2			
Net interest margin		90.2	2.76		92.5	2.83		91.2	2.59	

⁽²⁾Averages are based upon a daily averages for the periods indicated.

Assets Under Administration and Assets Under Management

Total assets under administration for the trust and custody businesses were \$129.5 billion and \$29.0 billion, respectively, at September 30, 2023, while assets under management were \$5.2 billion at September 30, 2023. This compares with \$106.2 billion, \$32.2 billion and \$5.0 billion, respectively, at December 31, 2022.

Reconciliation of US GAAP Results to Core Earnings

The table below shows the reconciliation of net income in accordance with US GAAP to core earnings, a non-GAAP measure, which excludes certain significant items that are included in our US GAAP results of operations. We focus on core net income, which we calculate by adjusting net income to exclude certain income or expense items that are not representative of our business operations, or "non-core". Core net income includes revenue, gains, losses and expense items incurred in the normal course of business. We believe that expressing earnings and certain other financial measures excluding these non-core items provides a meaningful base for period-to-period comparisons, which management believes will assist investors in analyzing the operating results of the Bank and predicting future performance. We believe that presentation of these non-GAAP financial measures will permit investors to assess the performance of the Bank on the same basis as management.

Core Earnings (in \$ millions except per share amounts)	Three months ended		
	September 30, 2023	June 30, 2023	September 30, 2022
Net income	48.7	61.0	57.4
Non-core items			
<i>Non-core (gains) losses</i>			
Liquidation settlement from an investment previously written-off	—	(4.0)	—
Total non-core (gains) losses	—	(4.0)	—
<i>Non-core expenses</i>			
Early retirement program, voluntary separation, redundancies and other non-core compensation costs	8.2	—	—
Tax compliance review costs	—	—	0.2
Total non-core expenses	8.2	—	0.2
Total non-core items	8.2	(4.0)	0.2
Core net income	57.0	57.0	57.6
Average common equity	940.2	943.3	799.0
Less: average goodwill and intangible assets	(72.9)	(74.0)	(75.1)
Average tangible common equity	867.2	869.3	723.9
Core earnings per share fully diluted	1.16	1.14	1.16
Return on common equity	20.6 %	25.9 %	28.5 %
Core return on average tangible common equity	26.1 %	26.3 %	31.6 %
Shareholders' equity	922.9	950.3	754.9
Less: goodwill and intangible assets	(70.6)	(74.0)	(71.9)
Tangible common equity	852.3	876.3	683.0
Basic participating shares outstanding (in millions)	48.1	49.1	49.6
Tangible book value per common share	17.73	17.83	13.76
Non-interest expenses	92.5	83.5	82.0
Less: non-core expenses	(8.2)	—	(0.2)
Less: amortization of intangibles	(1.4)	(1.4)	(1.4)
Core non-interest expenses before amortization of intangibles	82.9	82.1	80.4
Core revenue before other gains and losses and provision for credit losses	142.2	142.6	141.1
Core efficiency ratio	58.3 %	57.6 %	57.0 %

Conference Call Information:

Butterfield will host a conference call to discuss the Bank's results on Wednesday, October 25, 2023 at 10:00 a.m. Eastern Time. Callers may access the conference call by dialing +1 (844) 855-9501 (toll-free) or +1 (412) 858-4603 (international) ten minutes prior to the start of the call and referencing the Conference ID: Butterfield Group. A live webcast of the conference call, including a slide presentation, will be available in the investor relations section of Butterfield's website at www.butterfieldgroup.com. A replay of the call will be archived on the Butterfield website for 12 months.

About Non-GAAP Financial Measures:

Certain statements in this release involve the use of non-GAAP financial measures. We believe such measures provide useful information to investors that is supplementary to our financial condition, results of operations and cash flows computed in accordance with US GAAP; however, our non-GAAP financial measures have a number of limitations. As such, investors should not view these disclosures as a substitute for results determined in accordance with US GAAP, and they are not necessarily comparable to non-GAAP financial measures that other companies use. See "Reconciliation of US GAAP Results to Core Earnings" for additional information.

Forward-Looking Statements:

Certain of the statements made in this release are forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements include statements with respect to our beliefs, plans, objectives, goals, expectations, anticipations, assumptions estimates, intentions, and future performance, including, without limitation, our intention to make share repurchases and our dividend payout target, and involve known and unknown risks, uncertainties and other factors, which may be beyond our control, and which may cause the actual results, performance, capital, ownership or achievements of Butterfield to be materially different from future results, performance or achievements expressed or implied by such forward-looking statements due to a variety of factors, including worldwide economic conditions (including economic growth and general business conditions) and fluctuations of interest rates, inflation, a decline in Bermuda's sovereign credit rating, the successful completion and integration of acquisitions (including our progress on subsequent closings of the acquisition of trust assets from Credit Suisse) or the realization of the anticipated benefits of such acquisitions in the expected time-frames or at all, success in business retention (including the retention of relationships associated with our Credit Suisse acquisition) and obtaining new business, the impact of the COVID-19 pandemic, the success of our updated systems and platforms and other factors. Forward-looking statements can be identified by words such as "anticipate," "assume," "believe," "estimate," "expect," "indicate," "intend," "may," "plan," "point to," "predict," "project," "seek," "target," "potential," "will," "would," "could," "should," "continue," "contemplate" and other similar expressions, although not all forward-looking statements contain these identifying words. All statements other than statements of historical fact are statements that could be forward-looking statements.

All forward-looking statements in this disclosure are expressly qualified in their entirety by this cautionary notice, including, without limitation, those risks and uncertainties described in our SEC reports and filings, including under the caption "Risk Factors" in our most recent Form 20-F. Such reports are available upon request from Butterfield, or from the Securities and Exchange Commission ("SEC"), including through the SEC's website at <https://www.sec.gov>. Any forward-looking statements made by Butterfield are current views as at the date they are made. Except as otherwise required by law, Butterfield assumes no obligation and does not undertake to review, update, revise or correct any of the forward-looking statements included in this disclosure, whether as a result of new information, future events or other developments. You are cautioned not to place undue reliance on the forward-looking statements made by Butterfield in this disclosure. Comparisons of results for current and any prior periods are not intended to express any future trends or indications of future performance, and should only be viewed as historical data. BF-All

About Butterfield:

Butterfield is a full-service bank and wealth manager headquartered in Hamilton, Bermuda, providing services to clients from Bermuda, the Cayman Islands, Guernsey and Jersey, where our principal banking operations are located, and The Bahamas, Switzerland, Singapore and the United Kingdom, where we offer specialized financial services. Banking services comprise deposit, cash management and lending solutions for individual, business and institutional clients. Wealth management services are composed of trust, private banking, asset management and custody. In Bermuda, the Cayman Islands and Guernsey, we offer both banking and wealth management. In The Bahamas, Singapore and Switzerland, we offer select wealth management services. In the UK, we offer residential property lending. In Jersey, we offer select banking and wealth management services. Butterfield is publicly traded on the New York Stock Exchange (symbol: NTB) and the Bermuda Stock Exchange (symbol: NTB.BH). Further details on the Butterfield Group can be obtained from our website at www.butterfieldgroup.com.

Investor Relations Contact:**Media Relations Contact:**

Noah Fields	Nicky Stevens
Investor Relations	Group Strategic Marketing & Communications
The Bank of N.T. Butterfield & Son Limited	The Bank of N.T. Butterfield & Son Limited
Phone: (441) 299 3816	Phone: (441) 299 1624
E-mail: noah.fields@butterfieldgroup.com	Cellular: (441) 524 4106
	E-mail: nicky.stevens@butterfieldgroup.com

FINANCIAL REPORT FOR THE NINE MONTHS ENDED SEPTEMBER 30, 2023

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, 2023 and December 31, 2022	2
Consolidated Statements of Operations (unaudited) for the Three and Nine Months Ended September 30, 2023 and 2022	3
Consolidated Statements of Comprehensive Income (unaudited) for the Three and Nine Months Ended September 30, 2023 and 2022	4
Consolidated Statements of Changes in Shareholders' Equity (unaudited) for the Three and Nine Months Ended September 30, 2023 and 2022	5
Consolidated Statements of Cash Flows (unaudited) for the Nine Months Ended September 30, 2023 and 2022	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, 2023	December 31, 2022
Assets		
Cash and demand deposits with banks - Non-interest bearing	96,703	93,032
Demand deposits with banks - Interest bearing	167,775	258,239
Cash equivalents - Interest bearing	1,485,300	1,749,516
Cash and cash equivalents	1,749,778	2,100,787
Securities purchased under agreements to resell	154,113	59,871
Short-term investments	738,810	884,478
Investment in securities		
Equity securities at fair value	—	236
Available-for-sale at fair value (amortized cost: \$2,035,947 (2022: \$2,209,078))	1,797,940	1,988,865
Held-to-maturity (fair value: \$2,829,583 (2022: \$3,197,508))	3,520,650	3,738,080
Total investment in securities	5,318,590	5,727,181
Loans		
Loans	4,775,786	5,121,391
Allowance for credit losses	(26,017)	(24,961)
Loans, net of allowance for credit losses	4,749,769	5,096,430
Premises, equipment and computer software, net	153,949	146,141
Goodwill	23,100	22,892
Other intangible assets, net	47,533	51,478
Equity method investments	7,059	12,484
Other real estate owned, net	815	800
Accrued interest and other assets	236,010	203,520
Total assets	13,179,526	14,306,062
Liabilities		
Deposits		
Non-interest bearing	2,568,879	3,039,701
Interest bearing	9,292,147	9,951,375
Total deposits	11,861,026	12,991,076
Employee benefit plans	93,127	92,018
Accrued interest and other liabilities	204,003	185,864
Total other liabilities	297,130	277,882
Long-term debt	98,431	172,289
Total liabilities	12,256,587	13,441,247
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: 48,689,935 (2022: 50,277,466)	488	503
Additional paid-in capital	1,005,558	1,032,632
Retained earnings (Accumulated deficit)	320,825	229,732
Less: treasury common shares, at cost: 619,212 (2022: 619,212)	(17,845)	(20,600)
Accumulated other comprehensive income (loss)	(386,087)	(377,452)
Total shareholders' equity	922,939	864,815
Total liabilities and shareholders' equity	13,179,526	14,306,062

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, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Non-interest income				
Asset management	7,999	7,413	24,165	22,294
Banking	14,066	14,051	40,219	39,647
Foreign exchange revenue	11,358	11,834	33,353	36,311
Trust	14,670	12,568	41,765	38,572
Custody and other administration services	3,318	3,343	9,981	10,271
Other non-interest income	579	711	2,842	4,556
Total non-interest income	51,990	49,920	152,325	151,651
Interest income				
Interest and fees on loans	80,373	65,268	237,646	175,866
Investments (none of the investment securities are intrinsically tax-exempt)				
Available-for-sale	8,797	8,518	26,463	30,023
Held-to-maturity	19,701	20,893	60,794	55,796
Cash and cash equivalents, securities purchased under agreements to resell and short-term investments	28,823	9,969	81,164	15,225
Total interest income	137,694	104,648	406,067	276,910
Interest expense				
Deposits	46,131	11,095	119,316	20,720
Long-term debt	1,371	2,400	6,720	7,201
Securities sold under agreement to repurchase	—	—	9	—
Total interest expense	47,502	13,495	126,045	27,921
Net interest income before provision for credit losses	90,192	91,153	280,022	248,989
Provision for credit (losses) recoveries	(531)	(793)	(2,729)	(783)
Net interest income after provision for credit losses	89,661	90,360	277,293	248,206
Net gains (losses) on equity securities	—	42	43	28
Net realized gains (losses) on available-for-sale investments	(3)	—	(14)	—
Net gains (losses) on other real estate owned	9	(25)	38	14
Net other gains (losses)	—	54	4,015	910
Total other gains (losses)	6	71	4,082	952
Total net revenue	141,657	140,351	433,700	400,809
Non-interest expense				
Salaries and other employee benefits	49,929	41,005	133,452	122,424
Technology and communications	15,958	14,295	44,782	42,411
Professional and outside services	4,294	4,839	14,087	15,323
Property	7,744	7,923	22,682	23,414
Indirect taxes	5,392	5,192	16,435	16,599
Non-service employee benefits expense	1,398	958	4,193	2,823
Marketing	1,549	1,456	4,747	4,547
Amortization of intangible assets	1,438	1,402	4,292	4,286
Other expenses	4,828	4,921	15,514	15,112
Total non-interest expense	92,530	81,991	260,184	246,939
Net income before income taxes	49,127	58,360	173,516	153,870
Income tax benefit (expense)	(381)	(929)	(1,566)	(2,959)
Net income	48,746	57,431	171,950	150,911
Earnings per common share				
Basic earnings per share	1.00	1.16	3.49	3.04
Diluted earnings per share	0.99	1.15	3.46	3.03

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, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Net income	48,746	57,431	171,950	150,911
Other comprehensive income (loss), net of taxes				
Unrealized net gains (losses) on translation of net investment in foreign operations	(704)	(4,305)	(348)	(8,388)
Net changes on investments transferred to held-to-maturity	2,651	3,080	7,282	(93,860)
Unrealized net gains (losses) on available-for-sale investments	(30,752)	(88,092)	(16,694)	(218,201)
Employee benefit plans adjustments	508	1,773	1,125	4,382
Other comprehensive income (loss), net of taxes	(28,297)	(87,544)	(8,635)	(316,067)
Total comprehensive income (loss)	20,449	(30,113)	163,315	(165,156)

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, 2023		September 30, 2022		September 30, 2023		September 30, 2022	
	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	49,757,131	498	50,248,890	502	50,277,466	503	49,911,351	499
Retirement of shares	(1,075,131)	(10)	—	—	(1,943,126)	(19)	(102,000)	(1)
Issuance of common shares	7,935	—	9,058	1	355,595	4	448,597	5
Balance at end of period	48,689,935	488	50,257,948	503	48,689,935	488	50,257,948	503
Additional paid-in capital								
Balance at beginning of period		1,024,846		1,023,097		1,032,632		1,017,640
Share-based compensation		5,038		4,351		14,524		11,297
Share-based settlements		22		18		557		613
Retirement of shares		(24,348)		—		(42,151)		(2,080)
Issuance of common shares, net of underwriting discounts and commissions		—		(1)		(4)		(5)
Balance at end of period		1,005,558		1,027,465		1,005,558		1,027,465
Retained earnings (Accumulated deficit)								
Balance at beginning of period		300,375		152,880		229,732		104,329
Net Income for the period		48,746		57,431		171,950		150,911
Common share cash dividends declared and paid, \$0.44 and \$1.32 per share (2022: \$0.44 and \$1.32 per share)		(21,426)		(21,839)		(65,250)		(65,494)
Retirement of shares		(6,870)		—		(15,607)		(1,274)
Balance at end of period		320,825		168,472		320,825		168,472
Treasury common shares								
Balance at beginning of period	619,212	(17,651)	619,212	(20,600)	619,212	(20,600)	619,212	(20,058)
Purchase of treasury common shares	1,075,131	(31,423)	—	—	1,943,126	(55,023)	102,000	(3,897)
Retirement of shares	(1,075,131)	31,229	—	—	(1,943,126)	57,778	(102,000)	3,355
Balance at end of period	619,212	(17,845)	619,212	(20,600)	619,212	(17,845)	619,212	(20,600)
Accumulated other comprehensive income (loss)								
Balance at beginning of period		(357,790)		(353,440)		(377,452)		(124,917)
Other comprehensive income (loss), net of taxes		(28,297)		(87,544)		(8,635)		(316,067)
Balance at end of period		(386,087)		(440,984)		(386,087)		(440,984)
Total shareholders' equity		922,939		754,856		922,939		754,856

