

**CAPITAL & RISK MANAGEMENT**  
**PILLAR 3 DISCLOSURES FOR THE SIX-MONTH PERIOD ENDED DECEMBER 31, 2023**

**THE BANK OF N.T. BUTTERFIELD & SON LIMITED**

<b>Contents</b>	<b>Page</b>
<b>1. Overview</b>	<a href="#"><u>3</u></a>
1.1. Background	
1.2. Basis of disclosures	
1.3. Scope of applications	
1.4. Location and verification	
<b>2. Risk Management Objectives and Policies</b>	<a href="#"><u>5</u></a>
2.1. Risk governance	
2.2. Risk management	
<b>3. Prudential Metrics</b>	<a href="#"><u>7</u></a>
<b>4. Capital Adequacy</b>	<a href="#"><u>9</u></a>
4.1. Capital management	
4.2. Regulatory capital framework	
4.3. Capital structure	
4.4. Linkages between financial statements and regulatory exposures	
4.5. Minimum capital requirement: Pillar 1	
4.6. Leverage ratio	
<b>5. Credit Risk Measurement, Mitigation and Reporting</b>	<a href="#"><u>15</u></a>
5.1. Credit risk overview	
5.2. Credit risk - retail and private banking	
5.3. Credit risk - commercial banking	
5.4. Credit risk - treasury	
5.5. Exposures	
5.6. Impairment provisions	
5.7. Credit risk concentrations	
5.8. Credit risk mitigation	
5.9. Securitization	
<b>6. Market and Liquidity Risk</b>	<a href="#"><u>28</u></a>
6.1. Market risk overview	
6.2. Interest rate risk	
6.3. Foreign exchange risk	
6.4. Liquidity risk	
<b>7. Operational Risk</b>	<a href="#"><u>33</u></a>
<b>8. Other Information</b>	<a href="#"><u>34</u></a>
8.1. Abbreviations	
8.2. Cautionary statements regarding forward-looking statements	

## 1. Overview

### 1.1 Background

Effective January 1, 2015, the BMA implemented the capital reforms proposed by the BCBS and referred to as the Basel III regulatory framework. Basel III aims to raise the quality, consistency and transparency of the capital base, limit the build-up of excess leverage and increase capital requirements for the banking sector. We are subject to the following requirements:

- CET1 ratio of at least 7.0% of RWA, inclusive of a minimum CET1 ratio of 4.5% and the new capital conservation buffer of 2.5%, but excluding the D-SIB surcharge described below;
- Tier 1 capital of at least 8.5% of RWA, inclusive of a minimum Tier 1 ratio of 6% and the new capital conservation buffer of 2.5% but excluding the D-SIB surcharge described below;
- Total capital of at least 10.5% of RWA, inclusive of a minimum total capital ratio of 8% and the new capital conservation buffer of 2.5% but excluding the D-SIB surcharge described below;
- The Group is considered to be a D-SIB and is subject to a 3% surcharge composed of CET1-eligible capital implemented by the BMA effective September 30, 2015. This is based upon the BMA's assessment of the extent to which the Group (individually and collectively with the other Bermuda banks) poses a degree of material systemic risk to the economy of Bermuda due to its role in deposit taking, lending, payment systems and other core economic functions;
- Counter-cyclical buffer of up to 2.5% composed of CET1-eligible capital may be implemented by the BMA when macroeconomic indicators provide an assessment of excessive credit or other pressures building in the banking sector, potentially increasing the CET1, Tier 1 and total capital ratios by up to 2.5%. No Counter-cyclical buffer has been implemented to date;
- Leverage ratio of 5.0% or higher;
- LCR with a minimum requirement of 100%; and
- NSFR with a minimum requirement of 100%.

The minimum capital ratio requirements set forth above do not reflect additional Pillar 2 add-on requirements that the BMA may impose upon the Group as a prudential measure from time to time. As the Group's capital requirements remain under continuous review by the BMA pursuant to its prudential supervision, the Group cannot guarantee that the BMA will not seek higher total capital ratio requirements from time to time.

In December 2017, the BCBS published standards that it described as the finalization of the Basel III post-crisis regulatory reforms (the standards are commonly referred to as "Basel IV"). Among other things, these standards revise the BCBS's standardized approach for credit risk (including recalibrating risk weights and introducing new segmentations for exposures) and provides a new standardized approach for operational risk capital. Under the BCBS framework, these standards were effective on January 1, 2023<sup>1</sup>, with an aggregate output floor phasing in through January 1, 2028<sup>1</sup>. The BMA adopted the BCBS's revised standardized approach for operational and credit risk effective January 1, 2023 and January 1, 2025, respectively.

The requirements of the Basel III regulatory capital framework include the disclosure requirements applicable to banks and deposit-taking companies which are known as Pillar 3. These are designed to promote market discipline by providing market participants with key information on a firm's risk exposure and risk management processes. Pillar 3 also aims to complement the minimum capital requirements described under Pillar 1, as well as the supervisory processes of Pillar 2.

### 1.2 Basis of Disclosures

This disclosure document has been prepared by the Group on a standardized basis and in accordance with the rules laid out in the BCBS standards issued in January 2015 entitled 'Revised Pillar 3 Disclosure Requirements' and in March 2017 entitled "Pillar 3 disclosure requirements – consolidated and enhanced framework" and as adopted by the BMA. Unless otherwise stated, all figures are as at December 31, 2023 and are expressed in US dollars. Certain tables in this report may not sum due to rounding.

---

<sup>1</sup> In March 2020, in response to the pandemic, the BCBS deferred the implementation timeline from January 1, 2022 to January 1, 2023 and the output floor phasing in from January 1, 2027 to January 1, 2028.

## 1.3 Scope of Application

The Bank is the parent company of The Bank of N.T. Butterfield & Son Limited group of companies and is regulated by the BMA. The Basel III Framework, therefore, applies to the Bank and its subsidiary undertakings (together referred to as both the “Bank” and the “Group”).

There is a requirement to calculate and maintain regulatory capital ratios on both a consolidated and a solo basis in respect of the Group’s banking businesses in Bermuda, the Cayman Islands, Guernsey and Jersey. Differences may exist between jurisdictions in the calculation of regulatory capital requirements. However, there are no differences between the basis of consolidation of the Group for accounting and prudential purposes. Full details of the basis of consolidation can be found in Note 2 of the Group’s audited consolidated financial statements for the year ended December 31, 2023.

The Group is made up of the following principal operating entities, which are all wholly owned subsidiaries and fully consolidated in the Group’s financial statements:

The Bank of N.T. Butterfield & Son Limited, Bermuda  
Butterfield Asset Management Limited, Bermuda  
Butterfield Securities (Bermuda) Limited  
Butterfield Trust (Bermuda) Limited  
Bermuda Trust Company Limited  
Butterfield Bank (Cayman) Limited  
Butterfield Trust (Cayman) Limited  
Butterfield Bank (Guernsey) Limited  
Butterfield Trust (Guernsey) Limited  
Butterfield Bank (Jersey) Limited  
Butterfield Mortgages Limited, UK  
Butterfield Trust (Bahamas) Limited  
Butterfield Holdings (Switzerland) Limited  
Butterfield Trust (Switzerland) Limited  
Butterfield Trust (Asia) Limited

All the Group’s subsidiaries are included in the Pillar 3 disclosures. Each overseas operating company is regulated by its own local regulator and is subject to its own regulatory capital requirements. Further details of the principal subsidiary undertakings can be found in the Group’s Annual Report on Form 20-F for the year ended December 31, 2023.

## 1.4 Location and Verification

Pursuant to BCBS guidance<sup>2</sup>, these disclosures have been published following Board approval.

The disclosures are not subject to external audit except where they are equivalent to those prepared under the accounting requirements for the inclusion in the Group’s Audited Financial Statements.

These disclosures have been published on the Group’s corporate website (<https://www.butterfieldgroup.com/investor-relations/pillar-3-disclosure>).

---

<sup>2</sup> [https://www.bis.org/basel\\_framework/chapter/DIS/10.htm?inforce=20230101&published=20211111](https://www.bis.org/basel_framework/chapter/DIS/10.htm?inforce=20230101&published=20211111)

## 2. Risk Management Objectives and Policies

### 2.1 Risk Governance

The principal categories of risk inherent in our business are financial, compliance, operational, reputational and strategic risks.

The Board of Directors has overall responsibility for determining the strategy for risk management, setting the Bank's risk appetite and ensuring that risk is monitored and controlled effectively. It accomplishes its mandate through the activities of two dedicated committees:

**The Risk Policy and Compliance Committee:** This committee of the Board assists the Board in fulfilling its responsibilities by overseeing the Group's risk profile and its performance against approved risk appetites and tolerance thresholds. Specifically, the committee considers the sufficiency of the Group's policies, procedures and limits related to the identification, measurement, monitoring and control of activities that give rise to credit, market, liquidity, interest rate, operational, regulatory, compliance, climate and reputational risks, as well as overseeing its compliance with laws, regulations and codes of conduct.

**The Audit Committee:** This committee reviews the overall adequacy and effectiveness of the Group's system of internal controls and the control environment, including in respect of the risk management process. It reviews recommendations arising from internal and independent audit review activities and management's response to any findings raised.

Both the RPCC and Audit Committee are supported in the execution of their respective mandates by the dedicated Audit, Compliance and Risk Policy Committees for our UK, Guernsey, Jersey, Cayman Islands and The Bahamas operations, which oversee the sufficiency of local risk management policies and procedures and the effectiveness of the system of internal controls that are in place. These committees are chaired by non-executive directors drawn from the boards of directors for each segment.

The Group executive management team is led by the Chairman & CEO and includes the members of executive management reporting directly to the Chairman & CEO. The executive management team is responsible for setting business strategy and for monitoring, evaluating and managing risks across the Group. It is supported by the following management committees:

**The Group Risk and Compliance Committee:** This committee comprises executive and senior management team members and is chaired by the Group Chief Risk Officer. It provides a forum for the strategic assessment of risks assumed across the Group as a whole based on an integrated view of risks including credit, market, liquidity, legal, regulatory and financial crime compliance, fiduciary, operational, cybersecurity, climate, insurance, pension, investment, capital and reputational risks, ensuring that these exposures are consistent with the risk appetites and tolerance thresholds promulgated by the Board and oversees the compliance of regulatory obligations arising under applicable laws, rules and regulations. It is responsible (i) for reviewing, evaluating and recommending the Group's Risk Appetite Framework, the results of the Capital Assessment and Risk Profile and recovery and resolution planning processes (including all associated stress testing performed) and the Group's key risk policies to the Board for approval; (ii) for reviewing and evaluating current and proposed business strategies in the context of our risk appetites; and (iii) for identifying, reviewing and advising on current and emerging risk issues and associated mitigation plans; and (iv) for reviewing the Group's compliance with external regulations and internal policies. It is supported in its mandate by the Compliance and Operational Risk Committee ("CORC"), a dedicated sub-committee that is responsible for the evaluation and monitoring of non-financial risks, including compliance, reputational and operational risks, as well as the Group's policies.

**The Group Asset and Liability Committee:** This committee comprises executive and senior management team members and is chaired by the Group CFO. The committee is responsible for liquidity, interest rate and exchange rate risk management and other balance sheet issues. It also oversees key policies and the execution of the Group's investment and capital management strategies and monitors the associated risks assumed. It is supported in the execution of its mandate by the work undertaken by the dedicated Asset & Liability Committees in each of the Bank's segments.

