

## **BASEL II PILLAR 3 DISCLOSURES FOR 2019**

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### **Basel II Pillar 3 Disclosure for 2019**

- **CIMB Bank Berhad**

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### ABBREVIATIONS

A-IRB Approach	: Advanced Internal Ratings Based Approach
ALM COE	: Asset Liability Management Centre of Excellence
ASB	: Amanah Saham Bumiputra
BI	: Banking Institutions
BIA	: Basic Indicator Approach
BNM	: Bank Negara Malaysia
BRCC	: Board Risk & Compliance Committee
CAF	: Capital Adequacy Framework and, in some instances referred to as the Risk-Weighted Capital Adequacy Framework
CAFIB	: Capital Adequacy Framework for Islamic Banks
CAR	: Capital Adequacy Ratio and, in some instances referred to as the Risk-Weighted Capital Ratio
CBSM	: Capital and Balance Sheet Management
CCR	: Counterparty Credit Risk
CIMBBG	: CIMB Bank, CIMBISLG, CIMBTH, CIMB Bank PLC (Cambodia), CIMB Factorlease Berhad, CIMB Bank (Vietnam) Limited and non-financial subsidiaries
CIMBISLG	: CIMB Islamic Bank Berhad, CIMB Islamic Nominees (Asing) Sdn Bhd and CIMB Islamic Nominees (Tempatan) SdnBhd
CIMBIBG	: CIMB Investment Bank Berhad, CIMB Futures Sdn Bhd and non-financial subsidiaries
CIMBGH Group	: Group of Companies under CIMB Group Holdings Berhad
CIMBTH	: CIMB Thai Bank Public Company Ltd and its subsidiaries
CIMB Bank	: CIMB Bank Berhad and CIMB Bank (L) Ltd (as determined under the CAF (Capital Components) and CAFIB (Capital Components) to include its wholly owned offshore banking subsidiary company)
CIMB Group or the Group	: Collectively CIMBBG, CIMBIBG and CIMBISLG as described within this disclosure
CIMB IB	: CIMB Investment Bank Berhad
CIMB Islamic	: CIMB Islamic Bank Berhad
CRM	: Credit Risk Mitigants
CRO	: Chief Risk Officer
CSA	: Credit Support Annexes, International Swaps and Derivatives Association Agreement
DFIs	: Development Financial Institutions
EAD	: Exposure At Default
EAR	: Earnings-at-Risk
ECAIs	: External Credit Assessment Institutions
EL	: Expected Loss
EP	: Eligible Provision
EVE	: Economic Value of Equity
EWRM	: Enterprise Wide Risk Management
Group EXCO	: Group Executive Committee
GSOC	: Group Strategic Oversight Committee
F-IRB Approach	: Foundation Internal Ratings Based Approach

### ABBREVIATIONS *(continued)*

Fitch	: Fitch Ratings
GALCO	: Group Asset Liability Management Committee
GCC	: Group Credit Committee
GIB	: Group Islamic Banking
GMRC	: Group Market Risk Committee
GRCC	: Group Risk & Compliance Committee
GRD	: Group Risk Division
GUC	: Group Underwriting Committee
HPE	: Hire Purchase Exposures
IRB Approach	: Internal Ratings Based Approach
IRRBB	: Interest Rate Risk in the Banking Book
KRI	: Key Risk Indicators
LGD	: Loss Given Default
MARC	: Malaysian Rating Corporation Berhad
MDBs	: Multilateral Development Banks
Moody's	: Moody's Investors Service
MRMWG	: Model Risk Management Working Group
MTM	: Mark-to-Market and/or Mark-to-Model
ORM	: Operational Risk Management
ORMF	: Operational Risk Management Framework
OTC	: Over the Counter
PD	: Probability of Default
PSEs	: Non-Federal Government Public Sector Entities
PSIA	: Profit Sharing Investment Accounts
QRRE	: Qualifying Revolving Retail Exposures
R&I	: Rating and Investment Information, Inc
RAM	: RAM Rating Services Berhad
RAROC	: Risk Adjusted Return on Capital
RORBB	: Rate of Return Risk in the Banking Book
RRE	: Residential Real Estate
RWA	: Risk-Weighted Assets
RWCAF	: Risk-Weighted Capital Adequacy Framework and, in some instances referred to as the Capital Adequacy Framework
S&P	: Standard & Poor's
SA	: Standardised Approach
SMEs	: Small and Medium Enterprises
SNC	: Shariah Non Compliance
SRM	: Shariah Risk Management
VaR	: Value at Risk

### OVERVIEW OF BASEL II AND PILLAR 3

The 'International Convergence of Capital Measurement and Capital Standards: A Revised Framework' or commonly known as 'Basel II' issued by the Bank of International Settlements, as adopted by BNM seeks to increase the risk sensitivity in capital computations and prescribes a number of different approaches to risk calculation that allow the use of internal models to calculate regulatory capital. The particular approach selected must commensurate with the financial institution's risk management capabilities. The Basel II requirements are stipulated within three broad 'Pillars' or sections.

Pillar 1 focuses on the minimum capital measurement methodologies and their respective qualifying criteria to use specified approaches available to calculate the RWA for credit, market and operational risks. CIMB Bank and its subsidiaries including CIMBISLG which offers Islamic banking financial services (collectively known as 'CIMBBG'), apply the IRB Approach for its major credit exposures. The IRB Approach prescribes two approaches, the F-IRB Approach and A-IRB Approach. Under F-IRB Approach, the Group applies its own PD and the regulator prescribed LGD, whereas under the A-IRB Approach, the Group applies its own risk estimates of PD, LGD and EAD. The remaining credit exposures are on the SA and where relevant, will progressively migrate to the IRB Approach. CIMBIB and its subsidiaries ('CIMBIBG') adopt the SA for credit risk. CIMBBG, CIMBISLG and CIMBIBG (collectively known as 'CIMB Group' or the 'Group') adopt the SA for market risk and BIA for operational risk.

Pillar 2 focuses on how sound risk management practices should be implemented from the Supervisory Review perspective. It requires financial institutions to make their own assessments of capital adequacy in light of their risk profile and to have a strategy in place for maintaining their capital levels.

Pillar 3 complements Pillar 1 and Pillar 2 by presenting disclosures in accordance with requirements aimed to encourage market discipline in a manner that every market participant can assess key pieces of information attributed to the capital adequacy framework of financial institutions.

#### ***Frequency of Disclosure***

The qualitative disclosures contained herein are required to be updated on an annual basis and more frequently if significant changes to policies are made. The capital structure and adequacy disclosures are published on a quarterly basis. All other quantitative disclosures are published semi-annually in conjunction with the Group's half yearly reporting cycles.

#### ***Medium and Location of Disclosure***

The disclosures are available on CIMBGH Group's corporate website ([www.cimb.com](http://www.cimb.com)). The consolidated disclosures for CIMB Bank, CIMB Islamic and CIMBIB are also available in CIMBGH Group's 2019 Annual Report and corporate website.

### OVERVIEW OF BASEL II AND PILLAR 3 *(continued)*

#### ***Basis of Disclosure***

The disclosures herein are formulated in accordance with the requirements of BNM's guidelines on RWCAF (Basel II) – Disclosure Requirements (Pillar 3) and CAFIB – Disclosure Requirements (Pillar 3). These disclosures published are for the year ended 31 December 2019.

The basis of consolidation for financial accounting purposes is described in the 2019 financial statements. The capital requirements are generally based on the principles of consolidation adopted in the preparation of financial statements. During the financial year, CIMB Bank did not experience any impediments in the distribution of dividends. There were also no capital deficiencies in any subsidiaries that are not included in the consolidation for regulatory purposes. For the purposes of this disclosure, the disclosures presented within will be representative of the CIMB Bank entity disclosures only.

The term 'credit exposure' as used in the disclosures is a prescribed definition by BNM based on the RWCAF (Basel II) – Disclosure Requirements (Pillar 3) and CAFIB – Disclosure Requirements (Pillar 3). Credit exposure is defined as the estimated maximum amount a banking institution may be exposed to a counterparty in the event of a default or EAD. This differs with similar terms applied in the 2019 financial statements as the credit risk exposure definition within the ambit of accounting standards represents the balance outstanding as at balance sheet date and does not take into account the expected undrawn contractual commitments. Therefore, information within this disclosure is not directly comparable to that of the 2019 financial statements for CIMB Bank.

Any discrepancies between the totals and sum of the components in the tables contained in the disclosures are due to actual summation method and then rounded up to the nearest thousands.

These disclosures have been reviewed and verified by internal auditors and approved by the Board Risk Committee of CIMB Group, as delegated by the Board of Directors of CIMBGH Group.

**RISK MANAGEMENT OVERVIEW**

Our Group embraces risk management as an integral part of our Group’s business, operations and decision-making process. In ensuring that the Group achieves optimum returns whilst operating within a sound business environment, the risk management teams are involved at the early stage of the risk taking process by providing independent inputs, including relevant valuations, credit evaluations, new product assessments and quantification of capital requirements. These inputs enable the business units to assess the risk-vs-reward of their propositions, thus enabling risk to be priced appropriately in relation to the return.

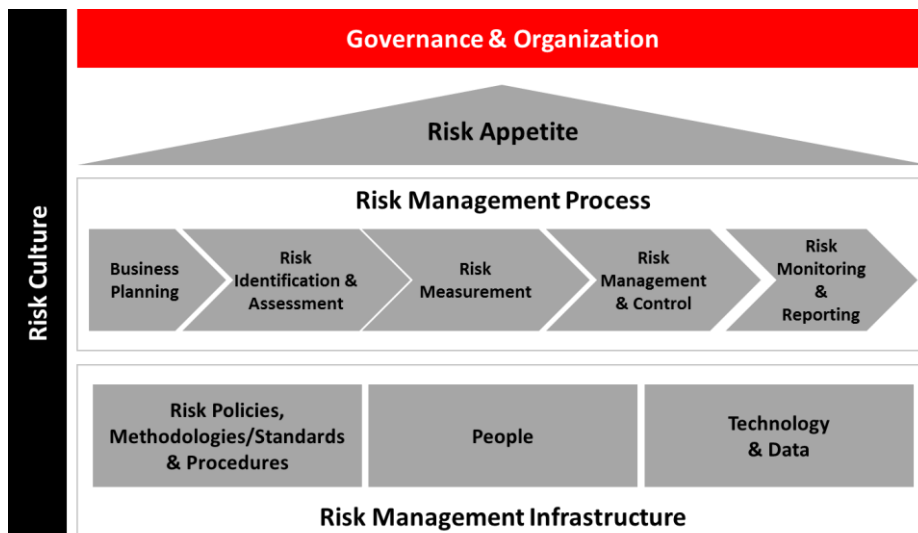
Generally, the objectives of our risk management activities are to:

- identify the various risk exposures and capital requirements;
- ensure risk taking activities are consistent with risk policies and the aggregated risk position is within the risk appetite as approved by the Board; and
- create shareholder value through sound risk management framework.

***Enterprise Wide Risk Management Framework***

Our Group employs a Group Enterprise-Wide Risk Management (EWRM) framework as a standardised approach to effectively manage our risks and opportunities. The Group EWRM framework provides our Board and management with tools to anticipate and manage both the existing and potential risks, taking into consideration changing risk profiles as dictated by changes in business strategies, the external environment and/or regulatory environment.

The key components of the Group’s EWRM framework are represented in the diagram below:



The design of the Group EWRM framework involves a complementary ‘top-down strategic’ and ‘bottom-up tactical’ risk management approach.

### RISK MANAGEMENT OVERVIEW *(continued)*

#### *Enterprise Wide Risk Management Framework (continued)*

##### The key features of the Group EWRM framework include:

- a) **Risk Culture:** The Group embraces risk management as an integral part of its culture and decision-making processes. The Group's risk management philosophy is embodied in the Three Lines of Defence approach, whereby risks are initially managed at the point of risk-taking activities. There is clear accountability of risk ownership across the Group.
- b) **Governance & Organisation:** A strong governance structure is important to ensure an effective and consistent implementation of the Group EWRM framework. The Board is ultimately responsible for the Group's strategic direction, which is supported by the risk appetite and relevant risk management frameworks, policies and procedures. The Board is assisted by various risk committees and control functions in ensuring that the Group's risk management framework is effectively maintained.
- c) **Risk Appetite:** It is defined as the amount and type of risks that the Group is able and willing to accept in pursuit of its strategic and business objectives. Risk appetite is set in conjunction with the annual strategy and business planning process to ensure appropriate alignment between strategy, growth aspirations, operating plans, capital and risk.
- d) **Risk Management Process:**
  - **Business Planning:** Risk management is central to the business planning process, including setting frameworks for risk appetite, risk posture and new product/ new business activities.
  - **Risk Identification & Assessment:** Risks are systematically identified and assessed through the robust application of the Group's risk policies, methodologies/standards and procedures.
  - **Risk Measurement:** Risks are measured and aggregated using the Group-wide methodologies across each of the risk types, including stress testing.
  - **Risk Management and Control:** Risk management limits and controls are used to manage risk exposures within the risk appetite set by the Board. Risk management limits and controls are regularly monitored and reviewed in the face of evolving business needs, market conditions and regulatory changes. Corrective actions are taken to mitigate risks.
  - **Risk Monitoring and Reporting:** Risks on an individual as well as on a portfolio basis are regularly monitored and reported to ensure they remain within the Group's risk appetite.
- e) **Risk Management Infrastructure**
  - **Risk Policies, Methodologies/Standards and Procedures addressing all areas of material risks:** Well-defined risk policies by risk type provide the principles by which the Group manages its risks. Methodologies/Standards provide specific directions that help support and enforce policies. Procedures provide more detailed guidance to assist with the implementation of policies.
  - **People:** Attracting the right talent and skills is key to ensuring a well-functioning Group EWRM framework. The organisation continuously evolves and proactively responds to the increasing complexity of the Group as well as the economic and regulatory environment.
  - **Technology and Data:** Appropriate technology and sound data management support risk management activities.



### **RISK MANAGEMENT OVERVIEW (continued)**

#### ***Risk Governance***

At the apex of the governance structure are the respective Boards of entities within the Group, which decides on the entity's risk appetite corresponding to its business strategies. Each BRCC reports directly into the respective Boards and assumes responsibility on behalf of the respective Boards for the supervision of risk management and control activities. Each BRCC determines the relevant entity's risk strategies and policies, keeping them aligned with the principles within the risk appetite. Each BRCC also oversees the implementation of the Group EWRM framework, provides strategic guidance and reviews the decisions of our GRCC.

To facilitate the effective implementation of the Group EWRM framework, our BRCC has established various specialised/sub-risk committees within our Group, each with distinct lines of responsibilities and functions, which are clearly defined in the terms of reference.

