Clarien Bank Limited

Interim Pillar 3 Disclosures

March 31st, 2019

CLARIEN

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1. CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING STATEMENTS

These Capital and Risk Management Pillar 3 Disclosures as at March 31, 2019 contain certain forward-looking statements with respect to the consolidated financial condition, results of operations and business of Clarien Bank Limited ("The Bank"). All statements, other than statements of historical facts, included or referenced in this document which address the activities, events or developments that we expect or anticipate will or may occur in the future, are forward-looking statements. The words 'will', 'believe', 'expect', 'anticipate', 'project', 'estimate', 'predict' and similar expressions are also intended to identify forward-looking statements. These forward-looking statements may include, among others, statements with respect to our liquidity and capital requirements; business strategy; financial and operating targets or plans; projections of revenues, income, market share or other financial forecasts; expansion and growth of our business and operations; and future capital expenditures.

These statements are based on certain assumptions and analyses we have made in light of our experience and perception of historical trends, current conditions and expected future developments, as well as other factors believed to be appropriate in the circumstances. However, whether actual results and developments will conform to expectations and predictions is subject to a number of risks and uncertainties that could cause actual results to differ materially from expectations, including, among others, the risks discussed in this disclosure document.

Consequently, all of the forward-looking statements made in this document are qualified by these cautionary statements and the results or developments that we anticipate may not be realized or, even if substantially realized, they may not have the expected consequences to, or effects on, us or our business or operations. The Bank assumes no obligation to update publicly any such forward-looking statements, whether as a result of new information, future events or otherwise.

2. INTRODUCTION

2.1 Clarien Background

Clarien has been driven by the belief and by our purpose of helping clients navigate their future. This focus remains as important to us today as when the Bank was founded, our purpose is an intrinsic part of why we exist. Clarien is proud to help clients and their families to achieve their financial goals. From treating our clients fairly, handling their money and personal details with security, from treating our employees well, from contributing to our community funding programs.

These disclosures provide a detailed view of the capital resources of the Bank, the different components of capital risk and the Bank's risk management strategy. Clarien's approach to managing capital risk targets strong capital ratios relative to regulatory requirements, helping to ensure that Clarien is secure for current and future generations of clients.

2.2 Basel Background

At the consolidated Clarien Group and solo level, Clarien calculated capital for prudential regulatory reporting purposes throughout the interim reporting period October 1, 2018 to March 31, 2019 using the Basel III framework of the Basel Committee on Banking Supervision ('BCBS'). The Basel Committee's framework is structured around three 'pillars': Pillar 1 minimum capital requirements and Pillar 2 supervisory review process are complemented by Pillar 3 market discipline. The aim of Pillar 3 is to produce disclosures that allow market participants to assess the scope of application by banks of the Basel Committee's framework and the rules in their jurisdiction, their capital condition, risk exposures and risk management processes, and hence their capital adequacy. Pillar 3 requires all material risks to be disclosed, enabling a comprehensive view of a bank's risk profile.

There is a requirement to calculate and maintain regulatory capital ratios on both a Group consolidation basis and on an individual (or Solo) basis. There are no differences between the basis of consolidation of the Group for accounting and prudential purposes.

Pillar 1 – Describes the calculation for minimum regulatory capital for Credit, Operational and Market risk. Credit risk regulatory capital requirements are more risk-based than the 1988 Accord. An explicit Operational risk regulatory capital charge was introduced for the first time while Market risk requirements remained the same in the current accord. The Bank adheres to the Standardized approach to both Credit and Operational risk with a *de minimis* exemption from the BMA from holding Market risk capital due to the nature of its operations.

Pillar 2 – The Supervisory review process. This is intended to bridge the gap between regulatory and economic capital requirements giving supervisors discretion to increase regulatory capital requirements based on the assessment of risk factors. Management of the Bank assesses, measures and documents all risk exposures (Pillar 1 and 2), governance and internal control environment and strategic and capital planning considerations in the Capital Assessment and Risk Profile document ("CARP") which is submitted annually to the BMA. Pillar 2 risks include Concentration risk, Strategic risk and Reputational risk. The BMA assesses the Bank's CARP and determines adequacy against standards required under the Basel II Accord Statement of Principles resulting in a final capital requirement. This is expressed as a ratio of total capital: Pillar 1 capital or at any point in time as an absolute dollar figure with the BMA expecting management to operate with a capital cushion above that minimum.

Pillar 3 – Market discipline. This is designed to promote market discipline by providing market participants with key information on a firm's risk exposures 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.

2.3 Basel III

Basel III superseded Basel II and took effect on January 1, 2015 with transitional arrangements until full implementation in January 1, 2019. The three pillar framework of Basel II is unchanged but there have been changes to the detailed requirements within each pillar. Pillar 3 has more detailed disclosure requirements and will adopt generic templates over the course of the transition to allow improved comparability and transparency between institutions covered by Basel accords.

Basel III has strengthened the rules on the quality of capital to ensure loss absorption is adequate and allow financial institutions to deal with shocks and stresses related to financial and economic factors. Basel III requires that the quality of capital to cover Pillar 1 capital requirements is improved in terms of its ability to absorb losses, meaning that more of the Pillar 1 capital requirement must be met by Common Equity Tier 1 (CET1). Basel III has increased the value in the Bank's risk weighted assets, primarily driven by the increased risk weightings across the loan book.

In addition to minimum capital ratios, a capital conservation buffer of 2.5% was introduced in 2019 and phased in over the implementation period. Furthermore, a capital surcharge for Domestic Systemically Important Banks ('D-SIB') ranging between 0.5% and 3.0% for all Bermuda Banks has also been implemented. The new Basel rules also address areas of leverage and liquidity. The Authority has adopted a Liquidity Coverage Ratio ('LCR') with phased implementation consistent with that published by the Basel Committee. The LCR aims to ensure Banks have sufficient stock of unencumbered highly liquid assets to survive a high liquidity stressed scenario lasting 30 days.

Further information regarding the implementation of Basel III can be found on the Bermuda Monetary Authority's website www.bma.bm.

2.4 Basis of Disclosure

The following represents the Bank's Pillar 3 disclosures as of March 31, 2019. All figures are expressed in Bermuda dollars in thousands, unless specified otherwise. Certain tables in this report may not sum due to rounding. All risk disclosures apart from Liquidity Coverage Ratio (LCR), Net Stable Funding Ratio (NSFR) and Interest Rate Risk in the Banking Book (IRRBB) disclosures are made in respect of the Bank as a consolidated legal entity, in line with regulatory returns made to the BMA. As such, the Bank's subsidiaries are included in these Pillar 3 disclosures. LCR, NSFR and IRRBB disclosures are on Solo basis.

The Bank's Consolidated Interim Financial Statements as of March 31, 2019 include the results of operations for the following subsidiary companies, all of which are wholly owned:

Legal entity	Activity
First Bermuda Group Limited	Holding Company
First Bermuda Securities Limited	Brokerage Services; Subsidiary of First Bermuda Group Limited
Onshore Nominees Limited	Nominee Company of First Bermuda Group Limited
Offshore Nominees Limited	Nominee Company of First Bermuda Group Limited
Clarien Investments Limited ("CIL")	Investment management
Clarien Brokerage Limited	Brokerage Services; Subsidiary of CIL
Clarien BSX Services Limited	Trading member of Bermuda Stock Exchange; Subsidiary of CIL
Clarien Trust Limited	Trust administration
Clarien UK Limited	Inactive

The Bank has no capital deficiencies, nor are there any restrictions, practical or legal impediments to the transfer of funds between the Bank and any of its subsidiaries.

In addition, these Pillar 3 disclosures have also been prepared in accordance with regulatory capital adequacy concepts and rules.

The following disclosures have not been subject to external audit.

2.5 Basis and frequency of disclosure

This document sets out the 2019 Pillar 3 disclosures for Clarien Group. The purpose of these disclosures is to give information on the basis of Basel III capital requirements and on the management of risks faced by Clarien. Disclosures and bases of measurement are therefore in accordance with the rules laid out by Basel and the Bermuda Monetary Authority. The disclosures may differ from similar information in the Annual Report and Accounts which are prepared in accordance with International Financial Reporting Standards ('IFRS'). Therefore, the information in these disclosures may not be directly comparable with that information.

Unless otherwise stated, all figures and narrative are as at March 31, 2019.

2.6 Media and Location

The Pillar 3 disclosures for March 31, 2019 are available on the Bank's website www.clarienbank.com.

2.7 Reporting

Clarien's capital position is reported quarterly to the Board in Clarien's Business Performance reporting pack. More detailed reports of capital and risk are considered monthly by Asset and Liability Committee ("ALCO"). A range of Key Risk Indicators and Key Performance Indicators are routinely monitored (in both actual and forecast terms) by management and by the Board and its sub-committees (Board Risk Committee "Risk Co") to ensure that appropriate actions can be taken should triggers be breached.

2.8 Changes to disclosure requirements

This Pillar 3 disclosure includes new tables and commentary, the majority of which have been prescribed by the Basel Committee, the Bermuda Monetary Authority guidelines on disclosures.

2.9 Disclosure verification and sign off

The Pillar 3 disclosures have been verified and approved through internal governance procedures, the Audit Committee has reviewed and approved the disclosures. Whilst the disclosures are not subject to external audit, independent internal reviews have been undertaken to provide verification and assurance that the disclosures have been produced in line with appropriate internal controls.

3. RISK MANAGEMENT OBJECTIVES AND POLICIES

3.1 Risk Capital Management Approach

Our approach to capital management is driven by our strategic and organizational requirements, taking into account the regulatory, economic and commercial environment in which Clarien operates. It is our objective to maintain a strong capital base to support the development of our business and to exceed regulatory capital requirements at all times.

Our policy on capital management is underpinned by the capital management framework and our capital assessment and risk profile process, which enable the group to manage its capital in a consistent manner.

The Bank is exposed to numerous risks each of which are considered against its risk profile, new products and business services are considered against these risk types and thresholds. The detailed risk sections that follow in this disclosure show the business model impacts and the risk consequences. The primary risk disclosures relate to credit, market and operational risks

Clarien is primarily a local retail bank which lends approximately 80% of its total loans and mortgages to its retail clients creating credit risks and a credit risk profile to the Bank. The Bank manages these credit risks and those from other business lines (e.g. lending in Commercial banking) with its risk appetite and regulatory limits such as loan to value ratios ("LTV") approved by the Board. Treasury is a centralized finance function that supports all business lines and manages market risks (interest rate and foreign exchange risks) arising from the three Banking divisions (Retail, Commercial and Private Banking) along with Clarien Investment Limited, the asset management company and its subsidiaries. To support all business lines there are sales, marketing, operations, information technology, second line functions (such as finance, risk and compliance) that may give rise to operational risks. The following risks managed through the capital management framework have been identified as material and integral to Clarien's business model: credit, market, and operational risks and are explained in detail in this disclosure.

In addition, the Bank's stress testing and scenario analysis considers the business model and the major sources of risks identified by the Basel and BMA rules and emerging risks identified internally. The risk profile is tested and these values are reviewed against the Bank's risk profile and risk appetite measures agreed by the Board. Outside the stress testing framework, a list of principal risks is regularly evaluated for their effect on our capital ratios and any new product or service. In addition, other risks may be identified that have the potential to affect our RWAs and/or capital position. The downside or upside scenarios are assessed against our capital management objectives and mitigating actions are assigned as necessary

The group's approach to managing its capital position has been to ensure the Bank, its regulated subsidiaries and the group exceed current regulatory requirements, and it is well placed to meet expected future capital requirements.