**The Group Credit Committee:** This committee comprises executive and senior management and is chaired by the Group Chief Risk Officer. The committee is responsible for a broad range of activities relating to the monitoring, evaluation and management of credit risks assumed across the Group at both transaction and portfolio levels. It is supported in the execution of its mandate by the FIC, a dedicated sub-committee that is responsible for the evaluation and approval of recommended inter-bank and counterparty exposures assumed in the Group's treasury and investment portfolios, and by the activities of the jurisdictional Credit Committees, which review and approve transactions within delegated authorities and recommends specific transactions outside of these limits to the GCC for approval.

**The Provisions and Impairments Committee:** This committee comprises executive and senior management team members and is chaired by the Group Chief Risk Officer. The committee is responsible for approving significant provisions and other impairment charges. It also oversees the overall credit risk profile of the Group with a particular focus on non-accrual loans and assets. It is supported in the execution of its mandate by jurisdictional credit committees and the GCC, which make recommendations to this committee.

## 2.2 Risk Management

We manage our exposure to risk through a three "lines of defense" model.

**The first "line of defense"** is provided by our jurisdictional business units, which retain ultimate responsibility for the risks they assume and for bearing the cost of risks associated with these exposures.

**The second "line of defense"** is provided by our Risk Management and Compliance groups, which work in collaboration with our business units to identify, assess, mitigate and monitor the risks associated with our business activities and strategies. They do this by:

- Making recommendations to the GRCC regarding the constitution of the Risk Appetite Framework;
- Setting risk strategies that are designed to manage risk exposures assumed in the course of pursuing our business strategies and aligning them with agreed appetites;
- Establishing and communicating policies, procedures and limits to control risks in alignment with these risk strategies;
- Measuring, monitoring and reporting on risk levels;
- Opining on specific transactions that fall outside delegated risk limits; and
- Identifying and assessing emerging risks

The functions within the Risk Management and Compliance groups that support our risk management activities are outlined below.

**Group Market Risk** – This unit provides independent oversight of the measurement, monitoring and control of liquidity and funding risks, interest rate and foreign exchange risks as well as the market risks associated with our investment portfolios. It also monitors compliance with both regulatory requirements and our internal policies and procedures relating to the management of these risks.

**Group Credit Risk Management** – This unit is responsible for the adjudication and oversight of credit risks associated with our retail and commercial lending activities and the management of risks associated with our investment portfolios and counterparty exposures. It also establishes the parameters and delegated limits within which credit risks may be assumed and promulgates guidelines on how exposures should be managed and monitored.

**Group Operational Risk** – This unit assesses the effectiveness of our procedures and internal controls in managing our exposure to various forms of operational risk, including those associated with new business activities and processes and the deployment of new technologies. It is also responsible for our incident management processes and reviews the effectiveness of our loss data collection activities.

**Group Compliance** – This unit provides independent analysis and assurance of our compliance with applicable laws, regulations, codes of conduct and recommended best practices, including those associated with the prevention of financial crime, including money laundering and terrorist financing. It is also responsible for assessing our potential exposure to upstream risks and for providing guidance on the preparations that should be made in advance of these changes coming into effect.

**The third "line of defense"** is provided by our Group Internal Audit function, by providing independent and objective assurance over the design and effectiveness of controls in place to manage the key risks impacting the Group. To enhance the independence of the function, the Group Head of Internal Audit has a functional reporting line to the Chair of the Audit Committee and administratively reports to the Chairman & CEO.

Further details on the risk management framework can be found in the Group's Annual Report on Form 20-F for the year ended December 31, 2023 under Item 5.A: Risk Management.

### 3. Prudential Metrics

The table below provides an overview of the Group's prudential regulatory metrics for the last 5 quarters.

**Table 1: Key Metrics (KM1)**

		a	b	c	d	e
	(in millions of \$)	Dec 31, 2023	Sep 30, 2023	Jun 30, 2023	Mar 31, 2023	Dec 31, 2022
	<b>Available capital (amounts)</b>					
1	CET1	1,042.5	1,059.3	1,052.2	1,023.7	983.3
1a	CET1 capital as if CECL transitional arrangements had not been applied	1,040.9	1,057.7	1,050.6	1,022.1	980.2
2	Tier 1	1,042.5	1,059.3	1,052.2	1,023.7	983.3
2a	Tier 1 capital as if CECL transitional arrangements had not been applied	1,040.9	1,057.7	1,050.6	1,022.1	980.2
3	Total capital	1,151.9	1,168.6	1,161.3	1,207.6	1,167.0
3a	Total capital as if CECL transitional arrangements had not been applied	1,150.4	1,167.0	1,159.8	1,206.0	1,163.8
	<b>Risk-weighted assets (amounts)</b>					
4	Total RWA	4,540.7	4,521.7	4,627.6	4,604.1	4,843.4
	<b>Risk-based capital ratios as a percentage of RWA</b>					
5	CET1 ratio (%)	23.0%	23.4%	22.7%	22.2%	20.3%
5a	CET1 as if CECL transitional arrangements had not been applied	22.9%	23.4%	22.7%	22.2%	20.2%
6	Tier 1 ratio (%)	23.0%	23.4%	22.7%	22.2%	20.3%
6a	Tier 1 as if CECL transitional arrangements had not been applied	22.9%	23.4%	22.7%	22.2%	20.2%
7	Total capital ratio (%)	25.4%	25.8%	25.1%	26.2%	24.1%
7a	Total capital as if CECL transitional arrangements had not been applied	25.3%	25.8%	25.1%	26.2%	24.0%
	<b>Additional CET1 buffer requirements as a percentage of RWA</b>					
8	Capital conservation buffer requirement (2.5% from 2019) (%)	2.5%	2.5%	2.5%	2.5%	2.5%
9	Countercyclical buffer requirement (%)	—%	—%	—%	—%	—%
10	Bank D-SIB additional requirements (%)	3.0%	3.0%	3.0%	3.0%	3.0%
11	Total of bank CET1 specific buffer requirements (%) (row 8 + row 9+ row 10)	5.5%	5.5%	5.5%	5.5%	5.5%
12	CET1 available after meeting the bank's minimum capital requirements (%)	13.0%	13.4%	12.7%	12.2%	10.3%
	<b>Basel III Leverage Ratio</b>					
13	Total Basel III leverage ratio measure	13,777.8	13,540.3	13,899.2	14,125.7	14,774.3
14	Basel III leverage ratio (%) (row 2/row 13)	7.6%	7.8%	7.6%	7.2%	6.7%
14a	Leverage ratio as if CECL transitional arrangements had not been applied (%) (row 2a/row 13)	7.6%	7.8%	7.6%	7.2%	6.7%
	<b>Liquidity Coverage Ratio</b>					
15	Total HQLA	5,759.5	4,723.3	4,898.9	5,482.8	5,998.7
16	Total net cash outflow	4,045.9	3,808.5	3,920.8	3,996.2	4,327.1
17	LCR ratio (%)*	142%	124%	125%	137%	139%
	<b>Net Stable Funding Ratio</b>					
18	Total available stable funding	5,866.8	5,747.6	5,813.4	6,076.9	6,010.8
19	Total required stable funding	4,514.6	4,482.8	4,682.5	4,703.3	4,791.4
20	NSFR ratio (%)*	130%	128%	124%	129%	125%

\* The LCR and NSFR ratios are shown as the actuals at the end of the relevant quarter. LCR and NSFR ratios shown in tables LIQ1 and LIQ2 under section 6 are shown as the simple averages of the 6 monthly and 2 quarterly observations respectively.

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

## Capital and Risk Management Pillar 3 Disclosures for the six-month period ended December 31, 2023

Capital levels remained stable over the period with earnings accretion mostly offset by dividend payments and share repurchases. In addition, we recognized a new customer relationship intangible asset associated with the acquisition of trust client assets from Credit Suisse which is a deduction from capital. RWAs declined in 2H2023 due to a reduction in deposit funding levels driven by client activation of funds for investment purposes.

The leverage ratio remained flat in 2H2023.

The LCR increased in 2H2023 driven by an increase in HQLA Level 1 assets driven by both an improvement in unrealized losses on the investment portfolio and a movement of funds from the interbank market, thereby increasing the contribution of HQLA 2A assets.

The NSFR increased in 2H2023 driven by the above mentioned improvement in unrealized losses on the investment portfolio.



## 4. Capital Adequacy

### 4.1 Capital Management

One of management's primary objectives is to maintain the confidence of our clients, bank regulators and shareholders. A strong capital position helps the Group to take advantage of profitable investment opportunities and withstand unforeseen adverse developments.

The Group manages its capital both on a total Group basis and, where appropriate, on a legal entity basis, through its CARP process. The Group Finance division has the responsibility for measuring, monitoring and reporting capital levels within guidelines and risk appetite limits. The management of capital will also involve jurisdictional management to ensure compliance with local regulation. In establishing the guidelines and limits for capital, a variety of factors are taken into consideration, including the overall risk of the business in stressed scenarios, regulatory requirements, capital levels relative to our peers, and the impact on our credit ratings.

### 4.2 Regulatory Capital Framework

The current regulatory capital framework is based on three pillars:

- Pillar 1: Sets the minimum capital requirements for credit, market and operational risk. Information is presented in Table 4-6 below.
- Pillar 2: Under the Basel framework as implemented by the BMA, the Group undertakes a CARP process, which is an internal assessment of all material risks to determine the Group's capital adequacy. This internal assessment takes account of the minimum capital requirement and other risks not covered by the minimum capital requirement (Pillar 2). Where capital is deemed as not being able to mitigate a particular risk, alternative management actions are identified and described within the CARP. The CARP is presented to the RPCC before being presented to the Board for challenge and approval and then submission to the BMA. The CARP process is performed annually or more frequently should the need arise.

A SREP is then undertaken biennially by the BMA, which is designed to assess the Group's risk profile as documented in the CARP. This assessment is used to determine and set the Individual Capital Guidance which is the minimum level of capital the Group will be required to hold until the next SREP review is conducted.

- Pillar 3: Aims to promote market discipline through regulatory disclosure requirements.

### 4.3 Capital Structure

CET1 capital is comprised of common share capital, the share premium account, retained earnings and other reserves. It may also include interim retained profits that have been reviewed by external auditors, but losses must be taken into account, whether audited or not. Regulatory adjustments to CET1 capital include: unrealized gains and losses on AFS investments<sup>3</sup>, goodwill and intangible assets, the Group's defined benefit pension obligations and deferred tax. For accounting purposes, acquired customer relationships are capitalized as intangible assets where they meet certain criteria and amortized over a period not exceeding 15 years.

Tier 1 capital is comprised entirely of CET1 capital. Tier 2 capital is comprised of subordinated notes and qualifying allowances for expected credit losses<sup>4</sup>.

---

<sup>3</sup> One time, irrevocable election allowed by the BMA.

<sup>4</sup> Expected credit losses on fully performing loans are considered as qualifying for inclusion. See also discussion under Section 3 on adoption of CECL.

