Company No. 295400-W

OCBC Bank (Malaysia) Berhad
(Incorporated in Malaysia)

# Basel II Pillar 3 Market Disclosure
# 31 December 2023

*The disclosure in this section refers to OCBC Bank (M) Berhad Group position. OCBC Bank (M) Berhad Group consists of OCBC Bank (Malaysia) Berhad and OCBC Al-Amin Bank Berhad which are members of the Overseas-Chinese Banking Corporation Group in Singapore.*

BASEL II PILLAR 3 MARKET DISCLOSURES – 31 DECEMBER 2023

| CONTENTS | PAGE |
|---|---|

**ATTESTATION BY CHIEF EXECUTIVE OFFICER PURSUANT TO RISK WEIGHTED CAPITAL ADEQUACY FRAMEWORK (BASEL II) – DISCLOSURE REQUIREMENTS (PILLAR 3)**

The risk disclosures set out in the Risk Management Chapter and Basel II Pillar 3 Market Disclosure are generally in conformance with the Bank Negara Malaysia Risk Weighted Capital Adequacy Framework (Basel II) – Disclosure Requirements (Pillar 3) and Capital Adequacy Framework for Islamic Banks (CAFIB-Basel II) – Disclosure Requirements (Pillar 3) for the Group as at 31 December 2023.

TAN CHOR SEN
CHIEF EXECUTIVE OFFICER
Kuala Lumpur

**Risk Management**

OCBC (M) Group (hereinafter referred to as the Group) consists of OCBC Bank (Malaysia) Berhad (OCBC Bank) and OCBC Al-Amin Bank Berhad (OABB) which are members of the Oversea-Chinese Banking Corporation Group (OCBC Group) in Singapore.

## RISK MANAGEMENT IN OCBC (M) GROUP

At OCBC (M) Group, our corporate values and risk principles are firmly embedded in the way we manage risk.

The Group has a comprehensive risk management approach that covers all types of risks, underpinned by a strong corporate culture. This approach is embodied in our risk management framework, which incorporates our risk appetite and governance and covers the key principles, policies, and practices we use to manage both financial and non-financial risks.

Principal risk types are managed with the requisite skills and resources, detailed guidelines and procedures, and infrastructure and systems commensurate with our risk-taking. Close attention is paid to identifying and measuring, setting tolerances and monitoring, reporting and reviewing the risks we accept. Established escalation processes are in place to ensure that risks are discussed and sanctioned at the appropriate levels. Our risk management frameworks and approaches are periodically reviewed and enhanced to incorporate best-in-class practices.

Risks are increasingly inter-connected and have to be assessed holistically. To this end, we have also established cross functional assessments of risk via emerging risk discussions, and a suite of stress-testing and scenario analyses that inform what the impact of plausible risk factors could be to our earnings, capital, liquidity, customer segments, and obligations. Such impacts are taken into account in shaping our risk strategies and contingency plans.

**Principal Risk Types**
We generally categorise the risks we face into the following principal risk types:

**Table 1: Principal Risk Types**

| Principal Risks | Definition |
|---|---|
| **Credit Risk** | Credit risk is the risk of losing principal and/or income arising from the failure of an obligor or counterparty to meet its financial or contractual obligations or an adverse change in the credit profile of the obligor or counterparty. |
| **Market Risk** | Market risk is the risk of losing income and/or market value due to fluctuations in factors such as interest rates, foreign exchange rates, credit spreads, equity and commodity prices or their volatilities and correlations. |
| **Liquidity Risk** | Liquidity risk is the risk arising from the inability to meet financial and cash outflow obligations as they fall due. |
| **Interest Rate Risk in the Banking Book** | Interest Rate Risk in the Banking Book is the risk to income and/or capital arising from exposure to adverse changes in the interest rate environment. |
| **Information Security and Digital Risk** | Information security risk is the risk of compromising confidentiality, integrity and/or availability of information (in physical or digital form).<br><br>Digital risk encompasses cyber and technology risks. Cyber risk is the risk arising from malicious acts perpetrated by threat actors. Technology risk is the risk of disruption, failure or irregularity in essential financial services arising from the use of information and communication technologies. |

| | |
|---|---|
| **Operational Risk** | Operational risk is the risk of loss caused by failures in internal processes and systems or due to poor management, human error or external events. It covers various non-financial risks including fraud, money laundering, terrorism financing, sanctions, third-party, physical and personnel security risk, regulatory, legal and reputational risks. |