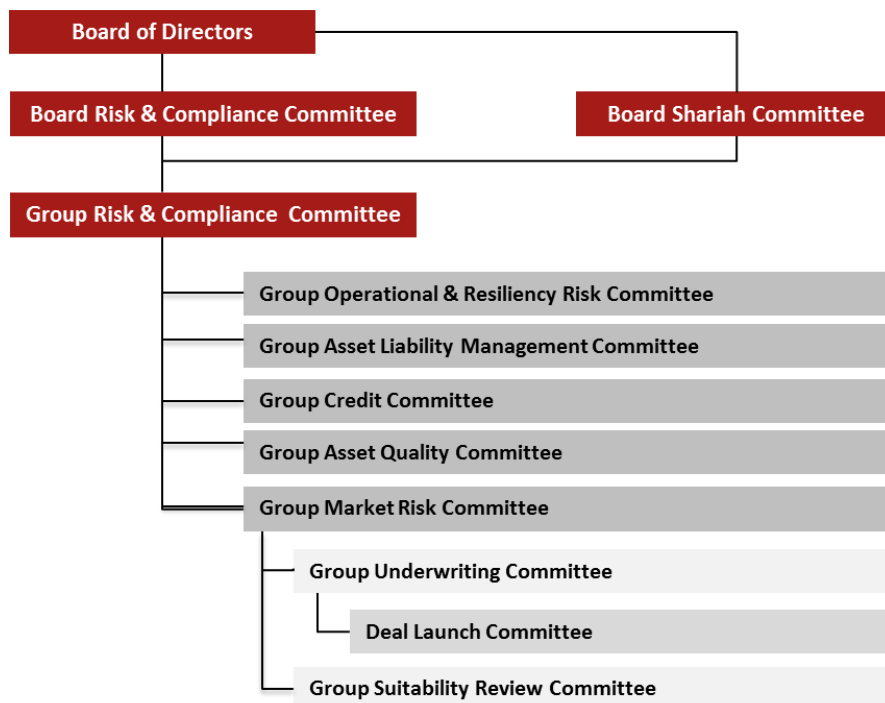
The responsibility of supervising risk management functions is delegated to our GRCC, comprised of senior management, and reports directly to our BRCC. Our GRCC performs the oversight function on overall risks undertaken by the Group in delivering its business plan vis-à-vis the stated risk appetite of our Group. Our GRCC is supported by specialised risk committees, namely Group Credit Committee, Group Market Risk Committee, Group Operational & Resiliency Risk Committee, Group Asset Liability Management Committee and Group Asset Quality Committee, each addressing one or more of the following:

- (i) Market risk, arising from fluctuations in the value of the trading or investment exposure due to changes in market risk factors such as interest/profit rates, currency exchange rates, credit spreads, equity prices, commodities prices and their associated volatility;
- (ii) Credit risk, arising from the possibility of losses due to an obligor, market counterparty or an issuer of securities or other instruments held, failing to perform its contractual obligations to the Group;
- (iii) Liquidity risk, arising from a bank's inability to efficiently meet its present and future funding needs or regulatory obligations when they come due, which may adversely affect its daily operations and incur unacceptable losses;
- (iv) Operational risk, arising from risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events;
- (v) Interest rate/rate of return risk in the banking book, which is the current and potential risk to the Group's earnings and economic value arising from movements in interest rates/profit rates;
- (vi) Capital risk, arising from the failure to meet minimum regulatory and internal requirements which could incur regulatory sanction on our Group, thereby resulting in a potential capital charge; and
- (vii) SNC risk, arising from risk of possible failure to comply with the Shariah requirements determined by the Shariah Advisory Council ("SAC") of BNM and Securities Commission ("SC"), Board Shariah Committee ("BSC") of the Group and other Shariah regulatory authorities of the jurisdictions in which the Group operates.

**RISK MANAGEMENT OVERVIEW (continued)**

**Risk Governance (continued)**

The structure of CIMB Group Risk Committees is depicted in the following chart:



Our overseas subsidiaries’ risk committees are set-up in a similar structure in their respective jurisdictions. Whilst recognising the autonomy of the local jurisdiction and compliance to local requirements, our Group strives to ensure a consistent and standardised approach in its risk governance process. As such, our Group and regional committees have consultative and advisory responsibilities on regional matters across our Group as regulators allow. This structure increases regional communication regarding technical knowledge. It further enhances support towards managing and responding to risk management issues, thus providing our Board with a comprehensive view of the activities within our Group.

**Three Lines of Defence**

Our Group’s risk management culture is embodied through the adoption of the Three Lines of Defence philosophy, whereby risks are managed from the point of risk-taking activities. This is to ensure clear accountability of risks across our Group and risk management as an enabler of business units. As a first line of defence, the line management (including key Business Pillars and Enablers) is primarily responsible for risk management on a day-to-day basis by taking appropriate actions to mitigate risks through effective controls. The second line of defence provides oversight and performs independent monitoring of business activities and reporting to the Board and management to ensure that our Group conducts business and operates within the approved appetite, and is in compliance with regulations. The third line of defence is Group Corporate Assurance Division who provides independent assurance of the adequacy and effectiveness of the internal controls and risk management processes.

### **RISK MANAGEMENT OVERVIEW (continued)**

#### ***The Roles of Group CRO and Group Risk Division***

Within the second line of defence is GRD, a function independent of business units that assists the Group's management and stakeholders in the monitoring and controlling of risk exposures within the Board-approved risk appetite statement.

Group Risk is headed by the Group CRO, appointed by our Board to lead the Group-wide risk management functions, including implementation of the Group EWRM framework. Our Group CRO:

- a) actively engages the respective boards and senior management on risk management issues and initiatives; and
- b) maintains an oversight on risk management functions across all entities within our Group. In each key country of operations, there is a local CRO or a local Head of Risk Management, whose main functions are to assess and manage the enterprise risk and liaise with regulators in the respective countries.

The organisational structure of Group Risk is made up of two major components, namely the CRO and the Risk Centres of Excellence ("CoE"):

#### **(a) CRO**

- (i) CRO's main function is to assess and manage the enterprise risk and liaise with regulators in the respective country/entity under his/her purview.
- (ii) The CRO is supported by the CRO International Offices, who oversee the risk management functions of the regional offices e.g. branches and small overseas banking subsidiaries.
- (iii) For countries where a CRO is not present and/or not required, a local Head of Risk Management is appointed to be the overall risk coordinator for that country.

#### **(b) Risk Centres of Excellence**

- (i) These are specialised teams of risk officers responsible for the active oversight of Group-wide functional risk management and the teams support respective CROs in the various geographies.
- (ii) The Risk CoEs consist of Risk Analytics, Credit Risk Infrastructure, Market Risk, Non-Financial Risk Management (comprising Operational, Shariah, Business Continuity Management, Technology, Outsourcing & Fraud Risk Management), Asset Liability Management and Credit Risk CoEs.

- Risk Analytics CoE

The Risk Analytics (RA) CoE ensures the Group's compliance to regulatory requirements prescribed for IRB Approach and facilitates other Risk CoEs in their respective risk management through Internal Capital Adequacy Assessment Process (ICAAP), Risk Appetite and Stress Testing. RA CoE also validates credit risk models and performs non-retail credit risk analytics, asset quality reporting and Single Counterparty Exposure Limit (SCEL) regulatory reporting.

- Credit Risk Infrastructure CoE

The Credit Risk Infrastructure (CRI) CoE implements risk infrastructure of loan decision engine and rating system which encompass credit risk models and lending criteria. The CoE also manages a Risk Data Mart that facilitates Credit Risk, Risk Weighted Asset (RWA) and SCEL reporting and analytics.

### **RISK MANAGEMENT OVERVIEW *(continued)***

#### ***The Roles of Group CRO and Group Risk Division (continued)***

##### (b) Risk Centres of Excellence (continued)

- Market Risk CoE

The Market Risk CoE recommends the framework and policies for the independent assessment, measurement and monitoring of market risk. This is operationalized through the review of treasury positions versus limits, performing mark-to-market valuation, calculating Value at Risk and market risk capital, as well as performing stress testing.

- Non-Financial Risk Management CoE

The Non-Financial Risk Management (NFRM) CoE ensures the first line of defence manages their operational risk by providing an operational risk framework that enables them to identify, assess, manage and report their operational risks. The team also provides constructive challenge and assessment to the first line of defence's execution of the operational risk framework and act as a consultant with the Group in providing operational risk expertise and reporting to senior management.

The Shariah Risk Management ("SRM") unit within the NFRM CoE facilitates the process of identifying, measuring, controlling and monitoring SNC risks inherent in the Group's Islamic banking businesses and services. It formulates, recommends and implements appropriate SRM policies and guidelines; as well as develops and implements processes for SNC risk awareness.

NFRM CoE also extend its specialist risk oversight to cover Business Continuity Management, Fraud, Technology and Outsourcing risks.

- Asset Liability Management CoE

The Asset Liability Management CoE recommends the framework and policies for the independent assessment, measurement and monitoring of liquidity risk and interest rate risk in the banking book. It conducts regular stress testing on the Group's liquidity and interest rate risk profile, by leveraging on the standardised infrastructure it has designed, built and implemented across the region. It provides the framework and tools for maintenance of the early warning system indicators and contingency funding plan by business owners across the Group.

- Credit Risk CoE

The Credit Risk CoE consists of retail and non-retail credit risk and is dedicated to the assessment, measurement, management, monitoring and reporting of credit risk of the Group. It ensures a homogenous and consistent approach to credit risk policies, methodologies and procedures; credit risk models; underwriting; and portfolio analytics.

In ensuring a standardised approach to risk management across the Group, all risk management teams within our Group are required to conform to the Group EWRM framework, subject to necessary adjustments required for local regulations. For branches and subsidiaries without a risk management department, all risk management activities are centralised at relevant Risk CoEs. Otherwise, the risk management activities are performed by the local risk management team with matrix reporting line to relevant Risk CoEs.

#### ***Strategies and Processes for Various Risk Management***

Information on strategies and processes for Credit Risk, Market Risk, Operational Risk and Interest Rate Risk in the Banking Book are available in the later sections.

### **SHARIAH GOVERNANCE DISCLOSURE**

The Islamic business in CIMB Group is managed and overseen by the Group Islamic Banking (GIB). Its products and services are managed in strict compliance with Shariah under the guidance of CIMB Islamic Board Shariah Committee.

The Board of Directors of CIMB Group, CIMB Investment Bank Berhad, and CIMB Bank Berhad delegate and empower the Board of Directors of CIMB Islamic Bank Berhad to undertake the overall oversight function of the Islamic businesses and operations of the whole CIMB Group, which in turn delegates overseeing of the Shariah governance of Islamic businesses and activities in CIMB Group to CIMB's Board Shariah Committee established under CIMB Islamic Bank Berhad.

Whilst the Board of Directors is accountable for the overall Shariah governance and compliance of the Islamic businesses in CIMB Group, the Management is to ensure executions of business and operations are in accordance with Shariah principles and to provide necessary support to the Board Shariah Committee.

Shariah Advisory & Governance Department (S&G) of GIB which is basically a component of the Management serves as a coordinator of the overall Shariah governance of the Islamic businesses in CIMB Group. S&G is responsible to carry out Shariah Research, Advisory and Secretariat functions, whilst Shariah Review, Shariah Risk Management and Shariah Audit functions are performed by CIMB Group Compliance, Group Risk and Group Corporate Assurance Division respectively.

CIMB Group operates on a dual banking leverage model that utilises the full resources and infrastructure of CIMB Group. Accordingly, all divisions and staff of CIMB Group are responsible for complying with Shariah in their respective Islamic business activities.

In ensuring Islamic business activities are Shariah compliant and Shariah governance process are in place, S&G is to provide Shariah advisory and conduct in-depth Shariah research prior to submission to CIMB Board Shariah Committee. It is supported by control measures by Shariah Risk Management, regular review by Shariah Compliance Review and independent assessment by Shariah Audit. In CIMB Group, the Shariah Risk Management, Shariah Review, and Shariah Audit functions reside in Group Risk Division, Group Compliance, and Group Corporate Assurance Division respectively.

### **Shariah non-compliance income during the year**

During the year ended 31 December 2019, there was no SNC income.

### CAPITAL MANAGEMENT

#### *Key Capital Management Principles*

The key driving principles of the Group's and the Bank's capital management policies are to diversify its sources of capital to allocate capital efficiently, and achieve and maintain an optimal and efficient capital structure of the Group, with the objective of balancing the need to meet the requirements of all key constituencies, including regulators, shareholders and rating agencies.

This is supported by the Capital Management Plan which is centrally supervised by the Group EXCO who periodically assess and review the capital requirements and source of capital across the Group, taking into account all on-going and future activities that consume or create capital, and ensuring that the minimum target for capital adequacy is met. Quarterly updates on capital position of the Group are also provided to the Board of Directors.

Included in the annual Capital Management Plan is the establishment of the internal minimum capital adequacy target which is substantially above the minimum regulatory requirement. In establishing this internal capital adequacy target, the Group considers many critical factors, including, amongst others, phasing-in of the capital adequacy requirement and capital buffer requirements, credit rating implication, current and future operating environment and peer comparisons.

#### *Capital Structure and Adequacy*

The capital adequacy framework applicable to the Malaysian banking entities is based on the Bank Negara Malaysia ("BNM") Capital Adequacy Framework (Capital Components)/Capital Adequacy Framework for Islamic Banks (Capital Components), of which the latest revisions were issued on 5 February 2020. These guidelines set out the regulatory capital requirements concerning capital adequacy ratios and components of eligible regulatory capital in compliance with Basel III and were made applicable for all banking institutions and financial holding companies on 1 January 2018 and 1 January 2019 respectively.

The risk-weighted assets of CIMB Bank are computed in accordance with the Capital Adequacy Framework (Basel II - Risk-Weighted Assets), of which the latest revision was issued on 3 May 2019. The IRB Approach is applied for the major credit exposures. It prescribes two approaches, the F-IRB Approach and A-IRB Approach. The remaining credit exposures and Market Risk are on the Standardised Approach while Operational Risk is based on the Basic Indicator Approach. The components of eligible regulatory capital are based on the Capital Adequacy Framework (Capital Components).

**CAPITAL MANAGEMENT (continued)**  
**Capital Structure and Adequacy (continued)**

The table below presents the Capital Position of CIMB Bank Berhad.

**Table 1: Capital Position for CIMB Bank**

(RM'000)	CIMB Bank	
	2019	2018
<b>Common Equity Tier 1 capital</b>		
Ordinary shares	21,323,364	20,088,345
Other reserves	14,313,488	13,363,305
Less Proposed dividend	(1,227,104)	(1,135,854)
<b>Common Equity Tier 1 capital before regulatory adjustments</b>	<b>34,409,748</b>	<b>32,315,796</b>
<u>Less: Regulatory adjustments</u>		
Goodwill	(3,555,075)	(3,555,075)
Intangible assets	(949,261)	(830,487)
Deferred tax assets	(318,317)	(552,391)
Investment in capital instruments of unconsolidated financial and insurance/takaful entities	(5,853,079)	(5,856,416)
Regulatory reserve	(1,619,524)	(1,197,301)
Others	(74,283)	(2,182)
<b>Common equity Tier 1 capital after regulatory adjustments</b>	<b>22,040,209</b>	<b>20,321,944</b>
<b>Additional Tier 1 capital</b>		
Perpetual preference shares	200,000	200,000
Innovative Tier 1 Capital	1,000,000	1,000,000
Perpetual subordinated capital securities	1,400,000	1,400,000
<b>Additional Tier 1 capital before regulatory adjustments</b>	<b>2,600,000</b>	<b>2,600,000</b>
<u>Less: Regulatory adjustments</u>		
Investments in Additional Tier 1 capital instruments of unconsolidated financial and insurance/takaful entities	(223,047)	(225,956)
<b>Additional Tier 1 capital after regulatory adjustments</b>	<b>2,376,953</b>	<b>2,374,044</b>
<b>Total Tier 1 capital</b>	<b>24,417,162</b>	<b>22,695,988</b>
<b>Tier 2 Capital</b>		
Subordinated notes	8,700,000	7,900,000
Redeemable preference shares	29,740	29,740
Surplus eligible provisions over expected loss	704,187	708,469
General provisions	291,739	271,282
<b>Tier 2 capital before regulatory adjustments</b>	<b>9,725,666</b>	<b>8,909,491</b>

**CAPITAL MANAGEMENT (continued)**

**Capital Structure and Adequacy (continued)**

**Table 1: Capital Position for CIMB Bank (continued)**

(RM'000)	CIMB Bank	
	2019	2018
<u>Less: Regulatory adjustments</u>		
Investments in capital instruments of unconsolidated financial and insurance/takaful entities	(2,471,441)	(1,112,125)
<b>Total Tier 2 Capital</b>	<b>7,254,225</b>	<b>7,797,366</b>
<b>Total Capital Base</b>	<b>31,671,387</b>	<b>30,493,354</b>
<b>RWA</b>		
Credit risk	140,703,641	139,780,748
Market risk	11,790,372	10,773,681
Operational risk	15,820,712	14,727,726
Large Exposure risk requirement	866,895	881,647
<b>Total RWA</b>	<b>169,181,620</b>	<b>166,163,802</b>
<b>Capital Adequacy Ratios</b>		
<b>Before deducting proposed dividend</b>		
Common Equity Tier 1 Ratio	13.753%	12.914%
Tier 1 ratio	15.158%	14.342%
Total capital ratio	19.446%	19.035%
<b>After deducting proposed dividend</b>		
Common Equity Tier 1 Ratio	13.028%	12.230%
Tier 1 ratio	14.433%	13.659%
Total capital ratio	18.720%	18.351%

The Total Capital ratio increased in 2019 compared to 2018 primarily due to (i) higher retained earnings; (ii) higher share capital arising from the reinvestment of cash dividend surplus from CIMB Group's 13<sup>th</sup> and 14<sup>th</sup> Dividend Reinvestment Scheme ("DRS"); and (iii) issuance of RM800 mil 10 years non-callable 5 years Tier 2 subordinated debt; offset by (iv) subscription of RM450 mil to CIMB Thai's RM550 mil T2 subordinated debt and CIMB Islamic's RM800 mil T2 Junior Sukuk. The increase in RWA is mainly due to higher Credit, Market and Operational RWA.