# Capital and Risk Management Pillar 3 Disclosures for the six-month period ended December 31, 2023

The tables below show the composition of capital as well as the reconciliation between accounting capital and regulatory capital:

**Table 2: Composition of regulatory capital (CC1)**

	(in millions of \$)	Amounts	Source based on reference numbers/ letters of the balance sheet under the regulatory scope of consolidation
<b>Common Equity Tier 1 capital: instruments and reserves</b>			
1	Directly issued qualifying common share capital plus related stock surplus	971.3	(c)*
2	Retained earnings**	344.1	(d)*
3	Accumulated other comprehensive income (and other reserves)	(310.2)	(e)*
<b>6</b>	<b>Common Equity Tier 1 capital before regulatory deductions</b>	<b>1,005.2</b>	
<b>Common Equity Tier 1 capital regulatory adjustments</b>			
8	Goodwill (net of related tax liability)	(24.1)	(a)*
9	Other intangibles other than mortgage servicing rights (net of related tax liability)	(74.8)	(b)*
15	Defined benefit pension fund net assets	(26.7)	
26	National specific regulatory adjustments	162.9	(e)*
<b>28</b>	<b>Total regulatory adjustments to Common Equity Tier 1</b>	<b>37.3</b>	
<b>29</b>	<b>Common Equity Tier 1 capital (CET1)</b>	<b>1,042.5</b>	
<b>44</b>	<b>Additional Tier 1 capital (AT1)</b>	<b>—</b>	
<b>45</b>	<b>Tier 1 capital (T1= CET1 + AT1)</b>	<b>1,042.5</b>	
<b>Tier 2 capital: instruments and provisions</b>			
46	Directly issued qualifying Tier 2 instruments plus related stock surplus	100.0	
50	Provisions	9.4	
<b>58</b>	<b>Tier 2 capital (T2)</b>	<b>109.4</b>	
<b>59</b>	<b>Total regulatory capital (TC = T1 + T2)</b>	<b>1,151.9</b>	
<b>60</b>	<b>Total risk-weighted assets</b>	<b>4,540.7</b>	
<b>Capital ratios and buffers</b>			
61	Common Equity Tier 1 (as a percentage of risk-weighted assets)	23.0%	
62	Tier 1 (as a percentage of risk-weighted assets)	23.0%	
63	Total capital (as a percentage of risk-weighted assets)	25.4%	
<b>64</b>	<b>Institution specific buffer requirement (capital conservation buffer plus countercyclical buffer requirements plus higher loss absorbency requirement, expressed as a percentage of risk-weighted assets)</b>	<b>5.5%</b>	
65	Of which: capital conservation buffer requirement	2.5%	
66	Of which: bank-specific countercyclical buffer requirement	—%	
67	Of which: higher loss absorbency requirement	3.0%	
<b>68</b>	<b>Common Equity Tier 1 (as a percentage of risk-weighted assets) available after meeting the bank's minimum capital requirement.</b>	<b>588.4</b>	
<b>Applicable caps on the inclusion of provisions in Tier 2</b>			
76	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to standardised approach (prior to application of cap)	9.4	
77	Cap on inclusion of provisions in Tier 2 under standardised approach	56.8	

\* The references (a) - (e) above refer to the balance sheet components in Table 3 utilized in the calculation of regulatory capital.

\*\* Includes the impact of the CECL transitional arrangement which allows the deferral of the January 1, 2020 CECL adoption impact of \$7.8 million on its regulatory capital over a period of 5 years.

Capital levels remained stable over the period with earnings accretion mostly offset by dividend payments and share repurchases. In addition, we recognized a new customer relationship intangible asset associated with the acquisition of trust client assets from Credit Suisse which is a deduction from capital. RWAs declined in 2H2023 due to a reduction in deposit funding levels driven by client activation of funds for investment purposes.

Table 3: Reconciliation of regulatory capital to balance sheet (CC2)

(in millions of \$)	Balance sheet as at December 31, 2023	Under regulatory scope of consolidation as at December 31, 2023	Reference
<b>Assets</b>			
Cash and cash equivalents	1,646.6	1,646.6	
Securities purchased under agreement to resell	187.3	187.3	
Short-term investments	1,038.0	1,038.0	
Investment in securities	5,292.2	5,292.2	
Loans, net of allowance for credit losses	4,745.8	4,754.7	
Premises, equipment and computer software	154.4	154.4	
Goodwill	24.1	—	(a)*
Intangible assets	74.8	—	(b)*
Equity method investments	7.1	7.1	
Other real estate owned	0.5	0.5	
Accrued interest and other assets	203.2	205.4	
<b>Total assets</b>	<b>13,374.0</b>	<b>13,286.1</b>	
<b>Liabilities</b>			
Total deposits	11,986.7	11,986.7	
Employee benefit plans	88.7	88.7	
Accrued interest and other liabilities	196.5	108.6	
Long-term debt	98.5	98.5	
<b>Total liabilities</b>	<b>12,370.4</b>	<b>12,282.5</b>	
<b>Shareholders' equity</b>			
Paid-in share capital	989.4	989.4	
Of which: amount eligible for CET1	989.4	989.4	(c)*
Retained earnings (Accumulated deficit)	342.5	342.5	(d)*
Treasury common shares	(18.1)	(18.1)	(c)*
Accumulated other comprehensive income (loss)	(310.2)	(310.2)	(e)*
<b>Total shareholders' equity</b>	<b>1,003.6</b>	<b>1,003.6</b>	
<b>Total liabilities and shareholders' equity</b>	<b>13,374.0</b>	<b>13,286.1</b>	

\* The references (a) - (e) above refer to the balance sheet components utilized in the calculation of regulatory capital in Table 2.

4.4 Linkages Between Financial Statements and Regulatory Exposures<sup>5</sup>

Table 4: Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories (LI1)

(in millions of \$)	a	b	c	d	e	f	g
	Balance sheet as at December 31, 2023	Under regulatory scope of consolidation as at December 31, 2023	Carrying values of items:				
			Subject to credit risk framework	Subject to counterparty credit risk framework	Subject to the securitization framework	Subject to market risk framework	Not subject to capital requirements or subject to deduction from capital
<b>Assets</b>							
Cash and cash equivalents	1,646.6	1,646.6	1,646.6	—	—	—	—
Securities purchased under agreement to resell	187.3	187.3	187.3	—	—	—	—
Short-term investments	1,038.0	1,038.0	1,038.0	—	—	—	—
Investment in securities	5,292.2	5,292.2	966.1	—	4,326.1	—	—
Loans, net of allowance for credit losses	4,745.8	4,754.7	4,754.7	—	—	—	(8.8)
Premises, equipment and computer software	154.4	154.4	154.4	—	—	—	—
Goodwill	24.1	—	—	—	—	—	24.1
Intangible assets	74.8	—	—	—	—	—	74.8
Equity method investments	7.1	7.1	7.1	—	—	—	—
Other real estate owned	0.5	0.5	0.5	—	—	—	—
Accrued interest and other assets	203.2	205.4	205.4	—	—	—	(2.2)
<b>Total assets</b>	<b>13,374.0</b>	<b>13,286.1</b>	<b>8,960.0</b>	<b>—</b>	<b>4,326.1</b>	<b>—</b>	<b>87.9</b>
<b>Liabilities</b>							
Total deposits	11,986.7	11,986.7	—	—	—	—	11,986.7
Employee benefit plans	88.7	88.7	—	—	—	—	88.7
Accrued interest and other liabilities	196.5	108.6	—	—	—	—	108.6
Long-term debt	98.5	98.5	—	—	—	—	98.5
<b>Total liabilities</b>	<b>12,370.4</b>	<b>12,282.5</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>12,282.5</b>

Table 5: Main sources of differences between regulatory exposure amounts and carrying values in financial statements (LI2)

	(in millions of \$)	a	b	c	d	e
		Total	Items subject to:			
			Credit risk framework	Securitization framework	Counterparty credit risk framework	Market risk framework
1	Asset carrying value amount under scope of regulatory consolidation (as per template LI1)	13,286.1	13,286.1	—	—	—
2	Liabilities carrying value amount under regulatory scope of consolidation (as per template LI1)	—	—	—	—	—
3	<b>Total net amount under regulatory scope of consolidation</b>	<b>13,286.1</b>	<b>13,286.1</b>	<b>—</b>	<b>—</b>	<b>—</b>
4	Off-balance sheet amounts	1,031.1	1,031.1	—	—	—
9	<b>Exposure amounts considered for regulatory purposes</b>	<b>14,317.2</b>	<b>14,317.2</b>	<b>—</b>	<b>—</b>	<b>—</b>

4.5 Minimum Capital Requirement: Pillar 1

As at December 31, 2023, the CET1, Tier 1 and Total capital ratios of the Group were 23.0%, 23.0% and 25.4%, respectively.

<sup>5</sup> Updated on an annual basis only.

## Capital and Risk Management Pillar 3 Disclosures for the six-month period ended December 31, 2023

The following table provides a general overview of RWAs by type of risk with additional disclosures pertaining thereto in the following sections:

**Table 6: Overview of RWA (OV1)**

		a	b	c
		RWA		Minimum capital requirements
	(in millions of \$)	December 31, 2023	September 30, 2023	December 31, 2023
1	<b>Credit risk (excluding counterparty credit risk) (CCR)</b>	3,114.7	3,092.7	249.2
2	Of which standardised approach (SA)	3,114.7	3,092.7	249.2
12	<b>Securitization exposures in banking book</b>	709.3	716.2	56.7
15	Of which SA/simplified supervisory formula approach (SSFA)	709.3	716.2	56.7
19	<b>Operational risk</b>	707.3	707.3	56.6
21	Of which Standardised Approach	707.3	707.3	56.6
23	<b>Amounts below the thresholds for deduction (subject to 250% risk weight)</b>	9.5	5.5	0.8
25	<b>Total</b>	4,540.7	4,521.7	363.3

### 4.6 Leverage Ratio

The Basel III framework introduced the leverage ratio as a simple, non-risk based measure to restrict the build-up of leverage in the banking sector.

As at December 31, 2023, the leverage ratio for the Group was 7.6%, which is in excess of the 5.0% regulatory minimum set by the BMA.

The tables below provide a reconciliation of the accounting assets and the leverage ratios denominator, the exposure measure, and the data is presented as the actuals at the end of the two quarters in the second half of 2023:

**Table 7: Summary comparison of accounting assets vs leverage ratio exposure measure (LR1)**

	(in millions of \$)	December 31, 2023	September 30, 2023
1	Total consolidated assets as per published financial statements	13,374.0	13,179.5
3	Adjustment for fiduciary assets recognised on the balance sheet pursuant to the operative accounting framework but excluded from the leverage ratio exposure measure	(98.9)	(70.6)
4	Adjustments for derivative financial instruments	43.2	25.7
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	459.5	405.7
8	<b>Leverage ratio exposure</b>	<b>13,777.8</b>	<b>13,540.3</b>

Table 8: Leverage ratio common disclosure template (LR2)

(in millions of \$)		December 31, 2023	September 30, 2023
<b>On-balance sheet exposures</b>			
1	On-balance sheet items (excluding derivatives and SFTs, but including collateral)	13,374.0	13,179.5
2	(Asset amounts deducted in determining Basel III Tier 1 capital)	(98.9)	(70.6)
3	<b>Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of lines 1 and 2)</b>	<b>13,275.1</b>	<b>13,108.9</b>
<b>Derivative exposures</b>			
4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	12.5	0.7
5	Add-on amounts for PFE associated with all derivatives transactions	18.4	17.7
9	Adjusted effective notional amount of written credit derivatives	12.3	7.4
11	<b>Total derivative exposures (sum of lines 4 to 10)</b>	<b>43.2</b>	<b>25.7</b>
<b>Other off-balance sheet exposures</b>			
17	Off-balance sheet exposure at gross notional amount	987.9	902.0
18	(Adjustments for conversion to credit equivalent amounts)	(528.4)	(496.3)
19	<b>Off-balance sheet items (sum of lines 17 and 18)</b>	<b>459.5</b>	<b>405.7</b>
<b>Capital and total exposures</b>			
20	Tier 1 capital	1,042.5	1,059.3
21	<b>Total exposures (sum of lines 3, 11, 16 and 19)</b>	<b>13,777.8</b>	<b>13,540.3</b>
<b>Leverage ratio</b>			
22	Basel III leverage ratio	7.6%	7.8%

The leverage ratio remained flat in 2H2023.