A number of tools are employed to support the management of risk. The Bank adopts the standardized credit risk and operational risk measurement approaches detailed further in this document. The Board is responsible for setting risk appetite, which is articulated through its risk appetite statement, which defines minimum levels of capital ratios, including leverage that the Board is willing to operate within. These are translated into specific risk metrics, which are monitored by the Risk Co, Executive Committee ("ExCo"), ALCO and the Risk Management function.

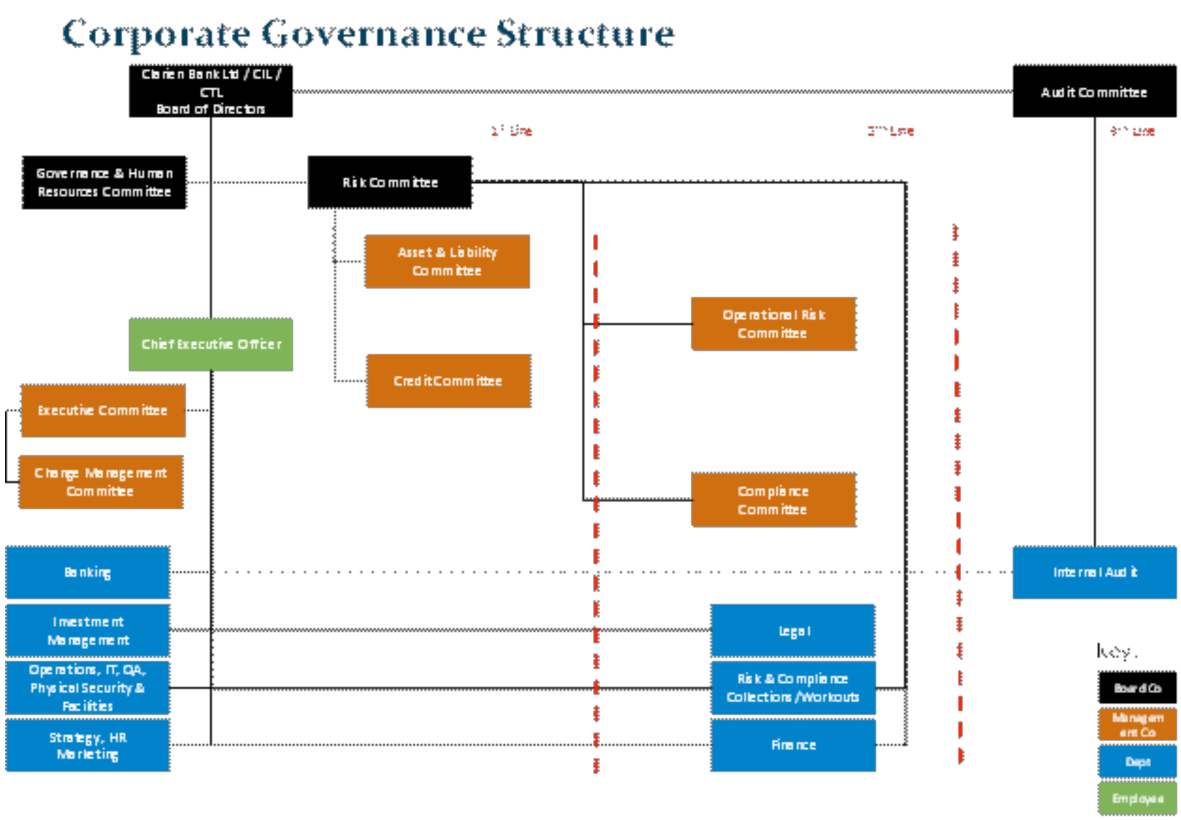
The capital structure is managed to ensure that minimum regulatory requirements are met, based on actuals and forecasts in a stressed position, as well as meeting the expectations of key stakeholders and to maintain a robust financial position to protect our clients. Any planned changes to the balance sheet, potential regulatory developments and other factors (such as trading outlook, sales movements or pipeline are reflected in the surplus capital allocation) are all considered. The Treasury function along with ALCO manage the available liquidity and capital surplus for the Bank.

3.2 Governance

The Bank's governance structure enables oversight and accountability for the effective management of risk. The Bank has implemented a robust structure to provide clear lines of responsibility, accountability and a greater focus on risk management.

A representation of the Bank's risk governance structure is provided below. The Boards of CTL and CIL report directly to the Board of CBL, as represented in this diagram. Additionally, the business activities of CTL and CIL, as well as the business activities of the Bank, are overseen by the Bank's management-level Operational Risk, Change Management Committee and Compliance Committees.

The Group has adopted the three lines of defense model which addresses how specific duties related to risk and internal control are assigned and coordinated. This ensures that responsibilities for risk management are clearly articulated to all levels of the Bank.



3.3 Boards and Board Committees

The Board is ultimately responsible for oversight of the Group, and has established Board Committees, with delegated authority to assist the Board in discharging its duties. These Board Committees are as follows:

- Audit Committee;
- Governance and Human Resources Committee; and
- Risk Committee.

The three Board Committees are comprised of the appropriate mix of both independent and non-independent members, with the majority being independent directors and the mix taking into consideration their skill set and experience. Each Committee reports on its activities to the Board of Directors on at least a quarterly basis.

Additionally, the Boards of the Bank's subsidiaries, Clarien Investments Limited and Clarien Trust Limited, report to the Bank's Board at least quarterly on the activities of those subsidiaries.

Audit Committee

The Audit Committee is responsible for ensuring the adequacy of the Group's corporate accounting and financial reporting processes and the quality and integrity of the Bank's financial statements and reports. It is also responsible for reviewing and ensuring the effectiveness of the Group's internal control system and the internal audit function. It also reviews and ensures the adequacy of the qualifications, independence and performance of the chartered public accountants engaged as the Group's independent auditor. An additional key role of the Committee is to maintain an open avenue of communication between it and the independent auditor, the Bank's management and its internal auditors.

Governance and Human Resources ("GHR") Committee

The GHR Committee is responsible for assisting the Board in fulfilling its oversight responsibilities for the Group's corporate governance framework. This includes monitoring Board committee effectiveness, Director nominations, assessment and remuneration. The Committee is also responsible for assisting the Board in fulfilling its oversight responsibilities for the appointment, performance evaluation and compensation of the Chief Executive Officer and certain other Senior Executives, talent development, retention strategies and succession planning, philosophy and principles for compensation programs and the design and application of material compensation programs.

Risk Committee

The Risk Committee provides oversight of the Group's ERM Framework and risk function, including the strategies, policies, procedures, processes, and systems, established by management to identify, assess, measure, monitor, and manage the key risks facing the Group. The Committee assists the Board of Directors and its other committees to oversee specific risk-related issues including setting overall risk appetite and mitigating risks inherent to the Group's business. The Committee oversees the process by which risk-based regulatory capital requirements are determined, including the Bank's internal capital assessment and risk profile. The Committee provides a supportive culture, setting the "tone at the top" in relation to the management of risk and maintenance of a strong internal control framework that fulfils the expectations of stakeholders and is consistent with safe and sound banking practices.

The following Committees report to the Risk Committee:

Credit Committee

The Credit Committee is responsible for the management of credit risk in the Bank. The responsibilities of the Credit Committee are set out in its Charter and include all aspects of credit risk management, including policy development and approval, portfolio review, credit transaction approval, determining delegated credit authority levels and model performance oversight. The Credit Committee meets at least monthly.

Asset and Liability Committee

The Asset and Liability Committee ("ALCO") is responsible for the oversight and strategic management of the investment portfolio, liquidity and funding positions, market risk exposure and capital management activities. The ALCO ensures the effectiveness of the market risk management control framework built on policies and principles, including balance sheet structure and interest rate, liquidity, funding and foreign exchange risks. The responsibilities of the ALCO are set out in its Charter and it meets at least monthly.

Compliance Committee

The general purpose of the Compliance Committee is to provide executive management oversight of the Group's Compliance Function, including the strategies, policies, procedures and systems established by management to identify, assess, measure, monitor and manage the key compliance risks facing the Group.

The Compliance Committee assists the Boards of Directors for each Group company and the Board Risk Committee of the Bank in their obligations of oversight of the Group's Compliance Function, and the identification, assessment and effective mitigation of compliance risks to the Group. The Committee reports to the Executive Committee and the Bank Board Risk Committee & meets at least quarterly.

Operational Risk Committee

The Operational Risk Committee is responsible for all aspects of operational risk. This Committee focuses on operational risks of the Group, and shared services units and oversees and supports the Bank's objectives regarding operational risk. The responsibilities of the Operational Risk Committee are set out in its Charter and it generally meets at least monthly.

Management Level Committees

The Board Committees are supported by management level committees, namely: the Executive Committee, and the Change Management Committee. Each of these management level committees are directly responsible for defined areas of risk, developing related risk management policies and procedures and quarterly reporting to the Risk Committee.

Executive Committee

The Board delegates its authority to the Executive Committee of the Bank ("ExCo") to manage the day-to-day activities of the Bank and its subsidiaries, Clarien Trust Limited and Clarien Investments Limited, and ensure that the Group's activities are consistent with the execution of business plans and strategy. In doing so the ExCo monitors and reviews business units' performance against plan, and the Group's activities' alignment to approved risk appetite metrics, thresholds and tolerances and adherence to policies approved by the Bank's Board.

The ExCo's responsibilities include the receipt, review and challenge of regular, at least quarterly, formal reports from the ExCo membership (comprised of the Executive Management Team for the Group) with respect to their area of responsibility, and comparison of each business unit's, and the Group's financial and operational performance against the Group's Strategic Plan.

Change Management Committee

The Change Management Committee ("CMC") is responsible for the governance, oversight and monitoring of the Bank's programme for change management and portfolio of approved projects. The CMC is also responsible for review and approval of new products and significant revisions to existing products offered by the Bank or its subsidiaries. The CMC reports to the ExCo management committee.

4. Enterprise Risk Management Framework (ERMF)

Clarien's risk management ensures that decisions are made having sufficiently considered any associated risks to support our purpose and strategic objectives and helps clients navigate their future success. Clarien manages its risk through an enterprise wide risk management framework, which sets out the minimum standards and associated processes with day-to-day management activities.

Enterprise Risk Management ("ERM") is a process effected by an entity's Board of Directors, Management and other personnel across the Group. The process is designed to identify potential events that may affect the Bank and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of the Group's objectives.

Effective risk management is at the heart of the Clarien's business, ensuring that decisions are made having sufficiently considered any associated risks to support delivery of Clarien's strategy and purpose to help clients navigate their future success.