**CAPITAL MANAGEMENT (continued)**

**Capital Structure and Adequacy (continued)**

The tables below show the RWA under various exposure classes under the relevant approach and applying the minimum regulatory capital requirement at 8% to establish the minimum capital required for each of the exposure classes:

**Table 2: Disclosure on Total RWA and Minimum Capital Requirement**

2019	CIMB Bank				
(RM'000) Exposure Class	Gross Exposure before CRM (SA)/EAD (IRB)	Net Exposure after CRM (SA)/EAD (IRB)	RWA	Total RWA after effects of PSIA	Minimum capital requirement at 8%
<b>Credit Risk</b>					
<b>Exposures under the SA</b>					
Sovereign/Central Banks	38,529,994	38,529,994	212,590	212,590	17,007
Public Sector Entities	4,038,442	4,038,354	7,671	7,671	614
Banks, DFIs & MDBs	993,081	993,081	339,434	339,434	27,155
Insurance Cos/Takaful Operators, Securities Firms & Fund Managers	2,007,723	1,971,120	1,184,828	1,184,828	94,786
Corporate	10,645,016	5,907,070	7,116,182	7,116,182	569,295
Regulatory Retail	14,444,437	13,174,349	9,725,079	9,725,079	778,006
Residential Mortgages/RRE Financing	1,070,995	1,066,232	392,968	392,968	31,437
Higher Risk Assets	1,102,133	1,102,133	1,653,200	1,653,200	132,256
Other Assets	6,217,408	6,217,408	2,649,135	2,649,135	211,931
Securitisation	289,990	289,990	57,998	57,998	4,640
<b>Total for SA</b>	<b>79,339,220</b>	<b>73,289,732</b>	<b>23,339,085</b>	<b>23,339,085</b>	<b>1,867,127</b>
<b>Exposures under the IRB Approach</b>					
Sovereign/Central Banks	-	-	-	-	-
Public Sector Entities	-	-	-	-	-
Banks, DFIs & MDBs	24,739,384	24,739,384	6,461,233	6,461,233	516,899
Insurance Cos/Takaful Operators, Securities Firms & Fund Managers	-	-	-	-	-
Corporate	112,365,102	112,365,102	73,826,562	73,826,562	5,906,125
Residential Mortgages/RRE Financing	65,160,084	65,160,084	12,758,473	12,758,473	1,020,678
Qualifying Revolving Retail	12,788,648	12,788,648	7,803,487	7,803,487	624,279
Hire Purchase	7,722,783	7,722,783	4,281,997	4,281,997	342,560
Other Retail	29,374,033	29,374,033	5,589,526	5,589,526	447,162
Securitisation	-	-	-	-	-
<b>Total for IRB Approach</b>	<b>252,150,035</b>	<b>252,150,035</b>	<b>110,721,279</b>	<b>110,721,279</b>	<b>8,857,702</b>
<b>Total Credit Risk (Exempted Exposures and Exposures under the IRB Approach After Scaling Factor)</b>	<b>331,489,254</b>	<b>325,439,766</b>	<b>140,703,641</b>	<b>140,703,641</b>	<b>11,256,291</b>

**CAPITAL MANAGEMENT (continued)**

**Capital Structure and Adequacy (continued)**

**Table 2: Disclosure on Total RWA and Minimum Capital Requirement (continued)**

2019	CIMB Bank				
(RM'000) Exposure Class	Gross Exposure before CRM (SA)/EAD (IRB)	Net Exposure after CRM (SA)/EAD (IRB)	RWA	Total RWA after effects of PSIA	Minimum capital requirement at 8%
<b>Large Exposure Risk Requirement</b>	<b>866,895</b>	<b>866,895</b>	<b>866,895</b>	<b>866,895</b>	<b>69,352</b>
<b>Market Risk (SA)</b>					
Interest Rate Risk/Profit Rate Risk			8,913,095	8,913,095	713,048
Foreign Currency Risk			969,351	969,351	77,548
Equity Risk			724,911	724,911	57,993
Commodity Risk			616,235	616,235	49,299
Options Risk			566,781	566,781	45,342
<b>Total Market Risk</b>			<b>11,790,372</b>	<b>11,790,372</b>	<b>943,230</b>
<b>Operational Risk (BIA)</b>			<b>15,820,712</b>	<b>15,820,712</b>	<b>1,265,657</b>
<b>Total RWA and Capital Requirement</b>			<b>169,181,620</b>	<b>169,181,620</b>	<b>13,534,530</b>

BASEL II PILLAR 3 DISCLOSURES FOR 2019

CAPITAL MANAGEMENT (continued)

Capital Structure and Adequacy (continued)

Table 2: Disclosure on Total RWA and Minimum Capital Requirement (continued)

2018	CIMB Bank				
(RM'000) Exposure Class	Gross Exposure before CRM (SA)/EAD (IRB)	Net Exposure after CRM (SA)/EAD (IRB)	RWA	Total RWA after effects of PSIA	Minimum capital requirement at 8%
<b>Credit Risk</b>					
<b>Exposures under the SA</b>					
Sovereign/Central Banks	36,517,277	36,517,277	134,452	134,452	10,756
Public Sector Entities	4,340,505	4,037,923	7,585	7,585	607
Banks, DFIs & MDBs	171,971	171,971	42,619	42,619	3,409
Insurance Cos/Takaful Operators, Securities Firms & Fund Managers	1,904,510	1,900,559	1,039,914	1,039,914	83,193
Corporate	10,164,004	5,968,911	7,154,740	7,154,740	572,379
Regulatory Retail	12,850,138	11,446,562	8,333,863	8,333,863	666,709
Residential Mortgages/RRE Financing	923,451	920,992	342,430	342,430	27,394
Higher Risk Assets	1,101,480	1,101,480	1,652,220	1,652,220	132,178
Other Assets	5,817,562	5,817,562	2,945,228	2,945,228	235,618
Securitisation	247,513	247,513	49,503	49,503	3,960
<b>Total for SA</b>	<b>74,038,413</b>	<b>68,130,750</b>	<b>21,702,554</b>	<b>21,702,554</b>	<b>1,736,204</b>
<b>Exposures under the IRB Approach</b>					
Sovereign/Central Banks	-	-	-	-	-
Public Sector Entities	-	-	-	-	-
Banks, DFIs & MDBs	20,525,996	20,525,996	5,728,807	5,728,807	458,305
Insurance Cos/Takaful Operators, Securities Firms & Fund Managers	-	-	-	-	-
Corporate	110,280,992	110,280,992	75,786,481	75,786,481	6,062,918
Residential Mortgages/RRE Financing	59,546,776	59,546,776	11,521,839	11,521,839	921,747
Qualifying Revolving Retail	12,923,586	12,923,586	7,661,666	7,661,666	612,933
Hire Purchase	8,561,254	8,561,254	4,841,302	4,841,302	387,304
Other Retail	32,779,519	32,779,519	5,854,428	5,854,428	468,354
Securitisation	-	-	-	-	-
<b>Total for IRB Approach</b>	<b>244,618,123</b>	<b>244,618,123</b>	<b>111,394,523</b>	<b>111,394,523</b>	<b>8,911,562</b>
<b>Total Credit Risk (Exempted Exposures and Exposures under the IRB Approach After Scaling Factor)</b>	<b>318,656,536</b>	<b>312,748,874</b>	<b>139,780,748</b>	<b>139,780,748</b>	<b>11,182,460</b>

**CAPITAL MANAGEMENT (continued)**

**Capital Structure and Adequacy (continued)**

**Table 2: Disclosure on Total RWA and Minimum Capital Requirement (continued)**

2018	CIMB Bank				
(RM'000) Exposure Class	Gross Exposure before CRM (SA)/EAD (IRB)	Net Exposure after CRM (SA)/EAD (IRB)	RWA	Total RWA after effects of PSIA	Minimum capital requirement at 8%
<b>Large Exposure Risk Requirement</b>	<b>881,647</b>	<b>881,647</b>	<b>881,647</b>	<b>881,647</b>	<b>70,532</b>
<b>Market Risk (SA)</b>					
Interest Rate Risk/Profit Rate Risk			7,380,753	7,380,753	590,460
Foreign Currency Risk			748,365	748,365	59,869
Equity Risk			521,180	521,180	41,694
Commodity Risk			1,595,968	1,595,968	127,677
Options Risk			527,415	527,415	42,193
<b>Total Market Risk</b>			<b>10,773,681</b>	<b>10,773,681</b>	<b>861,895</b>
<b>Operational Risk (BIA)</b>			<b>14,727,726</b>	<b>14,727,726</b>	<b>1,178,218</b>
<b>Total RWA and Capital Requirement</b>			<b>166,163,802</b>	<b>166,163,802</b>	<b>13,293,104</b>

**CAPITAL MANAGEMENT *(continued)***

***Internal Capital Adequacy Assessment Process (ICAAP)***

The Group has in place an EWRM framework that aligns ICAAP requirements into the Group's risk management and control activities. The coverage of ICAAP includes the following:

- a) Assessing the risk profile of the bank.
- b) Assessing the capital adequacy and capital management strategies.
- c) Monitoring compliance with regulatory requirement on capital adequacy.
- d) Reporting to management and regulator on ICAAP.
- e) Governance and independent review.

The full ICAAP cycle, from initial planning to regulatory submission and independent review, involves close coordination among the risk, capital and finance functions together with business and support divisions. In line with BNM's guidelines on RWCAF (Basel II) – ICAAP (Pillar 2), the Group submits its ICAAP report to the BRCC for approval and the Board for notification.

### **CREDIT RISK**

Credit risk is defined as the possibility of losses due to an obligor, market counterparty or an issuer of securities or other instruments held, failing to perform its contractual obligations to the Group.

Credit risk is inherent in banking activities and arises from traditional financing activities through conventional loans, financing facilities, trade finance as well as commitments to support clients' obligations to third parties, e.g. guarantees or kafalah contracts.

In derivatives, sales and trading activities, credit risk arises from the possibility that our Group's counterparties will be unable or unwilling to fulfil their obligation on transactions on or before settlement dates.

#### ***Credit Risk Management***

Without effective credit risk management, the impact of the potential losses can be overwhelming. The purpose of credit risk management is to keep credit risk exposure to an acceptable level vis-à-vis the capital, and to ensure the returns commensurate with risks.

Consistent with the three lines of defence model on risk management where risks are managed from the point of risk-taking activities, our Group implemented the risk-based delegated authority framework. This framework promotes clarity of risk accountability whereby the business unit, being the first line of defence, manages risk in a proactive manner and Group Risk as a function independent from the business units is the second line of defence. This enhances the collaboration between Group Risk and the business units.

The risk-based delegated authority framework encompasses joint delegated authority, enhanced credit approval process and outlines a clear set of policies and procedures that defines the limits and types of authority designated to specific individuals.

Our Group adopts a multi-tiered credit approving authority spanning from the delegated authorities at business level, joint delegated authority holders between business units and Group Risk, to the various credit committees. The credit approving committees are set up to enhance the efficiency and effectiveness of the credit oversight as well as the credit approval process for all credit applications originating from the business units. For corporate, commercial and private banking loans, credit applications are independently evaluated by the Credit Risk CoE team prior to submission to the joint delegated authority or the relevant committees for approval; certain business units' officers are delegated with credit approving authority to approve low valued credit facilities. For retail loans, all credit applications are evaluated and approved by Consumer Credit Operations according to the designated delegated authority with higher limit approved at joint delegated authority and relevant credit committee.

The GRCC with the support of Group Credit Committee, Group Asset Quality Committee, other relevant credit committees as well as Group Risk is responsible for ensuring adherence to the Board's approved risk appetite and risk posture. This, amongst others, includes reviewing and analysing portfolio trends, asset quality, watch-list reporting and reviewing policy. It is also responsible for articulating key credit risks and mitigating controls.

Adherence to and compliance with country sector limit, single customer and country and global counterparty limits, are approaches adopted to address concentration risk to any large sector or industry, or to a particular counterparty group or individual.

**CREDIT RISK *(continued)***

***Credit Risk Management (continued)***

Adherence to the above established credit limits is monitored daily by Group Risk, which combines all exposures for each counterparty or group, including off balance sheet items and potential exposures. For retail products, portfolio limits are monitored monthly by Group Risk.

It is our Group policy that all exposures must be rated or scored based on the appropriate internal rating models, where available. Retail exposures are managed on a portfolio basis and the risk rating models are designed to assess the credit worthiness and the likelihood of the obligors to repay their debts, performed by way of statistical analysis from credit bureau and demographic information of the obligors. The risk rating models for non-retail exposures are designed to assess the credit worthiness of the corporations or entities in paying their obligations, derived from both quantitative and qualitative risk factors such as financial history and demographics or company profile. These rating models are developed and implemented to standardise and enhance the credit underwriting and decision-making process for our Group's retail and non-retail exposures.

Credit reviews and rating are conducted on the non-retail credit exposures at minimum on an annual basis, and more frequently when material information on the obligor or other external factors come to light.

The exposures are actively monitored, reviewed on a regular basis and reported regularly to GRCC and BRCC. Asset quality is closely monitored so that deteriorating exposures are identified, analysed and discussed with the relevant business units for appropriate remedial actions including recovery actions, if required.

In addition to the above, the Group also employs VaR to measure credit concentration risk. The Group adopted the Monte Carlo simulation approach in the generation of possible portfolio scenarios to obtain the standalone and portfolio VaR. This approach takes into account the credit concentration risk and the correlation between obligors/counterparties and industries.

**CREDIT RISK (continued)**

**Summary of Credit Exposures**

i) Gross Credit Exposures by Geographic Distribution

The geographic distribution is based on the country in which the portfolio is geographically managed. The following tables represent CIMB Bank's credit exposures by geographic region:

**Table 3: Geographic Distribution of Credit Exposures**

2019	CIMB Bank				
(RM'000) Exposure Class	Malaysia	Singapore	Thailand	Other Countries	Total
Sovereign	35,074,852	3,313,260	-	141,882	38,529,994
PSE	4,038,442	-	-	-	4,038,442
Bank	16,023,632	5,539,387	-	4,169,446	25,732,466
Corporate	89,160,757	31,069,677	-	4,787,407	125,017,841
Mortgage/RRE Financing	59,788,763	6,200,128	-	242,188	66,231,079
HPE	7,722,783	-	-	-	7,722,783
QRRE	10,134,186	2,654,462	-	-	12,788,648
Other Retail	41,191,284	2,627,121	-	65	43,818,471
Other Exposures	6,183,449	700,900	-	725,182	7,609,531
<b>Total Gross Credit Exposure</b>	<b>269,318,149</b>	<b>52,104,935</b>	<b>-</b>	<b>10,066,170</b>	<b>331,489,254</b>

2018	CIMB Bank				
(RM'000) Exposure Class	Malaysia	Singapore	Thailand	Other Countries	Total
Sovereign	32,679,363	3,704,695	-	133,219	36,517,277
PSE	4,340,505	-	-	-	4,340,505
Bank	16,347,269	2,982,962	-	1,367,735	20,697,967
Corporate	86,520,349	31,206,124	-	4,623,034	122,349,507
Mortgage/RRE Financing	55,390,387	4,808,553	-	271,287	60,470,227
HPE	8,561,254	-	-	-	8,561,254
QRRE	10,307,840	2,615,746	-	-	12,923,586
Other Retail	43,381,406	2,246,890	-	1,362	45,629,658
Other Exposures	6,359,105	406,593	-	400,857	7,166,555
<b>Total Gross Credit Exposure</b>	<b>263,887,478</b>	<b>47,971,564</b>	<b>-</b>	<b>6,797,494</b>	<b>318,656,536</b>



**BASEL II PILLAR 3 DISCLOSURES FOR 2019**
**CREDIT RISK (continued)**
**Summary of Credit Exposures (continued)**

## ii) Gross Credit Exposures by Sector

The following tables represent CIMB Bank's credit exposure analysed by sector:

**Table 4: Distribution of Credit Exposures by Sector**

2019												CIMB Bank
(RM'000) Exposure Class	Primary Agriculture	Mining and Quarrying	Manufacturing	Electricity, Gas and Water Supply	Construction	Wholesale and Retail Trade, and Restaurants and Hotels	Transport, Storage and Communication	Finance, Insurance/ Takaful, Real Estate and Business Activities	Education, Health and Others	Household	Others*	Total
Sovereign	182,249	-	-	855,724	3,120,050	-	2,665,141	11,484,229	20,031,887	-	190,714	38,529,994
PSE	2,703	-	-	-	-	-	-	183	4,035,208	-	347	4,038,442
Bank	-	-	-	-	-	-	-	25,732,466	-	-	-	25,732,466
Corporate	6,633,229	6,508,857	11,755,968	6,577,082	11,486,247	14,829,117	9,476,146	36,869,964	11,502,218	6,943,830	2,435,185	125,017,841
Mortgage/ RRE Financing	-	-	-	-	-	-	-	-	-	66,231,079	-	66,231,079
HPE	-	-	-	-	-	-	-	-	-	7,722,783	-	7,722,783
QRRE	-	-	-	-	-	-	-	-	-	12,788,648	-	12,788,648
Other Retail	183,413	51,687	1,040,032	31,691	762,703	2,062,806	284,296	2,534,866	562,120	36,304,858	-	43,818,471
Other Exposures	-	-	-	66,891	-	-	-	1,217,844	57,302	-	6,267,494	7,609,531
<b>Total Gross Credit Exposure</b>	<b>7,001,594</b>	<b>6,560,543</b>	<b>12,795,999</b>	<b>7,531,387</b>	<b>15,369,000</b>	<b>16,891,923</b>	<b>12,425,583</b>	<b>77,839,551</b>	<b>36,188,735</b>	<b>129,991,198</b>	<b>8,893,740</b>	<b>331,489,254</b>

\*Others are exposures which are not elsewhere classified.