## 5. Credit Risk Measurement, Mitigation and Reporting

### 5.1 Credit Risk Overview

Credit risk is defined as the risk that unexpected losses arise as a result of the Group's borrowers or market counterparties failing to meet their obligations to repay. Credit risk is managed through the jurisdictional CRM departments. CRM provides a system of checks and balances for our diverse credit-related activities by establishing and monitoring all credit-related policies and practices throughout the Group and assuring their uniform application. These activities are designed to diversify credit exposure on an industry and client basis, thus lessening overall credit risk. These credit management activities also apply to our use of derivative financial instruments, including foreign exchange contracts and interest rate risk management instruments, which are used primarily to facilitate client transactions.

Individual credit authority for commercial and other loans is limited to specified amounts and maturities. Credit decisions involving commitment exposure in excess of the specified individual limits are submitted to CRM and then to the GCC, which provides a forum for ongoing executive review of loan activity, establishing our credit guidelines and policies and approving selected credit transactions in accordance with our business objectives. The committee reviews large credit exposures, establishes and reviews credit strategy and policy and approves selected credit transactions. The FIC manages counterparty risk in respect of third party bank counterparties which do not have commercial credit relationships within the Group and also approves country exposure limits.

As part of our ongoing credit granting process, internal ratings are assigned to commercial clients before credit is extended, based on an assessment of creditworthiness. At least annually, a review of all significant credit exposures is undertaken to identify, at an early stage, clients who might be facing financial difficulties. Internal borrower risk ratings are also reviewed during this process, allowing identification of adverse individual borrower and sector trends, and accurate application of internal borrower risk ratings which incorporates but is not limited to an assessment of climate risk impacting borrower risk ratings.

An integral part of the CRM function is to formally review past due and potential problem loans to determine which credits, if any, need to be placed on non-accrual status or charged off. The allowance for loan losses is reviewed quarterly to determine the amount necessary to maintain an adequate provision for current expected credit losses.

Another way credit risk is managed is by requiring collateral. Management's assessment of the borrower's creditworthiness determines whether collateral is obtained. The amount and type of collateral held varies but may include deposits held in financial institutions, mutual funds, US Treasury securities, other marketable securities, income-producing commercial properties, accounts receivable, residential real estate, property, plant and equipment, and inventory. Values of variable collateral are monitored on a regular basis to ensure that they are maintained at an appropriate level, which includes an assessment of the climate risk impact on the value of the collateral.

### 5.2 Credit Risk - Retail and Private Banking

Retail and private lending activity is split between residential mortgages, personal loans, credit cards and authorized overdrafts. Retail credit risks are managed in accordance with limits and processes set out in the credit risk policies and guidelines approved by GCC and GRCC (and approved by the Board). The policies set out where specialist underwriting may be needed.

For residential mortgages, a combination of lending policy criteria, lending guidelines and underwriting are used to make a decision on applications for credit. The primary factors considered are affordability, residential status, residential history, credit history, employment history, nature of income and LTV of the residential property. In addition, confirmation of a borrower's identity is obtained and an assessment of the value of the collateral is carried out prior to granting a credit facility. When considering applications, the primary focus is placed on the willingness and ability to repay.

For other retail lending products, similar lending policy criteria are used, and each of these products has its own policy and underwriting guidelines to enable decisions on applications for credit and to manage accounts. The factors used are attuned to the lending product in question, although affordability and credit history are considered in all cases. Ongoing monitoring of all retail and private banking credit is undertaken by the business unit concerned as well as by CRM. In addition, the GCC reviews reports on a weekly basis. In the event that particular exposures show adverse features such as arrears, the Bank's specialist recovery teams generally work with borrowers to resolve the situation.

## 5.3 Credit Risk - Commercial Banking

Commercial credit risks are managed in accordance with limits and asset quality measures set out in the credit risk policies and guidelines approved by the GCC (and ratified by the Board).

In respect of Commercial Banking, there is a level of delegated sanctioning authority to underwrite certain credit risks based upon an evaluation of the borrower's experience, track record, financial strength, ability to repay, transaction structure and security characteristics. Lending decisions for large or high risk exposures are based upon a thorough credit risk analysis and the assignment of an internal borrower risk rating, and are subject to further approval by the assigned officers in CRM or the GCC.

Consideration is also given to risk mitigation measures which will provide the Group with protection, such as third-party guarantees, supporting collateral and security, legal documentation and financial covenants. Commercial portfolio asset quality monitoring is based upon a number of measures, including the monitoring of financial covenants, cash flows, pricing movements and variable collateral. In the event that particular exposures begin to show adverse features such as payment arrears, covenant breaches or business trading losses, a full risk reassessment is undertaken. Where appropriate, a specialist recovery team will work with the borrower to resolve the situation. If this proves unsuccessful, the case will be subject to intensive monitoring and management procedures designed to maximize debt recovery.

## 5.4 Credit Risk - Treasury

Treasury credit risks are managed in accordance with limits, asset quality measures and criteria set out within the policy approved by the GCC and ratified by the Board. The policy also sets out powers which require higher levels of authorization according to the size of the transaction or the nature of the associated risk. The FIC identifies, assesses, prioritizes and manages our risks associated with counterparty exposure to other financial institutions, as well as country-specific exposures.

Exposures to financial institutions arise within the Group's investment portfolio and treasury operations. The Group has treasury operations in all of its banking locations. Treasury exposures primarily take the form of deposits with banks and foreign exchange positions. Exposures to financial institutions in the investment portfolio can take the form of bonds, floating rate notes and/or certificates of deposit.

Diversification and avoidance of concentration is emphasized. The Group establishes limits for countries and each financial institution where there is an expected exposure. Ongoing asset quality monitoring is undertaken by Treasury and CRM and reports are sent to the FIC and GCC on a monthly basis and GRCC on a quarterly basis. Exception reporting takes place against a range of asset quality triggers. Treasury uses a number of risk mitigation techniques including netting and collateralization agreements. Other methods (such as margining and derivatives) are used periodically to mitigate the risk associated with particular transactions or groups of transactions.

For its exposure to Treasury credit risk, the Group uses external credit assessment institutions as permitted under Basel III for sovereign, financial institutions, asset-backed securities, covered bonds and corporate risks. With regard to financial institutions and corporates, the Group's preference for a long-term rating is the senior unsecured rating. However, counterparty ratings and/or short-term deposit or commercial paper ratings are used if this is unavailable. For asset-backed securities, the issue or tranche rating is used.

## 5.5 Exposures

The following tables analyze the Group's regulatory credit risk exposures as at December 31, 2023. Exposures are allocated to specific standardized exposure portfolios determined by the BMA's Revised Framework for Regulatory Capital Assessment and it is these portfolios that determine the risk weights used. These exposures include both on- and off-balance sheet exposures, with the latter shown separately after credit conversion factors have been applied.



**Table 9: Credit Quality of Assets (CR1)**

	(in millions of \$)	a	b	c	d	e	g
		Gross carrying values of		Allowances / impairments	Of which ECL accounting provisions for credit losses on SA exposures		Net values (a+b-c)
		Defaulted exposures	Non-defaulted exposures		Allocated in regulatory category or Specific	Allocated in regulatory category or General	
1	Loans	61.0	4,710.6	25.8	16.3	9.4	4,745.8
2	Debt securities	—	2,441.1	—	—	—	2,441.1
3	Off-balance sheet exposures	—	746.2	0.3	—	—	745.9
4	<b>Total</b>	<b>61.0</b>	<b>7,898.0</b>	<b>26.1</b>	<b>16.3</b>	<b>9.4</b>	<b>7,932.9</b>

Defaulted exposures noted above are those for which the accrual of interest has been discontinued.

**Table 10: Credit Quality of impaired exposures by geographical area**

	(in millions of \$)	Gross Carrying Values of Impaired exposures	Allowances / impairments	Write offs in the year
1	Bermuda	105.0	17.4	3.0
2	Cayman	6.2	0.1	0.1
3	Guernsey	5.2	0.3	0.2
4	Jersey	8.2	—	—
5	<b>Total</b>	<b>124.6</b>	<b>17.8</b>	<b>3.4</b>

**Table 11: Credit Quality of impaired exposures by product class**

	(in millions of \$)	Gross Carrying Values of Impaired exposures	Allowances / impairments	Write offs in the year
1	Commercial loans	19.3	9.4	0.8
2	Commercial real estate	3.9	0.7	—
3	Consumer loans	1.0	0.5	1.2
4	Residential mortgages	100.4	7.1	1.4
5	<b>Total</b>	<b>124.6</b>	<b>17.8</b>	<b>3.4</b>

Table 12: Analysis of Exposures

	(in millions of \$)	Average Exposure	Position at
		2023	December 31, 2023
1	Cash	71.5	74.2
2	Claims on Sovereigns	2,537.4	2,712.9
3	Claims on Public Sector Entities	6.4	6.4
4	Claims on Corporates	520.6	572.5
5	Claims on Banks and Securities Firms	1,323.9	1,136.2
6	Securitized Loans	4,472.9	4,335.6
7	Retail Loans	193.9	192.7
8	Residential Mortgages	3,407.9	3,226.9
9	Commercial Mortgages	602.0	596.5
10	Past Due Loans	91.5	126.0
11	Other Balance Sheet Exposures	300.1	306.2
12	Non-Market Related Off Balance Sheet Credit exposures	445.7	459.5
13	Market Related Off Balance Sheet Credit Exposures	30.4	43.2
14	<b>Total</b>	<b>14,004.2</b>	<b>13,788.7</b>

Table 13: Geographic Distribution of Exposures

	(in millions of \$)	Bermuda	Cayman	Channel Islands & UK	Other	Total
		1	Cash	40.4	33.7	—
2	Claims on Sovereigns	785.1	696.6	1,231.2	—	2,712.9
3	Claims on Public Sector Entities	6.4	—	—	—	6.4
4	Claims on Corporates	402.1	66.0	104.5	—	572.5
5	Claims on Banks and Securities Firms	306.2	424.7	395.1	10.2	1,136.2
6	Securitized Loans	1,690.5	2,022.3	622.8	—	4,335.6
7	Retail Loans	85.3	77.6	29.8	—	192.7
8	Residential Mortgages	900.1	740.8	1,586.0	—	3,226.9
9	Commercial Mortgages	465.9	77.8	52.8	—	596.5
10	Past Due Loans	72.8	0.9	52.3	—	126.0
11	Other Balance Sheet Exposures	168.1	65.2	56.3	16.6	306.2
12	Non-Market Related Off Balance Sheet Credit exposures	147.6	154.4	157.5	—	459.5
13	Market Related Off Balance Sheet Credit Exposures	26.5	0.9	15.8	—	43.2
14	<b>Total</b>	<b>5,096.9</b>	<b>4,361.0</b>	<b>4,304.1</b>	<b>26.8</b>	<b>13,788.7</b>