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, 2023	September 30, 2022
Cash flows from operating activities		
Net income	171,950	150,911
Adjustments to reconcile net income to operating cash flows		
Depreciation and amortization	26,850	31,260
Provision for credit losses (recoveries)	2,729	783
Share-based payments and settlements	15,081	11,910
Net change in equity securities at fair value	236	(28)
Net realized (gains) losses on available-for-sale investments	14	—
Net (gains) losses on other real estate owned	(38)	(14)
(Increase) decrease in carrying value of equity method investments	209	238
Dividends received from equity method investments	5,216	119
Net other non-cash movements	1,089	—
Changes in operating assets and liabilities		
(Increase) decrease in accrued interest receivable and other assets	(30,995)	(58,569)
Increase (decrease) in employee benefit plans, accrued interest payable and other liabilities	(6,351)	11,005
Cash provided by (used in) operating activities	185,990	147,615
Cash flows from investing activities		
(Increase) decrease in securities purchased under agreements to resell	(94,242)	(252,838)
Short-term investments other than restricted cash: proceeds from maturities and sales	1,595,489	2,218,276
Short-term investments other than restricted cash: purchases	(1,394,737)	(1,812,381)
Available-for-sale investments: proceeds from sale	5,586	—
Available-for-sale investments: proceeds from maturities and pay downs	240,789	198,451
Available-for-sale investments: purchases	(71,859)	(83,900)
Held-to-maturity investments: proceeds from maturities and pay downs	216,951	327,401
Held-to-maturity investments: purchases	—	(383,332)
Net (increase) decrease in loans	375,529	(131,421)
Additions to premises, equipment and computer software	(21,409)	(20,783)
Proceeds from sale of other real estate owned	359	731
Cash provided by (used in) investing activities	852,456	60,204
Cash flows from financing activities		
Net increase (decrease) in deposits	(1,180,727)	(695,114)
Repayment of long-term debt	(75,000)	—
Common shares repurchased	(55,023)	(3,897)
Cash dividends paid on common shares	(65,250)	(65,494)
Cash provided by (used in) financing activities	(1,376,000)	(764,505)
Net effect of exchange rates on cash, cash equivalents and restricted cash	(1,955)	(139,283)
Net increase (decrease) in cash, cash equivalents and restricted cash	(339,509)	(695,969)
Cash, cash equivalents and restricted cash: beginning of period	2,116,546	2,203,497
Cash, cash equivalents and restricted cash: end of period	1,777,037	1,507,528
Components of cash, cash equivalents and restricted cash at end of period		
Cash and cash equivalents	1,749,778	1,484,819
Restricted cash included in short-term investments on the consolidated balance sheets	27,259	22,709
Total cash, cash equivalents and restricted cash at end of period	1,777,037	1,507,528
Supplemental disclosure of non-cash items		
Transfer to (out of) other real estate owned	336	1,193
Transfer of available-for-sale investments to held-to-maturity investments	—	998,157
Initial recognition of right-of-use assets and operating lease liabilities	—	138

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

Note 1: Nature of business

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

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

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

Note 2: Significant accounting policies

The accompanying unaudited interim consolidated financial statements of the Bank have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and should be read in conjunction with the Bank's audited financial statements for the year ended December 31, 2022.

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 of financial instruments
- Impairment of goodwill
- Employee benefit plans
- Share-based compensation

New Accounting Standards

Troubled Debt Restructurings and Vintage Disclosures

Beginning January 1, 2023, the Bank adopted Accounting Standards Update ("ASU") 2022-02, Financial Instruments - Credit Losses (Topic 326), Troubled Debt Restructurings and Vintage Disclosures. This ASU eliminates the accounting guidance for troubled debt restructurings ("TDRs") by creditors that have adopted the CECL model while enhancing disclosure requirements for loan refinancings and restructurings made with borrowers experiencing financial difficulty. In addition, this ASU also requires disclosure of current period gross charge-offs by year of origination. The Bank has elected to adopt these amendments on a prospective basis.

Accordingly, from the date of adoption, the Bank will evaluate whether a modified loan represents a new loan or a continuation of an existing loan. If the effective yield on the restructured loan is at least equal to the effective yield for comparable loans with similar collection risks and the modifications to the original loan are more than minor, the Bank will derecognize the existing loan and recognize the restructured loan as a new loan. If a loan restructuring does not meet these conditions, the Bank will account for the modification as a continuation of the existing loan. See Note 6: Loans for the new required disclosures.

New Accounting Pronouncements

There were no accounting developments issued during the nine months ended September 30, 2023 or accounting standards pending adoption which impacted the Bank.

Note 3: Cash and cash equivalents

	September 30, 2023	December 31, 2022
Non-interest bearing		
Cash and demand deposits with banks	96,703	93,032
Interest bearing¹		
Demand deposits with banks	167,775	258,239
Cash equivalents	1,485,300	1,749,516
Sub-total - Interest bearing	1,653,075	2,007,755
Total cash and cash equivalents	1,749,778	2,100,787

¹Interest bearing cash and cash equivalents includes certain demand deposits with banks as at September 30, 2023 in the amount of \$111.5 million (December 31, 2022: \$157.2 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, 2023	December 31, 2022
Unrestricted		
Maturing within three months	368,199	390,540
Maturing between three to six months	301,679	421,734
Maturing between six to twelve months	41,673	56,445
Total unrestricted short-term investments	711,551	868,719
Affected by drawing restrictions related to minimum reserve and derivative margin requirements		
Interest earning demand and term deposits	27,259	15,759
Total restricted short-term investments	27,259	15,759
Total short-term investments	738,810	884,478

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, 2023				December 31, 2022			
	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	—	(488)	236
Total equity securities	—	—	—	—	724	—	(488)	236
Available-for-sale								
US government and federal agencies	1,749,637	—	(227,848)	1,521,789	1,919,285	14	(206,523)	1,712,776
Non-US governments debt securities	266,321	—	(7,557)	258,764	262,892	—	(11,429)	251,463
Asset-backed securities - Student loans	40	—	—	40	5,640	—	(14)	5,626
Residential mortgage-backed securities	19,949	—	(2,602)	17,347	21,261	—	(2,261)	19,000
Total available-for-sale	2,035,947	—	(238,007)	1,797,940	2,209,078	14	(220,227)	1,988,865
Held-to-maturity¹								
US government and federal agencies	3,520,650	—	(691,067)	2,829,583	3,738,080	—	(540,572)	3,197,508
Total held-to-maturity	3,520,650	—	(691,067)	2,829,583	3,738,080	—	(540,572)	3,197,508

¹For the nine months ended September 30, 2023, and the nine months ended September 30, 2022, the provision for credit losses for HTM investments was 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, 2023, comprising 170 securities representing 100% of the AFS portfolios' carrying value (December 31, 2022: 163 and 99.8%), represent credit losses. Total gross unrealized AFS losses were 13.2% of the fair value of the affected securities (December 31, 2022: 11.1%).

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, 2023, were comprised of 219 securities representing 100% of the HTM portfolios' carrying value (December 31, 2022: 220 and 100.0%). Total gross unrealized HTM losses were 24.4% of the fair value of affected securities (December 31, 2022: 16.9%).

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 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 13 securities (December 31, 2022: 13) 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 15.6% - 49.1% and 46.1% - 54.8%, 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, 2023						
Available-for-sale securities with unrealized losses						
US government and federal agencies	78,492	(1,102)	1,443,297	(226,746)	1,521,789	(227,848)
Non-US governments debt securities	—	—	258,764	(7,557)	258,764	(7,557)
Asset-backed securities - Student loans	—	—	40	—	40	—
Residential mortgage-backed securities	—	—	17,347	(2,602)	17,347	(2,602)
Total available-for-sale securities with unrealized losses	78,492	(1,102)	1,719,448	(236,905)	1,797,940	(238,007)
Held-to-maturity securities with unrealized losses						
US government and federal agencies	—	—	2,829,583	(691,067)	2,829,583	(691,067)
December 31, 2022						
Available-for-sale securities with unrealized losses						
US government and federal agencies	713,462	(68,016)	995,154	(138,507)	1,708,616	(206,523)
Non-US governments debt securities	—	—	251,463	(11,429)	251,463	(11,429)
Asset-backed securities - Student loans	—	—	5,626	(14)	5,626	(14)
Residential mortgage-backed securities	14,474	(1,618)	4,526	(643)	19,000	(2,261)
Total available-for-sale securities with unrealized losses	727,936	(69,634)	1,256,769	(150,593)	1,984,705	(220,227)
Held-to-maturity securities with unrealized losses						
US government and federal agencies	1,462,005	(142,228)	1,735,503	(398,344)	3,197,508	(540,572)

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	Over 10 years	No specific or single maturity	
September 30, 2023							
Available-for-sale							
US government and federal agencies	—	202,473	494,506	—	—	824,810	1,521,789
Non-US governments debt securities	22,392	150,151	86,221	—	—	—	258,764
Asset-backed securities - Student loans	—	—	—	—	—	40	40
Residential mortgage-backed securities	—	—	—	—	—	17,347	17,347
Total available-for-sale	22,392	352,624	580,727	—	—	842,197	1,797,940
Held-to-maturity							
US government and federal agencies	—	—	—	—	—	3,520,650	3,520,650

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

Pledged Investments

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

	September 30, 2023		December 31, 2022	
	Amortized cost	Fair value	Amortized cost	Fair value
Pledged Investments				
Available-for-sale	28,632	25,567		
Held-to-maturity	135,543	113,724	32,938	24,991

Sale Proceeds and Realized Gains and Losses of AFS Securities

	Nine months ended							
	September 30, 2023				September 30, 2022			
	Sale proceeds	Gross realized gains	Gross realized (losses)	Transfers to HTM ¹	Sale proceeds	Gross realized gains	Gross realized (losses)	Transfers to HTM ¹
Asset-backed securities - Student loans	5,586	—	(14)	—	—	—	—	—
US government and federal agencies	—	—	—	—	—	—	—	998,157
Total	5,586	—	(14)	—	—	—	—	998,157

¹During the nine months ended September 30, 2022, certain investments were transferred out of the AFS categorization and into HTM. The transfers were recorded at fair value of the securities on the date of transfer. The related net unrealized losses of \$99.1 million that were recorded in AOCI will be accreted over the remaining life of the transferred investments using the effective interest rate method.

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 credit card portfolio is managed as a single portfolio and includes consumer and business cards. The effective yield on total loans as at September 30, 2023 is 6.46% (December 31, 2022: 5.91%). The interest receivable on total loans as at September 30, 2023 is \$21.7 million (December 31, 2022: \$16.6 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 classification managers 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 that the 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 classification and allowance for expected credit losses by class of loans is as follows:

September 30, 2023	Pass	Special mention	Substandard	Non-accrual	Total amortized cost	Allowance for expected credit losses	Total net loans
Commercial loans							
Government	277,981	—	—	—	277,981	(992)	276,989
Commercial and industrial	267,173	—	870	18,401	286,444	(10,174)	276,270
Commercial overdrafts	107,284	—	186	382	107,852	(387)	107,465
Total commercial loans	652,438	—	1,056	18,783	672,277	(11,553)	660,724
Commercial real estate loans							
Commercial mortgage	586,094	342	1,411	3,097	590,944	(1,448)	589,496
Construction	11,868	—	—	—	11,868	—	11,868
Total commercial real estate loans	597,962	342	1,411	3,097	602,812	(1,448)	601,364
Consumer loans							
Automobile financing	19,582	—	17	162	19,761	(77)	19,684
Credit card	79,811	—	480	—	80,291	(1,844)	78,447
Overdrafts	39,608	—	—	43	39,651	(300)	39,351
Other consumer ¹	41,625	—	1,611	803	44,039	(1,274)	42,765
Total consumer loans	180,626	—	2,108	1,008	183,742	(3,495)	180,247
Residential mortgage loans	3,141,713	18,172	120,556	36,514	3,316,955	(9,521)	3,307,434
Total	4,572,739	18,514	125,131	59,402	4,775,786	(26,017)	4,749,769

¹Other consumer loans' amortized cost includes \$7 million of cash and portfolio secured lending and \$26 million of lending secured by buildings in construction or other collateral.

December 31, 2022	Pass	Special mention	Substandard	Non-accrual	Total amortized cost	Allowance for expected credit losses	Total net loans
Commercial loans							
Government	281,518	—	—	—	281,518	(1,368)	280,150
Commercial and industrial	298,137	—	796	18,461	317,394	(10,359)	307,035
Commercial overdrafts	123,874	—	632	45	124,551	(416)	124,135
Total commercial loans	703,529	—	1,428	18,506	723,463	(12,143)	711,320
Commercial real estate loans							
Commercial mortgage	613,090	2,082	1,503	3,182	619,857	(884)	618,973
Construction	7,474	—	—	—	7,474	—	7,474
Total commercial real estate loans	620,564	2,082	1,503	3,182	627,331	(884)	626,447
Consumer loans							
Automobile financing	20,673	—	—	161	20,834	(93)	20,741
Credit card	77,419	—	295	—	77,714	(1,043)	76,671
Overdrafts	44,414	—	—	6	44,420	(355)	44,065
Other consumer ¹	56,699	—	—	801	57,500	(1,205)	56,295
Total consumer loans	199,205	—	295	968	200,468	(2,696)	197,772
Residential mortgage loans	3,419,186	8,132	102,413	40,398	3,570,129	(9,238)	3,560,891
Total	4,942,484	10,214	105,639	63,054	5,121,391	(24,961)	5,096,430

¹Other consumer loans' amortized cost includes \$9 million of cash and portfolio secured lending and \$37 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 classification is as follows:

September 30, 2023	Pass	Special mention	Substandard	Non-accrual	Total amortized cost
Loans by origination year					
2023	386,117	—	—	4	386,121
2022	873,050	—	17	944	874,011
2021	543,177	2,975	—	22	546,174
2020	394,899	438	2,572	28	397,937
2019	562,474	—	6,000	2,931	571,405
Prior	1,572,467	14,759	115,876	55,048	1,758,150
Overdrafts and credit cards	240,555	342	666	425	241,988
Total amortized cost	4,572,739	18,514	125,131	59,402	4,775,786

December 31, 2022	Pass	Special mention	Substandard	Non-accrual	Total amortized cost
Loans by origination year					
2022	971,776	—	—	4	971,780
2021	646,436	—	—	20	646,456
2020	485,944	142	508	23	486,617
2019	680,939	—	277	3,118	684,334
2018	393,623	—	12,133	1,355	407,111
Prior	1,499,410	9,767	91,795	58,483	1,659,455
Overdrafts and credit cards	264,356	305	926	51	265,638
Total amortized cost	4,942,484	10,214	105,639	63,054	5,121,391