The Clarien Group has in place an Enterprise Risk Policy that:

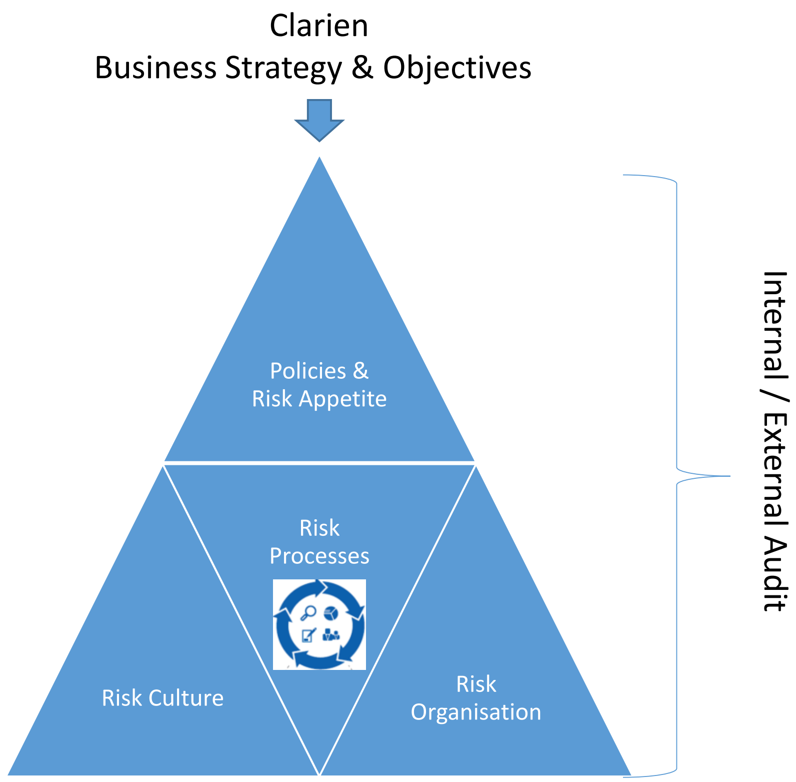
- Clearly articulates the Group's approach to risk governance and ERM; and
- Provides clear linkage between the Group's strategic and governance arrangements, and operational considerations detailed in the ERM Framework.

The Group has in place an ERM Framework which outlines the operational structure and processes for the management of enterprise-wide risk and includes the following five key components:

- Risk Strategy and Appetite;
- Risk Governance;
- Risk Assessment and Measurement;
- Risk Management and Monitoring; and
- Risk Reporting and Insights.

The Bank has multiple channels of communication to ensure the conduct of our employees and our fair delivery of services to our clients and market integrity. The Bank adopts the trust but verify approach with regards to its controls and is structured along the three lines of defense model. There are formal procedures and code of conduct for our staff members and risk management is formally included in our performance measurement programmes. Staff are reminded to report risk events, breaches or triggers above limits to their manager and the ERM department. There are formal disciplinary processes and procedures when breaches or violations occur. Risk Co and the sub risk committees are formally made aware of the risk appetite measures and reported to on a monthly basis. Management and staff members are also made aware of these metrics and these are communicated during regular management meetings.

Over the past year, Clarien has spent significant effort improving and evolving the ERMF in response to industry developments, good practice, and to simplify our processes to improve their effectiveness and efficiency. The ERM function has implemented an industry good practice ERM maturity adequacy and effectiveness programme. The diagram below outlines the ERM framework which is structured to manage the risks to which the Bank is exposed linking Clarien's strategic objectives to risk based decision making.



4.1 Risk appetite

Risk appetite details how much risk the Board is willing to take in pursuit of the Bank's strategic aims. Board risk appetite is set within the context of the Bank's strategy and provides a proportionate view of the risk profile and the trade-offs in decision-making and risk capacity (the maximum level of risk at which Clarien can operate that, if breached, would mean the Bank is trading without authority). It is informed by our stress testing and scenario analysis.

To provide a structure for Board appetite for risk, Clarien uses a consistent risk categorization model (strategic, credit, liquidity, operational, reputational, compliance, interest rate and foreign exchange risks) however the following are the principal risks for capital perspective:

- Capital resources and Capital adequacy requirements – covered in sections 6 and 7;
- Credit risk – covered in section 8;
- Liquidity risk covered in section 9;
- Market risk (including interest rate risk and foreign exchange risk) – covered in Section 10; and
- Operational risk – covered in section 11.

Each of these risks has a defined risk appetite consisting of statements supported by metrics, including rationale, limits, triggers and actions. The principal risks are further sub-divided into more detailed categories of risk for which management risk appetite is set in the context of the Board’s risk appetite.

4.2 Risk Strategy

Risk strategy articulates the anticipated development and deployment of the Clarien's strategic objectives, identifying the risks which result from the strategic plan, new products and services and setting out how these will be managed. These may include the Board's preference or tolerances for risks (articulating the amount of and type of risk which the Bank is willing to take in exchange for a return).

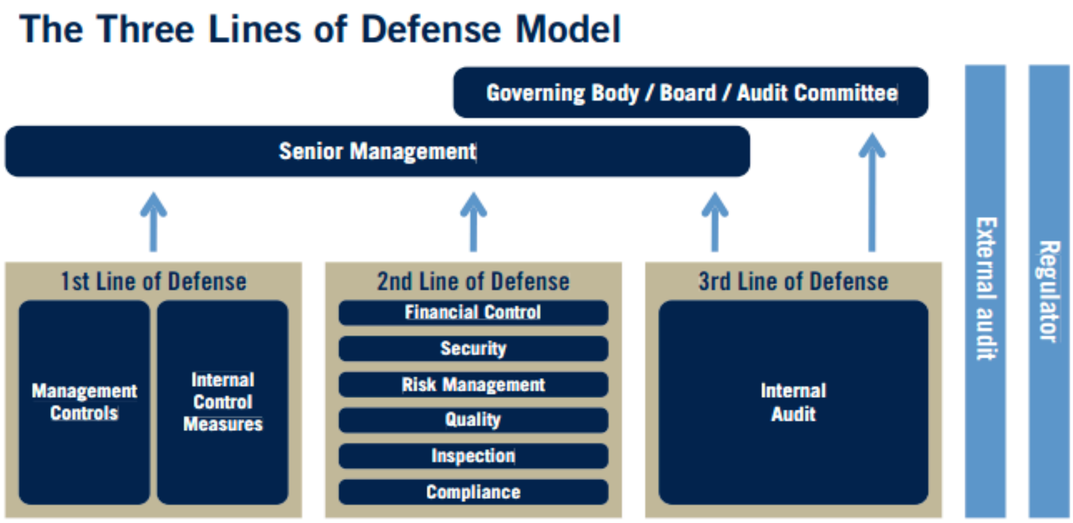
4.3 Control Environment

The control environment encompasses all the policies and controls the Bank operates on a day-to-day basis (e.g. reconciliations) to manage our risks within appetite. Through the control environment, Clarien manages our strategy and risk appetite into specific requirements for which policies, controls, processes and tools are designed, implemented, operated and tested. This provides assurance that each of the Bank's key risks are appropriately managed and controlled.

On an aggregate basis the Bank may implement processes and strategies to manage, hedge, and mitigate risks that arise from the bank's business model (for example, the use of insurance to transfer of some of our operational risks and Treasury activities to manage the Balance Sheet)**.**

4.4 Risk and Control Management

Clarien operates a three lines of defense model, ensuring clear separation between risk and control ownership (first line), oversight, support and challenge (second line), and audit assurance (third line). Accountabilities within the three lines of defense model are outlined below:



Adapted from ECIIA/FERMA *Guidance on the 8th EU Company Law Directive, article 41*

The roles and responsibilities and accountabilities of the three lines of defense are further highlighted in the table below:

1st Line of Defense	*2nd Line of Defense*	*3rd Line of Defense*
• Set and implement business strategy and objectives and performance measurement	• Provide expert risk advice on business initiatives	• Perform independent audits of the system of internal control, the effectiveness of first line risk and control and second line risk oversight, support and challenge
• Identifying, owning and managing risks	• Recommend risk appetite to the Board Risk Co	• Preparing an opinion on the risk management and controls framework and present to the Audit Committee.
• Define, operate and test controls	• Report enterprise risks to the Board Risk Co	• Identify emerging risks and threats to Clarien
• Implement and maintain regulatory compliance and adherence to company policies	• Conduct risk-based thematic reviews	
• Identify emerging risks and threats to Clarien	• Recommend and implement the enterprise risk management framework and associated policies	
	• Identify emerging risks and threats to Clarien	

Finance and the Risk Management functions prepare and recommend the Capital Assessment Risk Profile (CARP) and this Pillar III statement for Audit Committee approval. The Regulatory Compliance function is also another second line function which oversees the adherence of regulatory compliance including prudential requirements performed by Finance and Risk Management. In addition, Internal Audit reviews all second line functions including the CARP.

4.5 Stress testing

Clarien's stress testing activity is designed to test its business model using the major sources of risks identified by the Basel and BMA rules and emerging risks identified internally. Stress testing scenarios can comprise a firm-specific stress (idiosyncratic), a market-wide stress (systemic) or a combination of the two to assess capital and liquidity adequacy.

Stress testing is an integral part of the annual financial planning and budgetary process, the adequacy assessment processes for liquidity and capital and the annual review of risk appetite. Clarien engages in thorough stress testing, scenario analysis and contingency planning, allowing it to understand the impact of severe but plausible stresses to ensure that it remains resilient to them.

This includes a range of bank wide, multi-risk category stress tests and operational risk scenario analysis. Stress testing outputs are used for capital and liquidity planning, determining potential management actions within contingency plans. Stress testing results are included in the annual CARP approved by Risk Co.

4.6 Risk & Incident & Control

The objective of risk reporting is to confirm Clarien's risk profile and provide relevant risk information to better informed decision making. Ongoing risk reporting enables the Board and management monitor and manage performance against risk appetite but also to advise on emerging risks, any material breaches of risk appetite and aggregated risk faced by the Bank. Risk reporting is provided to management and the Risk Co on a monthly and quarterly basis, with the ability to report more frequently, as required to effectively manage the Bank's risk profile. This enables the Board to ensure that the business remains within risk appetite.

Risk models are used to quantify exposures of Clarien's principal risks primarily IFRS 9 loan loss provision and Interest Rate Risk in the Banking Book. A separate framework setting out the policy and standards for model use across Clarien, including model development, approval, validation, implementation, on-going management and reporting is now being adopted.

5. KEY PRUDENTIAL METRICS

The table below provides an overview of the Bank's key prudential regulatory metrics for the previous 6 quarters.

	KM01 Key Metrics $'000	Mar-19	Dec-18	Sep-18	Jun-18	Mar-18	Dec-17
	Available capital (amounts)						
1	Common Equity Tier 1 (CET1)	119,981	116,745	116,704	114,053	106,790	105,254
2	Tier 1	119,981	116,745	116,704	114,053	106,790	105,254
3	Total capital	120,709	117,361	117,796	116,148	109,302	111,115
	Risk-weighted assets (amounts)						
4	Total risk-weighted assets (RWA)	598,058	594,195	606,653	586,327	587,156	583,051
	Risk-based capital ratios as a percentage of RWA						
5	Common Equity Tier 1 ratio (%)	20.06%	19.65%	19.24%	19.45%	18.19%	18.05%
6	Tier 1 ratio (%)	20.06%	19.65%	19.24%	19.45%	18.19%	18.05%
7	Total capital ratio (%)	20.18%	19.75%	19.42%	19.81%	18.62%	19.06%
	Additional CET1 buffer requirements as a percentage of RWA						
8	Capital conservation buffer requirement (2.5% from 2019) (%)	2.50%	1.88%	1.88%	1.88%	1.88%	1.25%
9	Countercyclical buffer requirement (%)	-	-	-	-	-	-
10	Bank D-SIB additional requirements (%)	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
11	Total of bank CET1 specific buffer requirements (%) (row 8 + row 9+ row 10)	3.50%	2.88%	2.88%	2.88%	2.88%	2.25%
12	CET1 available after meeting the bank's minimum capital requirements (%)	12.06%	12.27%	11.86%	12.07%	10.81%	11.30%
	Basel III Leverage Ratio						
13	Total Basel III leverage ratio measure	1,224,897	1,234,453	1,261,056	1,246,559	1,242,097	1,205,318
14	Basel III leverage ratio (%) (row 2/row 13)	9.80%	9.46%	9.25%	9.15%	8.60%	8.73%
	Liquidity Coverage Ratio						
15	Total HQLA	321,662	333,738	379,144	394,102	358,128	352,286
16	Total net cash outflow	217,061	226,971	232,091	251,920	216,758	246,395
17	LCR ratio (%)	148%	147%	163%	156%	165%	143%
	Net Stable Funding Ratio						
18	Total available stable funding	950,054	932,717	940,612	941,162	938,709	903,820
19	Total required stable funding	664,422	650,351	658,984	644,648	658,902	623,886
20	NSFR ratio (%)	143%	143%	143%	146%	142%	145%

Available capital (CET1, Tier1 and Total capital) continue to grow due to increasing profitability of the Bank for the past several quarters. The leverage, liquidity and NSFR ratios are well above prescribed regulatory thresholds.