**Table 14: Residual Maturity Breakdown of Exposures**

	(in millions of \$)	Up to 12 months	1-5 years	More than 5 years	No specific maturity	Total
1	Cash	74.2	—	—	—	74.2
2	Claims on Sovereigns	1,857.6	603.8	251.5	—	2,712.9
3	Claims on Public Sector Entities	0.2	6.2	—	—	6.4
4	Claims on Corporates	358.4	198.4	15.7	—	572.5
5	Claims on Banks and Securities Firms	1,136.2	—	—	—	1,136.2
6	Securitized	—	10.5	4,325.1	—	4,335.6
7	Retail Loans	144.4	37.9	10.5	—	192.7
8	Residential Mortgages	404.6	953.7	1,868.6	—	3,226.9
9	Commercial Mortgages	12.4	167.1	417.0	—	596.5
10	Past Due Loans	71.0	5.9	49.1	—	126.0
11	Other Balance Sheet Exposures	—	—	—	306.2	306.2
12	Non-Market Related Off Balance Sheet Credit exposures	459.5	—	—	—	459.5
13	Market Related Off Balance Sheet Credit Exposures	43.2	—	—	—	43.2
14	<b>Total</b>	<b>4,561.5</b>	<b>1,983.6</b>	<b>6,937.5</b>	<b>306.2</b>	<b>13,788.7</b>

The above table shows residual maturity of exposures stated on a contractual, rather than an expected basis and does not take into account the cash flows payable or receivable over the life of the exposure.

The table below details the mappings between the main external credit assessment institutions i.e. Fitch, Moody's and S&P used by the Group and the credit quality steps used to determine the risk weightings applied to rated counterparties. Where no external rating is used in the risk weighted assets calculation, the unrated credit quality step applies.

In August 2023, Fitch downgraded the US Long-Term Foreign-Currency Issuer Default Rating to 'AA+' from 'AAA' which impacted the ratings on the Banks' holdings of US government treasuries and mortgage-backed securities issued by US governmental agencies.

Asset classes for which ECAI is used includes: sovereigns; public sector entities; corporates; and banks and securities firms.

**Table 15: ECAI Mapping**

Credit quality step	Fitch's assessment	Moody's assessment	S&P assessment
Step 1	AAA to AA-	Aaa to Aa3	AAA to AA-
Step 2	A+ to A-	A1 to A3	A+ to A-
Step 3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-
Step 4	BB+ to BB-	Ba1 to Ba3	BB+ to BB-
Step 5	B+ to B-	B1 to B3	B+ to B-
Step 6	CCC+ and below	Caa1 and below	CCC+ and below

## 5.6 Impairment Provisions

### Impairment of Financial Assets

The Group uses a CECL model which is based on expected losses. The CECL model is applied by the Group to the measurement of credit losses on financial instruments at amortized cost, including loan receivables and HTM debt securities. The Group also applies the CECL model to certain off-balance sheet credit exposures such as undrawn loan commitments, standby letters of credit, financial guarantees, and other similar instruments. In line with Topic 326, the Group will present credit losses on AFS securities as a valuation allowance rather than as a direct write-down. Changes in expected credit losses are recorded through the respective credit loss allowances on the consolidated balance sheets as well as in the provision for credit losses (or recoveries) in the consolidated statements of operations.

## Capital and Risk Management Pillar 3 Disclosures for the six-month period ended December 31, 2023

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

### Past Due, Non-accrual, TDR and Impaired Loans

Beginning January 1, 2023, the Bank adopted Accounting Standards Update 2022-02, Financial Instruments - Credit Losses (Topic 326), Troubled Debt Restructurings and Vintage Disclosures. This ASU eliminates the accounting guidance for troubled debt restructurings by creditors that have adopted the CECL model while enhancing disclosure requirements for loan refinancings and restructurings made with borrowers experiencing financial difficulty.

Detailed information regarding the definitions of past due, non-accrual, TDRs and impaired loans can be found in Note 2 (I. Loans) of the Group's audited Consolidated Financial Statements for the year ended December 31, 2023. A loan is considered to be impaired when, based on current information and events, the Bank determines that it will not be able to collect all amounts due according to the original loan contract, including scheduled interest payments. Impaired loans include all non-accruing loans and all modified loans to borrowers experiencing financial difficulty even if full collectability is expected following the restructuring. The definitions for past due, TDRs, non-accrual and impaired loans are the same for both accounting and regulatory purposes.

The following table shows the past due loans and allowances for impaired exposures and charges to the consolidated statement of operations for the period ended December 31, 2023. The amounts shown as delinquent represent the full amount of the loan outstanding, not just the amount that is delinquent:

**Table 16: Loan Exposures**

	(in millions of \$)	Commercial Loans	Commercial Real Estate Loans	Consumer Loans	Residential Mortgage Loans	Total
1	Neither past due nor impaired	652.5	603.5	187.3	3,099.0	4,542.3
2	Impaired but not delinquent	0.9	0.7	0.2	58.0	59.8
3	Delinquent:	18.5	3.5	4.3	143.3	169.5
4	30 to 59 Days	—	—	1.0	23.5	24.5
5	60 to 89 Days	—	0.4	0.4	17.6	18.3
6	Over 90 Days	18.5	3.1	2.8	102.2	126.7
7	<b>Total Exposures (1+2+3)</b>	<b>671.8</b>	<b>607.7</b>	<b>191.7</b>	<b>3,300.3</b>	<b>4,771.6</b>
8	Allowances for expected credit losses	(11.2)	(1.4)	(3.1)	(10.0)	(25.8)
9	<b>Net Exposures (7+8)</b>	<b>660.6</b>	<b>606.3</b>	<b>188.6</b>	<b>3,290.3</b>	<b>4,745.8</b>
10	Provision taken (released) during the period	0.6	0.6	1.2	2.1	4.4

**Table 17: Change in stock of defaulted loans and debt securities (CR2)**

	(in millions of \$)	Total
1	<b>Defaulted loans and debt securities at end of the previous reporting period</b>	<b>58.1</b>
2	Loans and debt securities that have defaulted since the last reporting period	12.4
3	Returned to non-defaulted status	2.0
4	Amounts written off	3.4
5	Other changes	(4.1)
6	<b>Defaulted loans and debt securities at end of the reporting period (1+2-3-4+5)</b>	<b>61.0</b>

Defaulted loans increased in the second half of 2023. This was driven by residential mortgages in Bermuda and Cayman moving into non-accrual status outpacing loan settlements. Further details of the Group's past due, non-accrual and impaired loans can be found in Note 6 of the Group's December 31, 2023 unaudited Consolidated Financial Statements.

### Allowance for Credit Losses

The Group maintains an allowance for credit losses, which in management's opinion is adequate to absorb all estimated credit-related losses in its lending and off-balance sheet credit-related arrangements at the balance sheet date.

For AFS debt securities in an unrealized loss position, the Group first assesses whether it intends to sell, or it is more likely than not that it will be required to sell the security before recovery of its amortized cost basis. If either of the criteria regarding intent or requirement to sell is met, the security's amortized cost basis is written down to fair value through income. For debt securities available-for-sale that do not meet the aforementioned criteria, the Group evaluates whether the decline in fair value has resulted from credit losses or other factors. In making this assessment, management considers the extent to which fair value is less than amortized cost, any changes to the rating of the security by a rating agency, and adverse conditions specifically related to the security, among other factors. If this assessment indicates that a credit loss exists, the present value of cash flows expected to be collected from the security are compared to the amortized cost basis of the security. If the present value of cash flows expected to be collected is less than the amortized cost basis, a credit loss exists and an allowance for credit losses is recorded for the credit loss, limited by the amount that the fair value is less than the amortized cost basis. Any impairment that has not been recorded through an allowance for credit losses is recognized in other comprehensive income.

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

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

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

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

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

## Capital and Risk Management Pillar 3 Disclosures for the six-month period ended December 31, 2023

The following table summarizes the movement in the allowance for expected credit losses for the period to December 31, 2023:

**Table 18: Loan Allowances**

	(in millions of \$)	Commercial Loans	Commercial Real Estate Loans	Consumer Loans	Residential Mortgage Loans	Total
1	Balance at the beginning of period	12.1	0.9	2.7	9.2	25.0
2	Provision increase (decrease)	0.6	0.6	1.2	2.1	4.4
3	Recoveries of previous charge-offs	0.1	—	1.0	0.6	1.7
4	Charge-offs, by origination year					
5	2023	—	—	—	—	—
6	2022	—	—	(0.1)	—	(0.1)
7	2021	—	—	—	—	—
8	2020	—	—	—	—	—
9	2019	—	—	—	—	—
10	Prior	(1.5)	—	(0.1)	(2.1)	(3.7)
11	Overdrafts and credit cards	(0.1)	—	(1.5)	—	(1.6)
12	Other	—	—	—	0.2	0.2
13	Allowances for expected credit losses at end of period	11.2	1.4	3.1	10.0	25.8

### 5.7 Credit Risk Concentrations

Concentration risk is defined as: any single exposure or group of exposures with the potential to produce losses large enough (relative to the Group's capital, total assets or overall risk level) to threaten the Group's health or ability to maintain core operations.

The management of concentration risk is addressed in the first instance by the Group's large exposure policy and related credit guidelines, which require that credit facilities to entities that are affiliated through common ownership or management are aggregated for adjudication and reporting purposes. The policy also defines what constitutes a large exposure and the related reporting requirements. The CRM function also undertakes monitoring and assessment of our exposure to concentration risk, reporting the results of these analyses to the GCC, GRCC and RPCC.

The factors taken into consideration when assessing concentration risk are as follows:

- single or linked counterparty;
- industry or economic sector (e.g. hospitality, property development, commercial office building investment);
- geographic region;
- product type;
- collateral type;
- maturity date (whether of the facility or of interest rate fixes).

**5.7.1 Counterparty Concentration** is the risk associated with assuming a high level of exposure to a single counterparty, the failure of which could have an adverse impact on the Group.

Large exposures are reviewed quarterly by the GRCC and RPCC for the loan portfolio and the treasury/investment portfolios. Group Market Risk and Treasury work closely together on daily treasury positions and exceptions.

All large exposures and concentrations in the portfolio are reviewed and agreed by the FIC on a quarterly basis and are reported to the Board and the BMA as a part of this process. The review of large exposures considers:

- Facility total;
- Any link with other facilities;
- Total linked facility being within guidelines;
- BRR;
- Security value on the facility;
- LTV percentage against minimum security covenants.

**5.7.2 Industry Concentration** encompasses the scenario that a risk factor inherent within an industry is tied to an entire portfolio of accounts or investments; e.g., a portfolio made up of a large number of small individual loans where all the counterparties are hotel operators. We believe that due to the nature of the Group's client base our exposure to the property, insurance and fund sectors could be classified as industry concentration, although we believe that geographic and product concentration are the more appropriate risks to measure.

**5.7.3 Geographic Concentration** of the book is monitored as follows:

- Reports are generated which provide details of all the property loan exposure of the Group. Through this, loans are subdivided into regional exposure.
- From this, the percentage breakdown per region of the Group's property exposure is analyzed and reported to the GRCC and RPCC. Assessment of the exposure allows the committees to decide whether the Group should decline further lending in any area in which it is becoming over-weighted.