**BASEL II PILLAR 3 DISCLOSURES FOR 2019**
**CREDIT RISK (continued)**
**Summary of Credit Exposures (continued)**

ii) Gross Credit Exposures by Sector (continued)

**Table 4: Distribution of Credit Exposures by Sector (continued)**

2018	CIMB Bank											
(RM'000) Exposure Class	Primary Agriculture	Mining and Quarrying	Manufacturing	Electricity, Gas and Water Supply	Construction	Wholesale and Retail Trade, and Restaurants and Hotels	Transport, Storage and Communication	Finance, Insurance/ Takaful, Real Estate and Business Activities	Education, Health and Others	Household	Others*	Total
Sovereign	201,135	-	-	894,052	2,212,408	-	2,899,126	9,246,085	20,953,167	-	111,305	36,517,277
PSE	2,817	-	-	-	-	-	50	274	4,337,036	-	328	4,340,505
Bank	-	-	-	-	-	-	-	20,697,967	-	-	-	20,697,967
Corporate	6,424,210	7,046,438	8,406,110	6,570,715	12,361,219	15,573,597	11,750,256	35,422,328	10,167,153	6,524,139	2,103,341	122,349,507
Mortgage/ RRE Financing	-	-	-	-	-	-	-	-	-	60,470,227	-	60,470,227
HPE	-	-	-	-	-	-	-	-	-	8,561,254	-	8,561,254
QRRE	-	-	-	-	-	-	-	-	-	12,923,586	-	12,923,586
Other Retail	169,503	51,492	1,008,592	18,087	722,817	1,878,385	272,449	2,353,625	565,186	38,589,521	-	45,629,658
Other Exposures	-	-	-	-	-	-	-	1,276,879	72,114	-	5,817,562	7,166,555
<b>Total Gross Credit Exposure</b>	<b>6,797,665</b>	<b>7,097,929</b>	<b>9,414,702</b>	<b>7,482,854</b>	<b>15,296,444</b>	<b>17,451,983</b>	<b>14,921,882</b>	<b>68,997,158</b>	<b>36,094,655</b>	<b>127,068,727</b>	<b>8,032,537</b>	<b>318,656,536</b>

\*Others are exposures which are not elsewhere classified.

**CREDIT RISK (continued)**

**Summary of Credit Exposures (continued)**

iii) Gross Credit Exposures by Residual Contractual Maturity

The following tables represent CIMB Bank's credit exposure analysed by residual contractual maturity:

**Table 5: Distribution of Credit Exposures by Residual Contractual Maturity**

2019	CIMB Bank			
(RM'000) Exposure Class	Less than 1 year	1 to 5 years	More than 5 years	Total
Sovereign	15,621,251	10,682,627	12,226,116	38,529,994
PSE	1,171	4,854	4,032,416	4,038,442
Bank	20,024,113	4,473,429	1,234,924	25,732,466
Corporate	47,665,262	43,380,796	33,971,783	125,017,841
Mortgage/RRE Financing	36,483	610,280	65,584,315	66,231,079
HPE	70,935	3,910,690	3,741,159	7,722,783
QRRE	12,788,648	-	-	12,788,648
Other Retail	2,219,763	3,726,298	37,872,410	43,818,471
Other Exposures	41,182	224,325	7,344,024	7,609,531
<b>Total Gross Credit Exposure</b>	<b>98,468,809</b>	<b>67,013,298</b>	<b>166,007,146</b>	<b>331,489,254</b>

2018	CIMB Bank			
(RM'000) Exposure Class	Less than 1 year	1 to 5 years	More than 5 years	Total
Sovereign	13,517,134	8,666,676	14,333,467	36,517,277
PSE	302,900	5,204	4,032,402	4,340,505
Bank	13,565,275	6,383,521	749,170	20,697,967
Corporate	47,455,903	41,457,758	33,435,846	122,349,507
Mortgage/RRE Financing	32,412	596,218	59,841,598	60,470,227
HPE	69,324	3,929,935	4,561,996	8,561,254
QRRE	12,923,586	-	-	12,923,586
Other Retail	2,143,313	2,780,098	40,706,247	45,629,658
Other Exposures	35,112	183,842	6,947,602	7,166,555
<b>Total Gross Credit Exposure</b>	<b>90,044,958</b>	<b>64,003,251</b>	<b>164,608,327</b>	<b>318,656,536</b>

**CREDIT RISK (continued)**

**Credit Quality of Loans, Advances & Financing**

i) Past Due But Not Impaired

A loan/financing is considered past due when any payment due under strict contractual terms is received late or missed. Late processing and other administrative delays on the side of the borrower/customer can lead to a financial asset being past due but not impaired. Therefore, loans/financing and advances less than 90 days past due are not usually considered impaired, unless other information is available to indicate the contrary. For the purposes of this analysis, an asset is considered past due and included below when any payment due under strict contractual terms is received late or missed. The amount included is the entire financial asset, not just the payment, of principal or interest/profit or both, overdue.

The following tables provide an analysis of the outstanding balances as at 31 December 2019 and 31 December 2018 which were past due but not impaired by sector and geographical respectively:

**Table 6: Past Due but Not Impaired Loans, Advances and Financing by Sector**

(RM'000)	CIMB Bank	
	2019	2018
Primary Agriculture	17,581	24,516
Mining and Quarrying	3,869	13,211
Manufacturing	59,295	71,801
Electricity, Gas and Water Supply	675	171
Construction	73,899	88,427
Wholesale and Retail Trade, and Restaurants and Hotels	131,989	224,179
Transport, Storage and Communication	22,917	33,655
Finance, Insurance/Takaful, Real Estate and Business Activities	249,198	240,142
Education, Health and Others	38,444	105,929
Household	7,206,527	8,007,840
Others*	10,238	8,253
<b>Total</b>	<b>7,814,632</b>	<b>8,818,124</b>

\*Others are exposures which are not elsewhere classified.

**Table 7: Past Due but Not Impaired Loans, Advances and Financing by Geographic Distribution**

(RM'000)	CIMB Bank	
	2019	2018
Malaysia	7,569,713	8,334,133
Singapore	242,111	346,491
Other Countries	2,808	137,500
<b>Total</b>	<b>7,814,632</b>	<b>8,818,124</b>

**CREDIT RISK (continued)**

**Credit Quality of Loans, Advances & Financing (continued)**

ii) Credit Impaired Loans/Financings

CIMB Bank classifies a loan, advances and financing as credit impaired when it meets one or more of the following criteria:

- (a) Where the principal or interest/profit or both of the credit facility is past due for more than 90 days or 3 months;
- (b) In the case of revolving credit facilities (e.g. overdraft facilities), where the outstanding amount has remained in excess of the approved limit for a period of more than 90 days or 3 months;
- (c) Where the amount is past due or the outstanding amount has been in excess of the approved limit for 90 days or 3 months or less, and the credit facility exhibits weaknesses in accordance with the Bank's internal credit risk rating framework; or
- (d) As soon as a default occurs where the principal and /or interest/profit repayments/payments are scheduled on intervals of 3 months or longer. For the purpose of ascertaining the period in arrears:
  - Repayment/payment on each of the instalment amount must be made in full. A partial repayment/payment made on an instalment amount shall be deemed to be still in arrears; and
  - Where a moratorium on credit facilities is granted in relation to the rescheduling and restructuring exercise due to specific and exceptional circumstances as set in the Bank's internal policy, the determination of period in arrears shall exclude the moratorium period granted.
- (e) Force Impaired Credit Facilities  
The credit facility is force impaired due to various reasons, such as bankruptcy, appointment of Independent Financial Advisor, etc. In the event where a credit facility is not in default or past due but force impaired, the credit facility shall be classified as impaired upon approval by GAQC.
- (f) Cross Default  
When an obligor/counterparty has multiple credit facilities with the Bank and cross default obligation applies, an assessment of provision is required under which default of one debt/financing obligation triggers default on another debt/financing obligation (cross default). Where there is no right to set off clause is available, assessment of provision needs to be performed on individual credit facility level instead of consolidated obligor/counterparty level.

The Bank assesses on a forward looking basis the expected credit losses (ECL) associated with its loans, advances and financing. The ECL is measured on either a 12-month or Lifetime basis depending on whether a significant increase in credit risk has occurred since initial recognition or whether an asset is considered to be credit-impaired. The 12-month or lifetime ECL reflects multiple forward-looking scenarios and is weighted based on the probability of occurrence for each scenario. The ECL can be assessed and measured either on collective or individual basis.

For collective assessment, the ECL is determined by projecting the PD, LGD and EAD for each future month and for each individual exposure or collective segment. The three components are multiplied together to calculate an ECL for each future month, which is then discounted back to the reporting date and summed. The discount rate used in the ECL calculation is the original effective interest rate or an approximation thereof.

**CREDIT RISK (continued)**

**Credit Quality of Loans, Advances & Financing (continued)**

ii) Credit Impaired Loans/Financings (continued)

For individual assessment, the ECL allowance is determined by comparing the outstanding exposure with the present value of cash flow which is expected to be received from the borrower.

The following tables provide an analysis of the outstanding balances as at 31 December 2019 and 31 December 2018 which were credit impaired by sector and geographical respectively:

**Table 8: Credit Impaired Loans, Advances and Financing by Sector**

(RM'000)	CIMB Bank	
	2019	2018
Primary Agriculture	52,651	52,576
Mining and Quarrying	825,267	1,003,220
Manufacturing	152,031	162,985
Electricity, Gas and Water Supply	247,202	726
Construction	134,838	140,463
Wholesale and Retail Trade, and Restaurants and Hotels	249,585	230,463
Transport, Storage and Communication	1,054,568	1,054,174
Finance, Insurance/Takaful, Real Estate and Business Activities	241,853	239,652
Education, Health and Others	95,209	100,631
Household	1,371,436	1,142,120
Others*	6,353	7,541
<b>Total</b>	<b>4,430,993</b>	<b>4,134,551</b>

\*Others are exposures which are not elsewhere classified.

**Table 9: Credit Impaired Loans, Advances and Financing by Geographic Distribution**

(RM'000)	CIMB Bank	
	2019	2018
Malaysia	3,601,006	3,093,067
Singapore	826,283	676,323
Other Countries	3,704	365,161
<b>Total</b>	<b>4,430,993</b>	<b>4,134,551</b>

**CREDIT RISK (continued)**

**Credit Quality of Loans, Advances & Financing (continued)**

iii) Expected Credit Losses

**Table 10: Expected credit losses (Stage 1, 2 and 3) by Sector**

(RM'000)	CIMB Bank			
	2019			
	12-month expected credit losses (Stage 1)	Lifetime expected credit losses – not credit impaired (Stage 2)	Lifetime expected credit losses – credit impaired (Stage 3)	Total
Primary Agriculture	21,167	6,413	25,059	52,639
Mining and Quarrying	15,016	302	209,375	224,693
Manufacturing	27,366	3,569	173,911	204,846
Electricity, Gas and Water Supply	1,886	44	23,910	25,840
Construction	17,149	3,908	68,731	89,788
Wholesale and Retail Trade, and Restaurants and Hotels	16,631	21,358	49,932	87,921
Transport, Storage and Communications	11,446	1,082	980,693	993,221
Finance, Insurance/Takaful, Real Estate and Business Activities	55,888	10,503	154,131	220,522
Education, Health and Others	11,853	1,970	3,189	17,012
Household	453,534	395,451	500,298	1,349,283
Others*	9,540	475	4,866	14,881
<b>Total</b>	<b>641,476</b>	<b>445,075</b>	<b>2,194,095</b>	<b>3,280,646</b>

\*Others are exposures which are not elsewhere classified.

**CREDIT RISK (continued)**

**Credit Quality of Loans, Advances & Financing (continued)**

iii) Expected Credit Losses (continued)

**Table 10: Expected credit losses (Stage 1, 2 and 3) by Sector (continued)**

(RM'000)	CIMB Bank			
	2018			
	12-month expected credit losses (Stage 1)	Lifetime expected credit losses – not credit impaired (Stage 2)	Lifetime expected credit losses – credit impaired (Stage 3)	Total
Primary Agriculture	26,420	6,102	31,549	64,071
Mining and Quarrying	8,522	4,694	201,290	214,506
Manufacturing	41,166	58,875	115,535	215,576
Electricity, Gas and Water Supply	6,862	3,071	488	10,421
Construction	25,599	20,384	70,190	116,173
Wholesale and Retail Trade, and Restaurants and Hotels	70,744	40,294	97,444	208,482
Transport, Storage and Communications	19,092	7,730	1,025,433	1,052,255
Finance, Insurance/Takaful, Real Estate and Business Activities	97,657	35,763	155,061	288,481
Education, Health and Others	13,405	12,089	5,634	31,128
Household	441,328	226,796	491,118	1,159,242
Others*	8,606	27,695	5,875	42,176
<b>Total</b>	<b>759,401</b>	<b>443,493</b>	<b>2,199,617</b>	<b>3,402,511</b>



**CREDIT RISK (continued)**

**Credit Quality of Loans, Advances & Financing (continued)**

iii) Expected Credit Losses (continued)

**Table 11: Expected credit losses (Stage 1, 2 and 3) by Geographic Distribution**

(RM'000)	CIMB Bank			
	2019			
	12-month expected credit losses (Stage 1)	Lifetime expected credit losses – not credit impaired (Stage 2)	Lifetime expected credit losses – credit impaired (Stage 3)	Total
Malaysia	522,587	413,418	1,987,052	2,923,057
Singapore	107,842	31,456	205,628	344,926
Other Countries	11,047	201	1,415	12,663
<b>Total</b>	<b>641,476</b>	<b>445,075</b>	<b>2,194,095</b>	<b>3,280,646</b>

(RM'000)	CIMB Bank			
	2018			
	12-month expected credit losses (Stage 1)	Lifetime expected credit losses – not credit impaired (Stage 2)	Lifetime expected credit losses – credit impaired (Stage 3)	Total
Malaysia	553,468	369,092	1,735,541	2,658,101
Singapore	149,604	70,471	262,303	482,378
Thailand	30,172	-	-	30,172
Other Countries	26,157	3,930	201,773	231,860
<b>Total</b>	<b>759,401</b>	<b>443,493</b>	<b>2,199,617</b>	<b>3,402,511</b>

**CREDIT RISK (continued)**

**Credit Quality of Loans, Advances & Financing (continued)**

iii) Expected Credit Losses (continued)

**Table 12: Expected credit losses charges/(write back) and write-off for Stage 3**

(RM'000)	CIMB Bank	
	2019	
	Charges/(write back)	Write-off
	Lifetime expected credit losses - Credit impaired (Stage 3)	Lifetime expected credit losses - Credit impaired (Stage 3)
Primary Agriculture	1,859	10,009
Mining and Quarrying	51,732	30,372
Manufacturing	98,731	48,851
Electricity, Gas and Water Supply	23,483	127
Construction	23,951	34,921
Wholesale and Retail Trade, and Restaurants and Hotels	21,726	41,055
Transport, Storage and Communications	(14,874)	44,587
Finance, Insurance/Takaful, Real Estate and Business Activities	24,933	14,103
Education, Health and Others	3,166	6,948
Household	515,123	473,682
Others*	(494)	871
<b>Total</b>	<b>749,336</b>	<b>705,526</b>

\*Others are exposures which are not elsewhere classified.