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, 2023	30 - 59 days	60 - 89 days	More than 90 days	Total past due loans	Total current	Total amortized cost
Commercial loans						
Government	—	—	—	—	277,981	277,981
Commercial and industrial	173	150	18,401	18,724	267,720	286,444
Commercial overdrafts	—	—	382	382	107,470	107,852
Total commercial loans	173	150	18,783	19,106	653,171	672,277
Commercial real estate loans						
Commercial mortgage	468	358	3,097	3,923	587,021	590,944
Construction	—	—	—	—	11,868	11,868
Total commercial real estate loans	468	358	3,097	3,923	598,889	602,812
Consumer loans						
Automobile financing	49	—	162	211	19,550	19,761
Credit card	356	559	480	1,395	78,896	80,291
Overdrafts	—	—	43	43	39,608	39,651
Other consumer	208	881	2,286	3,375	40,664	44,039
Total consumer loans	613	1,440	2,971	5,024	178,718	183,742
Residential mortgage loans	23,585	15,776	78,630	117,991	3,198,964	3,316,955
Total amortized cost	24,839	17,724	103,481	146,044	4,629,742	4,775,786

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, 2022	30 - 59 days	60 - 89 days	More than 90 days	Total past due loans	Total current	Total amortized cost
Commercial loans						
Government	—	—	—	—	281,518	281,518
Commercial and industrial	5	—	18,461	18,466	298,928	317,394
Commercial overdrafts	—	—	45	45	124,506	124,551
Total commercial loans	5	—	18,506	18,511	704,952	723,463
Commercial real estate loans						
Commercial mortgage	363	—	3,181	3,544	616,313	619,857
Construction	—	—	—	—	7,474	7,474
Total commercial real estate loans	363	—	3,181	3,544	623,787	627,331
Consumer loans						
Automobile financing	104	5	160	269	20,565	20,834
Credit card	423	231	295	949	76,765	77,714
Overdrafts	—	—	6	6	44,414	44,420
Other consumer	179	16	797	992	56,508	57,500
Total consumer loans	706	252	1,258	2,216	198,252	200,468
Residential mortgage loans	30,813	4,081	49,486	84,380	3,485,749	3,570,129
Total amortized cost	31,887	4,333	72,431	108,651	5,012,740	5,121,391

Changes in Allowances For Credit Losses

The increase in the allowance for credit losses during the nine months ended September 30, 2023 was primarily attributable to an increase in credit card provisions, changes in specific provisions on identified loans, changes in macroeconomic factors, such as GDP forecasts, and partially offset by net paydowns and maturities in the portfolio. As per the Bank's accounting policy, as disclosed in Note 2 of the December 31, 2022 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, 2023				Total
	Commercial	Commercial real estate	Consumer	Residential mortgage	
Balance at the beginning of period	12,143	884	2,696	9,238	24,961
Provision increase (decrease)	546	574	933	705	2,758
Recoveries of previous charge-offs	70	—	787	574	1,431
Charge-offs, by origination year					
2023	—	—	—	—	—
2022	—	—	(29)	—	(29)
2021	—	—	(19)	—	(19)
2020	—	—	(20)	—	(20)
2019	—	—	(2)	—	(2)
Prior	(1,147)	(9)	(122)	(1,162)	(2,440)
Overdrafts and credit cards	(63)	—	(711)	—	(774)
Other	4	(1)	(18)	166	151
Allowances for expected credit losses at end of period	11,553	1,448	3,495	9,521	26,017

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, 2022				
	Commercial	Commercial real estate	Consumer	Residential mortgage	Total
Balance at the beginning of period	11,126	1,168	3,020	12,759	28,073
Provision increase (decrease)	1,302	(192)	560	(546)	1,124
Recoveries of previous charge-offs	1	—	930	240	1,171
Charge-offs	(18)	—	(2,350)	(2,683)	(5,051)
Other	(72)	(1)	(10)	(171)	(254)
Allowances for expected credit losses at end of period	12,339	975	2,150	9,599	25,063

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.

Non-Performing Loans

During the nine months ended September 30, 2023, no interest was recognized on non-accrual loans. Non-performing loans at September 30, 2023 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, 2023				December 31, 2022					
	Non-accrual loans with an allowance	Non-accrual loans without an allowance	due more than 90 days and accruing	Past	Total non-performing loans	Non-accrual loans with an allowance	Non-accrual loans without an allowance	due more than 90 days and accruing	Past	Total non-performing loans
Commercial loans										
Commercial and industrial	18,099	302	—	—	18,401	18,159	302	—	—	18,461
Commercial overdrafts	—	382	—	—	382	—	45	—	—	45
Total commercial loans	18,099	684	—	—	18,783	18,159	347	—	—	18,506
Commercial real estate loans										
Commercial mortgage	1,921	1,176	—	—	3,097	1,494	1,688	—	—	3,182
Total commercial real estate loans	1,921	1,176	—	—	3,097	1,494	1,688	—	—	3,182
Consumer loans										
Automobile financing	128	34	—	—	162	141	20	—	—	161
Credit card	—	—	480	—	480	—	—	295	—	295
Overdrafts	—	43	—	—	43	—	6	—	—	6
Other consumer	532	270	1,611	—	2,413	649	152	—	—	801
Total consumer loans	660	347	2,091	—	3,098	790	178	295	—	1,263
Residential mortgage loans	20,739	15,775	47,677	—	84,191	20,621	19,777	10,964	—	51,362
Total non-performing loans	41,419	17,982	49,768	—	109,169	41,064	21,990	11,259	—	74,313

Loan Modifications Made to Borrowers Experiencing Financial Difficulty (from January 1, 2023)

The following table summarizes the amortized cost basis of loan modifications made to borrowers experiencing financial difficulty during the nine-month period ended September 30, 2023.

September 30, 2023	Amortized cost basis				Weighted average financial effects		
	Term extension and interest rate reduction	Term extension	Interest rate reduction	In % of the class of loans	Months of term extension	Interest rate reduction	
Residential mortgage loans	2,012	2,222	5,221	0.3 %	31	3.0 %	

Age analysis of modified loans

As at September 30, 2023, except for \$0.3 million of residential mortgages for which a reduction in interest rate was granted and which are 30 to 59 days past due, all loans to borrowers experiencing financial difficulty for which a concession was granted in the preceding nine-month period are current.

Modified loans that subsequently defaulted

As at September 30, 2023, no loans to borrowers experiencing financial difficulty for which a concession was granted in the preceding nine-month period had a payment default.

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

Loans modified in a TDR (Prior to January 1, 2023)

As at December 31, 2022, the Bank had no loans that were modified in a TDR during the preceding 12 months that subsequently defaulted.

TDRs (prior to January 1, 2023) Outstanding	December 31, 2022	
	Accrual	Non-accrual
Commercial loans	796	—
Commercial real estate loans	1,503	2,357
Residential mortgage loans	59,175	10,342
Total TDRs outstanding	61,474	12,699

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, 2023				December 31, 2022			
	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
Belgium	5,183	—	—	5,183	2,641	—	—	2,641
Bermuda	43,720	1,792,815	199,635	2,036,170	40,671	1,920,467	243,904	2,205,042
Canada	813,648	—	—	813,648	1,216,876	—	—	1,216,876
Cayman	31,581	1,175,123	186,655	1,393,359	36,609	1,236,373	233,599	1,506,581
Germany	1,588	—	—	1,588	20,422	—	—	20,422
Guernsey	2	617,377	197,556	814,935	1	674,562	199,714	874,277
Ireland	43,278	—	—	43,278	26,597	—	—	26,597
Japan	13,591	—	—	13,591	13,071	—	—	13,071
Jersey	—	170,497	14,734	185,231	—	150,769	35,042	185,811
Norway	355,540	—	—	355,540	99,777	—	—	99,777
Switzerland	2,094	—	—	2,094	2,748	—	—	2,748
The Bahamas	1,568	5,833	—	7,401	1,521	7,510	—	9,031
United Kingdom	727,571	1,014,141	53,846	1,795,558	715,750	1,131,710	108,406	1,955,866
United States	600,514	—	—	600,514	865,671	—	—	865,671
Other	2,823	—	—	2,823	2,781	—	—	2,781
Total gross exposure	2,642,701	4,775,786	652,426	8,070,913	3,045,136	5,121,391	820,665	8,987,192

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, 2023									
Demand or less than \$100k ¹	2,568,879	5,722,361	8,291,240	38,408	16,324	17,152	10,423	82,307	8,373,547
Term - \$100k or more	N/A	N/A	—	2,415,661	591,333	399,383	81,102	3,487,479	3,487,479
Total deposits	2,568,879	5,722,361	8,291,240	2,454,069	607,657	416,535	91,525	3,569,786	11,861,026
December 31, 2022									
Demand or less than \$100k ¹	3,039,701	6,844,127	9,883,828	32,764	9,814	12,848	11,391	66,817	9,950,645
Term - \$100k or more	N/A	N/A	—	2,093,464	447,471	423,737	75,759	3,040,431	3,040,431
Total deposits	3,039,701	6,844,127	9,883,828	2,126,228	457,285	436,585	87,150	3,107,248	12,991,076

¹The weighted-average interest rate on interest-bearing demand deposits as at September 30, 2023 is 0.79% (December 31, 2022: 0.47%).

By Type and Segment

	September 30, 2023			December 31, 2022		
	Payable on demand	Payable on a fixed date	Total	Payable on demand	Payable on a fixed date	Total
Bermuda	3,747,364	799,204	4,546,568	3,813,274	674,895	4,488,169
Cayman	2,834,702	996,572	3,831,274	3,641,646	651,168	4,292,814
Channel Islands and the UK	1,709,174	1,774,010	3,483,184	2,428,908	1,781,185	4,210,093
Total deposits	8,291,240	3,569,786	11,861,026	9,883,828	3,107,248	12,991,076

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 included an estimate of the 2023 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, 2022. During the nine months ended September 30, 2023, 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, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Defined benefit pension expense (income)				
Interest cost	1,346	741	4,024	2,280
Expected return on plan assets	(1,534)	(1,624)	(4,586)	(4,998)
Amortization of net actuarial (gains) losses	571	552	1,713	1,666
Amortization of prior service (credit) cost	20	19	59	63
Settlement (gain) loss	—	26	—	(794)
Total defined benefit pension expense (income)	403	(286)	1,210	(1,783)
Post-retirement medical benefit expense (income)				
Service cost	19	32	57	97
Interest cost	1,197	778	3,590	2,336
Amortization of net actuarial (gains) losses	131	361	393	1,083
Amortization of prior service (credit) cost	(333)	131	(1,000)	393
Total post-retirement medical benefit expense (income)	1,014	1,302	3,040	3,909

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, 2023, \$118.9 million (December 31, 2022: \$121.3 million) of standby letters of credit were issued under this facility.

	September 30, 2023	December 31, 2022
Outstanding unfunded commitments to extend credit		
Commitments to extend credit	405,948	564,324
Documentary and commercial letters of credit	240	2,331
Total unfunded commitments to extend credit	406,188	566,655
Allowance for credit losses	(245)	(274)

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 are generally represented by deposits with the Bank or a charge over assets held in mutual funds.

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

	September 30, 2023			December 31, 2022		
	Gross	Collateral	Net	Gross	Collateral	Net
Outstanding financial guarantees						
Standby letters of credit	242,792	235,642	7,150	250,543	243,393	7,150
Letters of guarantee	3,446	3,410	36	3,467	3,431	36
Total	246,238	239,052	7,186	254,010	246,824	7,186

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 of 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, 2023, the Bank had 7 open positions (December 31, 2022: 2) in resell agreements with a remaining maturity of less than 30 days involving pools of mortgages issued by US federal agencies. The amortized cost of these resell agreements is \$154.1 million (December 31, 2022: \$59.9 million) and is included in securities purchased under agreements to resell on the consolidated balance sheets. As at September 30, 2023, there were no positions (December 31, 2022: 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.

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.

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, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Lease costs				
Operating lease costs	1,920	1,800	5,717	5,777
Short-term lease costs	641	722	1,863	1,646
Sublease income	(284)	(279)	(842)	(926)
Total net lease cost	2,277	2,243	6,738	6,497
Operating lease income	248	246	760	748
Other information for the period				
Right-of-use assets related to new operating lease liabilities	—	—	—	138
Operating cash flows from operating leases	1,931	1,790	5,834	5,771
Other information at end of period			September 30, 2023	December 31, 2022
Operating leases right-of-use assets (included in other assets on the balance sheets)			30,898	33,641
Operating lease liabilities (included in other liabilities on the balance sheets)			30,138	32,965
Weighted average remaining lease term for operating leases (in years)			8.90	9.24
Weighted average discount rate for operating leases			5.40 %	5.40 %

The following table summarizes the maturity analysis of the Bank's commitments for long-term leases as at December 31, 2022:

Year ending December 31	Operating Leases
2023	7,129
2024	6,457
2025	4,133
2026	3,357
2027	3,152
2028 & thereafter	17,735
Total commitments	41,963
Less: effect of discounting cash flows to their present value	(8,998)
Operating lease liabilities	32,965

Note 12: Segmented information

The Bank is managed by the Chairman & 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 & 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 & 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, 2022. 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 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, automated teller machines ("ATMs") and debit cards. Retail services include deposit services, consumer and mortgage lending, credit cards and personal insurance products. Commercial banking includes commercial lending and mortgages, cash management, payroll services, remote banking and letters of credit. Treasury services include money market and foreign exchange activities. Bermuda's wealth management offering consists of Butterfield Asset Management Limited, which provides investment management, advisory and brokerage services and Butterfield Trust (Bermuda) Limited, which provides trust, estate, company management and custody services. Bermuda is also the location of the Bank's head offices and accordingly, retains the unallocated corporate overhead expenses.