LCR ratio shown above is actual at the end of the quarter whereas the figures in the table LIQ01 under Liquidity section reflects 6 monthly averages.

The NSFR ratio for September 2018 presented above has been amended from the last submission.

6. CAPITAL RESOURCES

The Bank's regulatory capital is allocated into two tiers.

6.1 Total Common Equity Tier 1 Capital

Total Common Equity Tier 1 Capital ("CET 1") includes ordinary shares, contributed surplus, retained earnings and reserves created by appropriations of retained earnings. Within retained earnings, profits are only included where audited or reviewed by external auditors, however, losses must be taken into account, whether reviewed or not. A deduction from CET 1 is made in respect of goodwill. Ordinary shares carry no right to regular dividends.

6.2 Tier 2 Capital

Tier 2 Capital comprises of the expected credit losses only related to stage 1.
The table below shows a reconciliation between accounting and regulatory capital.

LI1 Reconciliation of Capital amounts in $'000

Reconciliation of accounting capital to regulatory capital	**Mar-19**	**Dec-18**
Common share capital	5,000	5,000
Retained earnings	66,860	64,931
Contributed surplus	46,406	46,406
General reserve	10,000	10,000
Accumulated other comprehensive income	(887)	(3,221)
Total Shareholder's Equity	**127,379**	**123,116**
Regulatory adjustments:		
Goodwill	(7,457)	(7,457)
AOCI: Unrealized gains(losses) on AFS Porfolio	887	3,221
Revaluation adjustment	(828)	(828)
Earnings from October to December 2018	-	(1,307)
Total CET 1 Capital	**119,981**	**116,745**

	Mar-19	**Dec-18**
Total CET1 Capital	119,981	116,745
Tier 1 Capital	119,981	116,745
Loan Loss Provision -Stage 1	728	616
Total Capital available	120,709	117,361

As at March 31, 2019, the capital ratios were as follows:

CET1	20.06%
Tier1	20.06%
Total Capital ratios	20.18%

*The above ratios as at March 31, 2019 include earnings for the quarter ended March 31, 2019 which are reviewed by external auditors.

	Table CC1	a
		Amounts
	Common Equity Tier 1 capital: instruments and reserves	
1	Directly issued qualifying common share (and equivalent for non-joint stock companies) capital plus related stock surplus	51,406
2	Retained earnings	66,860
3	Accumulated other comprehensive income (and other reserves)*	10,000
4	*Directly issued capital subject to phase-out from CET1 (only applicable to non-joint stock companies)*	-
5	Common share capital issued by third parties (amount allowed in group CET1)	-
6	**Common Equity Tier 1 capital before regulatory deductions**	**128,266**
	Common Equity Tier 1 capital regulatory adjustments	
8	Goodwill (net of related tax liability)	7,457
9	Other intangibles other than mortgage servicing rights (net of related tax liability)	828
28	**Total regulatory adjustments to Common Equity Tier 1**	8,285
	Tier 2 capital: instruments and provisions	
50	Provisions	728
51	**Tier 2 capital before regulatory adjustments**	728
	Tier 2 capital: regulatory adjustments	
58	**Tier 2 capital (T2)**	728
59	**Total regulatory capital (TC = T1 + T2)**	120,709
60	**Total risk-weighted assets**	598,058
	Capital ratios and buffers	
61	**Common Equity Tier 1 (as a percentage of risk-weighted assets)**	20.06%
62	**Tier 1 (as a percentage of risk-weighted assets)**	20.06%
63	**Total capital (as a percentage of risk-weighted assets)**	20.18%
68	**Common Equity Tier 1 (as a percentage of risk-weighted assets) available after meeting the bank's minimum capital requirement.****	12.06%

** This includes only General Reserve, As per BMA's guidelines OCI has been excluded*

*** Minimum capital requirement includes minimum CET 4.5% + CCR 2.50% + D-SIB 1% =8.00%*

There are no significant movement in these numbers over the reporting period

Table CC2	a	b	c
	Balance sheet as in published financial statements	Under regulatory scope of consolidation	Reference
	As at period-end	As at period-end	
Assets			
Cash & cash Equivalent	222,151	222,749	
Investment Securities	243,307	243,212	
Prepayments, accrued income and other assets	9,665	7,795	
Accrued interest on cash, deposits with Banks & securities			
Loans & advances	718,722	721,320	
Goodwill and other intangible assets			
Of which: goodwill	7,456	7,456	
Of which: intangibles (excluding MSRs)	10,287	10,287	
Of which: MSRs			
Property, plant and equipment	13,849	13,849	
Total assets	1,225,437	1,226,667	
Liabilities			
Deposits from banks			
Items in the course of collection due to other banks			
Customer accounts (deposit liabilities)	1,094,646	1,082,142	
Accruals, deferred income and other liabilities	3,412	16,418	
Provisions			
Retirement benefit liabilities			
Total liabilities	1,098,058	1,098,560	
Shareholders' equity			
Paid-in share capital			
Of which: amount eligible for CET1	61,406	47,806	
Of which: amount eligible for AT1			
Retained earnings	66,860	80,301	
Accumulated other comprehensive income	(887)		
Total shareholders' equity	127,379	128,107	

Most of the individual differences are due to differences in grouping methodology under financial statements and Regulatory reporting. The total difference is insignificant.

6.3 Leverage Ratio

Basel III introduced a non-risk based leverage ratio to supplement the risk based capital requirements. The ratio shows the Tier 1 capital as a proportion of on and off balance sheet assets. The BMA leverage ratio framework requires a minimum ratio of 5%.

The table below provides a reconciliation of accounting assets and the leverage exposure measure as at March 31, 2019:

LR1 Ratio Exposure measure amounts in $'000	Mar-19	Dec-18
Total consolidated assets as per published financial statements	1,225,437	1,235,368
Adjustments for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	-	-
Adjustments for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	5,687	5,897
Other adjustments (including Goodwill)*	(6,226)	(6,812)
Leverage ratio exposure measure	**1,224,897**	**1,234,453**

**Other adjustments include Goodwill for $7,457*

The Bank's ratio exceeds the minimum requirement as disclosed in the table below as prescribed in the guidance, as at March 31, 2019.

	LR2 Leverage Ratio amounts in $'000	Mar-19	Dec-19
On-balance sheet exposures			
	On-balance sheet exposures (excluding derivatives and securities financing transactions (SFTs), but including collateral)	1,225,437	1,235,368
	(Asset amounts deducted in determining Basel III Tier 1 capital)	(6,226)	(6,812)
	Total on-balance sheet exposures (excluding derivatives and SFTs)	1,219,211	1,228,556
Other off-balance sheet exposures			
	Off-balance sheet exposure at gross notional amount	38,627	42,991
	(Adjustments for conversion to credit equivalent amounts)	(32,941)	(37,094)
	Off-balance sheet items	5,687	5,897
Capital and total exposures			
	Tier 1 capital	119,981	116,745
	Total exposures	1,224,897	1,234,453
Leverage ratio			
	Basel III leverage ratio	9.80%	9.46%

The leverage ratio has increased from quarter over quarter due to decrease in the size of the balance sheet driven by the decrease in the deposit balance and increase in Tier 1 capital.

7. CAPITAL ADEQUACY

7.1 Overview

Capital is held to provide a cushion for unexpected losses. The Board sets the internal level of capital within its risk tolerance articulated in the risk appetite statement with the aim of ensuring minimum regulatory capital levels, as set and monitored by the BMA, are always exceeded.

The Bank's minimum regulatory capital is a combination of the requirements derived from Pillar 1 and Pillar 2 rules, as detailed in section 2.2.

Management of the Bank assesses, measures and documents all risk exposures (Pillar 1 and 2), governance and internal control environment and strategic and capital planning considerations in its CARP which is submitted annually to the BMA. In addition to the annual CARP process, the Bank's Pillar 1 capital requirements are regularly monitored and are formally reported on a quarterly basis to the BMA and the Board.

7.2 Regulatory Capital Requirements for Pillar 1

Regulatory ratios for Pillar 1 are calculated by dividing total regulatory capital by risk weighted assets (RWA). RWA are determined according to the varying levels of risk attached to assets and off-balance sheet exposures, using Basel guidelines.

The following table shows the Bank's overall minimum Pillar I capital requirement for credit, operational, and market risk, based on 8% of risk weighted assets as at March 31, 2019.

	OV1 Risk Weighted Assets amounts in $'000	RWA		Minimum capital requirements*
		Mar-19	Dec-18	Mar-19
1	Credit risk (excluding counterparty credit risk)	**511,400**	**506,919**	**40,912**
2	Of which: standardised approach (SA)	511,400	506,919	40,912
3	Of which: foundation internal ratings-based (F-IRB) approach			
4	Of which: supervisory slotting approach			
5	Of which: advanced internal ratings-based (A-IRB) approach			
6	Counterparty credit risk (CCR)			
7	Of which: standardised approach for counterparty credit risk			
8	Of which: Internal Model Method (IMM)			
9	Of which: other CCR			
10	Credit valuation adjustment (CVA)			
11	Equity positions under the simple risk weight approach	27	637	2.1
12	Equity investments in funds - look-through approach			
13	Equity investments in funds - mandate-based approach			
14	Equity investments in funds - fall-back approach			
15	Settlement risk			
16	Securitisation exposures in the banking book	**157**	**165**	**12.6**
17	Of which: securitisation internal ratings-based approach (SEC-IRBA)			
18	Of which: securitisation external ratings-based approach (SEC-ERBA), including internal assessment approach			
19	Of which: securitisation standardised approach (SEC-SA)	157	165	12.6
20	Market risk	-	-	-
21	Of which: standardised approach (SA)	-	-	-
22	Of which: internal model approaches (IMA)			
23	Capital charge for switch between trading book and banking book			
24	Operational risk	86,475	86,475	6,918
25	Amounts below thresholds for deduction (subject to 250% risk weight)			
26	Floor adjustment			
27	**Total**	**598,058**	**594,195**	**47,845**

* Minimum capital requirement of 8% (excluding Capital conservation Buffer of 2.50% and D-SIB 1%)

Majority of the equity investments were sold in January 2019. There are no other significant movements over the period.