**CREDIT RISK (continued)**

**Credit Quality of Loans, Advances & Financing (continued)**

iii) Expected Credit Losses (continued)

**Table 12: Expected credit losses charges/(write back) and write-off for Stage 3 (continued)**

(RM'000)	CIMB Bank	
	2018	
	Charges/(write back)	Write-off
	Lifetime expected credit losses - Credit impaired (Stage 3)	Lifetime expected credit losses - Credit impaired (Stage 3)
Primary Agriculture	2,419	3,343
Mining and Quarrying	58,555	2,947
Manufacturing	35,427	25,596
Electricity, Gas and Water Supply	148	22
Construction	17,930	6,473
Wholesale and Retail Trade, and Restaurants and Hotels	(29,903)	34,106
Transport, Storage and Communications	12,033	2,697
Finance, Insurance/Takaful, Real Estate and Business Activities	6,738	5,965
Education, Health and Others	1,318	2,199
Household	521,726	497,669
Others*	12,407	838
<b>Total</b>	<b>638,798</b>	<b>581,855</b>

\*Others are exposures which are not elsewhere classified

**CREDIT RISK (continued)**

**Credit Quality of Loans, Advances & Financing (continued)**

iii) Expected Credit Losses (continued)

**Table 13: Analysis of movement in the Expected Credit Losses for Loans, Advances and Financing**

(RM'000)	CIMB Bank			
	2019			
	12-month expected credit losses (Stage 1)	Lifetime expected credit losses - not credit impaired (Stage 2)	Lifetime expected credit losses - credit impaired (Stage 3)	Total
<b>At 1 January 2019</b>	759,401	443,493	2,199,617	3,402,511
Changes in expected credit losses due to transferred within stages	469,847	(346,936)	(122,911)	-
Transferred to Stage 1	639,224	(542,606)	(96,618)	-
Transferred to Stage 2	(168,242)	462,742	(294,500)	-
Transferred to Stage 3	(1,135)	(267,072)	268,207	-
<b>Total charge to Income Statement</b>	<b>(587,332)</b>	<b>347,968</b>	<b>749,336</b>	<b>509,972</b>
New financial assets originated	530,200	4,570	81,768	616,538
Financial assets that have been derecognised	(297,847)	(76,305)	-	(374,152)
Write back in respect of full recoveries	-	-	(42,425)	(42,425)
Change in credit risk	(819,685)	419,703	709,993	310,011
Write-offs	(193)	(33)	(705,526)	(705,752)
Exchange fluctuation	(261)	64	(2,490)	(2,687)
Transfer from related companies	-	-	-	-
Other movements	14	519	76,069	76,602
<b>Total</b>	<b>641,476</b>	<b>445,075</b>	<b>2,194,095</b>	<b>3,280,646</b>

**CREDIT RISK (CONTINUED)**

**Credit Quality of Loans, Advances and Financing (continued)**

iii) Expected Credit Losses (continued)

**Table 13: Analysis of movement in the Expected Credit Losses for Loans, Advances and Financing (continued)**

(RM'000)	CIMB Bank			
	2018			
	12-month expected credit losses (Stage 1)	Lifetime expected credit losses - not credit impaired (Stage 2)	Lifetime expected credit losses - credit impaired (Stage 3)	Total
<b>At 1 January 2018</b>	702,566	478,824	2,239,192	3,420,582
Changes in expected credit losses due to transferred within stages	630,749	(496,364)	(134,835)	-
Transferred to Stage 1	883,127	(683,135)	(199,992)	-
Transferred to Stage 2	(202,020)	449,963	(247,943)	-
Transferred to Stage 3	(50,358)	(263,192)	313,550	-
<b>Total charge to Income Statement</b>	(573,492)	455,651	638,798	520,957
New financial assets originated	339,194	1,228	24,879	365,301
Financial assets that have been derecognised	(251,885)	(66,123)	-	(318,008)
Write back in respect of full recoveries	-	-	(37,808)	(37,808)
Change in credit risk	(660,801)	520,546	651,727	511,472
Write-offs	(706)	(99)	(581,855)	(582,660)
Exchange fluctuation	1,208	206	2,264	3,678
Transfer from related companies	49	51	792	892
Other movements	(973)	5,224	34,811	39,062
<b>Total</b>	<b>759,401</b>	<b>443,493</b>	<b>2,199,617</b>	<b>3,402,511</b>

**CREDIT RISK (continued)**

***Capital Treatment for Credit Risk for Portfolios under the SA***

Details on RWA and capital requirements related to Credit Risk are disclosed separately for CIMB Bank in Table 2. Details on the disclosure for portfolios under the SA and the IRB Approach are in the sections that followed.

***Credit Risk – Disclosure for Portfolios under the SA***

Credit exposures under SA are mainly exposures where the IRB Approach is not applicable or exposures that will eventually adopt the IRB Approach. Under SA, the regulator prescribes the risk weights for all asset types.

Exposures which are rated externally relate to sovereign and central banks while the unrated exposures relate to personal financing and other exposures. The Group applies external ratings for credit exposures under SA from S&P, Moody's, Fitch, RAM, MARC and R&I. CIMB Group follows the process prescribed under BNM's guidelines on CAF (Basel II – Risk-Weighted Assets) and CAFIB (Risk-Weighted Assets) to map the ratings to the relevant risk weights for computation of regulatory capital.

The following tables present the credit exposures by risk weights and after credit risk mitigation:

BASEL II PILLAR 3 DISCLOSURES FOR 2019

CREDIT RISK (continued)

Credit Risk – Disclosure for Portfolios under the SA (continued)

Table 14: Disclosure by Risk Weight under SA

2019												CIMB Bank
(RM'000) Risk Weights	Sovereign/ Central Banks	PSEs	Banks, MDBs and DFIs	Insurance Cos/Takaful Operators, Securities Firms & Fund Managers	Corporate	Regulatory Retail	Residential Mortgages/ RRE Financing	Higher Risk Assets	Other Assets	Securitisation *	Total Exposures after Netting and Credit Risk Mitigation*	Total Risk- Weighted Assets
0%	38,150,327	-	216,137	-	-	3,080	-	-	3,568,274	-	41,937,818	-
20%	-	38,354	163,462	248,694	2,849	420,518	-	-	-	289,990	1,163,867	232,773
35%	-	-	-	-	-	-	990,537	-	-	-	990,537	346,688
50%	334,153	-	613,482	1,174,673	41,797	22,044	58,830	-	-	-	2,244,978	1,122,489
75%	-	-	-	-	-	12,448,289	-	-	-	-	12,448,289	9,336,216
100%	45,514	-	-	547,753	5,689,081	253,781	16,866	-	2,649,135	-	9,202,129	9,202,129
100% < RW < 1250%	-	-	-	-	69,196	26,637	-	1,102,133	-	-	1,197,967	1,796,950
1250%	-	-	-	-	104,147	-	-	-	-	-	104,147	1,301,838
<b>Total</b>	<b>38,529,994</b>	<b>38,354</b>	<b>993,081</b>	<b>1,971,120</b>	<b>5,907,070</b>	<b>13,174,349</b>	<b>1,066,232</b>	<b>1,102,133</b>	<b>6,217,408</b>	<b>289,990</b>	<b>69,289,732</b>	<b>23,339,084</b>
<b>Average Risk Weight</b>	<b>1%</b>	<b>20%</b>	<b>34%</b>	<b>60%</b>	<b>120%</b>	<b>74%</b>	<b>37%</b>	<b>150%</b>	<b>43%</b>	<b>20%</b>	<b>34%</b>	
<b>Deduction from Capital Base</b>	-	-	-	-	-	-	-	-	-	-	-	

\*The total includes the portion which is deducted from Capital Base, if any.

BASEL II PILLAR 3 DISCLOSURES FOR 2019

CREDIT RISK (continued)

Credit Risk – Disclosure for Portfolios under the SA (continued)

Table 14: Disclosure by Risk Weight under SA (continued)

2018	CIMB Bank											
(RM'000) Risk Weights	Sovereign/ Central Banks	PSEs	Banks, MDBs and DFIs	Insurance Cos/Takaful Operators, Securities Firms & Fund Managers	Corporate	Regulatory Retail	Residential Mortgages/ RRE Financing	Higher Risk Assets	Other Assets	Securitisation *	Total Exposures after Netting and Credit Risk Mitigation*	Total Risk- Weighted Assets
0%	36,248,372	-	-	-	-	2,420	-	-	2,872,334	-	39,123,127	-
20%	-	37,923	144,556	409,874	3,579	483,580	-	-	-	247,513	1,327,025	265,405
35%	-	-	-	-	-	-	843,120	-	-	-	843,120	295,092
50%	268,905	-	27,415	1,065,492	116,816	8,866	61,067	-	-	-	1,548,561	774,281
75%	-	-	-	-	-	10,884,470	-	-	-	-	10,884,470	8,163,353
100%	-	-	-	425,193	5,645,549	62,953	16,805	-	2,945,228	-	9,095,729	9,095,729
100% < RW < 1250%	-	-	-	-	98,819	4,272	-	1,101,480	-	-	1,204,571	1,806,856
1250%	-	-	-	-	104,147	-	-	-	-	-	104,147	1,301,838
<b>Total</b>	<b>36,517,277</b>	<b>37,923</b>	<b>171,971</b>	<b>1,900,559</b>	<b>5,968,911</b>	<b>11,446,562</b>	<b>920,992</b>	<b>1,101,480</b>	<b>5,817,562</b>	<b>247,513</b>	<b>64,130,750</b>	<b>21,702,553</b>
<b>Average Risk Weight</b>	<b>0%</b>	<b>20%</b>	<b>25%</b>	<b>55%</b>	<b>120%</b>	<b>73%</b>	<b>37%</b>	<b>150%</b>	<b>51%</b>	<b>20%</b>	<b>34%</b>	
<b>Deduction from Capital Base</b>	-	-	-	-	-	-	-	-	-	-	-	

\*The total includes the portion which is deducted from Capital Base, if any.



**CREDIT RISK (continued)**

**Credit Risk – Disclosure for Portfolios under the SA (continued)**

The following tables present the non-retail credit exposures before the effect of credit risk mitigation, according to ratings by ECAIs:

**Table 15: Disclosures of Rated and Unrated Non-Retail Exposures under SA according to Ratings by ECAIs**

2019		CIMB Bank		
(RM '000) Exposure Class	Investment Grade	Non-Investment Grade	No Rating	Total
<b>On and Off-Balance-Sheet Exposures</b>				
Public Sector Entities	-	-	4,038,442	4,038,442
Insurance Cos/Takaful Operators, Securities Firms & Fund Managers	1,440,043	-	567,681	2,007,723
Corporate	112	-	10,644,904	10,645,016
Sovereign/Central Banks	23,353,283	-	15,176,711	38,529,994
Banks, MDBs and DFIs	993,081	-	-	993,081
<b>Total</b>	<b>25,786,519</b>	<b>-</b>	<b>30,427,738</b>	<b>56,214,257</b>

2018		CIMB Bank		
(RM '000) Exposure Class	Investment Grade	Non-Investment Grade	No Rating	Total
<b>On and Off-Balance-Sheet Exposures</b>				
Public Sector Entities	-	-	4,340,505	4,340,505
Insurance Cos/Takaful Operators, Securities Firms & Fund Managers	1,488,365	-	416,144	1,904,510
Corporate	3,367	-	10,160,638	10,164,004
Sovereign/Central Banks	22,187,017	-	14,330,260	36,517,277
Banks, MDBs and DFIs	171,971	-	-	171,971
<b>Total</b>	<b>23,850,720</b>	<b>-</b>	<b>29,247,548</b>	<b>53,098,268</b>

CREDIT RISK (continued)

Credit Risk – Disclosure for Portfolios under the SA (continued)

Table 16: Disclosures of Securitisation under SA according to Ratings by ECAIs

2019		CIMB Bank		
(RM '000) Exposure Class	Investment Grade	Non-Investment Grade	No Rating	Total
On and Off-Balance-Sheet Exposures				
Securitisation	289,990	-	-	289,990

2018		CIMB Bank		
(RM '000) Exposure Class	Investment Grade	Non-Investment Grade	No Rating	Total
On and Off-Balance-Sheet Exposures				
Securitisation	247,513	-	-	247,513

### **CREDIT RISK (continued)**

#### ***Credit Risk – Disclosure for Portfolios under the IRB Approach***

CIMB Bank adopts the A-IRB Approach for its retail exposures and F-IRB Approach for its non-retail exposures. The IRB Approach allows CIMB Bank to adopt various rating systems to measure its credit risk to both retail and non-retail exposures. The internal risk rating systems are used not only for regulatory capital purposes, but also for credit approval and risk management reporting.

For retail exposures, application scorecards are integral to the credit approval process. Credit officers use scorecard outputs in the determination of approval of a credit application. Behavioural scorecards are used to determine the future conduct of the account for collection and limit management purposes.

For non-retail exposures, internal ratings are one of the tools used to assist the approving committees in making informed decisions of the credit application.

The models used in the internal rating systems are subject to strict governance and controls. The models are developed and maintained by Group Risk with input from business units to ensure that material risks are captured. Before the models are implemented, they are subject to approval by GRCC and subsequently BRCC. After implementation, the models are subject to regular performance monitoring to ensure that they continue to perform as expected and the risk parameters remain appropriate.

New models are assessed by a validation team, which is independent from the development team, to ensure robustness of the model development process, completeness of the documentation, and accuracy of the risk estimates. The validation exercise also ensures that the models meet regulatory standards. Existing models are assessed on an annual basis by the validation team to ensure that the models continue to be appropriate and the risk estimates continue to be accurate.

#### ***Retail Exposures***

Retail exposures are portfolio in large numbers of similarly managed exposures due to homogeneous characteristics. This applies to both exposures to individuals as well as exposures to small businesses which are managed on a pooled basis. The exposure of a single retail facility is typically low and usually referred to as program lending/financing.

Retail exposures covered under the A-IRB Approach include credit cards, auto loans/financing, Xpress Cash, residential mortgages, business premises loans/financing and ASB financing. The PDs of these exposures are typically estimated from the outputs of application scorecards for newer customers and behavioural scorecards for older customers. The models deployed for retail portfolio include application and behavioural scorecards or application and behavioural models, PD, LGD and EAD segmentation.

#### **a) PD, LGD and EAD Segmentation Models for Retail Exposures**

The risk estimates are generally developed based on internal historical data and complies with BNM guidelines on CAF (Basel II - Risk-Weighted Assets) and CAFIB (Risk-Weighted Assets). However, in instances of insufficient historical data, the respective models risk estimate is developed based on expert judgment or aligned to available industry data with margins of conservatism applied.

**CREDIT RISK (continued)**

**Credit Risk – Disclosure for Portfolios under the IRB Approach (continued)**

*Retail Exposures (continued)*

PD Calibration

- PD is defined as the probability of a borrower/customer defaulting within a one year time horizon.
- PD estimated for each pool must be representative of the long term average. In the event the internal historical data is not sufficient to cover an economic cycle, appropriate adjustment (via Cycle Scaling Factor) will be incorporated based on proxy data which are relevant and of longer history to derive the long term average PD, which is normally referred to as “Central Tendency”.

EAD Estimation

- EAD represents the expected level of usage of the facility when default occurs.
- The EAD for retail exposures is generally based on the respective portfolio’s summed outstanding exposure including any undrawn balances, and for revolving exposures such as credit card receivables, each loan’s/financing’s EAD estimation includes the estimated net additional drawings for loans/financing defaulting over the next 12 months.