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

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

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 mortgage lending, private banking and treasury services, internet banking, wealth management and fiduciary services. The jurisdiction also offers mortgage lending to the retail market. 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, 2023	December 31, 2022
Bermuda	5,235,391	5,405,365
Cayman	4,122,160	4,566,144
Channel Islands and the UK	3,931,432	4,626,183
Other	42,077	35,874
Total assets before inter-segment eliminations	13,331,060	14,633,566
Less: inter-segment eliminations	(151,534)	(327,504)
Total	13,179,526	14,306,062

Three months ended September 30, 2023	Net interest income		Provision for credit (losses) recoveries	Non-interest income	Net revenue before gains and losses	Gains and losses	Total net revenue	Total expenses	Net income
	Customer	Inter-segment							
Bermuda	46,171	(1,210)	(572)	21,665	66,054	10	66,064	50,093	15,971
Cayman	30,901	1,784	(93)	15,426	48,018	(3)	48,015	17,439	30,576
Channel Islands and the UK	13,109	(574)	134	10,433	23,102	—	23,102	21,654	1,448
Other	11	—	—	9,323	9,334	(1)	9,333	8,582	751
Total before eliminations	90,192	—	(531)	56,847	146,508	6	146,514	97,768	48,746
Inter-segment eliminations	—	—	—	(4,857)	(4,857)	—	(4,857)	(4,857)	—
Total	90,192	—	(531)	51,990	141,651	6	141,657	92,911	48,746

Three months ended September 30, 2022	Net interest income		Provision for credit (losses) recoveries	Non-interest income	Net revenue before gains and losses	Gains and losses	Total net revenue	Total expenses	Net income
	Customer	Inter-segment							
Bermuda	43,313	(720)	(290)	22,210	64,513	16	64,529	47,162	17,367
Cayman	31,309	652	(468)	15,319	46,812	—	46,812	15,429	31,383
Channel Islands and the UK	16,523	68	(35)	9,690	26,246	55	26,301	17,812	8,489
Other	8	—	—	7,120	7,128	—	7,128	6,936	192
Total before eliminations	91,153	—	(793)	54,339	144,699	71	144,770	87,339	57,431
Inter-segment eliminations	—	—	—	(4,419)	(4,419)	—	(4,419)	(4,419)	—
Total	91,153	—	(793)	49,920	140,280	71	140,351	82,920	57,431

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, 2023	Net interest income		Provision for credit (losses) recoveries	Non-interest income	Net revenue before gains and losses	Gains and losses	Total net revenue	Total expenses	Net income
	Customer	Inter- segment							
Bermuda	140,018	(3,091)	(3,074)	64,904	198,757	4,089	202,846	144,278	58,568
Cayman	98,763	4,595	113	47,721	151,192	(4)	151,188	48,347	102,841
Channel Islands and the UK	41,209	(1,504)	232	28,427	68,364	(2)	68,362	59,646	8,716
Other	32	—	—	25,534	25,566	(1)	25,565	23,740	1,825
Total before eliminations	280,022	—	(2,729)	166,586	443,879	4,082	447,961	276,011	171,950
Inter-segment eliminations	—	—	—	(14,261)	(14,261)	—	(14,261)	(14,261)	—
Total	280,022	—	(2,729)	152,325	429,618	4,082	433,700	261,750	171,950

Nine months ended September 30, 2022	Net interest income		Provision for credit (losses) recoveries	Non-interest income	Net revenue before gains and losses	Gains and losses	Total net revenue	Total expenses	Net income
	Customer	Inter- segment							
Bermuda	118,618	(1,958)	602	64,526	181,788	40	181,828	141,036	40,792
Cayman	79,824	1,431	(1,161)	47,734	127,828	—	127,828	45,706	82,122
Channel Islands and the UK	50,535	526	(224)	30,957	81,794	912	82,706	55,618	27,088
Other	12	1	—	21,456	21,469	—	21,469	20,560	909
Total before eliminations	248,989	—	(783)	164,673	412,879	952	413,831	262,920	150,911
Inter-segment eliminations	—	—	—	(13,022)	(13,022)	—	(13,022)	(13,022)	—
Total	248,989	—	(783)	151,651	399,857	952	400,809	249,898	150,911

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 amortized cost of AFS investments due to movements in foreign exchange rates. The foreign exchange movement on the unrealized gain or loss on the AFS investments is not considered to be part of the hedging relationship and continues to be recognized in AOCIL. The effective portion of changes in the amortized cost of the hedged items attributable to foreign exchange rates is recognized in current year earnings consistent with the related change in fair value of the hedging instrument. 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.

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 income (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 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 revenue.

Client service derivatives

The Bank enters into foreign exchange contracts 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 revenue.

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. The 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, 2023	Derivative instrument	Number of contracts	Notional amounts	Gross positive fair value	Gross negative fair value	Net fair value
Risk management derivatives						
Net investment hedges	Currency swaps	2	44,477	776	—	776
Fair value hedges	Currency swaps	3	153,205	286	(3,285)	(2,999)
Derivatives not formally designated as hedging instruments	Currency swaps	62	1,205,785	12,808	(2,517)	10,291
Subtotal risk management derivatives			1,403,467	13,870	(5,802)	8,068
Client services derivatives	Spot and forward foreign exchange	141	364,078	2,361	(2,160)	201
Total derivative instruments			1,767,545	16,231	(7,962)	8,269
<hr/>						
December 31, 2022	Derivative instrument	Number of contracts	Notional amounts	Gross positive fair value	Gross negative fair value	Net fair value
Risk management derivatives						
Net investment hedges	Currency swaps	1	5,207	—	(215)	(215)
Fair value hedges	Currency swaps	4	130,751	2,714	(191)	2,523
Derivatives not formally designated as hedging instruments	Currency swaps	63	1,884,169	8,052	(10,269)	(2,217)
Subtotal risk management derivatives			2,020,127	10,766	(10,675)	91
Client services derivatives	Spot and forward foreign exchange	160	312,772	2,401	(2,237)	164
Total derivative instruments			2,332,899	13,167	(12,912)	255

In addition to the above, as at September 30, 2023 foreign denominated deposits of £255.9 million (December 31, 2022: £235.5 million) and CHF 0.4 million (December 31, 2022: 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

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

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.

September 30, 2023	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	16,231	(4,884)	11,347	—	—	11,347
Derivative liabilities						
Spot and forward foreign exchange and currency swaps	7,962	(4,884)	3,078	—	(2)	3,076
Net positive fair value			8,269			

December 31, 2022	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	13,167	(6,658)	6,509	—	(9)	6,500
Derivative liabilities						
Spot and forward foreign exchange and currency swaps	12,912	(6,658)	6,254	—	(352)	5,902
Net positive fair value			255			

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, 2023	September 30, 2022	September 30, 2023	September 30, 2022
		Spot and forward foreign exchange	Foreign exchange revenue	—	725
Currency swaps, not designated as hedge	Foreign exchange revenue	20,943	27,989	12,508	34,262
Currency swaps - fair value hedges	Foreign exchange revenue	(6,489)	(3,376)	(5,523)	(7,462)
Total net gains (losses) recognized in net income		14,454	25,338	7,023	27,541

Derivative instrument	Consolidated statements of comprehensive income line item	Three months ended		Nine months ended	
		September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
		Currency swaps - net investment hedge	Unrealized net gains (losses) on translation of net investment in foreign operations	(1,307)	79
Total net gains (losses) recognized in comprehensive income		(1,307)	79	991	(768)

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, 2022.

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 US and UK 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 included asset-backed securities for which the market was relatively illiquid and for which information about actual trading prices was 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, 2023. During the year ended December 31, 2022, there were no transfers between Level 1 and Level 2. There was a transfer out of Level 3 into Level 2 due to increased price observability during the year ended December 31, 2022.

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, 2023			Total carrying amount / fair value	December 31, 2022			Total carrying amount / fair value
	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	—	—	—	—	—	236	—	236
Total equity securities	—	—	—	—	—	236	—	236
Available-for-sale investments								
US government and federal agencies	696,979	824,810	—	1,521,789	838,938	873,838	—	1,712,776
Non-US governments debt securities	236,372	22,392	—	258,764	229,071	22,392	—	251,463
Asset-backed securities - Student loans	—	40	—	40	—	5,626	—	5,626
Residential mortgage-backed securities	—	17,347	—	17,347	—	19,000	—	19,000
Total available-for-sale	933,351	864,589	—	1,797,940	1,068,009	920,856	—	1,988,865
Other assets - Derivatives	—	11,347	—	11,347	—	6,509	—	6,509
Financial liabilities								
Other liabilities - Derivatives	—	3,078	—	3,078	—	6,254	—	6,254

Level 3 Reconciliation

The Level 3 financial instrument, was a federal family education loan program guaranteed student loan security and was valued using a non-binding quote from an external security pricing service. During the year ended December 31, 2022, this instrument was transferred to Level 2 due to increased price observability.

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

	September 30, 2023	Year ended December 31, 2022
	Available- for-sale investments	Available- for-sale investments
Carrying amount at beginning of period	—	13,174
Proceeds from sales, paydowns and maturities	—	(7,631)
Change in unrealized gains (losses) recognized in other comprehensive income	—	102
Realized and unrealized gains recognized in net income	—	(19)
Transfers in (out of) Level 3 out of (into) Level 2 - AFS	—	(5,626)
Carrying amount at end of period	—	—
Cumulative gain (loss) recognized in other comprehensive income	—	(14)

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

	Level	September 30, 2023			December 31, 2022		
		Carrying amount	Fair value	Appreciation / (depreciation)	Carrying amount	Fair value	Appreciation / (depreciation)
Financial assets							
Cash and cash equivalents	Level 1	1,749,778	1,749,778	—	2,100,787	2,100,787	—
Securities purchased under agreements to resell	Level 2	154,113	154,113	—	59,871	59,871	—
Short-term investments	Level 1	738,810	738,810	—	884,478	884,478	—
Investments held-to-maturity	Level 2	3,520,650	2,829,583	(691,067)	3,738,080	3,197,508	(540,572)
Loans, net of allowance for credit losses	Level 2	4,749,769	4,636,367	(113,402)	5,096,430	5,049,570	(46,860)
Other real estate owned ¹	Level 2	815	815	—	800	800	—
Financial liabilities							
Term deposits	Level 2	3,569,786	3,573,637	(3,851)	3,107,248	3,108,511	(1,263)
Long-term debt	Level 2	98,431	94,201	4,230	172,289	177,919	(5,630)

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

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, 2023	Earlier of contractual maturity or repricing date						Non-interest bearing funds	Total
	Within 3 months	3 to 6 months	6 to 12 months	1 to 5 years	After 5 years			
(in \$ millions)								
Assets								
Cash and cash equivalents	1,653	—	—	—	—	97	1,750	
Securities purchased under agreement to resell	154	—	—	—	—	—	154	
Short-term investments	395	302	42	—	—	—	739	
Investments	24	153	214	746	4,182	—	5,319	
Loans	2,424	71	280	1,607	341	27	4,750	
Other assets	—	—	—	—	—	468	468	
Total assets	4,650	526	536	2,353	4,523	592	13,180	
Liabilities and shareholders' equity								
Shareholders' equity	—	—	—	—	—	923	923	
Demand deposits	5,722	—	—	—	—	2,569	8,291	
Term deposits	2,454	608	417	92	—	—	3,571	
Other liabilities	—	—	—	—	—	297	297	
Long-term debt	—	—	—	98	—	—	98	
Total liabilities and shareholders' equity	8,176	608	417	190	—	3,789	13,180	
Interest rate sensitivity gap	(3,526)	(82)	119	2,163	4,523	(3,197)	—	
Cumulative interest rate sensitivity gap	(3,526)	(3,608)	(3,489)	(1,326)	3,197	—	—	
December 31, 2022								
(in \$ millions)								
Assets								
Cash and cash equivalents	2,008	—	—	—	—	93	2,101	
Securities purchased under agreement to resell	60	—	—	—	—	—	60	
Short-term investments	406	422	56	—	—	—	884	
Investments	6	8	179	943	4,592	—	5,728	
Loans	2,927	35	166	1,533	406	29	5,096	
Other assets	—	—	—	—	—	437	437	
Total assets	5,407	465	401	2,476	4,998	559	14,306	
Liabilities and shareholders' equity								
Shareholders' equity	—	—	—	—	—	865	865	
Demand deposits	6,819	25	—	—	—	3,040	9,884	
Term deposits	2,126	457	437	87	—	—	3,107	
Other liabilities	—	—	—	—	—	278	278	
Long-term debt	—	75	—	97	—	—	172	
Total liabilities and shareholders' equity	8,945	557	437	184	—	4,183	14,306	
Interest rate sensitivity gap	(3,538)	(92)	(36)	2,292	4,998	(3,624)	—	
Cumulative interest rate sensitivity gap	(3,538)	(3,630)	(3,666)	(1,374)	3,624	—	—	

Note 16: Long-term debt

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 others, 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 it became 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 amortized over the life of the notes. These notes were redeemed at face value in June 2023.

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 others, 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, 2023 and the year ended December 31, 2022.

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, 2023. The interest payments are calculated until contractual maturity using the current 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								
2020 issuance	June 15, 2025	June 15, 2030	5.25 %	3 months US\$ SOFR + 5.060%	100,000	5,250	39,471	18,378
Unamortized debt issuance costs					(1,569)			
Long-term debt less unamortized debt issuance costs					98,431			

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, 2023, the average number of outstanding awards of unvested common shares was 1.4 million (September 30, 2022: 1.0 million). Only awards for which the sum of 1) the expense that will be recognized in the future (i.e., the unrecognized expense) and 2) its exercise price, if any, was lower than the average market price of the Bank's common shares were considered dilutive and, therefore, included in the computation of diluted earnings per share. An award's unrecognized expense is also considered to be the proceeds the employees would need to pay to purchase accelerated vesting of the awards. For the purposes of calculating dilution, such proceeds are assumed to be used by the Bank to buy back common shares at the average market price. The weighted-average number of outstanding awards, net of the assumed weighted-average number of common shares bought back, is included in the number of diluted participating shares.

	Three months ended		Nine months ended	
	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Net income	48,746	57,431	171,950	150,911
Basic Earnings Per Share				
Weighted average number of common shares issued	49,232	50,252	49,884	50,197
Weighted average number of common shares held as treasury stock	(619)	(619)	(619)	(619)
Weighted average number of common shares (in thousands)	48,613	49,633	49,265	49,578
Basic Earnings Per Share	1.00	1.16	3.49	3.04
Diluted Earnings Per Share				
Weighted average number of common shares	48,613	49,633	49,265	49,578
Net dilution impact related to awards of unvested common shares	527	214	423	245
Weighted average number of diluted common shares (in thousands)	49,140	49,847	49,688	49,823
Diluted Earnings Per Share	0.99	1.15	3.46	3.03

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

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.

Changes in Outstanding Stock Option Plans

There were no stock options outstanding as at September 30, 2023 and December 31, 2022.

Share Based Plans

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

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

The grant date weighted average fair value of unvested share awards granted in the nine months ended September 30, 2023 was \$32.94 per share (December 31, 2022: \$35.05 per share). The Bank expects to settle these awards by issuing new shares.

Employee Deferred Incentive Program ("EDIP")

Under the Bank's EDIP, 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 Program ("ELTIP")

Under the Bank's ELTIP, 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.

Employee Share Purchase Plan ("ESPP")

The Bank's ESPP was approved in July 2021 and registered in November 2021. The first offering period started in March 2022. Under the Bank's ESPP, eligible employees may elect to contribute up to 15% of their regular compensation toward the purchase of the Bank's shares at a 10% discount from market price on the closing date of each offering period. The ESPP specifies two consecutive six month offering periods per year. In the case of termination of employment or voluntary partial or full withdrawal from the plan, the related current offering period ESPP contributions are refunded to the employee and thus cannot be used to purchase shares under the ESPP. During the nine months ended September 30, 2023, 12,523 shares (December 31, 2022: 10,143) were issued under the ESPP Plan.

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

	Nine months ended			
	September 30, 2023		September 30, 2022	
	EDIP	ELTIP	EDIP	ELTIP
Outstanding at beginning of period	621	705	297	704
Granted	189	376	478	270
Vested (fair value in 2023: \$10.8 million, 2022: \$17.0 million)	(141)	(185)	(153)	(278)
Outstanding at end of period	669	896	622	696

Share-based Compensation Cost Recognized in Net Income

	September 30, 2023		September 30, 2022	
	EDIP and ELTIP		EDIP and ELTIP	
	14,323		11,420	
Cost recognized in net income	14,323		11,420	

Unrecognized Share-based Compensation Cost

	September 30, 2023		December 31, 2022	
	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	12,949	2.86	14,234
ELTIP				
Performance vesting shares	14,802	1.92	10,232	1.75
Total unrecognized expense	27,751		24,466	

Note 19: Share repurchase programs

From time to time, the Bank may seek to repurchase and retire equity securities of the Bank, through cash purchases, 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 Repurchase Program

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

On February 10, 2021, the Board approved a common share repurchase program, authorizing the purchase of up to 2.0 million common shares through to February 28, 2022.

On February 14, 2022, the Board approved a common share repurchase program, authorizing the purchase of up to 2.0 million common shares through to February 28, 2023.

On February 13, 2023, the Board approved a new common share repurchase program, authorizing the purchase of up to 3.0 million common shares through to February 29, 2024.