Difference between Regulatory exposure amounts and carrying value in financial statements:

Due to simple business model and absence of any complex financial instruments such as Derivatives etc. the regulatory exposure amounts are more or less similar to carrying values in financial statements, whatever differences reflected in individual asset/liabilities classes are purely driven by grouping/classification methodology.

Table LI1	a	b	c	d	e	f	g
			Carrying values of items:				
	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Subject to credit risk framework	Subject to counterparty credit risk framework	Subject to the securitisation framework	Subject to market risk framework	Not subject to capital requirements or subject to deduction from capital
Assets							
Cash and cash equivalent	222,151	222,749	222,749				
Loans and advances	718,722	721,320	721,320				
Investment securities	243,307	243,212	243,212				
Goodwill	7,456	7,456	7,456				
Other Assets	33,801	31,931	31,931				
Total Assets	1,225,437	1,226,667	1,226,667	-	-	-	-
Liabilities							
Deposit Liabilities	1,094,646	1,082,142					1,082,142
Items in the course of collection due to other banks							
Other Liabilities	3,412	16,418					16,418
Repurchase agreements and other similar secured borrowings							
Trading portfolio liabilities							
Financial liabilities designated at fair value							
Derivative financial instruments							
Total Liabilities	1,098,058	1,098,560	-	-	-	-	1,098,560

As the difference between the two categories is insignificant, presentation of table LI2 is not required.

8. CREDIT RISK

Credit risk is inherent in the Bank's various lending and business activities. Credit risk is the risk of loss arising from a customer or counterparty failing to meet their financial obligations to the Bank as they fall due. The Bank provides credit through residential and commercial mortgages, secured and unsecured loans and credit cards. Credit risk also arises through other activities not directly related to the provision of services to clients, such as short-term investments and interbank loans relating to liquidity management. All mortgage lending is originated by the Bank and retained and serviced within its Lending Division.

Adverse changes in the credit quality of borrowers or a general deterioration in economic conditions could affect the recoverability and value of Clarien's assets and therefore its financial performance. Comprehensive risk management methods and processes have been established as part of Clarien's overall risk framework to measure, mitigate and manage credit risk within Clarien's risk appetite.

Exposure, as shown in these credit risk disclosures, is defined as the exposure value under the regulatory definitions for capital purposes.

Clarien uses a wide range of techniques to reduce the 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 table below shows the use of credit quality of assets, broken down by loans and debt securities. This table includes both unsecured and secured exposures, and the value of exposures secured by collateral as at March 31, 2019.

	CR1 Credit Quality of Assets	**Carrying values of**		**Allowances/ impairments**	**Net values**
	amounts in $'000	**Defaulted exposures**	**Non-defaulted exposures**		
1	Loans	102,454	653,197	34,556	721,095
2	Debt securities	0	401,179	0	401,179
3	Off-balance sheet exposures	0	38,627	0	38,627
4	**Total**	**102,454**	**1,093,004**	**34,556**	**1,160,902**

** Allowances / impairments balance pertains to ECL stage 2 and Stage 3 provisions as of March 31, 2019 for both defaulted and non-defaulted exposures.*

Clarien uses the standardized approach for the following credit risk exposure classes and these are displayed in the following tables section 8.4 to 8.6:

- Cash in hand;
- Claims on Sovereigns and Multilateral Development banks, Public Sector Entities; Corporates (non-commercial), Banks and Securities Firms;
- Securitizations;
- Retail loans;
- Retail mortgages (secured against residential property);
- Commercial mortgages (secured against property);
- Past due loans;
- Other balance sheet exposures; and
- Non market related items.

8.1 Credit Risk: Loans and Mortgages

The effective management of credit risk requires the establishment of an appropriate credit risk culture. Key credit risk policies and credit risk management strategies are important elements used to create this culture. The Bank has implemented appropriate internal processes and risk-oriented strategies for actively identifying, managing, monitoring and reporting credit risk on its mortgage and non-mortgage portfolios which are suitable to the nature, scale and complexity of the business. This is supported by policies and controls such as internal approval limits and thresholds.

The Board, through its Risk Committee, and the management Credit Committee, reviews and approves the Bank's credit risk strategy and credit risk policies. The Board adopts credit limits (e.g. LTVs) and risk appetite thresholds within those defined by the BMA always maintaining the regulatory minimums.

The objectives of the credit risk strategy are to ensure that:

- The risk parameters for new underwritings, and for the portfolio as a whole are clearly specified;
- Target markets and product offerings are well defined at both enterprise-wide and business line levels;
- Transactions and limits are managed in a manner that is consistent with the Bank's risk appetite;
- Loans are priced on a risk adjusted basis;
- Loans are appropriately collateralized and collateral is maintained and valued periodically;
- Credit risk is managed from concentration and country risk perspectives; and
- Sufficient information and data is maintained to be able to track and monitor changes over time.

The credit risk policy articulates the credit risk management framework, including:

- Aggregate limits, beyond which credit applications must be escalated to the Bank's Credit Committee and Risk Co; and
- Single name/aggregation exposures, beyond which exposures must be reported and reviewed by the Credit Committee, with Board oversight.

The Bank's Credit Risk Management ("CRM") team develops the credit risk management framework and policies that detail, among other things, the credit risk rating system and associated parameter estimates; the delegation of authority for granting credit; the calculation of the allowance for credit losses; and the authorization of write-offs. The CRM function is headed by the Head of Credit who reports to the Chief Risk Officer and the team adjudicates credits, performs credit risk analysis and credit risk reporting to the Credit Committee and Risk Co.

The CRM team generates multiple risk reports for the ExCo, Credit Committee and Board Risk Co highlighting risk analysis, delinquency exposures, counterparty and country risk measures and other aggregate / portfolio effects.

Both commercial credit exposures, as well as residential credit risk, are segmented by purpose codes, collateral and applicable industries. The Bank does not have excessive concentration to any single borrower or related group of borrowers. A review of exposures in excess of 5% of the capital base is conducted by the Risk Committee on a quarterly basis.

An integral part of the CRM, Collections and Workouts function is to formally review and monitor past due and potential problem loans to determine which credits, if any, need to be charged off. The allowance for loan losses is reviewed quarterly to determine the amount necessary to maintain an adequate provision for credit losses.

Banking units and the CRM regularly review the various segments of the loan portfolio to assess the impact of economic trends or specific events on the performance of the portfolio and determine whether corrective action is required. The results of these reviews are reported to the Credit Committee and, when significant, to the Risk Committee of the Board.

The Bank's credit risk rating system utilizes an eight point scale used to differentiate the risk of default of borrowers and the risk of loss on facilities. The Bank's credit risk rating system is subject to a governance and oversight framework. The objectives of this framework are to ensure that:

- Credit risk ratings, methodologies and parameters are appropriately designed and developed, independently validated and regularly reviewed; and
- The review and validation processes represent an effective challenge to the design and development process.

8.2 Enterprise-wide Adjudication

Business groups within the Bank analyze, evaluate and recommend all credit requests and financial restructurings to the CRM function. To ensure that risks are adequately assessed, properly approved, continually monitored and actively managed, CRM provides the independent adjudication function. The decision-making process begins with an assessment of the credit risk of the individual borrower or counterparty. Key factors considered in the assessment include:

- The borrower's debt service ability;
- The borrower's current and projected income, financial results or credit statistics;
- The industry in which the borrower operates;
- Economic trends;
- Collateral risk; and
- An assessment of the borrower's management.

Based on this assessment, a risk rating is assigned at the facility (or counterparty) level, taking into consideration additional factors, such as collateral/security, structure, term and any other forms of credit risk mitigation or credit enhancements that may affect the amount of potential loss in the event of a default. Security typically takes the form of registered mortgages or charges over real estate; or inventory, receivables and operating assets when lending to corporate and commercial borrowers; and cash or treasuries for trading lines such as securities lending, repurchase transactions, and derivatives. The use of such collateral is in line with terms that are usual and customary to standard lending activities in Bermuda. The types of acceptable collateral and related third party valuation processes are documented in risk management policies and manuals. Other forms of credit risk mitigation include third party guarantees and, in the case of derivatives facilities, master netting agreements.

The Chief Risk Officer and Credit Committee (depending on the size of the overall exposure) is the final arbiter of internal risk ratings. Individual credit exposures are regularly monitored by both the business line units and CRM for any signs of deterioration and losses are re-rated as necessary.

8.3 Credit Risk: Interbank Lending and Investment Securities

The Bank engages in short-term lending to other bank counterparties and investments in securities as part of its ongoing liquidity management program. Risks are managed within specific counterparty limits approved by the Credit Committee and limits, asset quality plans and criteria set out in the Bank's Investment Policy Statement, which is approved by the Risk Committee. Furthermore the portfolio will comply with the current Counterparty Risk Policy and Country Risk Policy and limits approved by the

Credit Committee. The Bank uses external credit agency ratings, as detailed in section 8.7, supplemented by internal analysis to manage the risks associated with interbank lending and investment activities.

8.4 Average and Total Credit Risk Exposure

The following table sets out asset class exposures as at March 31, 2019. Amounts include on- and off-balance sheet exposures after applying regulatory credit conversion factors.

Exposures under the standardised approach	Average Exposure $'000	Exposure as at Mar 2019 $'000
Cash	9,456	10,074
Claims on Sovereigns and multilateral development banks	289,618	279,054
Claims on Public Sector Entities	24,527	24,060
Claims on Corporates	66,174	46,432
Claims on Banks and Securities Firms	120,274	153,919
Securitisations	48	45
Retail Loans	29,084	29,053
Residential Mortgages	519,527	507,191
Commercial Mortgages	71,407	68,613
Past Due Loans	70,891	68,812
Other Balance Sheet Exposures	33,707	31,957
Non-market Related Off Balance Sheet Credit Exposures	42,301	38,627
Total exposures under the standardised approach	**1,277,014**	**1,257,837**

8.5 Standardized Gross Exposure by Geographical Area

The table below shows an analysis of credit risk by geographical location as at March 31, 2019. The geographical area is determined by the country of incorporation for companies and individuals by the country of residence.

Exposures under the standardised approach	North America $'000	Europe $'000	Asia & Middle East $'000	Australia $'000	Total $'000
Cash	10,074	-	-	-	10,074
Claims on Sovereigns and multilateral development banks	256,130	12,995	9,929	-	279,054
Claims on Public Sector Entities	24,060	-	-	-	24,060
Claims on Corporates	46,432	-	-	-	46,432
Claims on Banks and Securities Firms	118,137	19,936	-	15,846	153,919
Securitisations	45	-	-	-	45
Retail Loans	29,053	-	-	-	29,053
Residential Mortgages	507,191	-	-	-	507,191
Commercial Mortgages	68,613	-	-	-	68,613
Past Due Loans	68,812	-	-	-	68,812
Other Balance Sheet Exposures	31,957	-	-	-	31,957
Non-market Related Off Balance Sheet Credit Exposures	38,627	-	-	-	38,627
Total exposures under the standardised approach	**1,199,131**	**32,931**	**9,929**	**15,846**	**1,257,837**

8.6 Standardized Gross Exposures by Residual Maturity

The table below sets out an analysis of credit risk by maturity as at March 31, 2019. Residual maturity of exposures is based on contractual maturity dates and not expected or behaviorally adjusted dates. Cash flows receivable over the life of the exposure are not included.