LGD Estimation

- LGD is the estimated amount of loss expected if a loan/financing defaults, calculated as a percentage of EAD. The value depends on the collateral (if any) and other factors (internal, external, direct and indirect costs associated with recoveries).
- LGD for retail exposures is estimated based on historical internal data and the following sources of recoveries are incorporated into the estimation:
  - (i) Regularisation of defaulted accounts.
  - (ii) Sale proceeds from collaterals.
  - (iii) Cash receipts from borrowers/customers.

**CREDIT RISK (continued)**

**Credit Risk – Disclosure for Portfolios under the IRB Approach (continued)**

*Retail Exposures (continued)*

The following tables summarise the retail credit exposures measured under A-IRB Approach as at 31 December 2019 and 31 December 2018:

**Table 17: Retail Exposures under the IRB Approach by PD Band**

2019	CIMB Bank			
(RM'000) PD Range of Retail Exposures	0% ≤ PD < 2%	2% ≤ PD < 100%	100% Or Default	Total
<b>Total Retail Exposure</b>	<b>94,829,537</b>	<b>18,238,995</b>	<b>1,977,017</b>	<b>115,045,549</b>
Residential Mortgage/RRE Financing	58,148,119	5,598,832	1,413,134	65,160,084
QRRE	9,139,308	3,538,118	111,222	12,788,648
Hire Purchase	6,793,067	832,229	97,487	7,722,783
Other Retail	20,749,043	8,269,816	355,175	29,374,033
<b>Exposure Weighted Average LGD</b>				
Residential Mortgage/RRE Financing	18%	21%	26%	
QRRE	89%	89%	89%	
Hire Purchase	50%	52%	54%	
Other Retail	25%	14%	54%	
<b>Exposure Weighted Average Risk Weight</b>				
Residential Mortgage/RRE Financing	10%	70%	209%	
QRRE	30%	137%	224%	
Hire Purchase	50%	87%	158%	
Other Retail	16%	22%	103%	

**CREDIT RISK (continued)**

**Credit Risk – Disclosure for Portfolios under the IRB Approach (continued)**

*Retail Exposures (continued)*

**Table 17: Retail Exposures under the IRB Approach by PD Band (continued)**

2018	CIMB Bank			
(RM'000) PD Range of Retail Exposures	0% ≤ PD < 2%	2% ≤ PD < 100%	100% Or Default	Total
<b>Total Retail Exposure</b>	<b>92,192,122</b>	<b>19,941,386</b>	<b>1,677,628</b>	<b>113,811,136</b>
Residential Mortgage/RRE Financing	52,730,061	5,684,615	1,132,100	59,546,776
QRRE	9,345,955	3,466,110	111,521	12,923,586
Hire Purchase	7,341,794	1,106,810	112,650	8,561,254
Other Retail	22,774,313	9,683,850	321,356	32,779,519
<b>Exposure Weighted Average LGD</b>				
Residential Mortgage/RRE Financing	19%	21%	27%	
QRRE	89%	89%	89%	
Hire Purchase	50%	52%	55%	
Other Retail	25%	12%	55%	
<b>Exposure Weighted Average Risk Weight</b>				
Residential Mortgage/RRE Financing	10%	68%	192%	
QRRE	29%	137%	222%	
Hire Purchase	50%	85%	185%	
Other Retail	16%	19%	114%	

**CREDIT RISK (continued)**

**Credit Risk – Disclosure for Portfolios under the IRB Approach (continued)**

*Retail Exposures (continued)*

**Table 18: Retail Exposures under the IRB Approach by Expected Loss Range**

2019	CIMB Bank			
(RM'000) EL Range of Retail Exposures	EL ≤ 1%	1% < EL < 100%	EL = 100%	Total
<b>Total Retail Exposure</b>	<b>103,623,287</b>	<b>11,191,212</b>	<b>231,049</b>	<b>115,045,549</b>
Residential Mortgage/RRE Financing	62,371,325	2,715,462	73,297	65,160,084
QRRE	7,689,817	5,098,142	689	12,788,648
Hire Purchase	6,795,406	919,723	7,654	7,722,783
Other Retail	26,766,739	2,457,885	149,409	29,374,033
<b>Exposure Weighted Average LGD</b>				
Residential Mortgage/RRE Financing	19%	25%	39%	
QRRE	89%	89%	90%	
Hire Purchase	50%	52%	53%	
Other Retail	21%	28%	88%	

2018	CIMB Bank			
(RM'000) EL Range of Retail Exposures	EL ≤ 1%	1% < EL < 100%	EL = 100%	Total
<b>Total Retail Exposure</b>	<b>102,191,956</b>	<b>11,405,955</b>	<b>213,225</b>	<b>113,811,136</b>
Residential Mortgage/RRE Financing	56,951,635	2,533,510	61,631	59,546,776
QRRE	7,782,532	5,138,753	2,301	12,923,586
Hire Purchase	7,348,697	1,206,655	5,902	8,561,254
Other Retail	30,109,091	2,527,037	143,391	32,779,519
<b>Exposure Weighted Average LGD</b>				
Residential Mortgage/RRE Financing	19%	25%	40%	
QRRE	89%	89%	90%	
Hire Purchase	50%	52%	54%	
Other Retail	21%	24%	88%	

**CREDIT RISK (continued)**

**Credit Risk – Disclosure for Portfolios under the IRB Approach (continued)**

*Non-retail Exposures*

Non-retail exposures covered under the F-IRB Approach include foreign sovereigns, corporates (Specialised Lending/Financing uses supervisory slotting criteria), SMEs and banks. The PDs of these exposures are estimated from internal ratings assigned across a spectrum of risk levels on a master scale. Each internal rating has a corresponding 1-year average PD and a likely corresponding regulatory loan/financing classification. The LGDs of these exposures are assigned as per the CAF (Basel II - Risk-Weighted Assets) and CAFIB (Risk-Weighted Assets); that is an LGD of 45% for senior exposures and 75% for subordinated exposures, with appropriate adjustments for eligible collateral.

The process by which an internal rating is assigned to an obligor is governed by the Group Credit Risk Rating Methodology. Firstly, a risk model uses a weighted combination of quantitative and qualitative risk factors to generate an initial rating. The quantitative risk factors and weights are derived through statistical techniques and the qualitative risk factors and weights are derived through deliberation with credit experts. The initial rating may subsequently be upgraded or downgraded based on a predefined set of criteria, such as quality of financial statements and support from a parent entity. Finally, an approving authority deliberates before deciding on a final rating. If a facility is guaranteed by one or more corporate guarantors, then the framework recognises the credit risk mitigation by substituting the obligor rating with the corporate guarantor’s rating.

The following tables summarise the non-retail credit exposures measured under F-IRB Approach as at 31 December 2019 and 31 December 2018:

**Table 19: Credit Exposures Subject to Supervisory Risk Weight under IRB Approach**

2019	CIMB Bank					
(RM '000) Supervisory Categories	Strong	Good	Satisfactory	Weak	Default	Total
Project Finance	637,140	1,719,524	-	-	1,673,357	4,030,021
Object Finance	-	-	-	-	-	-
Commodities Finance	-	-	-	-	-	-
Income Producing Real Estate	2,668,593	9,067,123	275,572	292,680	94,828	12,398,796
<b>RWA</b>	<b>1,691,883</b>	<b>8,230,150</b>	<b>316,908</b>	<b>731,701</b>	<b>-</b>	<b>10,970,641</b>



**CREDIT RISK (continued)**

**Credit Risk – Disclosure for Portfolios under the IRB Approach (continued)**

*Non-retail Exposures (continued)*

**Table 19: Credit Exposures Subject to Supervisory Risk Weight under IRB Approach (continued)**

2018	CIMB Bank					
(RM '000) Supervisory Categories	Strong	Good	Satisfactory	Weak	Default	Total
Project Finance	852,032	2,367,903	42,529	225,388	1,602,104	5,089,957
Object Finance	-	-	-	-	-	-
Commodities Finance	-	-	-	-	-	-
Income Producing Real Estate	1,578,315	10,742,738	592,488	167,070	88,270	13,168,881
<b>RWA</b>	<b>1,279,316</b>	<b>10,154,381</b>	<b>730,269</b>	<b>981,145</b>	<b>-</b>	<b>13,145,111</b>

CIMB Bank has no exposure to High Volatility Commercial Real Estate and Equities under the Supervisory Slotting Criteria.

**Table 20: Non-Retail Exposures under IRB Approach by Risk Grades**

2019	CIMB Bank				
(RM'000) Internal Risk Grading	1 - 3	4 - 9	10 - 13	Default	Total
<b>Total Non-Retail Exposure</b>	<b>39,887,758</b>	<b>59,591,083</b>	<b>18,277,499</b>	<b>2,919,329</b>	<b>120,675,669</b>
Sovereign/Central Banks	-	-	-	-	-
Bank	19,411,771	5,193,551	134,063	0	24,739,384
Corporate (excluding Specialised Lending/ Financing)	20,475,987	54,397,532	18,143,436	2,919,329	95,936,285
<b>Exposure Weighted Average LGD</b>					
Sovereign/Central Banks	-	-	-	-	
Bank	44%	44%	45%	45%	
Corporate (excluding Specialised Lending/ Financing)	42%	40%	37%	43%	
<b>Exposure Weighted Average Risk Weight</b>					
Sovereign/Central Banks	-	-	-	-	
Bank	21%	42%	166%	-	
Corporate (excluding Specialised Lending/ Financing)	17%	72%	111%	-	

**CREDIT RISK (continued)**

**Credit Risk – Disclosure for Portfolios under the IRB Approach (continued)**

*Non-retail Exposures (continued)*

**Table 20: Non-Retail Exposures under IRB Approach by Risk Grades (continued)**

2018	CIMB Bank				
(RM'000) Internal Risk Grading	1 - 3	4 - 9	10 - 13	Default	Total
<b>Total Non-Retail Exposure</b>	<b>31,841,854</b>	<b>57,456,848</b>	<b>20,961,763</b>	<b>2,287,685</b>	<b>112,548,150</b>
Sovereign/Central Banks	-	-	-	-	-
Bank	14,017,811	6,266,253	241,932	-	20,525,996
Corporate (excluding Specialised Lending/ Financing)	17,824,043	51,190,596	20,719,831	2,287,685	92,022,154
<b>Exposure Weighted Average LGD</b>					
Sovereign/Central Banks	-	-	-	-	
Bank	43%	44%	45%	-	
Corporate (excluding Specialised Lending/ Financing)	45%	41%	35%	43%	
<b>Exposure Weighted Average Risk Weight</b>					
Sovereign/Central Banks	-	-	-	-	
Bank	20%	40%	147%	-	
Corporate (excluding Specialised Lending/ Financing)	18%	73%	106%	-	

*\*Note: Subsequent to the disclosure, there was amendment to the 2017 figures.*

**CREDIT RISK (continued)**

**Credit Risk – Disclosure for Portfolios under the IRB Approach (continued)**

*Expected Losses versus Actual Losses by Portfolio Types*

The following table summarises the expected losses versus actual losses by portfolio type:

**Table 21: Analysis of Expected Losses versus Actual Losses by Portfolio Types**

<b>CIMB Bank</b>				
<b>(RM'000) Exposure Class</b>	<b>2019</b>		<b>2018</b>	
	<b>Regulatory Expected Losses as at 31 December 2018</b>	<b>Actual Losses for the year ended 31 December 2019</b>	<b>Regulatory Expected Losses as at 31 December 2017</b>	<b>Actual Losses for the year ended 31 December 2018</b>
Sovereign	-	-	-	-
Bank	14,602	0	11,042	0
Corporate	822,900	273,721	636,806	(18,842)
Mortgage/RRE Financing	163,875	62,655	192,390	73,717
HPE	89,911	137,502	92,091	147,988
QRRE	426,954	168,708	401,794	143,771
Other Retail	148,409	17,987	146,403	29,544
<b>Total</b>	<b>1,666,650</b>	<b>660,573</b>	<b>1,480,526</b>	<b>376,177</b>

Actual loss refers to impairment provisions and direct write-offs, if any during the year.

On the other hand, EL measures the loss expected from non-defaulted exposures at the start of the year. It is computed based on the risk parameters of the adopted IRB Approach. While a comparison of actual losses and EL provides some insight of the predictive power of the IRB Approach models used by the Group, the two metrics are not directly comparable due to the differences in methodology.

**CREDIT RISK (continued)**

***Off-Balance Sheet Exposures and Counterparty Credit Risk (CCR)***

Off-Balance Sheet exposures are exposures such as derivatives, trade facilities and undrawn commitments. The Group adopts the Current Exposure method to compute the capital requirement for CCR under BNM's guidelines on CAF (Basel II - Risk-Weighted Assets) and CAFIB (Risk-Weighted Assets).

i) **Credit Risk Mitigation**

For credit derivatives and swaps transactions, the Group enters into master agreement with counterparties, whenever possible. Further, the Group may also enter into CSA with counterparties. The net credit exposure with each counterparty is monitored based on the threshold agreed in the master agreement and the Group may request for additional margin for any exposures above the agreed threshold, in accordance with the terms specified in the relevant CSA or the master agreement. The eligibility of collaterals and frequency calls are negotiated with the counterparty and endorsed by GCC.

ii) ***Treatment of Rating Downgrade***

In the event of a one-notch downgrade of rating, based on the terms of the existing Credit Support Annexes, International Swaps and Derivatives Association Agreement and exposure as at 31 December 2019 and 31 December 2018 there was no requirement for additional collateral to be posted.

On the other hand, counterparty rating is being monitored and in the event of a rating downgrade, remedial actions such as revision of the counterparty credit limit, suspension of the limit or the request for additional collateral may be taken.

The following tables disclose the Off-Balance Sheet exposures and CCR as at 31 December 2019 and 31 December 2018:

CREDIT RISK (continued)

Off-Balance Sheet Exposures and CCR (continued)

Table 22: Disclosure on Off-Balance Sheet Exposures and CCR

2019	CIMB Bank			
(RM '000) Description	Principal Amount	Positive Fair Value of Derivative Contracts	Credit Equivalent Amount	Risk-Weighted Assets
Direct Credit Substitutes	3,321,133		3,321,133	2,139,947
Transaction Related Contingent Items	4,825,777		2,412,888	1,397,795
Short Term Self Liquidating Trade Related Contingencies	4,114,540		822,908	624,944
Assets Sold With Recourse	-		-	-
Forward Asset Purchases	-		-	-
Obligations under an On-going Underwriting Agreement	-		-	-
Lending/Financing of banks' securities or the posting of securities as collateral by banks, including instances where these arise out of repo-style transactions (i.e. repurchase/reverse repurchase and securities lending/borrowing transactions)/Commitments to buy back Islamic securities under Sales and Buy Back Agreement	439,666		442,012	48,499
Foreign Exchange Related Contracts				
One year or less	18,473,621	91,919	280,815	225,500
Over one year to five years	315,938	4,422	21,313	23,530
Over five years	-	-	-	-
Interest/Profit Rate Related Contracts				
One year or less	458,917	5,145	8,488	7,324
Over one year to five years	2,831,441	76,618	139,243	116,143
Over five years	382,748	26,262	57,178	55,005
Equity Related Contracts				
One year or less	72,097	1,168	5,494	8,686
Over one year to five years	178,546	54,538	68,822	102,155
Over five years	-	0	0	0
Commodity Contracts				
One year or less	451	646	691	1,712
Over one year to five years	497	1,025	1,084	2,687
Over five years	-	-	-	-
OTC derivative transactions and credit derivative contracts subject to valid bilateral netting agreements	491,843,710	2,176,992	8,298,907	3,805,331

CREDIT RISK (continued)

Off-Balance Sheet Exposures and CCR (continued)

Table 22: Disclosure on Off-Balance Sheet Exposures and CCR (continued)

2019	CIMB Bank			
(RM '000) Description	Principal Amount	Positive Fair Value of Derivative Contracts	Credit Equivalent Amount	Risk-Weighted Assets
Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year	25,901,409		23,332,949	7,264,412
Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year	-		-	-
Any commitments that are unconditionally cancellable at any time by the bank without prior notice or that effectively provide for automatic cancellation due to deterioration in a borrower's/customer's creditworthiness	95,391,764		-	-
Unutilised credit card lines	25,258,786		6,303,453	2,750,482
Off-balance sheet items for securitisation exposures	-		-	-
Off-balance sheet exposures due to early amortisation provisions	-		-	-
<b>Total</b>	<b>673,811,041</b>	<b>2,438,734</b>	<b>45,517,378</b>	<b>18,574,153</b>