In the nine months ended September 30, 2023, the Bank repurchased and retired 1,943,126 shares.

	Nine months ended		Year ended December 31	
	September 30, 2023	2022	2022	2021
Common share repurchases				
Acquired number of shares (to the nearest 1)	1,943,126	102,000	534,828	534,828
Average cost per common share	28.32	38.21	36.93	36.93
Total cost (in US dollars)	55,022,758	3,897,268	19,753,336	19,753,336

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 20: Accumulated other comprehensive income (loss)

	Unrealized net gains (losses) on translation of net investment in foreign operations	Unrealized net gains (losses) on HTM investments	Unrealized net gains (losses) on AFS investments	Employee benefit plans adjustments			Total AOCIL
				Pension	Post-retirement healthcare	Subtotal - employee benefits plans	
Nine months ended September 30, 2023							
Balance at beginning of period	(25,700)	(91,212)	(220,345)	(47,905)	7,710	(40,195)	(377,452)
Other comprehensive income (loss), net of taxes	(348)	7,282	(16,694)	1,732	(607)	1,125	(8,635)
Balance at end of period	(26,048)	(83,930)	(237,039)	(46,173)	7,103	(39,070)	(386,087)

	Unrealized net gains (losses) on translation of net investment in foreign operations	Unrealized net gains (losses) on HTM investments	Unrealized net gains (losses) on AFS investments	Employee benefit plans adjustments			Total AOCIL
				Pension	Post-retirement healthcare	Subtotal - employee benefits plans	
Nine months ended September 30, 2022							
Balance at beginning of period	(20,913)	91	(21,982)	(56,400)	(25,713)	(82,113)	(124,917)
Transfer of AFS investments to HTM investments	—	(99,143)	99,143	—	—	—	—
Other comprehensive income (loss), net of taxes	(8,388)	5,283	(317,344)	2,906	1,476	4,382	(316,067)
Balance at end of period	(29,301)	(93,769)	(240,183)	(53,494)	(24,237)	(77,731)	(440,984)

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, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Net unrealized gains (losses) on translation of net investment in foreign operations adjustments					
Foreign currency translation adjustments	N/A	(14,829)	(27,752)	2,840	(63,463)
Gains (losses) on net investment hedge	N/A	14,125	23,447	(3,188)	55,075
Net change		(704)	(4,305)	(348)	(8,388)
Held-to-maturity investment adjustments					
Net unamortized gains (losses) transferred from AFS	N/A	—	—	—	(99,143)
Amortization of net gains (losses) to net income	Interest income on investments	2,651	3,080	7,282	5,283
Net change		2,651	3,080	7,282	(93,860)
Available-for-sale investment adjustments					
Gross unrealized gains (losses)	N/A	(32,359)	(90,801)	(16,006)	(322,409)
Net unrealized (gains) losses transferred to HTM	N/A	—	—	—	99,143
Transfer of realized (gains) losses to net income	Net realized gains (losses) on AFS investments	3	—	14	—
Foreign currency translation adjustments of related balances	N/A	1,604	2,709	(702)	5,065
Net change		(30,752)	(88,092)	(16,694)	(218,201)
Employee benefit plans adjustments					
Defined benefit pension plan					
Net actuarial gain (loss)	N/A	—	(9)	—	339
Net loss (gain) on settlement reclassified to net income	Net other gains (losses)	—	26	—	(794)
Amortization of net actuarial (gains) losses	Non-service employee benefits expense	571	552	1,713	1,666
Amortization of prior service (credit) cost	Non-service employee benefits expense	20	19	59	63
Foreign currency translation adjustments of related balances	N/A	119	693	(40)	1,632
Net change		710	1,281	1,732	2,906
Post-retirement healthcare plan					
Amortization of net actuarial (gains) losses	Non-service employee benefits expense	131	361	393	1,083
Amortization of prior service (credit) cost	Non-service employee benefits expense	(333)	131	(1,000)	393
Net change		(202)	492	(607)	1,476
Other comprehensive income (loss), net of taxes		(28,297)	(87,544)	(8,635)	(316,067)

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, 2023, the Bank declared and paid cash dividends of \$1.32 (September 30, 2022: \$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, 2023 and December 31, 2022. The following table sets forth the Bank's capital adequacy in accordance with the Basel III framework:

	September 30, 2023		December 31, 2022	
	Actual	Regulatory minimum	Actual	Regulatory minimum
Capital				
CET 1 capital	1,059,278	N/A	983,342	N/A
Tier 1 capital	1,059,278	N/A	983,342	N/A
Tier 2 capital	109,306	N/A	183,640	N/A
Total capital	1,168,584	N/A	1,166,982	N/A
Risk Weighted Assets	4,521,728	N/A	4,843,370	N/A
Leverage Ratio Exposure Measure	13,549,592	N/A	14,774,309	N/A
Capital Ratios (%)				
CET 1 capital	23.4 %	10.0 %	20.3 %	10.0 %
Tier 1 capital	23.4 %	11.5 %	20.3 %	11.5 %
Total capital	25.8 %	13.5 %	24.1 %	13.5 %
Leverage ratio	7.8 %	5.0 %	6.7 %	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 deposits with the Bank, have loans and/or are guarantors for loans with the Bank. Loans to directors were made in the ordinary course of business at normal credit terms, including interest rate and collateral requirements. Loans to executives may be eligible for preferential rates. All of these loans were considered performing loans as at September 30, 2023 and December 31, 2022. 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, 2021	7,375
Net loans issued (repaid) during the year	(5,362)
Effect of changes in the composition of related parties	18,380
Balance at December 31, 2022	20,393
Net loans issued (repaid) during period	(523)
Balance at September 30, 2023	19,870

Consolidated balance sheets	September 30, 2023	December 31, 2022
Deposits	53,497	92,806

Consolidated statement of operations	Three months ended		Nine months ended	
	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Interest and fees on loans	294	280	850	606
Total non-interest expense	37	47	162	173
Other non-interest income	111	—	147	—

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, 2023	December 31, 2022
Loans	9,917	10,211
Deposits	418	560
Accrued interest and other liabilities	341	180

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, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Interest and fees on loans	212	178	617	477
Total non-interest expense	435	284	1,206	1,025
Other non-interest income	61	58	182	175

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 year ended December 31, 2021.

As at September 30, 2023, 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, 2023	December 31, 2022
Loans	10	—
Deposits	36,978	20,549

Consolidated statement of operations	Three months ended		Nine months ended	
	September 30, 2023	September 30, 2022	September 30, 2023	September 30, 2022
Asset management	2,356	2,252	6,855	5,338
Custody and other administration services	305	268	864	577
Interest expense - deposits	221	—	235	—

Note 23: Subsequent events

On October 24, 2023, the Board of Directors declared an interim dividend of \$0.44 per common share to be paid on November 22, 2023 to shareholders of record on November 8, 2023.



Third Quarter 2023
The Bank of N.T. Butterfield & Son
Limited

Earnings Presentation
October 25, 2023

Forward-Looking Statements



Forward-Looking Statements:

Certain of the statements made in this release are forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements include statements with respect to our beliefs, plans, objectives, goals, expectations, anticipations, assumptions estimates, intentions, and future performance, including, without limitation, our intention to make share repurchases and our dividend payout target, and involve known and unknown risks, uncertainties and other factors, which may be beyond our control, and which may cause the actual results, performance, capital, ownership or achievements of Butterfield to be materially different from future results, performance or achievements expressed or implied by such forward-looking statements due to a variety of factors, including worldwide economic conditions (including economic growth and general business conditions) and fluctuations of interest rates, inflation, a decline in Bermuda's sovereign credit rating, the successful completion and integration of acquisitions (including our progress on subsequent closings of the acquisition of trust assets from Credit Suisse) or the realization of the anticipated benefits of such acquisitions in the expected time-frames or at all, success in business retention (including the retention of relationships associated with our Credit Suisse acquisition) and obtaining new business, the impact of the COVID-19 pandemic, the success of our updated systems and platforms and other factors. Forward-looking statements can be identified by words such as "anticipate," "assume," "believe," "estimate," "expect," "indicate," "intend," "may," "plan," "point to," "predict," "project," "seek," "target," "potential," "will," "would," "could," "should," "continue," "contemplate" and other similar expressions, although not all forward-looking statements contain these identifying words. All statements other than statements of historical fact are statements that could be forward-looking statements.

All forward-looking statements in this disclosure are expressly qualified in their entirety by this cautionary notice, including, without limitation, those risks and uncertainties described in our Securities and Exchange Commission ("SEC") reports and filings, including under the caption "Risk Factors" in our most recent Form 20-F. Such reports are available upon request from Butterfield, or from the SEC, including through the SEC's website at <https://www.sec.gov>. Any forward-looking statements made by Butterfield are current views as at the date they are made. Except as otherwise required by law, Butterfield assumes no obligation and does not undertake to review, update, revise or correct any of the forward-looking statements included in this disclosure, whether as a result of new information, future events or other developments. You are cautioned not to place undue reliance on the forward-looking statements made by Butterfield in this disclosure. Comparisons of results for current and any prior periods are not intended to express any future trends or indications of future performance, and should only be viewed as historical data.

About Non-GAAP Financial Measures:

This presentation contains non-GAAP financial measures including "core" net income and other financial measures presented on a "core" basis. We believe such measures provide useful information to investors that is supplementary to our financial condition, results of operations and cash flows computed in accordance with GAAP; however, our non-GAAP financial measures have a number of limitations. As such, investors should not view these disclosures as a substitute for results determined in accordance with GAAP, and they are not necessarily comparable to non-GAAP financial measures that other companies use. Reconciliations of these non-GAAP measures to corresponding GAAP financial measures are provided in the Appendix of this presentation.

Agenda and Overview



Presenters

Michael Collins

Chairman and Chief Executive Officer

Craig Bridgewater

Group Chief Financial Officer

Michael Schrum

President and Group Chief Risk Officer

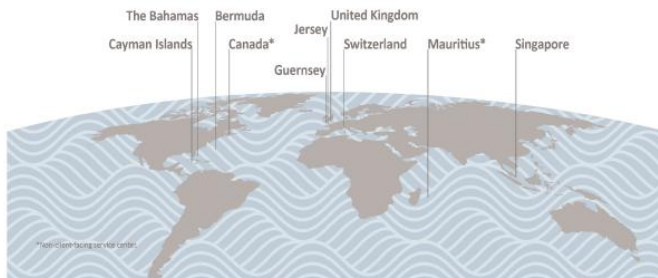
Agenda

- Overview
- Third Quarter 2023 Financials
- Q&A

Butterfield Overview

- Leading Bank in Attractive Markets
- Strong Capital Generation and Return
- Resilient, Capital Efficient, Diversified Fee Revenue Model
- Efficient, Conservative Balance Sheet
- Experienced Leadership Team

Ten International Locations



- Leading market positions in Bermuda & Cayman
- Expanding loan and mortgage offerings in The Channel Islands
- Well-secured lending in all markets
- Award winning banking and wealth management offerings

ESG Membership

WE SUPPORT



Awards



Third Quarter 2023 Highlights



- Net income of \$48.7 million, or \$0.99 per share
- Core net income** of \$57.0 million, or \$1.16 per share
- Return on average common equity of 20.6%; core return on average tangible common equity** of 26.1%
- Net Interest Margin of 2.76%, cost of deposits of 1.52%
- Cash dividend rate of \$0.44 per common share during the quarter
- Additional closings of the acquisition of trust assets from Credit Suisse
- Repurchases of 1.075 million shares at an average price of \$29.20 per share

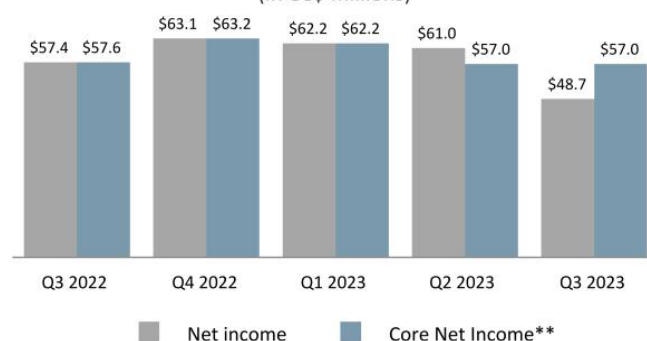
(In US\$ millions)	vs. Q2 2023		vs. Q3 2022	
	Q3 2023	\$ %	\$ %	
Net Interest Income	\$ 90.2	\$ (2.3)	\$ (1.0)	
Non-Interest Income	52.0	1.8	2.1	
Provision for Credit Losses	(0.5)	1.0	0.3	
Non-Interest Expenses*	(92.9)	(8.8)	(10.0)	
Other Gains (Losses)	—	(4.0)	(0.1)	
Net Income	\$ 48.7	\$ (12.3)	\$ (8.7)	(15.1)%
Non-Core Items**	8.2	(12.2)	8.1	
Core Net Income**	\$ 57.0	\$ —	\$ (0.6)	(1.1)%

Return on Equity



Net Income

(In US\$ millions)



* Includes income taxes

4 ** See the Appendix for a reconciliation of the non-GAAP measure



Financials

Income Statement

Net Interest Income

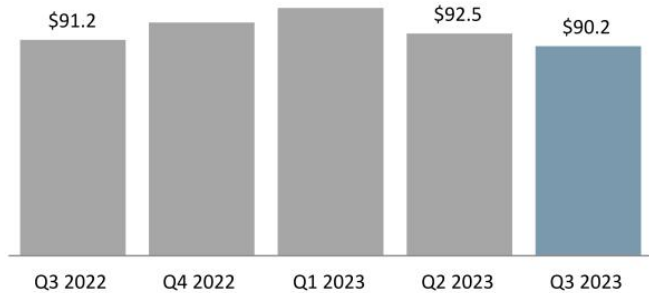


Net Interest Margin & Yields

(In US\$ millions)	Q3 2023		vs. Q2 2023	
	Avg. Balance	Yield	Avg. Balance	Yield
Cash, S/T Inv. & Repos	\$ 2,559.2	4.47 %	\$ 71.0	0.41 %
Investments	5,494.9	2.06 %	(119.8)	(0.01)%
Loans (net)	4,897.5	6.51 %	(86.6)	0.09 %
Interest Earning Assets	12,951.6	4.22 %	(135.4)	0.12 %
Interest Bearing Liabilities	9,438.8	(2.00)%	(17.0)	(0.24)%
Net Interest Margin		2.76 %		(0.07)%

Net Interest Income before Provision for Credit Losses -Trend

(In US\$ millions)



- Net interest income ("NII") decreased by \$2.3 million versus the prior quarter primarily due to increased interest-bearing deposit costs across all jurisdictions, partially offset by increased loan and treasury yields and lower subordinated debt interest payments following the redemption of the Bank's \$75 million 2018 series subordinated debt in the prior quarter
- Net interest margin ("NIM") decreased by 7 basis points to 2.76% as a result of higher deposit costs, which were partially offset by increased loan and treasury yields
- Average interest earning assets fell by \$135.4 million due to depositor withdrawals. The change in investments was due to paydowns and maturities, the proceeds of which were invested in treasury assets. The decrease in loans was the result of net paydowns during the quarter