The geographic distribution of loans by origination is presented in Section 5.5 above.

**5.7.4 Product Concentration** is defined in the context of credit risk, as an over-weighting in the portfolio to a given product type, making the Group vulnerable to the impact of a variety of external factors that could either reduce demand for the product itself or lead to an increase in the level of default rates experienced.

Butterfield operates as a full service bank in Bermuda and Cayman and aims to satisfy the requirements of its customers in these communities through the range of products and services it offers. Accordingly, there is no dependence or concentration on a single product in these markets outside of the residential mortgage portfolios which comprise 69.2% of the Group's loan book; in Bermuda residential mortgage lending makes up 54.4% of the Bermuda loan book, and loans for many purposes (e.g. education, business support, family requirements, green products) may also be in the form of residential mortgages.

Product category analysis confirms that the total lending portfolio is concentrated in the property market; this has been addressed in the stress testing performed.

**5.7.5 Collateral Concentration** considers whether the Group's loan book is secured by a limited number of collateral types. An example of this would be when a large value of loans to a diversified group of borrowers is all secured by shares in the same company or by the shares of various companies within the same industry sector. Any decline in the value of these shares or in the performance of the sector as a whole could have an adverse impact on the Group's security position across all affected borrowers.

The most relevant example of collateral concentration is the Group's exposure to real estate property values. Ignoring cash-backed facilities, the largest collateral concentrations within the portfolio are to residential and commercial property. The greatest risk with collateral concentration is that the value of the security could be severely reduced. To simulate this, the Group's stress testing process incorporates a scenario in which all real estate collateral is devalued by factors as high as 30%.

**5.7.6 Maturity concentration** has been classified as the concentration of loans that are either:

- Maturing at any similar time, leading to a sudden fall in the value of the portfolio and the income that this generates; or
- Have fixed interest rates that are approaching maturity at similar times, potentially impacting the repayment obligations on the borrowers (if rates have subsequently risen) and therefore the risk of default in the affected portfolio.

### **5.8 Credit Risk Mitigation**

The Group uses a wide range of techniques to reduce credit risk of its lending. The most basic of these is performing an assessment of the ability of a borrower to service the proposed level of borrowing without distress. However, the risk can be further mitigated by obtaining security for the funds advanced.

The following tables reflect the split between the Group's secured and unsecured exposures as well the effects of the credit risk mitigation techniques utilized.

**Table 19: Credit Risk Mitigation Techniques - Overview (CR3)**

		a	b	c	d	e	f	g
		Exposures unsecured: carrying amount	Exposures secured by collateral	Exposures secured by collateral, of which: secured amount	Exposures secured by financial guarantees	Exposures secured by financial guarantees, of which: secured amount	Exposures secured by credit derivatives	Exposures secured by credit derivatives, of which: secured amount
1	Loans	344.1	4,401.7	4,401.7	—	—	—	—
2	Debt securities	2,441.1	—	—	—	—	—	—
3	<b>Total</b>	<b>2,785.3</b>	<b>4,401.7</b>	<b>4,401.7</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
4	Of which defaulted	11.4	49.6	49.6				

The increase in debt securities compared with June 30, 2023, is due primarily to the reinvestment of the proceeds from investment portfolio maturities and paydowns into US, UK and Canadian treasury notes and mortgage-backed securities.

**Table 20: Standardized Approach - Credit Risk Exposure and Credit Risk Mitigation Effects (CR4)**

		a	b	c	d	e	f
		Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA Density	
		On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA Density
1	Cash	74.2	—	74.2	—	—	— %
2	Claims on Sovereigns	2,712.9	—	3,692.7	—	—	— %
3	Claims on Public Sector Entities	6.4	—	6.4	—	3.2	50.0 %
4	Claims on Corporates	572.5	—	377.7	—	332.9	88.1 %
5	Claims on Banks and Securities Firms	1,136.2	—	1,136.2	—	228.3	20.1 %
6	Securitized	4,335.6	—	3,546.4	—	709.3	20.0 %
7	Retail Loans	192.7	—	178.4	—	145.8	81.7 %
8	Residential Mortgages	3,226.9	—	3,226.9	—	1,161.1	36.0 %
9	Commercial Mortgages	596.5	—	596.5	—	596.5	100.0 %
10	Past Due Loans	126.0	—	126.0	—	189.0	150.0 %
11	Other Balance Sheet Exposures	306.2	—	306.2	—	306.2	100.0 %
12	Non-Market Related Off Balance Sheet Credit exposures	—	987.9	—	459.5	141.5	30.8 %
13	Market Related Off Balance Sheet Credit Exposures	—	43.2	—	43.2	10.1	23.4 %
14	<b>Total Standardised Approach</b>	<b>13,286.1</b>	<b>1,031.1</b>	<b>13,267.5</b>	<b>502.7</b>	<b>3,824.0</b>	<b>27.8 %</b>

The RWA density remained relatively stable compared with June 30, 2023.



Table 21: Standardized Approach - exposures by asset classes and risk weights (CR5)

	Risk Weight	a	b	c	d	e	f	g	h
Asset Classes	—%	20%	35%	50%	75%	100%	150%	Total credit exposures amount (post CCF and post-CRM)	
1	Cash	74.1	0.1	—	—	—	—	—	74.2
2	Claims on Sovereigns	3,692.7	—	—	—	—	—	—	3,692.7
3	Claims on Public Sector Entities	—	—	—	6.4	—	—	—	6.4
4	Claims on Corporates	—	1.0	—	88.0	—	288.7	—	377.7
5	Claims on Banks and Securities Firms	—	1,132.7	—	3.4	—	—	—	1,136.2
6	Securitizations	—	3,546.4	—	—	—	—	—	3,546.4
7	Retail Loans	—	—	—	—	130.3	48.1	—	178.4
8	Residential Mortgages	—	—	3,147.6	—	79.3	—	—	3,226.9
9	Commercial Mortgages	—	—	—	—	—	596.5	—	596.5
10	Past Due Loans	—	—	—	—	—	—	126.0	126.0
11	Other Balance Sheet Exposures	—	—	—	—	—	306.2	—	306.2
12	Non-Market Related Off Balance Sheet Credit exposures	173.3	94.2	98.8	10.1	—	83.0	—	459.5
13	Market Related Off Balance Sheet Credit Exposures	—	40.9	—	0.7	—	1.6	—	43.2
14	<b>Total Standardised Approach</b>	<b>3,940.1</b>	<b>4,815.3</b>	<b>3,246.4</b>	<b>108.6</b>	<b>209.6</b>	<b>1,324.1</b>	<b>126.0</b>	<b>13,770.2</b>

### Residential mortgages

Residential property is the Group's main source of collateral and means of mitigating credit risk inherent in the residential mortgage portfolio. All mortgage lending activities are supported by underlying assumptions and estimated values received from independent third parties..

All residential property is required to be insured to cover property risks through a third party.

### Commercial

Commercial property is one of the Group's primary sources of collateral and means of mitigating credit risk inherent in its commercial portfolios. Collateral for the majority of commercial loans comprises first legal charges over freehold or long leasehold property but the following may also be taken as security:

Life insurance policies	Credit balances assignments	Equitable charges
Shares	Guarantees	Charges over residential property
Debentures	Chattel mortgages	

For property-based lending, supporting information such as professional valuations are an important tool to help determine the suitability of the property offered as security and, in the case of investment lending, generating the cash to cover interest and principal payments.

All standard documentation is subject to in-house legal review and sign-off in order to ensure that the Group's legal documentation is robust and enforceable. Documentation for large advances may be specifically prepared by independent solicitors. Insurance requirements are always fully considered as part of the application process and the Group ensures that appropriate insurance is taken out to protect the property against an insurable event.

### Treasury

Collateral held as security for treasury assets, including investments, is determined by the nature of the instrument. Loans, debt securities, treasury and other eligible bills are generally unsecured with the exception of asset-backed securities and similar instruments, which are secured by pools of financial assets.

## Capital and Risk Management Pillar 3 Disclosures for the six-month period ended December 31, 2023

The ISDA Master Agreement is the Group's preferred method of documenting derivative activity. It is common in such cases for a Credit Support Annex to be executed in conjunction with the ISDA Master Agreement in order to mitigate credit risk on the derivatives portfolio. Valuations are performed, agreed with the relevant counterparties, and collateral is exchanged to bring the credit exposure within agreed tolerances.

The Group's legal documentation with its counterparties for derivative transactions grants legal rights of set-off for those transactions. Accordingly, for credit exposure purposes, negative market values on derivatives will offset positive market values on derivatives with the same counterparty in the calculation of credit risk, subject to an absolute exposure by counterparty.

The EAD value to the counterparty is measured under the standardized approach for measuring counterparty credit risk exposures method and is derived by adding the gross positive fair value of the contract (replacement cost) to the contracts potential future credit exposure, which is derived by applying a multiple base on the contracts residual maturity to the notional value of the contract, and applying an alpha of 1.4 to the sum of these components.

The following table shows the exposures to counterparty credit risk for derivative contracts as at December 31, 2023:

**Table 22: Analysis of CCR exposure by approach (CCR1)**

		a	b	d	e	f
		Replacement cost	Potential Future Exposure	Alpha used for computing regulatory EAD 1	EAD post-CRM	RWA
1	SA-CCR (for derivatives)	12.5	18.4	1.4	43.2	10.1
6	<b>Total</b>	<b>12.5</b>	<b>18.4</b>	<b>—</b>	<b>43.2</b>	<b>10.1</b>

**Table 23: Standardised Approach - CCR exposures by regulatory portfolio and risk weights (CCR3)**

	a	b	c	d	e	f	g	h	i
	—%	10%	20%	50%	75%	100%	150%	Others	Total credit exposure
Banks and securities firms	—	—	40.9	0.7	—	—	—	—	41.6
Corporates	—	—	—	—	—	0.8	—	—	0.8
Regulatory retail portfolios	—	—	—	—	—	0.8	—	—	0.8
<b>Total</b>	<b>—</b>	<b>—</b>	<b>40.9</b>	<b>0.7</b>	<b>—</b>	<b>1.6</b>	<b>—</b>	<b>—</b>	<b>43.2</b>

**Table 24: Exposure to central counterparties (CCR8)**

		a	b
		EAD (post-CRM)	RWA
11	Exposures to non-QCCPs (total)	43.2	10.1
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contribution); of which:	43.2	10.1
13	(i) OTC derivatives	43.2	10.1

### 5.9 Securitization

The Group has not, to date, securitized assets that it has originated. The Group's total exposure to purchased securitization positions as at December 31, 2023 was \$4.3 billion by carrying value, with U.S. government and federal agencies accounting for the majority of this exposure. Refer also Table 26 below.

**Table 25: Securitization exposures in the banking book (SEC1)**

	(in millions of \$)	Carrying Value
1	<b>Retail</b>	4,326.1
2	Of which residential mortgages	4,326.0
3	Of which other retail exposures	—
4	<b>Wholesale</b>	—
5	Of which commercial mortgages	—
6	<b>Total</b>	<b>4,326.1</b>

A combination of ratings published by Fitch, Moody's and S&P are used to derive the external rating to be used under the standardized approach for securitization exposures. In line with the BMA's Revised Framework for Regulatory Capital Assessment, where two credit assessments by ECAs are available, the less favorable of the two credit assessments is applied. Where more than two credit assessments are available, the two most favorable credit assessments are used and where the two most favorable assessments are different, the less favorable of the two is applied.