**CREDIT RISK (continued)**

**Off-Balance Sheet Exposures and CCR (continued)**

**Table 22: Disclosure on Off-Balance Sheet Exposures and CCR (continued)**

2018	CIMB Bank			
(RM '000) Description	Principal Amount	Positive Fair Value of Derivative Contracts	Credit Equivalent Amount	Risk-Weighted Assets
Direct Credit Substitutes	2,946,238		2,946,238	1,814,841
Transaction Related Contingent Items	4,381,626		2,190,813	1,291,041
Short Term Self Liquidating Trade Related Contingencies	2,179,143		435,829	222,600
Assets Sold With Recourse	-		-	-
Forward Asset Purchases	-		-	-
Obligations under an On-going Underwriting Agreement	-		-	-
Lending/Financing of banks' securities or the posting of securities as collateral by banks, including instances where these arise out of repo-style transactions (i.e. repurchase/reverse repurchase and securities lending/borrowing transactions)/Commitments to buy back Islamic securities under Sales and Buy Back Agreement	487,231		487,231	36,342
Foreign Exchange Related Contracts				
One year or less	19,792,574	107,965	297,807	215,765
Over one year to five years	158,313	3,452	12,362	16,142
Over five years	-	-	-	-
Interest/Profit Rate Related Contracts				
One year or less	1,913,634	146,818	167,268	181,323
Over one year to five years	3,311,911	82,858	183,095	174,810
Over five years	610,752	36,116	87,609	61,645
Equity Related Contracts				
One year or less	78,109	560	5,247	4,233
Over one year to five years	205,176	52,849	69,263	98,036
Over five years	-	-	-	-
Commodity Contracts				
One year or less	4,790	386	865	811
Over one year to five years	-	-	-	-
Over five years	-	-	-	-
OTC derivative transactions and credit derivative contracts subject to valid bilateral netting agreements	476,510,089	2,647,709	9,243,011	4,046,761

CREDIT RISK (continued)

Off-Balance Sheet Exposures and CCR (continued)

Table 22: Disclosure on Off-Balance Sheet Exposures and CCR (continued)

2018	CIMB Bank			
(RM '000) Description	Principal Amount	Positive Fair Value of Derivative Contracts	Credit Equivalent Amount	Risk-Weighted Assets
Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year	26,522,072		23,649,820	7,538,136
Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year	372,375		279,281	120,667
Any commitments that are unconditionally cancellable at any time by the bank without prior notice or that effectively provide for automatic cancellation due to deterioration in a borrower's/customer's creditworthiness	83,048,249		-	-
Unutilised credit card lines	24,563,660		6,418,339	2,864,448
Off-balance sheet items for securitisation exposures	-		-	-
Off-balance sheet exposures due to early amortisation provisions	-		-	-
<b>Total</b>	<b>647,085,943</b>	<b>3,078,713</b>	<b>46,474,078</b>	<b>18,687,602</b>



**CREDIT RISK (continued)**

**Off-Balance Sheet Exposures and CCR**

The table below shows the credit derivative transactions that create exposures to CCR (notional value) segregated between own use and client intermediation activities:

**Table 23: Disclosure on Credit Derivative Transactions**

(RM'000)	CIMB Bank			
	2019		2018	
	Notional of Credit Derivatives			
	Protection Bought	Protection Sold	Protection Bought	Protection Sold
Own Credit Portfolio	1,841,603	1,935,192	1,195,917	1,770,420
Client Intermediation Activities	20,750	333,770	20,750	228,040
<b>Total</b>	<b>1,862,353</b>	<b>2,268,962</b>	<b>1,216,667</b>	<b>1,998,460</b>
Credit Default Swaps	1,841,603	1,832,867	1,195,917	1,644,309
Total Return Swaps	20,750	436,095	20,750	354,151
<b>Total</b>	<b>1,862,353</b>	<b>2,268,962</b>	<b>1,216,667</b>	<b>1,998,460</b>

**Credit Risk Mitigation**

The employment of various credit risk mitigation techniques such as appropriate credit structuring, and posting of collateral and/or third party support form an integral part of the credit risk management process. Credit risk mitigants are taken where possible and are considered secondary recourse to the obligor for the credit risk underwritten.

i) Collaterals/Securities

All extension of secured credit facilities as deemed prudent, must be appropriately and adequately collateralised. A credit proposal is considered secured only when the entire proposal is fully covered by approved collateral/securities within their approved margins as set out in the relevant credit policy guides. GCC is empowered to approve any inclusion of new acceptable collaterals/securities.

Recognised collaterals include both financial and physical assets. Financial collaterals consist of mainly cash deposits, quoted shares, unit trusts and debt securities, while physical collateral includes land, buildings and vehicles. Guarantors accepted are in line with BNM's CAF (Basel II - Risk-Weighted Assets) and CAFIB (Risk-Weighted Assets) guidelines. Eligible credit protection is also used to mitigate credit losses in the event that the obligor/counterparty defaults.

ii) Collateral Valuation and Management

The Group has in place policies which govern the determination of eligibility of various collaterals including credit protection, to be considered for credit risk mitigation which includes the minimum operational requirements that are required for the specific collaterals to be considered as effective risk mitigants.

The collateral is valued periodically ranging from daily to annually, depending on the type of collateral. Specifically for real estate properties, a framework for valuation of real estate properties is established to ensure adequate policies and procedures are in place for efficient and proper conduct of valuation of real estate properties and other related activities in relation to the interpretation, monitoring and management of valuation of real estate properties.

**CREDIT RISK (continued)**
**Credit Risk Mitigation (continued)**

## iii) Netting

In mitigating the counterparty credit risks in foreign exchange and derivative transactions, our Group enters into master agreements that provide for closeout netting with counterparties, whenever possible. A master agreement that governs all transactions between two parties, creates the greatest legal certainty that the netting of outstanding obligations can be enforced upon termination of outstanding transactions if an event of default occurs.

## iv) Portfolio diversification for better clarity

Our Group avoids unwanted credit or market risk concentrations by diversifying our portfolios through a number of measures. Amongst others, there are guidelines in place relating to maximum exposure to any products, counterparty, sectors and country.

The following tables summarise the extent of which exposures are covered by eligible credit risk mitigants as at 31 December 2019 and 31 December 2018:

**Table 24: Disclosure on Credit Risk Mitigation**

2019	CIMB Bank			
(RM'000) Exposure Class	Exposures before CRM	Exposures Covered by Guarantees/ Credit Derivatives	Exposures Covered by Eligible Financial Collateral	Exposures Covered by Other Eligible Collateral
<b>Performing Exposures</b>				
Sovereign/Central Banks	38,529,994	-	-	-
Public Sector Entities	4,038,442	4,000,000	88	-
Banks, DFIs & MDBs	25,732,466	-	629,876	-
Insurance Cos/Takaful Operators, Securities Firms & Fund Managers	2,007,723	-	36,604	-
Corporate	118,198,796	2,698,126	12,971,007	12,121,161
Residential Mortgages/RRE Financing	65,407,259	-	4,762	-
Qualifying Revolving Retail	12,684,480	-	-	-
Hire Purchase	7,625,296	-	-	-
Other Retail	43,460,404	423,598	1,267,959	-
Securitisation	289,990	-	-	-
Higher Risk Assets	1,102,133	-	-	-
Other Assets	6,217,408	-	-	-
<b>Defaulted Exposures</b>	3,209,575	121	115,560	322,995
<b>Total Exposures</b>	<b>328,503,965</b>	<b>7,121,845</b>	<b>15,025,857</b>	<b>12,444,156</b>

The type of collateral recognised in each asset class is in accordance to the approach adopted in computing the RWA. The CRM shown is computed after taking into account the haircut as prescribed by the guidelines. For assets under SA, only financial collateral and guarantee are recognised. For assets under F-IRB Approach, guarantee, financial collateral and other eligible collateral are recognised. For assets under A-IRB Approach, the collateral has been taken into consideration in the computation of LGD, hence, excluded from the CRM disclosure.

CREDIT RISK (continued)

Credit Risk Mitigation (continued)

Table 24: Disclosure on Credit Risk Mitigation (continued)

2018	CIMB Bank			
(RM'000) Exposure Class	Exposures before CRM	Exposures Covered by Guarantees/ Credit Derivatives	Exposures Covered by Eligible Financial Collateral	Exposures Covered by Other Eligible Collateral
<b>Performing Exposures</b>				
Sovereign/Central Banks	36,517,277	-	-	-
Public Sector Entities	4,340,505	4,000,000	302,582	-
Banks, DFIs & MDBs	20,697,967	-	891,288	-
Insurance Cos/Takaful Operators, Securities Firms & Fund Managers	1,904,510	-	3,951	-
Corporate	116,343,436	1,637,233	10,712,928	12,778,178
Residential Mortgages/RRE Financing	59,789,710	-	2,459	-
Qualifying Revolving Retail	12,818,580	-	-	-
Hire Purchase	8,448,604	-	-	-
Other Retail	45,349,912	486,000	1,403,512	-
Securitisation	247,513	-	-	-
Higher Risk Assets	1,101,480	-	-	-
Other Assets	5,817,562	-	-	-
<b>Defaulted Exposures</b>	2,352,045	72	56,774	283,617
<b>Total Exposures</b>	<b>315,729,099</b>	<b>6,123,305</b>	<b>13,373,494</b>	<b>13,061,795</b>

The type of collateral recognised in each asset class is in accordance to the approach adopted in computing the RWA. The CRM shown is computed after taking into account the haircut as prescribed by the guidelines. For assets under SA, only financial collateral and guarantee are recognised. For assets under F-IRB Approach, guarantee, financial collateral and other eligible collateral are recognised. For assets under A-IRB Approach, the collateral has been taken into consideration in the computation of LGD, hence, excluded from the CRM disclosure.

**SECURITISATION**

***The Role CIMB Plays in the Securitisation Process***

In the course of its business, CIMB Group has undertaken securitisations of its own originated assets as a means of diversifying funding source, as well as advised on securitisations of third party assets as part of its regional debt capital markets services for its clients.

CIMB Group securitises its own assets in order to, amongst others, manage credit risk and to manage term funding for CIMB Group’s balance sheet. Typically, CIMB Group undertakes the following roles in the securitisation activities (either singularly or in combination):

- Originator and servicer of securitised assets
- Asset-backed securities marketing, syndication and trading
- Provider of liquidity facilities to self-originated and third-party transactions
- Investor of third-party securitisations (where CIMB is not originator or sponsor)

***Disclosure on Securitisation for Banking Book***

The following tables show the disclosure on Securitisation for Banking Book for 31 December 2019 and 31 December 2018:

**Table 25: Disclosure on Securitisation for Banking Book**

2019 (RM'000)	CIMB Bank			
Underlying Asset	Total Exposures Securitised	Past Due	Impaired	Gains/(Losses) Recognised during the year
<b>TRADITIONAL SECURITISATION (Banking Book) Originated by the Banking Institution</b>				
Hire Purchase Exposure	425,108	21,048	3,846	665

2018 (RM'000)	CIMB Bank			
Underlying Asset	Total Exposures Securitised	Past Due	Impaired	Gains/(Losses) Recognised during the year
<b>TRADITIONAL SECURITISATION (Banking Book) Originated by the Banking Institution</b>				
Hire Purchase Exposure	684,242	23,839	3,858	(4,290)

**BASEL II PILLAR 3 DISCLOSURES FOR 2019**
**SECURITISATION (continued)**
**Disclosure on Securitisation under the SA for Banking Book**

The tables below represent the disclosure on Securitisation under the SA for Banking Book:

**Table 26: Disclosure on Securitisation under the SA for Banking Book Exposures**

2019	CIMB Bank											
Exposure Class (RM'000)	Net Exposure After CRM	Exposures subject to deduction	Distribution of Exposures after CRM according to Applicable Risk Weights									Risk-Weighted Assets
			Rated Securitisation Exposures						Unrated (Look Through)			
			0%	10%	20%	50%	100%	350%	1250%	Weighted Average RW	Exposure Amount	
<b>Traditional Securitisation (Banking Book)</b>												
<i>Non-originating Banking Institution</i>												
<i>On-Balance Sheet</i>												
Most senior	279,990	-	-	-	279,990	-	-	-	-	-	-	55,998
Mezzanine	10,000	-	-	-	10,000	-	-	-	-	-	-	2,000
First loss	-	-	-	-	-	-	-	-	-	-	-	-
<i>Off-Balance Sheet</i>												
Rated eligible liquidity facilities	-	-	-	-	-	-	-	-	-	-	-	-
Unrated eligible liquidity facilities (with original maturity > 1 year)	-	-	-	-	-	-	-	-	-	-	-	-
Unrated eligible liquidity facilities (with original maturity < 1 year)	-	-	-	-	-	-	-	-	-	-	-	-
Eligible servicer cash advance facilities	-	-	-	-	-	-	-	-	-	-	-	-
Eligible underwriting facilities	-	-	-	-	-	-	-	-	-	-	-	-
Guarantees and credit derivatives	-	-	-	-	-	-	-	-	-	-	-	-
Other off-balance sheet securitisation exposures (excl. guarantees and credit derivatives)	-	-	-	-	-	-	-	-	-	-	-	-

SECURITISATION (continued)

Disclosure on Securitisation under the SA for Banking Book

Table 26: Disclosure on Securitisation under the SA for Banking Book Exposures (continued)

2019		CIMB Bank											
(RM'000) Exposure Class	Net Exposure After CRM	Exposures subject to deduction	Distribution of Exposures after CRM according to Applicable Risk Weights								Unrated (Look Through)		Risk-Weighted Assets
			Rated Securitisation Exposures								Weighted Average RW	Exposure Amount	
			0%	10%	20%	50%	100%	350%	1250%				
<i>Originating Banking Institution</i>													
<i>On-Balance Sheet</i>													
Most senior	-	-	-	-	-	-	-	-	-	-	-	-	
Mezzanine	-	-	-	-	-	-	-	-	-	-	-	-	
First loss	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Off-Balance Sheet</i>													
Rated eligible liquidity facilities	-	-	-	-	-	-	-	-	-	-	-	-	
Unrated eligible liquidity facilities (with original maturity > 1 year)	-	-	-	-	-	-	-	-	-	-	-	-	
Unrated eligible liquidity facilities (with original maturity < 1 year)	-	-	-	-	-	-	-	-	-	-	-	-	
Eligible servicer cash advance facilities	-	-	-	-	-	-	-	-	-	-	-	-	
Eligible underwriting facilities	-	-	-	-	-	-	-	-	-	-	-	-	
Guarantees and credit derivatives	-	-	-	-	-	-	-	-	-	-	-	-	
Other off-balance sheet securitisation exposures (excl. guarantees and credit derivatives)	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Total Exposures</b>	<b>289,990</b>	-	-	-	<b>289,990</b>	-	-	-	-	-	-	<b>57,998</b>	

SECURITISATION (continued)

Disclosure on Securitisation under the SA for Banking Book

Table 26: Disclosure on Securitisation under the SA for Banking Book Exposures (continued)

2018		CIMB Bank											
(RM'000) Exposure Class	Net Exposure After CRM	Exposures subject to deduction	Distribution of Exposures after CRM according to Applicable Risk Weights								Unrated (Look Through)		Risk-Weighted Assets
			Rated Securitisation Exposures								Weighted Average RW	Exposure Amount	
			0%	10%	20%	50%	100%	350%	1250%				
<b>Traditional Securitisation (Banking Book)</b>													
<i>Non-originating Banking Institution</i>													
<i>On-Balance Sheet</i>													
Most senior	236,372	-	-	-	236,372	-	-	-	-	-	-	47,274	
Mezzanine	11,141	-	-	-	11,141	-	-	-	-	-	-	2,228	
First loss	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Off-Balance Sheet</i>													
Rated eligible liquidity facilities	-	-	-	-	-	-	-	-	-	-	-	-	
Unrated eligible liquidity facilities (with original maturity > 1 year)	-	-	-	-	-	-	-	-	-	-	-	-	
Unrated eligible liquidity facilities (with original maturity < 1 year)	-	-	-	-	-	-	-	-	-	-	-	-	
Eligible servicer cash advance facilities	-	-	-	-	-	-	-	-	-	-	-	-	
Eligible underwriting facilities	-	-	-	-	-	-	-	-	-	-	-	-	
Guarantees and credit derivatives	-	-	-	-	-	-	-	-	-	-	-	-	
Other off-balance sheet securitisation exposures (excl. guarantees and credit derivatives)	-	-	-	-	-	-	-	-	-	-	-	-	