Income Statement

Non-Interest Income

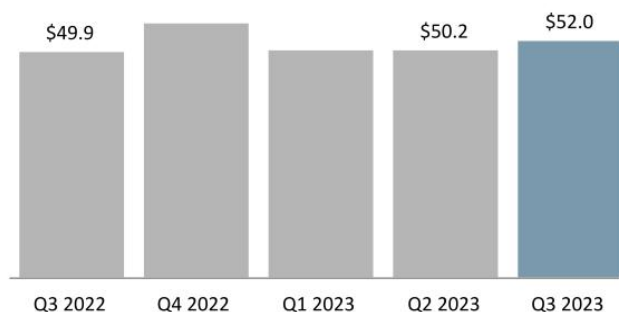


(In US\$ millions)

	Q3 2023	vs. Q2 2023
Asset management	\$ 8.0	\$ (0.2)
Banking	14.1	1.5
Foreign exchange revenue	11.4	0.1
Trust	14.7	0.4
Custody and other	3.3	—
Other	0.6	0.1
Total Non-Interest Income	\$ 52.0	\$ 1.8

Non-Interest Income Trend

(In US\$ millions)



- Total non-interest income was \$1.8 million higher versus the prior quarter, primarily due to higher banking income and trust fees
- Banking income benefited from increased card volumes in Bermuda and Cayman, as well as loan pre-payment fees
- Trust fees increased in the quarter as a result of new clients onboarded following the previously announced acquisition of Credit Suisse trust assets, organic growth and an increase in activity-based fees
- The fee income ratio was 36.7% in the third quarter of 2023 which compares favorably to the peer average* and the 35.5% in the prior quarter

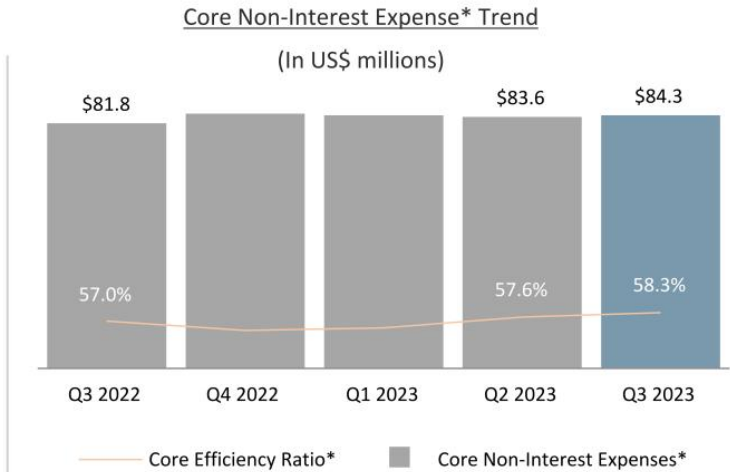
* Includes US banks identified by management as a peer group. Please see the Appendix for a list of these banks. Q2 2023 comparative data is used as Q3 2023 peer information was not widely available at time of publication.

Income Statement



Non-Interest Expenses

Core Non-Interest Expenses* (In US\$ millions)	vs. Q2 2023			
	Q3 2023	\$		%
Salaries & Benefits**	\$ 43.4	\$ 0.8		1.9 %
Technology & Comm.	16.0	1.1		7.1 %
Professional & O/S Services	4.3	(0.5)		(9.9)%
Property	7.7	0.2		3.2 %
Indirect Taxes	5.1	(0.2)		(2.9)%
Marketing	1.5	(0.1)		(8.6)%
Intangible Amortization	1.4	—		0.1 %
Other	4.8	(0.6)		(10.8)%
Expenses*	\$ 84.3	\$ 0.8		0.9 %
Non-Core Expenses*	8.2	8.2		100.0 %
Non-Interest Expenses	\$ 92.5	\$ 9.0		10.8 %



- Core non-interest expenses* were higher than the prior quarter primarily due to higher staff-related expenses, as well as higher technology and communications costs related to the Bank's upgraded IT infrastructure and core banking system in Bermuda
- Core efficiency ratio* of 58.3% is higher than the prior quarter due to lower net revenues and increased expenses. Butterfield continues to target a through-cycle core efficiency ratio of 60%

* See the Appendix for a reconciliation of the non-GAAP measure

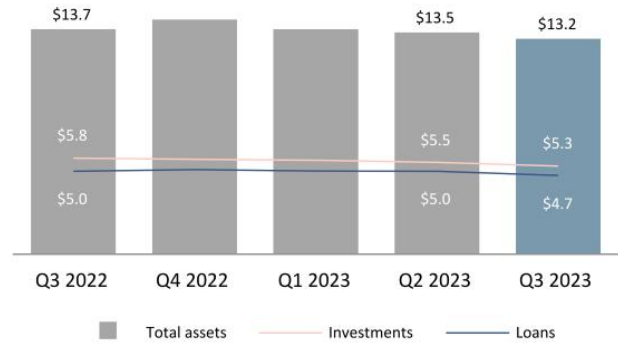
** Includes Non-Service Employee Benefits Expense

Balance Sheet

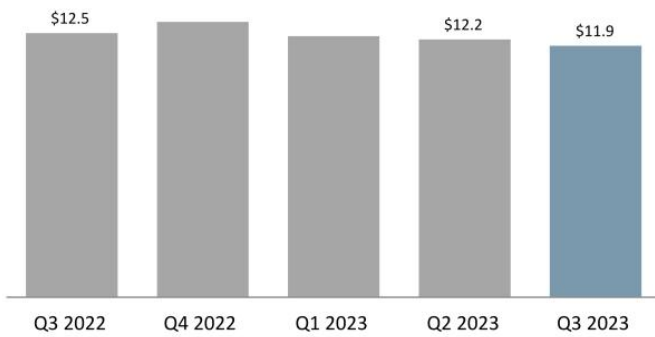


(In US\$ millions)	Q3 2023	Q4 2022	vs Q4 2022	
				%
Cash and cash equivalents	\$ 1,750	\$ 2,101		(17)%
Reverse Repos & S/T Investments	893	944		(5)%
Investments	5,319	5,727		(7)%
Loans (net)	4,750	5,096		(7)%
Other Assets	468	437		7 %
Total Assets	\$ 13,180	\$ 14,306		(8)%
Int. Bearing Deposits	\$ 9,292	\$ 9,951		(7)%
Non-Int. Bearing Deposits	2,569	3,040		(16)%
Other Liabilities	396	450		(12)%
Shareholders' Equity	923	865		7 %
Total Liab. & Equity	\$ 13,180	\$ 14,306		(8)%

Total Assets (In US\$ billions)



Total Deposits (In US\$ billions)



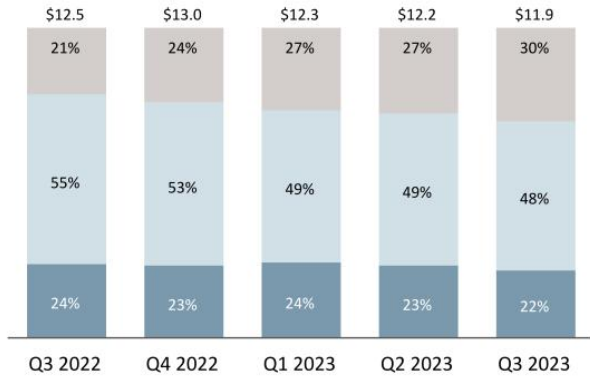
- Changes in deposit volumes represent normal commercial movements
- Period end deposit balances decreased by \$0.3 billion to \$11.9 billion compared to Q2 2023 due to client deposit activation
- Average deposits decreased over the third quarter of 2023 by \$0.1 billion from \$12.2 billion to \$12.1 billion at quarter end
- Butterfield's balance sheet remains low in risk density (risk weighted assets/total assets) at 34.3%

Deposit Composition by Segment

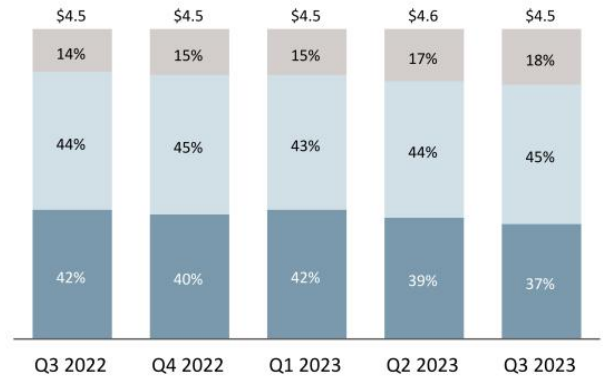


■ Non-interest bearing demand deposits
 ■ Interest bearing demand deposits
 ■ Term deposits

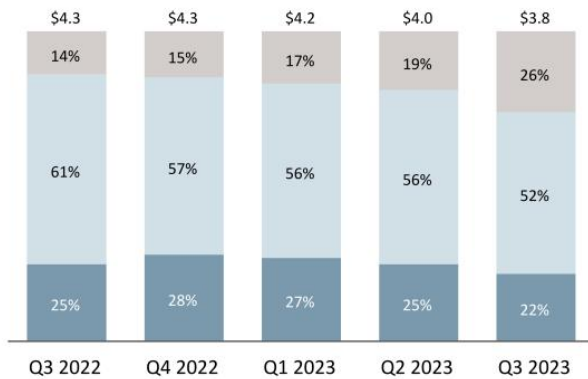
Group (US\$ Billions)



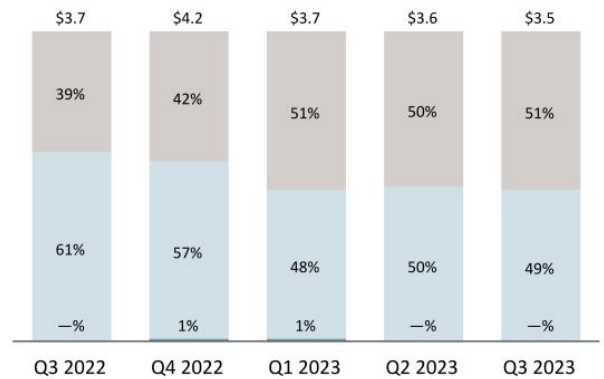
Bermuda (US\$ Billions)



Cayman (US\$ Billions)



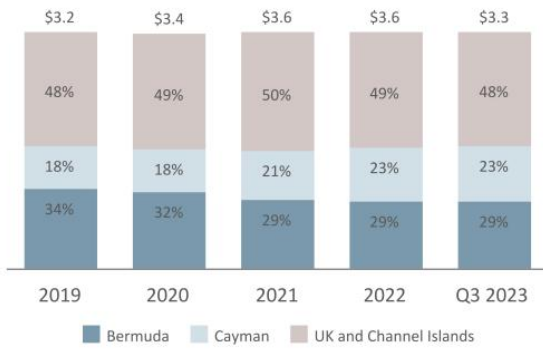
Channel Islands (US\$ Billions)



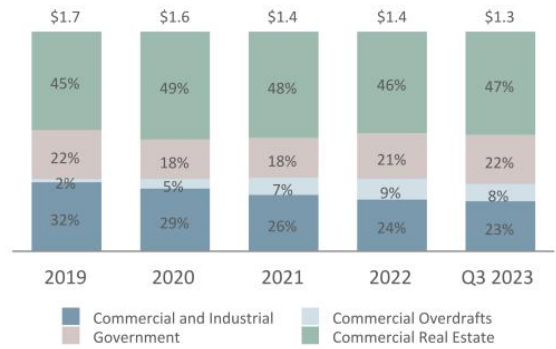
Loans



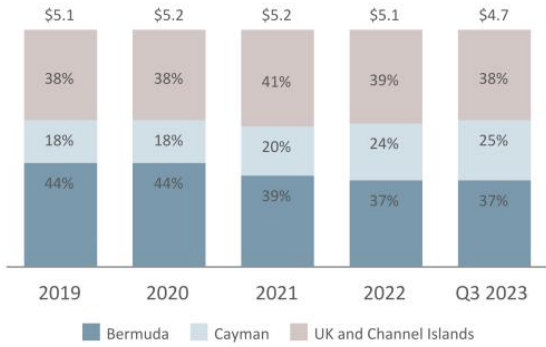
Residential Mortgage Loans (US\$ Billions)



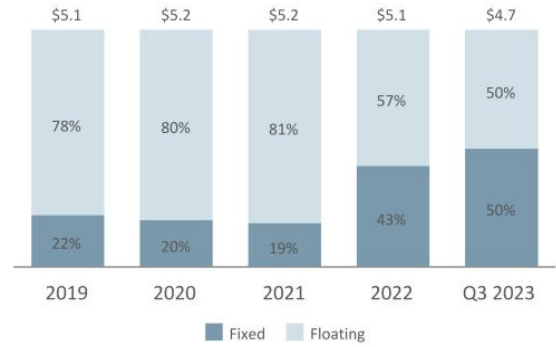
Commercial Loans (US\$ Billions)



Loan Portfolio Composition by Originating Segment (US\$ Billions)



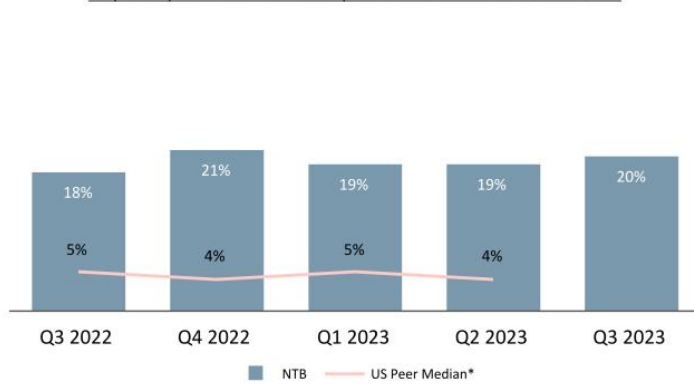
Fixed vs. Floating Rate Loans (US\$ Billions)



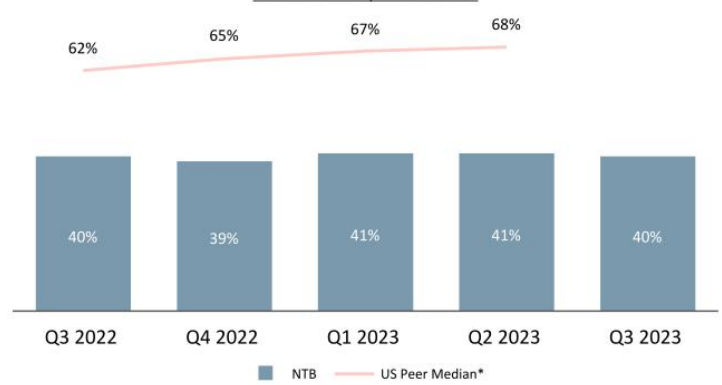
Balance Sheet Asset Mix



Liquidity: Cash & Cash Equivalents** to Total Assets



Loan-to-Deposit Ratio



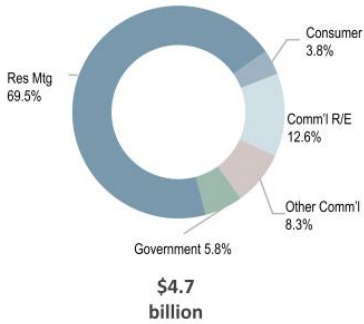
- Butterfield takes a conservative approach to managing the liquidity and funding risk profile of its balance sheet. This involves the retention of a significant liquidity holding of cash or cash equivalent balances, comprised of interbank deposits and short-dated sovereign Canadian, UK and US Treasury Bills as well as maintaining significant liquidity facilities with correspondent banks
- Butterfield also maintains capital, liquidity and funding buffers conservatively in excess of regulatory requirements

* Includes US banks identified by management as a peer group. Please see the Appendix for a list of these banks. Q3 2023 peer information was not widely available at time of publication and therefore not included.