The following table shows the aggregate amount of the Group's purchased securitizations as at December 31, 2023 broken down by risk weighting:

**Table 26: Securitization Exposures in the Banking Book and Associated Capital Requirements - Bank Acting as Investor (SEC4)**

		a	b	c	d	e	h	l	p
		Exposure values (by RW bands)					Exposure values (by regulatory approach)	RWA (by regulatory approach)	Capital charge after cap
		≤ 20% RW	> 20% to 50% RW	> 50% to 100% RW	> 100% to 1250% RW	1250% RW	SA / SSFA	SA / SSFA	SA / SSFA
1	<b>Total exposures</b>	4,335.6	—	—	—	—	4,335.6	709.3	56.7
2	Traditional securitization	4,335.6	—	—	—	—	4,335.6	709.3	56.7
3	Of which securitization	4,335.6	—	—	—	—	4,335.6	709.3	56.7
4	Of which retail underlying	4,335.6	—	—	—	—	4,335.6	709.3	56.7
5	Of which wholesale	—	—	—	—	—	—	—	—

## 6. Market and Liquidity Risk

### 6.1 Market Risk Overview

Market risk is the risk of a loss in earnings or decrease in value of the Group's balance sheet due to adverse movements in market factors such as interest rates, foreign exchange rates, credit spreads and equity prices.

Market risk exposures are generally calculated and monitored independently of each other. All market risks are monitored closely and regularly reported to GALCO by the Group Market Risk function, within the Risk Management group.

### 6.2 Interest Rate Risk

Interest rate risk is our exposure to movements in interest rates. Such risk is a normal part of banking and exposure to it can be an important source of profitability and shareholder value. However, where risk is excessive, the threat to earnings and capital can be significant. Changes in interest rates affect earnings by changing net income as well as the level of other interest-sensitive income and expenses. Such changes also affect underlying value of assets, liabilities and off balance-sheet instruments, and hence the economic value of the Group, since the present value of future cash flows changes as interest rates shift. With respect to investments, this risk only arises in the banking book, as the Group does not run a trading book.

According to the BMA "an institution's trading book consists of positions in financial instrument and commodities held either with the intention of trading or in order to hedge other elements of the banking book. Positions not assigned to the trading book fall into the banking book." Further, "each licensed institution must agree a trading book policy statement with the Authority. This includes the case of institutions seeking exemption from the detailed market risk calculation since exemption is dependent on receipt by the Authority of such a statement." As such, the Group has submitted a policy statement to the BMA which declares the activities of the Group as non-trading.

The principal objective of our interest rate risk management is to maximize profit potential while minimizing exposure to changes in interest rates. Our actions in this regard are taken under the guidance of GALCO. The committee is actively involved in formulating the economic assumptions that we use in our financial planning and budgeting processes and establishes policies which control and monitor the sources, uses and pricing of funds. From time to time, we utilize hedging techniques to reduce interest rate risk. GALCO uses interest income simulation and economic value of equity analysis to measure inherent risk in our balance sheet at specific points in time.

Appetite for interest rate risk is documented in the Group's policies on market risk and investments. This includes the completion of stress testing on at least a quarterly basis of the impact of an immediate and sustained shift in interest rates of +/- 200 basis points on Net Interest Income, Economic Value of Equity and the ratio between Tangible Total Equity and Average Tangible Assets.

Key modelling and parametric assumptions used in calculating  $\Delta$ EVE and  $\Delta$ NII in the table below include:

- The average repricing maturity of deposits is the product of the modelled maturity of deposits and their sensitivity to market rate movements. These models are calibrated based on historical observations, industry benchmarking and expert judgement. The models are also subjected to periodic back-testing and challenge/reaffirmation.
- Loan prepayment rates are calibrated from historical observations and expert judgement.
- For U.S. Agency Mortgage Backed Securities, which constitute the majority of the Group's investment portfolio, we use models developed by an external service provider. The outcomes of these models are periodically challenged using two different industry prepayment models and fitted as necessary.
- Commercial margins are included in the calculation of EVE.
- The Group does not perform any aggregation across currencies. Risk metrics are calculated for each balance sheet item at the individual level using yield curves and discount factors applicable to the item's original currency.
- Average and longest repricing maturities assigned to non-maturity deposits are 5 and 6 years, respectively

Table 27: Quantitative information on IRRBB (IRRBB1)<sup>6</sup>

(in millions of \$)	ΔEVE		ΔNII	
	Dec 31, 2023	Dec 31, 2022	Dec 31, 2023	Dec 31, 2022
Parallel up	(52.2)	(217.3)	12.5	12.2
Parallel down	67.2	90.8	(23.3)	(31.1)
Steeper	(34.9)	(123.8)		
Flattener	43.3	29.6		
Short rate up	(2.7)	(29.0)		
Short rate down	(5.2)	11.6		
<b>Maximum</b>	<b>67.2</b>	<b>217.3</b>	<b>23.3</b>	<b>31.1</b>
	<b>December 31, 2023</b>		<b>Dec 31, 2022</b>	
Tier 1 capital	1,042.5		983.3	

Central Banks continued to increase their base rates in 2023, albeit at a significantly slower pace compared to 2022. As a result, the Bank's NII increased by 7% in 2023 compared to a 15% increase in 2022.

As of December 2023, markets expectations are for interest rates to have peaked with Central Banks to begin easing their policies during 2024. Whilst lower interest rates should relieve the pressure on deposit funding costs, the Bank's short-term earnings are also exposed to a loss of income on floating rate loans and treasuries. Management plans to continue to strategically redeploy proceeds from investment maturities and paydowns, and excess liquidity into fixed-rate investments to minimize volatility in earnings.

Additional details are given in the Group's Annual Report for the year ended December 31, 2023 under Item 5.A: Market Risks.

### 6.3 Foreign Exchange Risk

The Group holds various non-BMD denominated assets and liabilities and maintains investments in subsidiaries whose domestic currency is either not the BMD or their domestic currency is not pegged to the USD. The domestic currencies of Bermuda, the Cayman Islands and The Bahamas are all pegged to the USD; although that does not mean that will always remain the case. Assets and liabilities denominated in currencies other than BMD or USD are translated to USD at the rates of exchange prevailing at the balance sheet date. The resulting gains or losses are included in foreign exchange revenue in the consolidated statement of operations. Assets and liabilities of subsidiaries outside of Bermuda are translated at the rate of exchange prevailing on the balance sheet date while associated revenues and expenses are translated to USD at the average rate of exchange prevailing through the accounting period. Unrealized translation gains or losses on investments in foreign currency based subsidiaries are recorded as a separate component of shareholders' equity within accumulated other comprehensive loss. Such gains or losses are recorded in the consolidated statement of operations only when realized. Our foreign currency subsidiaries may give rise to significant foreign currency translation movements against the BMD. We also provide foreign exchange services to our clients, principally in connection with our community banking and wealth management businesses, and effect other transactions in non-BMD currencies. Foreign currency volatility and fluctuations in exchange rates may impact the value of non-BMD denominated assets and liabilities and raise the potential for losses resulting from foreign currency trading positions where aggregate obligations to purchase and sell a currency other than BMD or USD do not offset one another, or offset each other in different time periods. If the policies and procedures we have in place to assess and mitigate potential impacts of foreign exchange volatility are not followed, or are not effective to mitigate such risks, our results and earnings may be negatively affected.

The Group maintains a clearly articulated foreign exchange risk exposure tolerance framework which limits exposures to select currencies. A full definition of the tolerance framework is contained in the Group's Market Risk Management Policy and its associated standards.

Note 16 of the Audited Consolidated Financial Statements as at December 31, 2023 provides details of the Group's foreign exchange and other derivative instruments as at that date.

### 6.4 Liquidity Risk

The objectives of liquidity risk management are to ensure that the Group can meet its cash flow requirements and capitalize on business opportunities on a timely and cost effective basis. Liquidity is defined as the ability to hold and/or generate cash adequate to meet the

<sup>6</sup> Updated on an annual basis only

## Capital and Risk Management Pillar 3 Disclosures for the six-month period ended December 31, 2023

Group's needs for day-to-day operations, severely adverse conditions, and material long and short-term commitments. Liquidity risk is the risk of potential loss if the Group were unable to meet its funding requirements at a reasonable cost.

Liquidity is monitored and managed at each banking jurisdictional level and on a group-wide basis. The Group treasury functions, located in Bermuda, Cayman Islands, Guernsey, Jersey and the United Kingdom, manage day-to-day liquidity. The Group Market Risk function has the responsibility for measuring and reporting to senior management on liquidity risk positions. Liquidity is managed based on demand, commitments, specific events and uncertainties to meet current and future financial obligations of a short-term nature. The objective in managing liquidity is to respond to the needs of depositors and borrowers as well as to earnings enhancement opportunities in a changing marketplace. Management is responsible for establishing and monitoring liquidity targets as well as strategies to meet these targets. The Group adopts a cautious liquidity risk appetite with internal quantitative liquidity risk tolerances more stringent than regulatory requirements. Specifically the Group manages liquidity against internal limits established by the Market Risk Management Policy and its related Liquidity Risk Standard and quarterly stress testing methodology.

The balance sheet includes loans representing 36.0% of total assets as at December 31, 2023. Further, at that date there were significant sources of liquidity within the balance sheet in the form of cash and cash equivalents, short-term investments, securities purchased under agreements to resell and investments amounting to \$8.2, or 61.0%, of total assets.

An important element of the liquidity management is the liquidity contingency plan which can be employed in the event of a liquidity crisis. The objective of the liquidity contingency plan is to ensure that liquidity is maintained during periods of stress. This plan takes into consideration a variety of scenarios that could challenge liquidity. These scenarios include specific and systemic events that can impact on- and off-balance sheet sources and uses of liquidity. This plan is reviewed and updated at least annually.

There is no central bank in Bermuda and thus there is no 'lender of last resort', and neither does the Group have committed standby facilities in its favor. The Group does have access to funding from the inter-bank market on an uncommitted basis and also have put in place formalized but uncommitted repurchase and collateralized facilities with counterparties which enable it to access funding on a secured basis. However, in a financial crisis, access to some of these liquidity sources may be restricted or the Group may not be able to access them at all. Another source of liquidity for the Group is the ability to draw funding from capital markets globally. The availability and cost of these funds are influenced, in part, by the Group's credit rating; as a result, a downgrade in the Group's credit ratings could have an adverse impact on its liquidity funding and the cost thereof. Similarly, a downgrade in Bermuda's sovereign credit rating could also adversely affect the Group's ability to access liquidity.

### 6.4.1 Liquidity Coverage Ratio

The objective of the LCR is to promote the short-term resilience of a bank's liquidity risk profile, ensuring that it has adequate stock of unencumbered HQLA that can easily be converted into cash to meet its liquidity needs in an acute stress scenario lasting for 30 days. The BMA requires Bermuda banks to maintain a minimum LCR of 100%. The Group is in compliance with this requirement as at December 31, 2023.

Data is presented as the simple average of the six monthly observations over the second half of 2023. HQLA is comprised predominantly of US, Canadian and UK sovereign debt and US government and federal agency securities whilst customer deposits remain the primary source of funding.