Asset class exposures by residual maturity	Within 1 yr $'000	After 1 but within 5 years $'000	After 5 years $'000	Total $'000
Cash	10,074	-	-	10,074
Claims on Sovereigns and Multilateral Development Banks	207,775	65,288	5,991	279,054
Claims on Public Sector Entities	10,030	10,034	3,996	24,060
Claims on Corporates	3,768	21,586	21,078	46,432
Claims on Banks and Securities Firms	75,015	69,064	9,840	153,919
Securitisations	-	-	45	45
Retail	8,994	7,855	12,204	29,053
Residential Mortgages	1,384	38,011	467,796	507,191
Commercial Mortgages	18,571	13,857	36,185	68,613
Past Due Loans	7,335	6,793	54,684	68,812
Other Balance Sheet Exposures	4,484	-	27,473	31,957
Non-market Related Off Balance Sheet Credit Exposures	31,184	7,443	-	38,627
Total exposures under the standardised approach	**378,614**	**239,931**	**639,292**	**1,257,837**

8.7 Application of the Standardized Approach for Credit Risk

The standardized approach stipulates that banks should use an External Credit Assessment Institution (“ECAI”), such as a credit rating agency, to determine the risk weighting applied to exposures to certain counterparties. The Bank has used Standard & Poor’s (“S&P”) rating group as its nominated ECAI. S&P’s ratings are used to assign exposures a credit quality step and thus calculate the credit risk capital requirement for the following classes of exposure: Sovereigns and multilateral development banks (“MDB’s”); Public sector entities; Corporates; and Banks and Securities firms. The Bank does not make material use of on- or off-balance sheet netting. The alignment of the BMA’s credit quality steps and S&P’s assessments are as follows:

Credit Quality Step	S&P's assessments
1	AAA to AA-
2	A+ to A-
3	BBB+ to BBB-
4	BB+ to BB-
5	B+ to B-
6	CCC+ and below

All other exposure classes are assigned risk weightings as prescribed in the BMA’s regulatory guidance.

The following table provide, for material segments only, an analysis of exposures by credit quality steps as at March 31, 2019:

	Credit Quality step	Risk weight %	Exposure '000	Exposure after credit risk mitigation '000
Sovereigns and MDB's				
	1	0%	263,134	263,134
	2	20%	15,920	15,920
	Total		279,054	279,054
Public Sector entities				
	1	20%	10,030	10,030
	2	50%	14,029	14,029
	Total		24,060	24,060
Corporates				
	3	100%	46,432	45,222
	Total		46,432	45,222
Banks & Securities firms				
	1	20%	97,693	77,757
	2	20% / 50%	19,387	19,387
	3	20% / 50%	16,615	16,615
	5	50% / 100%	20,224	20,224
	Total		153,919	133,984

8.8 Past Due and Impaired Financial Assets

At each reporting date, the Bank assesses whether there is objective evidence that financial assets not carried at fair value through profit and loss are impaired. Evidence of impairment may include indications that the borrower or group of borrowers is experiencing significant financial difficulty, default or delinquency in interest or principal payments or the debt being restructured to reduce the burden on the borrower. A financial asset or a group of financial assets are impaired when objective evidence demonstrates that a loss event has occurred after the initial recognition of the asset(s), and that the loss event has an impact on the future cash flows of the asset(s) that can be estimated reliably.

Objective evidence that financial assets are impaired can include significant financial difficulty of the borrower or issuer, the disappearance of an active market for a security or other observable data relating to a group of assets such as adverse changes in the payment status of the issuers in the group, or economic conditions that correlate with defaults in the group.

Other than loans, mortgages and credit card receivables, no other financial assets were considered to be impaired as at March 31, 2019.

Collateral obtained to mitigate credit risk is contracted, documented and safely stored.

The Bank's definition of a financial restructure is any change to a loans terms that are not predicated on financial difficulty and where the Bank is not granting a concession that it would not have otherwise approved (i.e. changes that do not fall into the TDR definition).

8.9 Past Due and Impaired Loans

In the opinion of management, a loan or mortgage is considered impaired when there has been deterioration in credit quality of the borrower to the extent that there is no longer reasonable assurance as to the timely collection of the full amount of principal and interest. Secured loans and mortgages where interest or principal is contractually past due 90 days or more are automatically classified as impaired, unless management determines that the loan or mortgage is fully secured, is in the process of collection and the collection efforts are reasonably expected to result in repayment of the loan or mortgage and overdue interest in full. For regulatory reporting purposes, loans are classified as past due after 90 days have passed since a payment is missed. Credit card receivables that are contractually 180 days past due are automatically written off.

	CR2 Changes in defaulted loans and securities amounts in $'000	Mar-19
1	**Defaulted loans and debt securities at the end of the previous reporting period**	71,789
2	Loans and debt securities that have defaulted since the last reporting period	7,841
3	Returned to non-default status	(7,870)
4	Amounts written off	(462)
5	Other changes	(2,486)
6	**Defaulted loans and debt securities at the end of the reporting period**	**68,812**

Over the period total balance of defaulted loans have decreased by approximately $3 million due to positive asset remediation during the period, a focus for the Bank in 2019.

Defaulted Loans as per the Table CR1 includes provision allowance amount whereas Table CR2 provides these loan numbers net of allowance. Please see below the reconciliation:

Defaulted Loans as per CR1	102,454
Less: Allowance	33,642
Net Defaulted loans as per CR2	68,812

8.10 Allowance for Credit Losses on Loans, Mortgages and Credit Card Receivables

The adequacy of the allowance for credit losses on loans, mortgages and credit card receivables is regularly reviewed by management taking into consideration matters such as current and future macroeconomic conditions, past loss experience and individual circumstances which may affect a borrower's future ability to pay. The allowance for credit losses is established by charges against income and a corresponding reduction of the related asset category, based on management's assessment of the estimated amount of losses within the loan, mortgage and credit card portfolios. The allowance for credit losses consists of stage 1-3 loan loss allowances as determined under the IFRS 9 accounting standard. The loan loss allowance is the amount required to reduce the carrying value of an impaired loan to its estimated realizable amount. Generally, the estimated realizable amount is determined by discounting the expected future cash flows at the loan's original effective interest rate.

Allowance for groups of homogeneous loans is established using a formula approach based on historic data. The methodology uses statistical analysis of historical data on delinquency and collateral trends to estimate the probability of default and expected collateral values respectively. The loss given default is then estimated based on the expected collateral values. The estimate of loss arrived at on the basis of historical information is then reviewed to ensure that it appropriately reflects the economic conditions and product mix at the reporting date. Default rates and loss factors are derived from actual loss experience.

The following tables show the past due and impaired loans as at March 31, 2019 for the Bank, as well as the movement on provisions for the six months ended March 31, 2019.

	Gross Balance	ECL Stage 1	ECL Stage 2	ECL Stage 3	Total Provision	Net Balance as of March 31, 2019
Past due, but not individually impaired	$'000	$'000	$'000	$'000	$'000	$'000
Up to 90 days						
Commercial Mortgage	991	-	-	-	-	991
Residential Mortgage	37,961	411	124	761	1,296	36,665
Retail & Other	578	8	13	8	29	549
More than 90 Days						
Commercial Mortgage	1,684	-	-	-	-	1,684
Residential Mortgage	10,610	-	-	-	-	10,610
Retail & Other	1,550	-	211	-	211	1,339
Impaired loans						
Commercial Mortgage	15,049	-	-	7,223	7,223	7,826
Residential Mortgage	66,699	-	-	23,051	23,051	43,649
Retail & Other	6,862	-	-	3,159	3,159	3,703
Neither past due nor impaired loans						
Commercial Mortgage	67,649	27	-	-	27	67,622
Residential Mortgage	470,770	237	7	-	244	470,526
Retail & Other	75,976	46	1	-	47	75,929
Total	**756,380**	**728**	**356**	**34,201**	**35,285**	**721,095**

	Commercial Mortgage	Residential Mortgage	Retail & Other	Total
	$'000	$'000	$'000	$'000
Net impairment loss on financial assets for the period ending March 31, 2019 as recorded in the Banks Profit and Loss Statement	562	4,864	299	5,724

All the above loans are originated in North America region (Bermuda)

Movement in provisions for the six months ended March 31, 2019.

	Stage 1	Stage 2	Stage 3	Total
Balance at September 30, 2018	1,092	138	30,062	**31,292**
Net Write offs	-	-	(462)	**(462)**
Recoveries	-	-	(2)	**(2)**
Provision for credit losses	(364)	218	4,602	**4,457**
Balance at March 31, 2019	**728**	**356**	**34,201**	**35,284**

During the period from September 30, 2018 to March 31, 2019, $25.4 million of loans were restructured out of which $883k were considered impaired.

*Given the Bank's credit policies and procedures, management does not consider loans past due less than 7 days as delinquent.

Credit Risk Mitigation

8.11 Loans and Mortgages

The effective management of credit risk in the Bank's loan book is supported by relevant policies and guidelines on the role of collateral supporting these obligations. The purpose of taking collateral is to act as a secondary source of repayment of the loan if the borrower defaults and is unable to cure the default by means other than the sale of the collateral.

The Bank relies heavily on the valuation and revaluation of individual collaterals, determination of the value of pledged collateral for secured loans, determination of collateral acceptability for the purposes of credit risk mitigation and collateral enforcement, should the client be in default.

Lending/Relationship Managers, through their credit underwriting analysis and under the guidance of CRM, determine whether and what type of collateral is required and the value of that collateral. The type of collateral held can include, but is not limited to: residential real estate; commercial properties; debentures covering business assets such as receivables and equipment; and pledging of cash deposits and investment securities portfolios. Significant haircuts are made on investment security portfolios minimizing any potential market risks. Clarien has no exposures to credit derivatives. Guarantees from third parties are also obtained in some instances. Independent third party valuations of collateral are monitored. All external valuation providers are vetted by CRM.

The following table reflects the split between the Banks secured and unsecured exposures, as at March 31, 2019.

CR3 CRM techniques	a	b	c	d	e	f	g
Amounts in $000	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
Loans	2,124	718,971	718,971	-	-	-	-
Debt securities	401,179	-	-	-	-	-	-
Total	403,304	718,971	718,971	-	-	-	-
Of which defaulted	2	68,810	68,810	-	-	-	-

8.12 Interbank Lending and Investment Securities

Collateral held as security for investment securities is determined by the nature of the instrument. Debt securities and treasuries are generally unsecured whereas asset-backed securities and similar instruments are secured by pools of financial assets.

8.13 Financial Collateral

The overall value of financial collateral used as credit risk mitigation within the Pillar 1 calculations was $11.9 million against loans and advances to customers, predominately retail loans, as incorporated in the determination of RWA values in Section 7.2 above.

The tables that follow demonstrate the effects of the CRM techniques as at March 31, 2019.

CR4 Credit Mitigation Effects amounts in $000s	Exposures before CCF and CRM		Exposures post-CCF and CRM		RWA and RWA density	
Asset classes	**On-balance sheet amount**	**Off-balance sheet amount**	**On-balance sheet amount**	**Off-balance sheet amount**	**RWA**	**RWA density**
Sovereigns and their central banks	249,052	-	249,052	-	3,184	1.28%
Non-central government public sector entities	24,060	-	24,060	-	9,021	37.49%
Multilateral development banks	30,002	-	30,002	-	-	-
Banks	153,919	-	133,984	-	42,982	32.08%
Securities firms	45	-	45	-	157	350.00%
Corporates	46,432	-	45,222	-	45,222	100.00%
Regulatory retail portfolios	29,053	-	22,239	-	18,583	83.56%
Secured by residential property	507,191	-	505,136	-	185,793	36.78%
Secured by commercial real estate	68,613	-	66,996	-	66,996	100.00%
Equity	27	-	27	-	27	100.00%
Past-due loans	68,812	-	68,651	-	102,976	150.00%
Higher-risk categories	-	-	-	-	-	-
Other assets	31,930	38,627	31,930	5,687	36,641	97.41%
Total	**1,209,137**	**38,627**	**1,177,344**	**5,687**	**511,584**	**43.24%**

There are no significant changes to the above numbers over the reporting period.