** Includes securities purchased under agreements to resell and short-term investments.

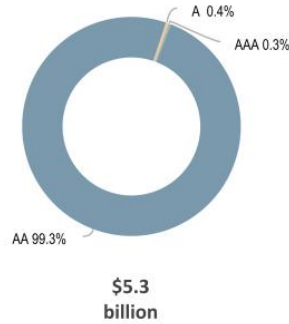


Loan Distribution



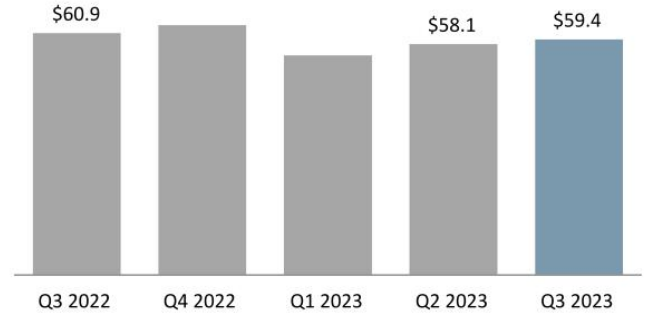
Investment Portfolio

Rating Distribution

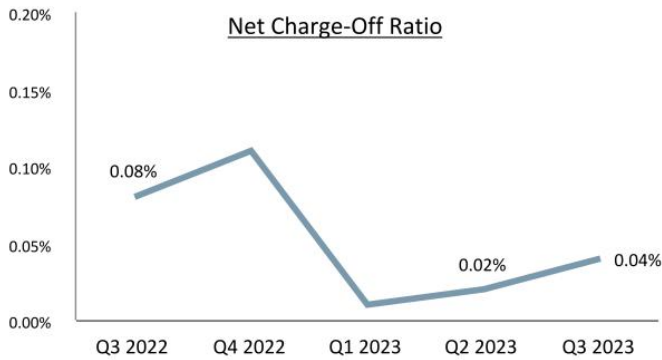


Non-Accrual Loans

(In US\$ millions)



Net Charge-Off Ratio



- Investment portfolio continues to be of very high credit quality with 99% comprised of AA rated securities, primarily US Government guaranteed mortgage backed securities and treasuries
- Non-accrual loans remained at 1.2% of gross loans, consistent with the prior quarter
- Allowance for credit losses at \$26.0 million representing an ACL/Total loans of 0.5%
- The net charge-off ratio continues to be low at 0.04% of total gross loans

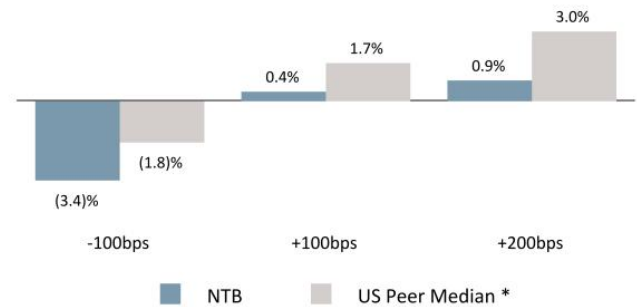
Interest Rate Sensitivity



Average Balance - Balance Sheet

	Average Balances (US\$Mil)		Duration	vs. Q2 2023	Weighted Average Life
	Q3 2023	vs. Q2 2023			
Cash & Reverse Repos & S/T Invest.	\$ 2,559.2	\$ 71.0	0.3	0.1	N/A
AFS	1,926.0	(44.7)	3.5	0.2	4.4
HTM**	3,568.9	(75.1)	6.7	0.2	9.2
Total	\$ 8,054.1	\$ (48.8)			

Interest Rate Sensitivity



- Total investment portfolio duration was at 5.5 years compared to the prior quarter of 5.3 years
- Interest rate sensitivity decreased in the quarter due to a lower volume of call deposits (incl. non-interest bearing) and migrations to more sensitive fixed-term deposits
- Unrealized losses on securities increased by \$30.7 million during the quarter. As of September 30, 2023, the Bank had \$238.0 million in net unrealized losses in the AFS portfolio, compared with net unrealized losses of \$207.3 million as at the end of the second quarter of 2023

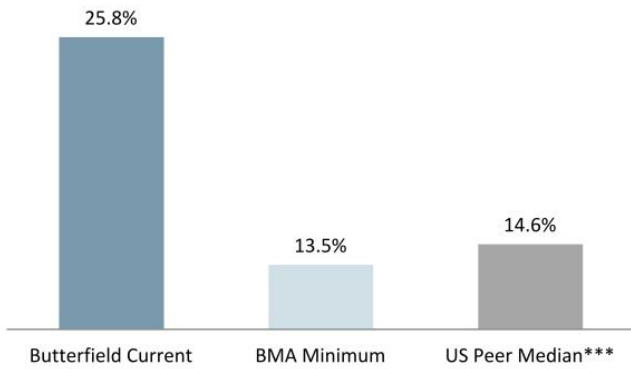
* Includes US banks identified by management as a peer group. Please see the Appendix for a list of these banks. Q2 2023 comparative data is used as Q3 2023 peer information was not widely available at time of publication.

** The HTM portfolio is comprised of securities with negative convexity which typically exhibit lower prepayment speeds when assuming higher future rates.

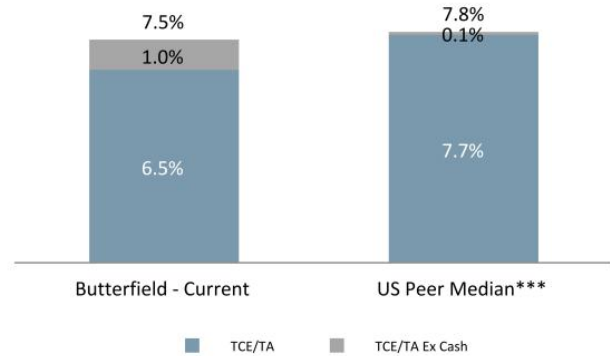
Capital Requirements and Dividend Return



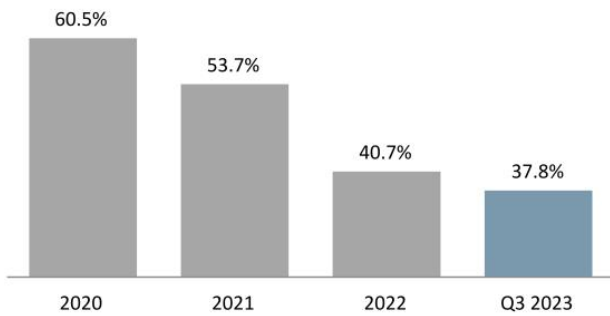
Regulatory Capital (Basel III) - Total Capital Ratio*



Leverage Capital



Dividend Payout Ratio**



- Regulatory capital levels remain conservatively above minimum requirements
- Quarterly dividend rate continues at \$0.44 per common share
- TCE/TA ratio of 6.5% has remained consistent with last quarter
- TCE/TA ex-cash and ex-OCI are 7.5% and 9.4%, respectively

* In accordance with regulatory capital guidance, the Bank has elected to make use of transitional arrangements which allow the deferral of the January 1, 2020 CECL impact of \$7.8 million on its regulatory capital over a period of 5 years.

** 2023 is based on year-to-date dividend and earnings per share

*** Includes US banks identified by management as a peer group. Please see the Appendix for a list of these banks. Q2 2023 comparative data is used as Q3 2023 peer information was not widely available at time of publication.

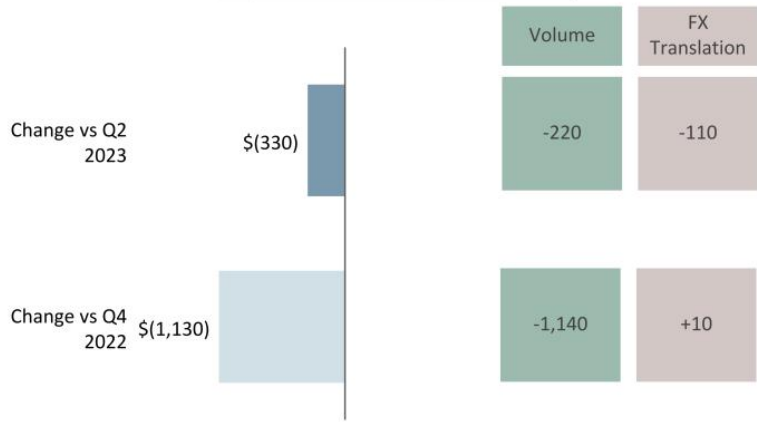


Appendix

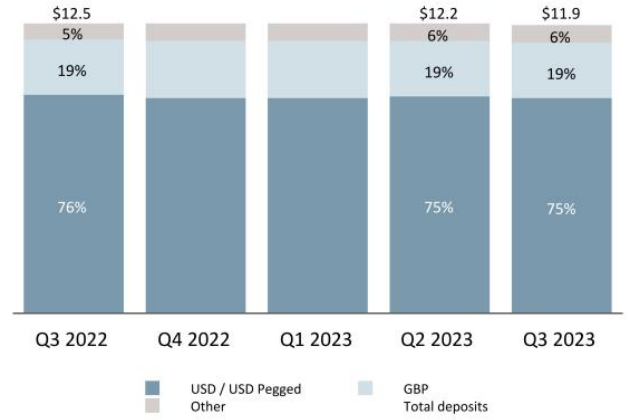
Balance Sheet Movements



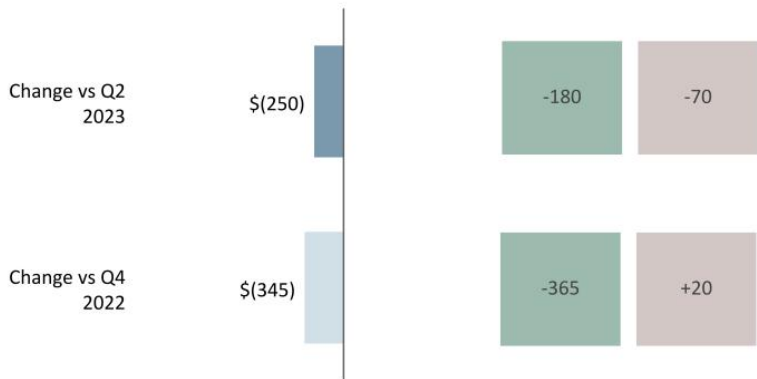
Deposit Movements (US\$ millions)



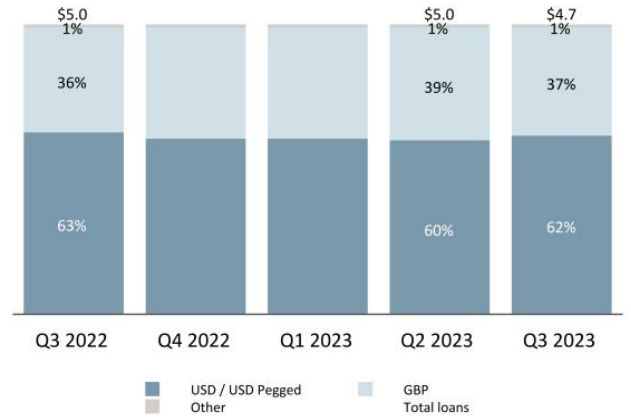
Deposit Composition by Currency (US\$ billions)



Loan Movements (US\$ millions)



Loan Composition by Currency (US\$ billions)



Balance Sheet Trends



(in millions of US Dollars, unless otherwise indicated)

	2023			2022				2021	
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Assets									
Cash and cash equivalents	\$ 1,750	\$ 1,795	\$ 1,345	\$ 2,101	\$ 1,485	\$ 1,340	\$ 2,103	\$ 2,180	\$ 2,310
Reverse Repos & S/T Investments	893	729	1,263	944	995	1,516	1,601	1,295	1,446
Investments	5,319	5,546	5,665	5,727	5,805	5,970	6,111	6,237	5,984
Loans, Net	4,750	5,003	5,022	5,096	4,992	5,139	5,068	5,241	5,204
Other Assets	468	435	438	437	422	386	383	382	389
Total Assets	\$ 13,180	\$ 13,510	\$ 13,733	\$ 14,306	\$ 13,699	\$ 14,350	\$ 15,266	\$ 15,335	\$ 15,332
Liabilities and Equity									
Total Deposits	\$ 11,861	\$ 12,192	\$ 12,348	\$ 12,991	\$ 12,461	\$ 13,075	\$ 13,933	\$ 13,870	\$ 13,861
Long-Term Debt	98	98	172	172	172	172	172	172	172
Other Liabilities	297	269	275	278	311	300	319	316	325
Total Liabilities	\$ 12,257	\$ 12,559	\$ 12,796	\$ 13,441	\$ 12,944	\$ 13,547	\$ 14,424	\$ 14,358	\$ 14,358
Common Equity	\$ 923	\$ 950	\$ 937	\$ 865	\$ 755	\$ 802	\$ 842	\$ 977	\$ 974
Total Equity	\$ 923	\$ 950	\$ 937	\$ 865	\$ 755	\$ 802	\$ 842	\$ 977	\$ 974
Total Liabilities and Equity	\$ 13,180	\$ 13,510	\$ 13,733	\$ 14,306	\$ 13,699	\$ 14,350	\$ 15,266	\$ 15,335	\$ 15,332
Key Metrics									
CET 1 Ratio	23.4 %	22.7 %	22.2 %	20.3 %	18.9 %	17.7 %	17.3 %	17.6 %	16.9 %
Total Tier 1 Capital Ratio	23.4 %	22.7 %	22.2 %	20.3 %	18.9 %	17.7 %	17.3 %	17.6 %	16.9 %
Total Capital Ratio	25.8 %	25.1 %	26.2 %	24.1 %	22.7 %	21.4 %	20.9 %	21.2 %	20.4 %
Leverage ratio	7.8 %	7.6 %	7.2 %	6.7 %	6.4 %	5.8 %	5.5 %	5.6 %	5.5 %
Risk-Weighted Assets (in \$ millions)	4,522	4,628	4,604	4,843	4,780	4,854	5,043	5,101	5,185
Risk-Weighted Assets / total assets	34.3 %	34.3 %	33.5 %	33.9 %	34.9 %	33.8 %	33.0 %	33.3 %	33.8 %
Tangible common equity ratio	6.5 %	6.5 %	6.3 %	5.6 %	5.0 %	5.1 %	5.0 %	5.8 %	5.8 %
Book value per common share (in \$)	19.20	19.34	18.80	17.42	15.21	16.17	16.97	19.83	19.68
Tangible book value per share (in \$)	17.73	17.83	17.32	15.92	13.76	14.61	15.30	18.08	17.92
Non-accrual loans/gross loans	1.2 %	1.2 %	1.1 %	1.2 %	1.2 %	1.2 %	1.2 %	1.2 %	1.2 %
Non-performing assets/total assets	0.8 %	0.7 %	0.6 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %
Allowance for credit losses/total loans	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %	0.5 %