Table 28: LCR Disclosure Template (LIQ1)

(in millions of \$)		a	b
		Total unweighted value (average)	Total weighted value (average)
<b>High-quality liquid assets</b>			
1	Total HQLA		5,018.5
<b>Cash outflows</b>			
2	<b>Retail deposits and deposits from small business customers, of which:</b>	<b>2,507.6</b>	<b>334.5</b>
3	Stable deposits	—	—
4	Less stable deposits	2,507.6	334.5
5	<b>Unsecured wholesale funding, of which:</b>	<b>7,055.3</b>	<b>4,643.5</b>
6	Operational deposits (all counterparties) and deposits in networks of cooperative banks	159.4	39.8
7	Non-operational deposits (all counterparties)	6,896.0	4,603.7
8	Unsecured debt	—	—
9	<b>Secured wholesale funding</b>	<b>—</b>	<b>14.9</b>
10	<b>Additional requirements, of which:</b>	<b>436.6</b>	<b>149.7</b>
11	Outflows related to derivative exposures and other collateral requirements	24.9	24.9
12	Outflows related to loss of funding of debt products	—	—
13	Credit and liquidity facilities	411.7	124.8
14	<b>Other contractual funding obligations</b>	<b>—</b>	<b>—</b>
15	<b>Other contingent funding obligations</b>	<b>123.0</b>	<b>6.2</b>
16	<b>TOTAL CASH OUTFLOWS</b>		<b>5,148.8</b>
<b>Cash inflows</b>			
17	<b>Secured lending (eg reverse repo)</b>	<b>292.6</b>	<b>150.3</b>
18	<b>Inflows from fully performing exposures</b>	<b>1,209.4</b>	<b>1,173.0</b>
19	<b>Other cash inflows</b>	<b>—</b>	<b>—</b>
20	<b>TOTAL CASH INFLOWS</b>	<b>1,501.9</b>	<b>1,323.3</b>
			<b>Total adjusted value</b>
21	<b>Total HQLA</b>		<b>5,018.5</b>
22	<b>Total net cash outflows</b>		<b>3,825.5</b>
23	<b>Liquidity coverage ratio (%)</b>		<b>131%</b>

The average LCR decreased in 2H2023 driven by a decrease in HQLA Level 1 assets driven by outflows of deposit funding and thereby decreasing the contribution of HQLA 2A assets.

#### 6.4.2 Net Stable Funding Ratio

The objective of the NSFR is to require banks to maintain a stable funding profile in relation to the composition of their assets and off-balance sheet activities over a one year horizon. The BMA requires Bermuda banks to maintain a minimum NSFR of 100% from implementation on January 1, 2018. The Group is in compliance with this requirement as at December 31, 2023.

Data is presented as the simple average of the two quarterly observations over the second half of 2023.

Table 29: NSFR Disclosure Template (LIQ2)

		a	b	c	d	e
		Unweighted value by residual maturity				Weighted value
(in millions of \$)		No maturity*	<6 months	6 months to <1 year	≥1 year	
<b>Available stable funding (ASF) item</b>						
1	<b>Capital:</b>	—	—	—	1,274.2	1,274.2
2	Regulatory capital	—	—	—	1,174.2	1,174.2
3	Other capital instruments	—	—	—	100.0	100.0
4	<b>Retail deposits and deposits from small business customers:</b>	2,725.1	661.0	146.8	50.3	3,230.0
5	Stable deposits	—	—	—	—	—
6	Less stable deposits	2,725.1	661.0	146.8	50.3	3,230.0
7	<b>Wholesale funding:</b>	3,558.0	4,645.7	135.4	1.4	1,278.4
8	Operational deposits	—	159.4	—	—	79.7
9	Other wholesale funding	3,558.0	4,486.4	135.4	1.4	1,198.7
10	<b>Liabilities with matching interdependent assets</b>	—	—	—	—	—
11	<b>Other liabilities:</b>	—	263.3	3.4	23.0	24.7
12	NSFR derivative liabilities	—	8.5	—	—	—
13	All other liabilities and equity not included in the above categories	—	254.8	3.4	23.0	24.7
14	<b>Total ASF</b>	—	—	—	—	5,807.2
<b>Required stable funding (RSF) item</b>						
15	<b>Total NSFR high-quality liquid assets (HQLA)</b>					624.9
16	<b>Deposits held at other financial institutions for operational purposes</b>	12.5	—	—	—	12.5
17	<b>Performing loans and securities:</b>	—	1,514.4	456.1	3,821.0	3,322.5
18	Performing loans to financial institutions secured by Level 1 HQLA	—	—	—	—	—
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	—	1,114.3	—	—	167.2
20	Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and PSEs, of which:	—	142.4	252.6	1,439.7	1,373.5
21	With a risk weight of less than or equal to 35% under the Basel II standardised approach for credit risk	—	—	—	—	—
22	Performing residential mortgages, of which:	—	246.5	203.5	2,363.9	1,761.5
23	With a risk weight of less than or equal to 35% under the Basel II standardised approach for credit risk	—	246.5	203.5	2,363.9	1,761.5
24	Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	—	11.2	—	17.3	20.3
25	<b>Assets with matching interdependent liabilities</b>	—	—	—	—	—
26	<b>Other liabilities:</b>	—	524.4	4.8	44.6	516.3
27	Physical traded commodities, including gold	—	—	—	—	—
28	Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs	—	—	—	—	—
29	NSFR derivative assets	—	6.8	—	—	5.1
30	NSFR derivative liabilities before deduction of variation margin posted	—	8.5	—	—	1.7
31	All other assets not included in the above categories	—	509.1	4.8	44.6	509.4
32	<b>Off-balance sheet items</b>	—	—	—	944.9	22.4
33	<b>Total RSF</b>	—	—	—	—	4,498.7
34	<b>Net Stable Funding Ratio (%)</b>					129%

\* Items to be reported in the "no maturity" time bucket do not have a stated maturity. These may include, but are not limited to, items such as capital with perpetual maturity, non-maturity deposits, short positions, open maturity positions, non-HQLA equities and physical traded commodities.

The average NSFR remained relatively stable in 2H2023.



## 7. Operational Risk

In providing services, the Group is exposed to operational risk. This is the risk of loss from inadequate or failed internal processes and systems, actions or inactions of people, or from external events.

The Group views the management of operational risk as integral to its objective of creating and maintaining shareholder value. Risk management requires the consideration of the risk/reward relationship in both the management of existing activities and the execution of all new business strategies. Our success is also dependent, in part, upon maintaining our reputation as a well-managed institution with shareholders, existing and prospective clients, creditors, and regulators. In order to maintain this reputation, we seek to minimize the frequency and severity of operational losses associated with compliance and fiduciary matters, product, process, technology failures, and business continuity.

Operational risk is mitigated through effective internal controls embedded in our business activities and our risk management practices, which are designed to continuously re-assess the effectiveness of these controls in order to keep the risk we assume at levels appropriate to our risk appetite as approved by the Board. Our overall approach is based on the following four guiding principles:

- Assessing risks is a day-to-day business activity that is the concern of every employee;
- Decisions are based on an assessment of all relevant operational risks;
- Risk decisions shall be made at the appropriate level based on clear lines of responsibility and delegated authority; and
- Unnecessary risks shall be avoided.

Data on operational losses and any significant control failures incurred are captured through an incident reporting process. These events are reported to both the GRCC and RPCC, which assess the sufficiency of the corrective actions taken by management to prevent recurrence. Both committees also receive regular reporting on actual performance against established risk tolerance metrics.

For the purposes of calculating its operational risk capital requirements, effective January 1, 2023, the Group has implemented the Revised Standardized Approach as adopted by the BMA and which replaces the Standardized Approach used under Basel II. The Revised Standardized Approach methodology is based on the following three components: (i) the Business Indicator; (ii) the Business Indicator Component; and (iii) the Internal Loss Multiplier.

## 8. Other Information

### 8.1 Abbreviations

The following abbreviated terms are used throughout the document:

<b>AFS</b>	Available-for-sale	<b>IRRBB</b>	Interest Rate Risk in the Banking Book
<b>ASF</b>	Available stable funding	<b>ISDA</b>	International Swaps and Derivatives Association
<b>AOCIL</b>	Accumulated Other Comprehensive Income (Loss)	<b>LCR</b>	Liquidity Coverage Ratio
<b>BCBS</b>	Basel Committee on Banking Supervision	<b>LGD</b>	Loss-Given Default
<b>BMA</b>	Bermuda Monetary Authority	<b>LTV</b>	Loan-to-Value
<b>BMD</b>	Bermuda Dollar	<b>NII</b>	Net Interest Income
<b>Board</b>	Board of Directors	<b>NSFR</b>	Net Stable Funding Ratio
<b>BRR</b>	Borrower Risk Ratings	<b>PCD</b>	Purchased Credit Deteriorated
<b>CARP</b>	Capital Assessment and Risk Profile	<b>PCI</b>	Purchased Credit-Impaired
<b>CCR</b>	Counterparty Credit Risk	<b>PD</b>	Probability of Default
<b>CECL</b>	Current Expected Credit Losses	<b>RPCC</b>	Risk Policy and Compliance Committee
<b>CEO</b>	Chief Executive Officer	<b>RSF</b>	Required stable funding
<b>CFO</b>	Chief Financial Officer	<b>RWA</b>	Risk-weighted Assets
<b>GET1</b>	Common Equity Tier 1 capital	<b>S&amp;P</b>	Standard and Poor's rating agency
<b>CORC</b>	Compliance and Operational Risk Committee	<b>SA-CCR</b>	Standardized Approach for measuring Counterparty Credit Risk exposures
<b>CRM</b>	Credit Risk Management	<b>SREP</b>	Supervisory Review and Evaluation Process
<b>D-SIB</b>	Domestic Systemically Important Bank	<b>TDR</b>	Troubled debt restructuring
<b>EAD</b>	Exposure at Default	<b>USD</b>	United States Dollar
<b>EVE</b>	Economic Value of Equity		
<b>ECAIs</b>	External Credit Assessment Institutions		
<b>FIC</b>	Financial Institutions Committee		
<b>GALCO</b>	Group Asset and Liability Committee		
<b>GCC</b>	Group Credit Committee		
<b>GRCC</b>	Group Risk and Compliance Committee		
<b>HQLA</b>	High Quality Liquid Assets		
<b>HTM</b>	Held-to-Maturity		

## 8.2 Cautionary Statements Regarding Forward-Looking Statements

Certain of the statements made in this document 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, any sudden liquidity crisis, the successful completion and integration of acquisitions (including our integration of the trust assets acquired 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, potential impacts of climate change, 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.



## BUTTERFIELD

**The Bank of N.T. Butterfield & Son Limited**

65 Front Street  
Hamilton, HM 12  
Bermuda  
Tel: (441) 295 1111  
Fax: (441) 295 3878

**Investor Relations Contact:**

Noah Fields  
Investor Relations  
The Bank of N.T. Butterfield & Son Limited  
Phone: (441) 299 3816  
E-mail: [noah.fields@butterfieldgroup.com](mailto:noah.fields@butterfieldgroup.com)

**Media Relations Contacts:**

Nicky Stevens  
Group Strategic Marketing & Communications  
The Bank of N.T. Butterfield & Son Limited  
Phone: (441) 299 1624  
E-mail: [nicky.stevens@butterfieldgroup.com](mailto:nicky.stevens@butterfieldgroup.com)