*Please refer to the respective sections for details of our risk management approach for each of the principal risk types.*

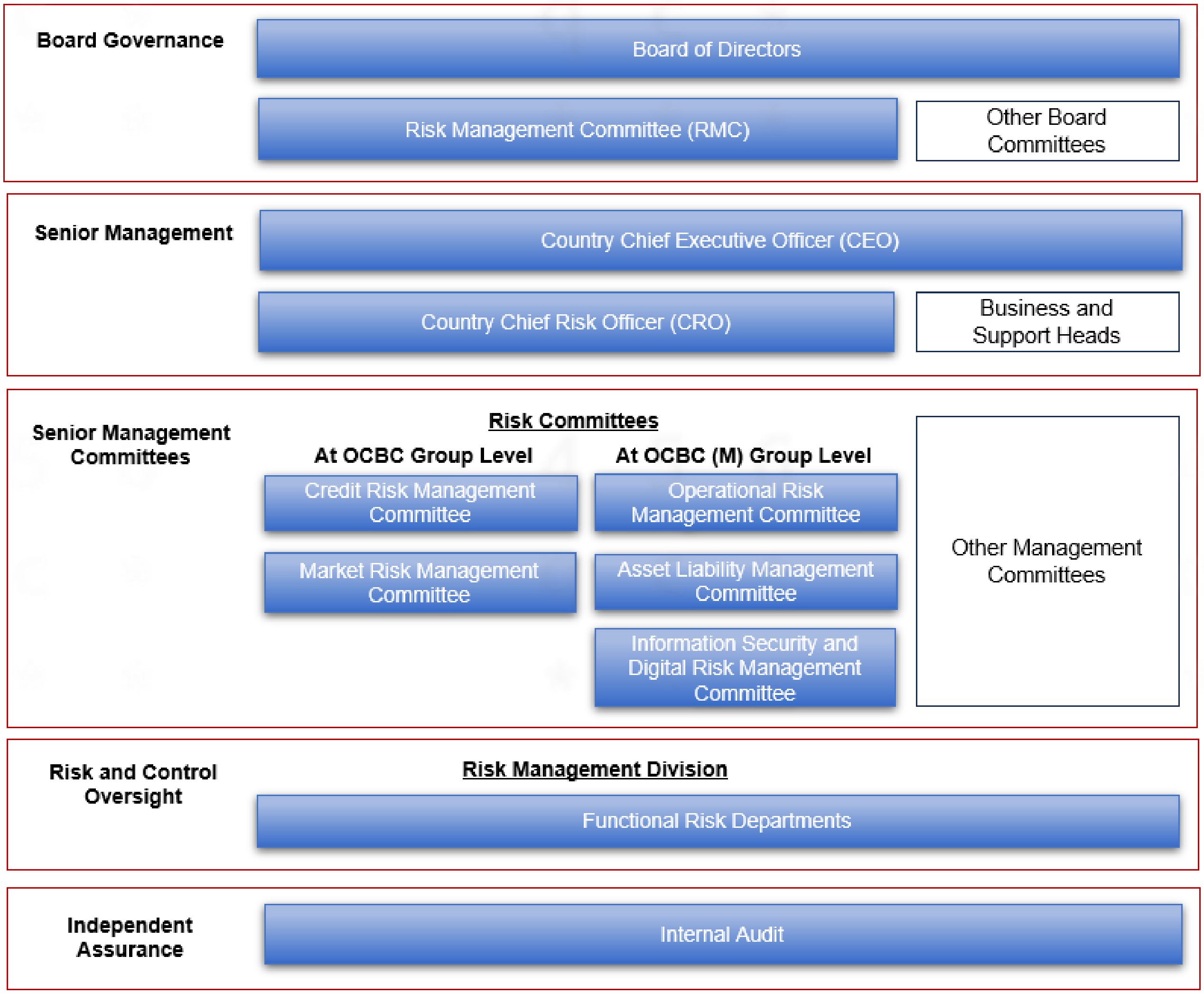
**Environmental, Social and Governance (ESG) and Climate Risks**