Average Balance Sheet Trends



(in millions of US Dollars, unless otherwise indicated)

	Q3 2023			Q2 2023			Q3 2022		
	Average balance (\$)	Interest (\$)	Average rate (%)	Average balance (\$)	Interest (\$)	Average rate (%)	Average balance (\$)	Interest (\$)	Average rate (%)
Assets									
Cash and cash equivalents, reverse repurchase agreements and short-term investments	\$ 2,559.2	\$ 28.8	4.47 %	\$ 2,488.2	\$ 25.2	4.06 %	\$ 2,818.4	\$ 10.0	1.40 %
Investment in securities	5,494.9	28.5	2.06 %	5,614.7	28.9	2.07 %	6,007.3	29.4	1.94 %
AFS	1,926.0	8.8	1.81 %	1,970.7	8.8	1.78 %	2,140.1	8.5	1.58 %
HTM	3,568.9	19.7	2.19 %	3,644.0	20.2	2.22 %	3,867.3	20.9	2.14 %
Loans	4,897.5	80.4	6.51 %	4,984.1	79.8	6.42 %	5,123.1	65.3	5.05 %
Commercial	1,394.9	23.2	6.60 %	1,396.7	23.0	6.59 %	1,523.3	20.8	5.41 %
Consumer	3,502.6	57.2	6.47 %	3,587.4	56.8	6.35 %	3,599.8	44.5	4.90 %
Total interest earning assets	12,951.6	137.7	4.22 %	13,087.0	133.9	4.10 %	13,948.9	104.6	2.98 %
Other assets	416.7			402.0			369.1		
Total assets	\$ 13,368.3			\$ 13,489.0			\$ 14,317.9		
Liabilities									
Deposits - interest bearing	\$ 9,340.4	\$ (46.1)	(1.96)%	\$ 9,308.0	\$ (38.5)	(1.66)%	\$ 9,939.5	\$ (11.1)	(0.44)%
Securities sold under agreement to repurchase	—	—	— %	0.4	—	(5.45)%	—	—	— %
Long-term debt	98.4	(1.4)	(5.53)%	147.4	(2.9)	(8.02)%	172.1	(2.4)	(5.53)%
Interest bearing liabilities	9,438.8	(47.5)	(2.00)%	9,455.8	(41.4)	(1.76)%	10,111.7	(13.5)	(0.53)%
Non-interest bearing customer deposits	2,739.3			2,863.2			3,074.6		
Other liabilities	279.3			243.6			256.2		
Total liabilities	\$ 12,457.4			\$ 12,562.6			\$ 13,442.4		
Shareholders' equity	910.9			926.4			875.5		
Total liabilities and shareholders' equity	\$ 13,368.3			\$ 13,489.0			\$ 14,317.9		
Non-interest bearing funds net of non-interest earning assets (free balance)									
	\$ 3,512.8			\$ 3,631.2			\$ 3,837.2		
Net interest margin		\$ 90.2	2.76 %		\$ 92.5	2.83 %		\$ 91.2	2.59 %

Income Statement Trends



(in millions of US Dollars, unless otherwise indicated)

	2023			2022				2021	
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Net Interest Income	\$ 90.2	\$ 92.5	\$ 97.4	\$ 94.6	\$ 91.2	\$ 82.0	\$ 75.9	\$ 74.5	\$ 75.7
Non-Interest Income	52.0	50.2	50.2	54.9	49.9	51.8	49.9	52.7	49.0
Prov. for Credit (Losses) Recovery	(0.5)	(1.5)	(0.7)	(1.6)	(0.8)	(0.7)	0.7	0.6	—
Non-Interest Expenses*	92.9	84.1	84.8	85.4	82.9	84.0	82.9	84.6	85.2
Other Gains (Losses)	—	4.0	0.1	0.6	0.1	0.1	0.8	(1.6)	0.3
Net Income	\$ 48.7	\$ 61.0	\$ 62.2	\$ 63.1	\$ 57.4	\$ 49.1	\$ 44.4	\$ 41.7	\$ 39.8
Non-Core Items**	\$ 8.2	\$ (4.0)	\$ —	\$ 0.1	\$ 0.2	\$ 1.1	\$ 0.3	\$ 0.1	\$ 0.2
Core Net Income**	\$ 57.0	\$ 57.0	\$ 62.2	\$ 63.2	\$ 57.6	\$ 50.2	\$ 44.7	\$ 41.7	\$ 40.0

Key Metrics

Loan Yield	6.51 %	6.42 %	6.23 %	5.79 %	5.05 %	4.48 %	4.26 %	4.18 %	4.22 %
Securities Yield	2.06	2.07	2.12	2.03	1.94	1.89	1.79	1.65	1.77
Cost of Deposits	1.52	1.27	1.10	0.78	0.34	0.16	0.12	0.12	0.11
Net Interest Margin	2.76	2.83	2.88	2.79	2.59	2.26	2.03	2.00	1.97
Core Efficiency Ratio**	58.3	57.6	56.0	55.6	57.0	60.2	63.7	64.7	66.3
Core ROATCE**	26.1	26.3	30.5	34.9	31.6	27.8	21.9	18.8	17.9
Fee Income Ratio	36.7	35.5	34.2	37.1	35.6	38.9	39.5	41.2	39.3
Fully Diluted Share Count (in millions of common shares)	49.1	49.9	50.1	50.0	49.8	49.8	49.8	49.8	49.9

* Includes income taxes

** See the reconciliation of non-GAAP measures on pages 23-24

Non-Interest Income & Expense Trends



(in millions of US Dollars, unless otherwise indicated)

	2023			2022				2021	
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Non-Interest Income									
Asset Management	\$ 8.0	\$ 8.2	\$ 7.9	\$ 7.4	\$ 7.4	\$ 7.4	\$ 7.5	\$ 7.6	\$ 7.4
Banking	14.1	12.6	13.6	17.5	14.1	12.9	12.7	15.4	12.6
FX Revenue	11.4	11.3	10.7	11.5	11.8	12.0	12.4	10.9	10.8
Trust	14.7	14.3	12.8	13.7	12.6	13.3	12.7	14.2	12.9
Custody & Other Admin.	3.3	3.3	3.3	3.4	3.3	3.3	3.6	3.9	3.7
Other	0.6	0.5	1.8	1.4	0.7	2.8	1.0	0.8	1.5
Total Non-Interest Income	\$ 52.0	\$ 50.2	\$ 50.2	\$ 54.9	\$ 49.9	\$ 51.8	\$ 49.9	\$ 52.7	\$ 49.0
Non-Interest Expense									
Salaries & Benefits*	\$ 51.3	\$ 42.6	\$ 43.7	\$ 44.7	\$ 42.0	\$ 42.3	\$ 41.0	\$ 41.1	\$ 42.0
Technology & Comm.	16.0	14.9	13.9	14.3	14.3	14.0	14.1	15.7	16.3
Professional & O/S Services	4.3	4.8	5.0	4.3	4.8	5.4	5.1	5.6	5.7
Property	7.7	7.5	7.4	8.0	7.9	7.6	7.9	8.0	7.8
Indirect Taxes	5.4	5.3	5.7	5.4	5.2	5.5	5.9	5.5	5.4
Marketing	1.5	1.7	1.5	1.8	1.5	1.6	1.5	1.2	0.9
Intangible Amortization	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5
Other	4.8	5.4	5.3	4.7	4.9	5.2	5.0	5.2	4.8
Total Non-Interest Expense	\$ 92.5	\$ 83.5	\$ 84.1	\$ 84.7	\$ 82.0	\$ 83.0	\$ 82.0	\$ 83.8	\$ 84.4
Income Taxes	0.4	0.5	0.7	0.7	0.9	1.1	1.0	0.8	0.8
Total Expense incl. Taxes	\$ 92.9	\$ 84.1	\$ 84.8	\$ 85.4	\$ 82.9	\$ 84.0	\$ 82.9	\$ 84.6	\$ 85.2

*Includes non-service employee benefits

Core Non-Interest Expense* Trends



(in millions of US Dollars, unless otherwise indicated)

	2023			2022				2021	
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Salaries & Benefits**	\$ 43.4	\$ 42.6	\$ 43.7	\$ 44.7	\$ 42.0	\$ 41.2	\$ 41.0	\$ 41.1	\$ 42.0
Technology & Comm.	16.0	14.9	13.9	14.3	14.3	14.0	14.1	15.7	16.3
Professional & O/S Services	7.7	4.7	5.0	4.2	4.7	5.4	4.9	5.5	5.6
Property	4.3	7.5	7.4	8.0	7.9	7.6	7.9	8.0	7.8
Indirect Taxes	5.1	5.3	5.7	5.4	5.2	5.5	5.9	5.5	5.4
Marketing	1.4	1.7	1.5	1.8	1.5	1.6	1.5	1.2	0.9
Intangible Amortization	1.5	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5
Other	4.8	5.4	5.3	4.7	4.9	5.2	4.8	5.2	4.7
Total Core Non-Interest Expense*	\$ 84.3	\$ 83.6	\$ 84.1	\$ 84.5	\$ 81.8	\$ 81.9	\$ 81.6	\$ 83.7	\$ 84.2
Income Taxes	0.4	0.5	0.7	0.7	0.9	1.1	1.0	0.8	0.8
Total Core Expense incld. Taxes*	\$ 84.7	\$ 84.1	\$ 84.8	\$ 85.3	\$ 82.8	\$ 83.0	\$ 82.6	\$ 84.5	\$ 84.9

* See the reconciliation of non-GAAP measures on pages 23-24

** Includes non-service employee benefits

Non-GAAP Reconciliation



(in millions of US Dollars, unless otherwise indicated)

		2023			2022	
		Q3	Q2	Q1	Q4	Q3
Net income	A	\$ 48.7	\$ 61.0	\$ 62.2	\$ 63.1	\$ 57.4
Non-core (gains), losses and expenses						
Non-core (gains) losses						
Liquidation settlement from an investment previously written-off		—	(4.0)	—	—	—
Total non-core (gains) losses	B	\$ —	\$ (4.0)	\$ —	\$ —	\$ —
Non-core expenses						
Early retirement program, voluntary separation, redundancies and other non-core compensation costs		8.2	—	—	—	—
Tax compliance review costs		—	—	—	0.1	0.2
Total non-core expenses	C	\$ 8.2	\$ —	\$ —	\$ 0.1	\$ 0.2
Total non-core (gains), losses and expenses	D=B+C	8.2	(4.0)	—	0.1	0.2
Core net income to common shareholders	E=A+D	\$ 57.0	\$ 57.0	\$ 62.2	\$ 63.2	\$ 57.6
Average shareholders' equity		940.2	943.3	902.5	791.2	799.0
Average common equity	F	940.2	943.3	902.5	791.2	799.0
Less: average goodwill and intangible assets		(72.9)	(74.0)	(74.2)	(73.4)	(75.1)
Average tangible common equity	G	867.2	869.3	828.3	717.8	723.9
Return on equity	A/F	20.6 %	25.9 %	28.0 %	31.6 %	28.5 %
Core return on average tangible common equity	E/G	26.1 %	26.3 %	30.5 %	34.9 %	31.6 %
Core earnings per common share fully diluted						
Adjusted weighted average number of diluted common shares (in thousands)	H	49.1	49.9	50.1	50.0	49.8
Earnings per common share fully diluted	A/H	0.99	1.22	1.24	1.26	1.15
Non-core items per share	D/H	0.17	(0.08)	—	0.01	0.01
Core earnings per common share fully diluted	E/H	1.16	1.14	1.24	1.27	1.16
Core return on average tangible assets						
Total average assets	I	\$ 13,349.0	\$ 13,660.8	\$ 14,115.6	\$ 13,863.7	\$ 14,160.1
Less: average goodwill and intangible assets		(72.9)	(74.0)	(74.2)	(73.4)	(75.1)
Average tangible assets	J	\$ 13,276.0	\$ 13,586.8	\$ 14,041.4	\$ 13,790.3	\$ 14,085.0
Return on average assets	A/I	1.4 %	1.8 %	1.8 %	1.8 %	1.6 %
Core return on average tangible assets	E/J	1.7 %	1.7 %	1.8 %	1.8 %	1.6 %

Non-GAAP Reconciliation

(continued) 

(in millions of US Dollars, unless otherwise indicated)

		2023			2022	
		Q3	Q2	Q1	Q4	Q3
Tangible equity to tangible assets						
Shareholders' equity	K	\$ 922.9	\$ 950.3	\$ 936.9	\$ 864.8	\$ 754.9
Less: goodwill and intangible assets		(70.6)	(74.0)	(74.1)	(74.4)	(71.9)
Tangible common equity	L	852.3	876.3	862.8	790.4	683.0
Total assets	M	13,179.5	13,509.5	13,732.7	14,306.1	13,699.3
Less: goodwill and intangible assets		(70.6)	(74.0)	(74.1)	(74.4)	(71.9)
Tangible assets	N	\$ 13,108.9	\$ 13,435.5	\$ 13,658.6	\$ 14,231.7	\$ 13,627.5
Tangible common equity to tangible assets	L/N	6.5 %	6.5 %	6.3 %	5.6 %	5.0 %
Tangible book value per share						
Basic participating shares outstanding (in millions)	O	48.1	49.1	49.8	49.7	49.6
Tangible book value per common share	L/O	17.73	17.83	17.32	15.92	13.76
Efficiency ratio						
Non-interest expenses		\$ 92.5	\$ 83.5	\$ 84.1	\$ 84.7	\$ 82.0
Less: Amortization of intangibles		(1.4)	(1.4)	(1.4)	(1.4)	(1.4)
Non-interest expenses before amortization of intangibles	P	91.1	82.1	82.7	83.3	80.6
Non-interest income		52.0	50.2	50.2	54.9	49.9
Net interest income before provision for credit losses		90.2	92.5	97.4	94.6	91.2
Net revenue before provision for credit losses and other gains/losses	Q	\$ 142.2	\$ 142.6	\$ 147.5	\$ 149.5	\$ 141.1
Efficiency ratio	P/Q	64.1 %	57.6 %	56.0 %	55.7 %	57.1 %
Core efficiency ratio						
Non-interest expenses		\$ 92.5	\$ 83.5	\$ 84.1	\$ 84.7	\$ 82.0
Less: non-core expenses	(C)	(8.2)	—	—	(0.1)	(0.2)
Less: amortization of intangibles		(1.4)	(1.4)	(1.4)	(1.4)	(1.4)
Core non-interest expenses before amortization of intangibles	R	82.9	82.1	82.7	83.1	80.4
Net revenue before provision for credit losses and other gains/losses	Q	142.2	142.6	147.5	149.5	141.1
Core efficiency ratio	R/Q	58.3 %	57.6 %	56.0 %	55.6 %	57.0 %



Our peer group includes the following banks, noted by their ticker symbols:

- First Hawaiian, Inc. (FHB)
- Bank of Hawaii Corporation (BOH)
- East West Bancorp, Inc. (EWBC)
- Cullen/Frost Bankers, Inc. (CFR)
- Associated Banc-Corp (ASB)
- Wintrust Financial Corporation (WTFC)
- Commerce Bancshares, Inc. (CBSH)
- Trustmark Corporation (TRMK)
- International Bancshares Corporation (IBOC)
- Community Bank System, Inc. (CBU)
- First Financial Bankshares, Inc. (FFIN)
- Westamerica Bancorporation (WABC)
- UMB Financial Corporation (UMBF)