	CR5 Exposures by class and RWA amounts in $'000s										
	Risk weight Asset classes	0%	10%	20%	35%	50%	75%	100%	150%	Others	Total credit exposures amount (post CCF and post-CRM)
1	Sovereigns and their central banks	233,132	-	15,920	-	-	-	-	-	-	249,052
2	Non-central government public sector entities	-	-	10,030	-	14,029	-	-	-	-	24,060
3	Multilateral development banks	30,002	-	-	-	-	-	-	-	-	30,002
4	Banks	-	-	96,913	-	26,943	-	10,128	-	-	133,984
5	Securities firms	-	-	-	-	-	-	-	-	45	45
6	Corporates	-	-	45,222	-	-	-	-	-	-	45,222
7	Regulatory retail portfolios	-	-	-	-	-	14,623	7,616	-	-	22,239
8	Secured by residential property	-	-	-	482,647	-	22,489	-	-	-	505,136
9	Secured by commercial real estate	-	-	-	-	-	-	66,996	-	-	66,996
10	Equity	-	-	-	-	-	-	27	-	-	27
11	Past-due loans	-	-	-	-	-	-	-	68,651	-	68,651
12	Higher-risk categories	-	-	-	-	-	-	-	-	-	-
13	Other assets	-	-	-	-	-	-	31,930	-	-	31,930
14	**Total**	263,134	-	168,085	482,647	40,972	37,112	116,697	68,651	45	1,177,344

There are no significant changes to the above numbers (other than reshuffling within investment asset classes to some extent) over the reporting period.

8.14 Counterparty Credit Risk for Derivative Contracts

The Bank may use derivative instruments to hedge its exposure to market risk, for example foreign exchange and interest rate risk. Counterparty Credit Risk ("CCR") is the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows. An economic loss would occur if the transactions or portfolio of transactions with the counterparty has a positive economic value at the time of default. Unlike exposure to credit risk through a loan, where the exposure to credit risk is unilateral and only the lending bank faces the risk of loss, CCR creates a bilateral risk of loss whereby the market value for many different types of transactions can be positive or negative to either counterparty. The market value is uncertain and can vary over time with the movement of underlying market factors.

Currently the Bank does not have any exposure to derivative transactions and has very insignificant counter party credit risk. Clarien has an exposure to the Bermuda Stock Exchange, as a central counterparty (CCP). BSX is a direct member of a CCP for local equity securities. The exposure to the exchange is typically short dated and overnight with relatively small.

In the case where these transactions take place liquidity is held for both additional collateral that would have to be posted in the event of a credit rating downgrade and adverse movements in market rates. Collateral requirements following downgrade are assessed on a contractual basis, whereas liquidity for changes in market rates is assessed using historic market rate volatility.

"Wrong-way risk" may occur when exposure to a counterparty is negatively correlated with the credit quality of that counterparty. Hence, there is a tendency for the exposure to increase as the creditworthiness decreases. This risk is managed through the Investment Policy, which governs the requirements for eligible collateral.

Counterparty limits are approved by Credit Risk Management function.

8.15 Securitizations

The Bank's only exposure to securitizations is through investment in third party securities, the holding at March 31, 2019 amounted to $45k.

SEC2 Securitizations amounts in $'000	Bank acts as originator			Bank acts as sponsor			Bank acts as investor		
	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
Retail (total) - of which	-	-	-	-	-	-	**45**	-	**45**
Residential Mortgage			-			-	45		45

SEC4 Capital Requirements amounts in $'000	Exposure values (by RW bands)					Exposure	RWA	Capital Charge
	≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	SA/SSFA	SA/SSFA	SA/SSFA
Total exposures	-	-	-	-	-	-	-	-
Traditional securitisation	-	-	-	-	-	-	-	-
Of which securitisation	-	-	-	45	-	45	157	12.58
Of which retail underlying	-	-	-	45	-	45	157	12.58
Of which wholesale	-	-	-	-	-	-	-	-
Of which re-securitisation	-	-	-	-	-	-	-	-
Of which senior	-	-	-	-	-	-	-	-
Of which non-senior	-	-	-	-	-	-	-	-

9. LIQUIDITY RISK

Liquidity risk is the risk that the Bank is not able to meet its financial obligations as they fall due, or can only do so at excessive cost. The Bank's policy is to ensure that sufficient funds are available to meet its ongoing and future commitments to customers and counterparties, both with respect to the demand for loans and the repayment of deposits, and to maintain the confidence of the marketplace in which the Bank operates.

The Bank's Treasury department is responsible for managing liquidity for the bank on a day today basis. Finance function provides various liquidity related reports on a daily / monthly basis, reflecting measurement and close monitoring of the liquidity position of the Bank. Apart from these regular reporting to the senior management, ALCO provides direct oversight on this function and reports to the Board Risk Co from a governance perspective. Management has recommended internal limits on various benchmarks such as LCR, Loan/Deposit ratio, open foreign Exchange (FX) positions, NSFR etc. which are always conservative compared to the prevalent Regulatory requirements.

The Bank manages liquidity based on current and forecasted movements in deposits, loans and other related portfolios including off balance sheet exposure based on demand, contractual commitments and customer behaviors. This is achieved by (i) adhering to a Board approved loan to deposit guidelines (ii) adherence to regulatory mandated liquidity mismatch guidelines with respect to the amount of potential projected cash outflow, looking out one month, as a percentage of total deposits and (iii) maintaining holdings of high quality liquid assets and short maturity interbank placements.

Currently the Bank maintains a portfolio of high quality and liquid assets in the investment portfolio with approximately 50% of the portfolio made up of US treasuries. The Bank's LCR which is a measure of liquidity is above 150% reflecting very conservative liquidity policy. NSFR for the past few quarters has been around 140% and Loan/Deposit ratio of around 66%. As at March 31, 2019, the Bank holds Cash and investments worth approx. BMD 465 million which is 38% of its total Balance Sheet size and 43% of its deposit obligations.

The Bank has a formalized and Board approved liquidity contingency plan which highlights the roles and responsibilities and actions to be taken in three stages i) pre crisis, ii) during a crisis event and iii) post the crisis event. This includes event with liquidity crises that can impact the Bank's funding and liquidity position severely.

As part of the annual Capital Assessment and Risk Profile (CARP), the Bank uses the BMA LCR calculations as a base for a stress scenario. The LCR retention ratios on both cash inflows and cash outflows are intended to reflect a 'Stressed Liquidity Event'. The bank further stress these factors by a factor of 25% from 10% to 13% and from 3% to 4% respectively.

The Bank relies mainly on customer deposits as a funding source, which has been very steady and stable historically. Notwithstanding the continued stability of the Bank's deposit funding, the Bank is actively establishing external repurchase facilities as a contingency funding plan. The Bank maintains a very sound investment portfolio consisting of US treasuries and high quality corporate bonds, which places the Bank in a good position to raise necessary funding in a very short timeframe to meet any adverse liquidity conditions. Acquisition of the Bank's holding company by NCB Financial Group in December 2017 also provides the Bank with additional avenues of support from its affiliate banking institution in Jamaica, National Commercial Bank Jamaica, should such adverse conditions occur.

The Bank operates only in Bermuda and does not have any foreign branches or operations. The Bank transacts only a small number of FX positions, predominantly spot transactions for customer flow. As a result the Bank has no substantial net exposure to foreign exchange rate fluctuations.

Maturity profile of the Bank Assets and Liabilities as at March 31, 2019 is as follows:

	Within 1 month	2 to 3 Months	4 to 12 Months	1 to 5 Years	Over 5 Years	Total
Liabilities						
Customers deposits	482,244	79,507	195,110	309,570	51,088	1,117,520
Other Liabilities	14,963.53	-	-	-	-	14,964
Total Financial liabilities (contractual maturity dates)	**497,208**	**79,507**	**195,110**	**309,570**	**51,088**	**1,132,483**
Total Financial assets (expected maturity dates)	**241,503**	**31,837**	**171,633**	**494,156**	**724,429**	**1,663,558**

9.1 Liquidity coverage ratio (LCR)

Please see below LCR details based on past 6 months data. Please note the followings:

- The Bank has a LCR ratio above 150% reflecting very healthy liquidity position.
- The Bank’s HQLA is comprised predominantly of US sovereign debt and high quality liquid investments.
- There are no significant intra period movements
- The Bank’s main source of funding continue to be customer deposits.
- The Bank has a very insignificant foreign currency exposure and hence currency mismatch is not material.
- The Bank has captured all the relevant cash flows for this calculations.

As mentioned earlier, well diversified customer deposits are the only external source of funding.

Currently the Bank does not have any borrowings from capital markets or wholesale funding sources, hence there are no concentration limits on funding sources as well as collateral pools.

	LIQ01 LCR disclosure template amounts in $'000	Total unweighted value (average)	Total weighted value (average)
High-quality liquid assets			
	Total HQLA		333,962
Cash outflows			
	Retail deposits and deposits from small business customers, of which:		
	Stable deposits	-	-
	Less stable deposits	527,426	36,823
	Unsecured wholesale funding, of which:		
	Operational deposits (all counterparties) and deposits in networks of cooperative banks	37,099	3,357
	Non-operational deposits (all counterparties)	333,049	244,351
	Secured wholesale funding		
	Additional requirements, of which:		
	Credit and liquidity facilities	12,345	1,075
	Other contractual funding obligations	3,362	3,362
	Other contingent funding obligations	643	32
	TOTAL CASH OUTFLOWS		289,000
Cash inflows			
	Inflows from fully performing exposures	74,553	68,352
	TOTAL CASH INFLOWS	74,553	68,352
			Total adjusted value
	Total HQLA		333,962
	Total net cash outflows		220,648
	Liquidity coverage ratio (%)		151%

9.2 Net Stable Funding Ratio (NSFR)

The NSFR requires banks to maintain a stable funding profile in relation to the composition of their assets and off balance sheet activities, looking over a one year horizon. The BMA requirement is 100% coverage.

Please see below NSFR workings based on March 31, 2019.

- The Bank has a NFSR ratio of 143% which is in line with previous periods with no significant movements.
- Customer deposits continue to be main source of funding for the bank.
- The Bank has a very simple Balance Sheet comprising of deposits and Loans and does not have any significant amount of interdependent assets/ liabilities.