We take an integrated and risk-based approach to addressing the financial and reputational implications with respect to ESG and climate risks. This entails ensuring that risk drivers that impact the Group across credit, market, liquidity, operational and reputational risks are adequately identified, assessed and managed in accordance with our existing risk management approaches and planning horizons. In addition to embedding ESG and climate risk management in the responsibilities of the relevant principal risk management committees, our risk appetite framework takes into account the management of the reputational and financial impact of sustainability issues.

Currently, ESG and climate considerations impinge more significantly on credit and reputational risks primarily relating to our wholesale lending activities. As such, we have incorporated such considerations in our Responsible Financing framework and policies and our credit approval processes for such activities. We continue to enhance our assessment and management of our portfolio through ESG and climate risk metrics, policies and reports, along with climate scenario analysis and stress testing. We also engage clients in certain sectors to evaluate their ability to manage ESG, transition and physical risks. High-risk clients undergo enhanced due diligence as well as further reviews and approvals; these include escalation of transactions with significant reputational risks to the Reputational Risk Review Group while time-bound action plans or legal covenants may be required. We will continue to progressively adopt quantitative ESG and climate risk metrics and enhance our climate risk scenario analysis methodologies taking into account industry developments, availability of data and regular dialogue with regulators.

## RISK GOVERNANCE AND ORGANISATION

A robust risk governance structure ensures effective oversight and accountability of risk. This enables smooth reporting and escalation of risks to the Board of Directors (Board) who have ultimate responsibility for the effective management of risk. The Board establishes the corporate strategy and approves the risk appetite within which senior management executes the strategy. The risk governance and oversight structure across the Group is illustrated below.




The Risk Management Committee (RMC) is the designated board committee overseeing risk management matters. It ensures that the Group's overall risk management philosophy and principles and risk appetite are aligned with the corporate strategy. The RMC has oversight of credit, market, liquidity, information security and digital, operational, conduct, money laundering and terrorism financing, legal, regulatory, strategic, ESG and fiduciary risks, as well as any other category of risk that may be delegated by the Board or deemed necessary by the Committee. The RMC ensures that the overall risk management organisation is in place and effective.

The RMC provides quantitative and qualitative guidance to major business units and risk functions to guide risk-taking. Senior management, functional risk committees, Country Chief Executive Officer (CEO) and RMC regularly review our risk drivers, risk profiles, risk management frameworks and policies, as well as compliance matters.

Risk Management Division (RMD)'s day-to-day responsibilities involve providing independent risk control and managing credit, market, liquidity, information security and digital, operational and ESG risks. It provides regular risk reports and updates on developments in material risk drivers and potential vulnerabilities. It recommends mitigating actions, to senior management, risk committees, RMC and the Board.

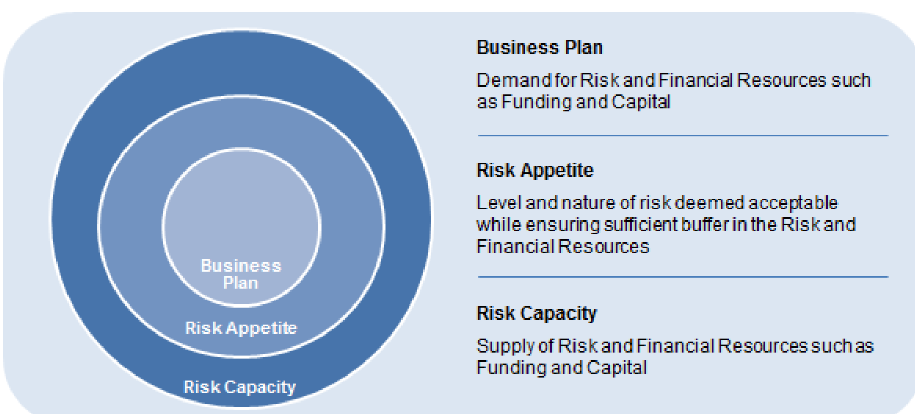
**Three Lines of Defence**

All employees are responsible for identifying and managing risk, a responsibility embedded in our corporate culture and robust internal control environment. This is operationalised via a three-line defence structure that distinctly outlines the roles, responsibilities and accountability of risk.