BASEL II PILLAR 3 DISCLOSURES FOR 2019

SECURITISATION (continued)

Disclosure on Securitisation under the SA for Banking Book

Table 26: Disclosure on Securitisation under the SA for Banking Book Exposures (continued)

2018		CIMB Bank											
(RM'000) Exposure Class	Net Exposure After CRM	Exposures subject to deduction	Distribution of Exposures after CRM according to Applicable Risk Weights								Unrated (Look Through)		Risk-Weighted Assets
			Rated Securitisation Exposures								Weighted Average RW	Exposure Amount	
			0%	10%	20%	50%	100%	350%	1250%				
<i>Originating Banking Institution</i>													
<i>On-Balance Sheet</i>													
Most senior	-	-	-	-	-	-	-	-	-	-	-	-	
Mezzanine	-	-	-	-	-	-	-	-	-	-	-	-	
First loss	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Off-Balance Sheet</i>													
Rated eligible liquidity facilities	-	-	-	-	-	-	-	-	-	-	-	-	
Unrated eligible liquidity facilities (with original maturity > 1 year)	-	-	-	-	-	-	-	-	-	-	-	-	
Unrated eligible liquidity facilities (with original maturity < 1 year)	-	-	-	-	-	-	-	-	-	-	-	-	
Eligible servicer cash advance facilities	-	-	-	-	-	-	-	-	-	-	-	-	
Eligible underwriting facilities	-	-	-	-	-	-	-	-	-	-	-	-	
Guarantees and credit derivatives	-	-	-	-	-	-	-	-	-	-	-	-	
Other off-balance sheet securitisation exposures (excl. guarantees and credit derivatives)	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Total Exposures</b>	<b>247,513</b>	-	-	-	<b>247,513</b>	-	-	-	-	-	-	<b>49,503</b>	



**SECURITISATION (continued)**

**Securitisation under the SA for Trading Book Exposures subject to Market Risk Capital Charge**

The tables below present the Securitisation under the SA for Trading Book Exposures subject to Market Risk Capital Charge:

**Table 27: Disclosure on Securitisation under the SA for Trading Book Exposures subject to Market Risk Capital Charge**

2019	CIMB Bank				
(RM'000) Securitisation Exposures	Total Exposure Value of Positions Purchased or Retained	Exposures subject to deduction	General Risk Charge	Specific Risk Charge	Risk-Weighted Assets
<b>TRADITIONAL SECURITISATION</b>					
<u>Originated by Third Party</u>					
<i>On-Balance Sheet</i>	55,517	-	2,063	1,120	39,793
<i>Off-Balance Sheet</i>	-	-	-	-	-
<i>Sub-total</i>	55,517	-	2,063	1,120	39,793
<u>Originated by Banking Institution</u>					
<i>On-Balance Sheet</i>	-	-	-	-	-
<i>Off-Balance Sheet</i>	-	-	-	-	-
<i>Sub-total</i>	-	-	-	-	-
<u>Securitisation subject to Early Amortisation</u>					
<u>Seller's interest</u>					
<i>On-Balance Sheet</i>	-	-	-	-	-
<i>Off-Balance Sheet</i>	-	-	-	-	-
<u>Investor's interest</u>					
<i>On-Balance Sheet</i>	-	-	-	-	-
<i>Off-Balance Sheet</i>	-	-	-	-	-
<i>Sub-total</i>	-	-	-	-	-
<b>TOTAL (TRADITIONAL SECURITISATION)</b>	<b>55,517</b>	<b>-</b>	<b>2,063</b>	<b>1,120</b>	<b>39,793</b>

SECURITISATION (continued)

Securitisation under the SA for Trading Book Exposures subject to Market Risk Capital Charge (continued)

Table 27: Disclosure on Securitisation under the SA for Trading Book Exposures subject to Market Risk Capital Charge (continued)

2018	CIMB Bank				
(RM'000) Securitisation Exposures	Total Exposure Value of Positions Purchased or Retained	Exposures subject to deduction	General Risk Charge	Specific Risk Charge	Risk-Weighted Assets
<b>TRADITIONAL SECURITISATION</b>					
<b><u>Originated by Third Party</u></b>					
<i>On-Balance Sheet</i>	-	-	-	-	-
<i>Off-Balance Sheet</i>	-	-	-	-	-
<i>Sub-total</i>	-	-	-	-	-
<b><u>Originated by Banking Institution</u></b>					
<i>On-Balance Sheet</i>	-	-	-	-	-
<i>Off-Balance Sheet</i>	-	-	-	-	-
<i>Sub-total</i>	-	-	-	-	-
<b><u>Securitisation subject to Early Amortisation</u></b>					
<b><u>Seller's interest</u></b>					
<i>On-Balance Sheet</i>	-	-	-	-	-
<i>Off-Balance Sheet</i>	-	-	-	-	-
<b><u>Investor's interest</u></b>					
<i>On-Balance Sheet</i>	-	-	-	-	-
<i>Off-Balance Sheet</i>	-	-	-	-	-
<i>Sub-total</i>	-	-	-	-	-
<b>TOTAL (TRADITIONAL SECURITISATION)</b>	-	-	-	-	-

### **MARKET RISK**

Market risk is defined as any fluctuation in the value of a trading or investment exposure arising from changes to market risk factors such as interest rates/profit rates, currency exchange rates, credit spreads, equity prices, commodities prices and their associated volatility.

#### ***Market Risk Management***

Our Group adopts various measures as part of the risk management process. Our GRCC with the assistance of GMRC and its delegated committees ensure that the risk exposures undertaken by our Group is within the risk appetite approved by our Board.

Market Risk CoE is responsible for measuring and controlling our Group's market risk through robust measurement and market risk limit monitoring while facilitating business growth within a controlled and transparent risk management framework.

Market Risk CoE evaluates the market exposures using the applicable market price and pricing model. The valuation process is carried out with the independent price verification requirements to ensure that financial assets/liabilities are recorded at fair value. The valuation methods and models used are validated by risk management quantitative analysts to assess their applicability relative to market conditions.

Our Group adopts the VaR methodology as an approach in the measurement of market risk. VaR is a statistical measure of the potential losses that could occur as a result of movements in market rates and prices over a specified time horizon within a given confidence level.

Stress testing is conducted to capture the potential market risk exposures from an unexpected market movement. In formulating stress scenarios, consideration is given to various aspects of the market; for example, identification of areas where unexpected losses can occur and areas where historical correlation may no longer hold true.

In addition to the above, Market Risk CoE undertakes the monitoring and oversight process at Treasury & Markets' trading floors, which include reviewing and analysing treasury trading activities vis-à-vis changes in the financial markets, assessing limit usage, assessing limit adequacy and verifying transaction prices.

#### ***Capital Treatment for Market Risk***

At present, the Group adopts the Standardised Approach to compute market risk capital requirement under BNM's guidelines on CAF (Basel II - Risk-Weighted Assets) and CAFIB (Risk-Weighted Assets).

Details on RWA and capital requirements related to Market Risk are disclosed separately for CIMB Bank for the following in Table 2:

- Interest Rate Risk/profit Rate Risk;
- Foreign Currency Risk;
- Equity Risk;
- Commodity Risk; and
- Options Risk.

### **OPERATIONAL RISK**

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. It includes legal risk but excludes strategic and reputation risks.

#### ***Operational Risk Management Oversight***

The NFRM CoE, a second line of defence function, provides the methodology, tools and processes for the identification, assessment, reporting and management of operational risks by the respective risk owners across the Group. The NFRM CoE also independently oversees the operational risk controls monitoring that resides within the first line of defence.

Identified risks are rated using a defined risk rating methodology applied across the Group's three lines of defence. Monitoring of the identified risks is primarily done through the Operational Risk Committee or relevant risk management committees operating in each material geography and business line. These committees report up to the relevant functional or country level committees.

A strong governance structure is in place to ensure an effective and consistent implementation of the Group's Operational Risk framework. The Board is ultimately responsible for the Group's risk management activities, sets the strategic directions, risk appetite and relevant frameworks for the Group.

The responsibility of risk management supervision and control is delegated to the Group Risk and Compliance Committee (GRCC), which reports to the Board Risk and Compliance Committee (BRCC). The GRCC, comprising Senior Management of the Group, performs the oversight function for the overall management of risks. The GRCC is supported by the Group Operational & Resiliency Risk Committee which is a specialised sub-committee providing oversight on operational risk matters across the Bank.

Escalation and reporting processes are well instituted through the various management Committees mentioned above. The responsibilities of the Committees and the Board include the following:

- i) Oversight and implementation of the Operational Risk Management Framework
- ii) Establish and monitor operational risk appetite
- iii) Establish effective policies, processes and systems for managing operational risk and an internal governance structure
- iv) Be aware of key operational risk issues
- v) Ensure that product risks are well managed and the needs and rights of consumers are appropriately addressed
- vi) Ensure compliance to regulatory and internal requirements including disclosures.

Group Corporate Assurance Division performs regular reviews and assessments of the operational risk management framework, processes and systems. Results are communicated to the Board and senior management.

#### ***Operational Risk Management Approach***

CIMB Group recognizes that the key determinant for a well-managed banking operation is to cultivate an organisational-wide risk management discipline and culture. Our Group manages operational risks through the following key measures:

- i) Sound risk management practices in accordance with Basel regulatory guidelines;
- ii) Board and senior management oversight;
- iii) Well-defined responsibilities for all personnel concerned;
- iv) Establishment of a risk management culture; and

**OPERATIONAL RISK (continued)**

***Operational Risk Management Approach (continued)***

- v) Deployment of ORM tools that include:
- Operational Event and Loss Data Management;
  - Risk & Control Self-Assessment;
  - Control Issue Management;
  - Key Risk Indicators;
  - New Product Approval Process; and
  - Scenario Analysis

These tools form part of the operational risk framework that allows the Group to effectively identify, measure, mitigate and report its operational risks. Each material division of the Group self-assesses on their internal risk and control environment rating and report key control deficiencies with remediation plans.

Each new or varied product with changes to the process flow is subjected to a rigorous risk review , where all critical and relevant areas of risk are being appropriately identified and assessed independently from the risk takers or product owners.

The promotion of a risk management culture within our Group, whereby the demand for integrity and honesty is non-negotiable, remains the core theme in our operational risk awareness program. Additionally, the e-learning module on operational risk management has enhanced the awareness of operational risk amongst the staff.

***Capital Treatment for Operational Risk***

The Group adopts the Basic Indicator Approach to compute operational risk capital requirement under BNM's guidelines on CAF (Basel II - Risk-Weighted Assets) and CAFIB (Risk-Weighted Assets).

Details on RWA and capital requirements related to Operational Risk are disclosed separately for CIMBBG, CIMBISLG and CIMBIBG in Tables 2 (a), (b) and (c).

## BASEL II PILLAR 3 DISCLOSURES FOR 2019

### EQUITY EXPOSURES IN BANKING BOOK

The Group's banking book equity investments consist of:

- i) Strategic stakes in entities held as part of growth initiatives and/or in support of business operations; and
- ii) Investments held for yield and/or long-term capital gains.

The Group's and CIMB Bank's banking book equity investments are measured at fair value in accordance with Malaysian Financial Reporting Standards.

Realised and unrealised gains or losses arising from sales and liquidations of equities for CIMB Bank for the year ended 31 December 2019 and 31 December 2018 is as follows:

**Table 28: Realised Gains/(Losses) from Sales and Liquidations, and Unrealised Gains of Equities**

(RM'000)	CIMB Bank	
	2019	2018
<b><u>Realised (loss)/gains</u></b>		
Shares, private equity funds and unit trusts	-	-
<b><u>Unrealised gains</u></b>		
Shares, private equity funds and unit trusts	54,805	76,313

The following table shows an analysis of equity investments by appropriate equity groupings and risk weighted assets as at 31 December 2019 and 31 December 2018:

**Table 29: Analysis of Equity Investments by Grouping and RWA**

(RM'000)	CIMB Bank			
	2019		2018	
	Exposures subject to Risk-Weighting	RWA	Exposures subject to Risk-Weighting	RWA
Privately held	1,102,133	1,653,200	1,101,480	1,652,220
Publicly traded	-	-	-	-
<b>Total</b>	<b>1,102,133</b>	<b>1,653,200</b>	<b>1,101,480</b>	<b>1,652,220</b>

### INTEREST RATE RISK IN THE BANKING BOOK

IRRBB is defined as the current and potential risk to the Group's earnings and economic value arising from movement of interest rates.

#### *IRRBB Management*

Our Group manages its exposure of fluctuations in the interest rates/profit rates through policies established by GALCO. IRRBB/RORBB undertaken by our Group is governed by an established risk appetite that defines the acceptable level of risk to be assumed by our Group. The risk appetite is established by the Board. The GALCO is a board-delegated committee which reports to the GRCC. With the support from ALM COE under Group Risk, and CBSM under Group Finance, our GALCO is responsible for the review and monitoring of the Group's balance sheet, business and hedging strategies, the overall interest rate risk/ rate of return risk profile and ensuring that such risk profile is within the established risk appetite. Treasury & Markets is responsible for the day-to-day management of exposures and gapping activities, including execution of hedging strategies.

IRRBB is measured by:

- **Economic Value of Equity sensitivity:**  
measures the long term impact of sudden interest rate movement across the full maturity spectrum of our Group's assets and liabilities. It defines and quantifies interest rate risk as the change in the economic value of equity (e.g. present value of potential future earnings and capital) as asset portfolio values and liability portfolio values would rise and fall with changes in interest rates. This measure helps the Group to quantify the risk and impact on capital with the focus on current banking book positions.

For the purpose of this disclosure, the impact under an instantaneous 100 bps parallel interest rate/ profit rate shock is applied. The treatments and assumptions applied are based on the contractual repricing maturity and remaining maturity of the products, whichever is earlier. Items with indefinite repricing maturity are treated based on the earliest possible repricing date. The actual dates may vary from the repricing profile allocated due to factors such as pre-mature withdrawals, prepayment and so forth.

**INTEREST RATE RISK IN THE BANKING BOOK (continued)**

*IRRBB Management (continued)*

The table below illustrates CIMB Bank's IRRBB under a 100 bps parallel upward interest rate shock from economic value perspective:

**Table 30: IRRBB – Impact on Economic Value**

(RM'000)	CIMB Bank	
	2019	2018
Currency	+100bps Increase (Decline) in Economic Value (Value in RM Equivalent)	
Ringgit Malaysia	(939,286)	(754,713)
US Dollar	(6,744)	14,459
Thai Baht	(8)	(8)
Singapore Dollar	(110,952)	(128,768)
Others	321	19,511
<b>Total</b>	<b>(1,056,669)</b>	<b>(849,519)</b>

- Earnings-at-Risk:

is the potential impact of interest/profit rate changes on the bank's accruing or reported earnings. It focuses on risk-to-earnings in the near term, typically the next one year. Fluctuations in interest rates/profit rate generally affect reported earnings through changes in the bank's net interest/profit income, which is the difference between total interest/profit income earned from assets and total interest/profit expense incurred from liabilities. Our Group's EAR takes into consideration forecasts on budgeted new business generation and product pricing strategies.

For the purpose of this disclosure, the impact under an instantaneous 100 bps parallel interest rate/profit rate shock is applied to the static balance sheet positions. The treatments and assumptions applied are based on the contractual repricing maturity and remaining maturity of the products, whichever is earlier. Items with indefinite repricing maturity are treated based on the earliest possible repricing date. The actual dates may vary from the repricing profile allocated due to factors such as pre-mature withdrawals, prepayment and so forth.



**INTEREST RATE RISK IN THE BANKING BOOK (continued)**

*IRRBB Management (continued)*

The table below illustrates CIMB Bank's IRRBB under a 100 bps parallel upward interest rate shock from the earnings perspective:

**Table 31: IRRBB – Impact on Earnings**

(RM'000)	CIMB Bank	
	2019	2018
Currency	+100bps Increase (Decline) in Earnings (Value in RM Equivalent)	
Ringgit Malaysia	196,475	316,872
US Dollar	(150,327)	(144,503)
Thai Baht	190	191
Singapore Dollar	(6,505)	18,573
Others	63,165	37,985
<b>Total</b>	<b>102,998</b>	<b>229,118</b>

[END OF SECTION]