LIQ2 NSFR disclosure template amounts in $'000	Unweighted value by residual maturity				Weighted value
	No maturity*	<6 months	6 months to 1 year	≥1 year	
Available stable funding (ASF) item					
Capital:	-	-	-	113,609	113,609
Regulatory capital	-	-	-	113,609	113,609
Retail deposits and deposits from small business customers:	-	410,130	36,382	322,501	724,362
Less stable deposits	-	410,130	36,382	322,501	724,362
Wholesale funding:	-	250,737	10,679	58,158	112,084
Non-operational deposits	-	250,737	10,679	58,158	112,084
Other liabilities:	-	15,432	-	-	-
All other liabilities and equity not included in the above categories	-	15,432	-	-	-
Total ASF					950,054
Required stable funding (RSF) item					
Total NSFR high-quality liquid assets (HQLA)					-
Performing loans and securities:	-	24,450	8,155	678,719	496,525
Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and PSEs, of which:					
With a risk weight of less than or equal to 35% under the Basel II standardised approach for credit risk	-	23,265	7,963	136,353	131,514
Performing residential mortgages, of which:					
With a risk weight of less than or equal to 35% under the Basel II standardised approach for credit risk		1,185	192	483,326	314,850
Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	-	-	-	59,040	50,161
Other liabilities:		251,157	66,013	182,365	167,393
All other assets not included in the above categories	0	251,157	66,013	182,365	167,393
Off-balance sheet items				38,627	503
Total RSF					**664,422**
Net Stable Funding Ratio (%)					**143%**

10. MARKET RISK

Market risk is the potential adverse change in the Bank income or in the value of the Bank's holdings of financial instruments arising from movements in interest rates, foreign exchange rates or equity prices. The objective of market risk management is to manage and control market risk exposure within acceptable parameters, while optimizing the return on risk.

The Bank's exposure to market risk is governed by a policy approved by the ALCO and ratified by the Risk Committee. The policy sets out the nature of risk which may be taken, and applicable maximum risk limits. Compliance with the Bank's risk limits and the Bank's exposure to market risks are reviewed at monthly meetings of ALCO and quarterly meetings of the Risk Committee. Since the Bank does not engage in propriety trading activities, its market risk exposure principally arises from its regular banking activities.

Day-to-day monitoring and management of market risk is undertaken by the Treasury Department. Exposure to market risk can be managed by using hedging instruments or by utilizing natural hedges existing within the variety of financial instruments the Bank holds.

The Bank has submitted a policy statement to the BMA declaring its activities as non-trading and has obtained a *de minimis* exemption from holding market risk capital due to the nature of its operations.

10.1 Interest Rate Risk

Qualitative Disclosures of IRRBB

This section contains qualitative disclosures providing a description of the risk management objective and policies concerning IRRBB.

a) Definition of IRRBB for the purposes of risk control and measurement.

The Bank defines IRRBB as Risk of losses, or reduced income, due to timing mismatches in the sensitivity of the Banks assets and liabilities to interest rate movements within the Banking Book.

A sufficiently high level of IRRBB could pose a significant threat to the Bank's capital and/or future earnings if not managed appropriately. Changes in interest rates can affect both the underlying economic value of the Bank's assets, liabilities and off-balance sheet instruments and its net interest income.

IRRBB comprises:

Repricing risk (mismatch risk) - timing difference in the maturity and repricing of bank assets, liabilities and off-balance sheet positions.

Basis Risk - imperfect correlation in the adjustment of the rates earned and paid on different instruments with otherwise similar repricing characteristics.

Option Risk – the risk related to interest-related option embedded in bank products. Such embedded optionality may exist, where the bank or its customers can make elections such as prepayment of a loan or early redemption of a deposit that alter the timing and amount of their cash flows.

b) The Bank's IRRBB management and mitigation strategies.

IRRBB is managed within the Bank's market risk framework. The board of directors retains ultimate responsibility for the effective management of IRRBB. Through the board's Risk Committee the board has delegated its responsibility for the management of IRRBB to ALCO. At management level, the Bank's ALCO proactively oversees the management of IRRBB.

As the board assumes ultimate responsibility for IRRBB and has defined the Bank's overall risk appetite for IRRBB. Appropriate limits have been set to measure this risk for earnings and EVE, within this risk must be managed. Compliance with this limits is measured and reported to ALCO and the Board.

ALCO's functions include: reviewing the framework to identify, measure, evaluate, control and monitor IRRBB in the Bank's balance sheet.

Hedging – The Bank primarily maintains its risk position within the desired level through adjustments to balance composition and does not intend as a matter of normal course to fully hedge the interest rate risk. However, if or when a hedge is concluded to be executed the proper documentation is maintained and accounting is done as per relevant IFRS standards.

Conduct of Stress Testing – The Bank currently conducts stress tests for net interest income variation, by assessing the impact of various interest rate shocks on the Bank's earning's. In addition, EVE stress tests are required by the Basel Committees guidelines which have been adopted by the Bank.

Model Validation – The Bank has an established model validation framework that covers IRRBB models. All new model and any revisions to existing models will be presented to ALCO for approval.

The role of independent audit – Internal Audit function is responsible for periodically reviewing the robustness of the IRRBB management framework by assessing the reliability of reporting effectiveness and efficiency of the IRRBB policy and framework.

c) The Periodicity of the calculation of the Bank's IRRBB measures.

The Bank would undertake its IRRBB measurement on monthly basis during normal course of business. The Bank employs various analytical techniques to measure interest rate sensitivity monthly within the banking book on both an earnings and economic-value basis. This would include an interest rate repricing profile analysis, a simulated modelling of the bank's earnings at risk and economic value for a standard interest rate shock, and stress testing of earnings and economic value for multiple stressed interest rate scenarios. These analyses include the application of both parallel and non-parallel interest rate shocks.

Earnings Approach (Earnings at risk): This is defined by the impact of changes in interest rate on the Bank's earnings. This is measured by the changes in the net interest income assuming a constant balance sheet, where maturing or repricing cash flows are replaced by new cash flows with identical features with regards to amount, repricing period and spread components.

Economic Value Approach (EVE): EVE sensitivity is computed with the assumption of a run-off balance sheet, where the existing interest sensitive positions in the Banking book are amortized based on their repricing cash flow and are not replaced by any new business. EVE measures the change in the present value of the assets and liabilities. The measure therefore depicts the change in economic equity resulting from an interest rate shock.

d) Interest rate shock and stress scenarios.

The Bank has applied the six interest rate shock scenarios as prescribed in the Basel guidance (namely parallel up, parallel down, short rate up, short rate down, flattener and steepener).

While all scenarios are applied for Δ EVE computations, only the parallel shocks are utilized to compute the Δ NII using the income approach.

e) Modelling assumptions.

The modelling assumptions used in the Bank's IRRBB report have been adopted for internal capital adequacy purposes from 1st January 2018.

f) IRRBB hedging.

The Bank does not fully hedge interest rate risk but targets to maintain its IRRBB position at a desired level, within the risk appetite, through strategic planning of balance sheet composition including an appropriate tenor and repricing mix of fixed and floating rate products.

Within the Bank's ALCO policies, Treasury is permitted from time to time to carry out fair value and cash flows hedges to hedge interest rate risk on particular assets and liabilities in order to maintain risk and return parameters within appetite and plan. Currently there are no such hedges.

g) Key modelling assumptions.

The modelling assumptions considered for the computation of Δ EVE and Δ NII:

- For Δ EVE commercial margins and other spread components have been included in the cash flows used in the computation and discount rate.
- Non-maturity deposits (NMD's) have been split in Retail and Wholesale deposits. The bank carried out behavioural analysis based on historical data to establish set levels of core and non-core deposits. For both Retail and Wholesale NMDs identified as non-core these have been taken to reprice in the overnight bucket. Correspondingly core deposits has been assigned the longest repricing maturity of 8 years with an average life of 4 years.
- A conditional prepayment rate ("CPR") has been computed for the loan portfolio based on a 3 year historical data. This was evaluated for Δ EVE computation with and without the CPR factor included and was deemed to have an immaterial impact on the results given the floating rate nature of the loan book. Therefore the CPR rate has been excluded at this time, this will be continually monitored for future changes.
- The Bank has significant currency exposure in base currency, BMD and also USD (which is pegged to the Bermuda Dollar). Exposures in all foreign currencies (FCY) are immaterial as they are less than 3% in total of assets and liabilities. The Bank has included FCY exposures in the base currency with the conversion rate as on the reporting date. Accordingly, significant interest rate correlations between different currencies are not applicable for the Bank's current portfolio.

Quantitative Disclosures of IRRBB

BMD $'000	Δ EVE*		Δ NII**	
Period	**Mar-19**	**Dec-18**	**Mar-19**	**Dec-18**
Parallel up	10,586	7,108	5,838	4,475
Parallel down	(11,502)	(7,819)	(11,481)	(10,117)
Steepener	(397)	328		
Flattener	2,790	1,291		
Short rate up	6,888	4,138		
Short rate down	(7,780)	(4,713)		
Maximum	**(11,502)**	**(7,819)**	**(11,481)**	**(10,117)**
Period	**Mar-19**		**Dec-18**	
Tier 1 Capital	**114,999**		**112,881**	

*Δ EVE: Change in Economic Value of Equity due to interest rate shocks

**Δ NII: Change in Net Interest Income due to interest rate shocks

With most of the Loan book being variable in nature, Bank's Balance Sheet is more sensitive to Asset book rather than Deposit book, which contains both variable and fixed rate liabilities. The Bank has plans to increase the duration of its Investment book by investing in longer duration fixed rate securities to reduce the sensitivity to -200bps shocks.

Movements in both EVE and NII were primarily driven by sale of long term fixed income securities, the proceeds of which were temporary held in T bills pending the right investment opportunity to reinvest in the Market.

11. OPERATIONAL RISK

11.1 Objectives and Policy

The Bank has adopted the definition of operational risk as proposed by the Basel Committee and endorsed by the BMA, namely "The risk of loss resulting from inadequate or failed internal processes, people and systems or from external events". This definition includes legal risk but excludes strategic and reputational risk.

The Bank complies with the Basel Committee on Banking Supervision (BCBS) guidelines, and the Bermuda Monetary Authority's (BMA) guidance papers on the management of Operational Risk. These requirements have been tailored proportionately in this framework to reflect our comparatively small size, lack of complexity and risk profile.

In line with the Basel committee's report on "Sound Practices for the Management and Supervision of Operational Risk" the Bank sees the following as core components of the ORM framework:

- Oversight by the Board of Directors and Executive Management;
- A strong ERM function, ORM and internal control culture;
- Effective internal reporting; and
- Robust business contingency planning.

Operational risk is relevant to every aspect of the Bank's business and owned by every employee within the organization. The broad definition covers events ranging from fraud to systems failure and downtime. The importance of managing these risks in a cost efficient and effective manner is critical to the organization meeting its business/strategic goals.

Conduct and Compliance risk

Is a subset of operational risks, the risk that the Bank exercises inappropriate judgement or makes errors in the execution of its business activities, leading to: noncompliance with regulation or legislation; market integrity being undermined; or an unfair outcome being created for our clients.

Model risk

Model risk is defined as the risk that arises from decisions based on the incorrect selection, implementation or usages of models such as those used in the implementation of IFRS 9 and IRRBB.

The performance and accuracy of IFRS 9 and IRRBB models are critical in terms of the calculation of credit risk capital requirements and calculating interest rate risks shocks. The effectiveness of the models is achieved through clear allocation of roles and responsibilities covering model ownership, approval and governance, ongoing model monitoring, review and independent validation.

11.2 Capital Calculation Methodology

The Bank has adopted the Standardized Approach for calculating its Basel II Pillar 1 operational risk capital. This approach divides the Group's activities into 8 primary business lines (corporate finance, trading and sales, retail banking, commercial banking, payment and settlement, agency services, asset management and retail brokerage). The capital charge for each business line is calculated by multiplying audited gross income by a factor (β) assigned to that business line. Audited gross income is averaged over 3 years, with β being an industry-wide relationship between operational risk loss experience for a given business line and the aggregate level of gross income for that business line.

CLARIEN

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