| Table 2: Three Lines of Defence | | |
|---|---|---|
| **First Line** | **Second Line** | **Third Line** |
| **Day-to-day Risk Management** | **Risk and Control Oversight** | **Independent Assurance** |
| **Business and Support Units:**<br>• Owns and manages risks arising from their business activities on a day-to-day basis.<br>• Carries out business activities that are consistent with Group's strategy and risk appetite.<br>• Operates within the approved boundaries of our policies and limits and comply with applicable laws and regulations. | **The Risk and Control Function:**<br>• Independently and objectively identifies and assesses the risk-taking activities of the first line.<br>• Establishes relevant risk management frameworks, policies, processes and systems.<br>• Provides independent identification, assessment, monitoring and reporting of the Group's risk profiles, portfolio concentrations and material risk issues. | **Internal Audit:**<br>• Independently assures the Country CEO, Audit Committee and the Board on the adequacy and effectiveness of our risk management and internal control systems.<br>• Evaluates the overall risk awareness and control consciousness of the management in discharging its supervisory and oversight responsibilities. |

## RISK APPETITE

Our aim is to manage risks in a prudent and sustainable manner for the long-term viability of the Group. The Board determines the Group's risk appetite, defining the level and nature of risks that we can undertake on behalf of our shareholders while maintaining our commitments to customers, debt holders, employees, regulators and other stakeholders. Business plans take into account the corporate strategy, the forward-looking operating environment and potential risks assessed against our risk appetite. Our risk appetite is operationalized across the Group through our policies, processes and limits to manage both financial and non-financial risks




Senior business and risk managers participate in regular forums to review the macroeconomic and financial development and discuss the operating conditions, event risks and potential "dark clouds" that may have a significant impact on our earnings or solvency. These risks are measured via stress tests as well as segment-specific and ad hoc event-specific portfolio reviews. The results are used to assess the potential impact of various scenarios on the Group's earnings and capital, and to identify vulnerabilities of material portfolios and trigger appropriate risk management actions.

We conduct an annual Internal Capital Adequacy Assessment Process (ICAAP) that incorporates the results of stress tests for various risk types. The aim is to assess if we can maintain sufficient capital levels under a forward-looking operating environment and in severe stress scenarios. Appropriate risk-mitigating actions are taken to manage potential risks.

## CREDIT RISK MANAGEMENT

Credit risk arises from our lending activities to retail, corporate and institutional customers. It also includes counterparty and issuer credit risks arising from our underwriting, trading and investment banking activities.

### Credit Risk Management Approach

Our credit risk management framework provides a comprehensive and proactive approach towards managing credit risk in the Group. The framework documents the credit risk objectives and minimum standards for the full credit risk management cycles of the Group's lending businesses. Effective risk management is enhanced by the experience and sound judgment of our credit specialists.
Our credit risk management approach is tailored based on the unique characteristics and nature of the various portfolios or customer segments. Specific policies and procedures are in place for major customer segments. Please refer to the table below for more information.

**Table 3: Credit Risk Management Approach for Major Customer Segments**

| Consumers and Small Businesses | Corporate and Institutional Customers |
|---|---|
| • Manage credit risks on a portfolio basis.<br>• Apply bankruptcy and credit bureau checks, together with systems and processes such as identity checks and independent verification of documentation for credit screening and fraud detection purposes.<br>• Use comprehensive risk management information systems (MIS), behavioural models and stress testing for monitoring and early identification of potentially weak credits. | • Assess credits individually with robust independent evaluation carried out by experienced credit officers.<br>• Use predefined target market and risk acceptance criteria to guide credit extensions.<br>• Business and credit risk units jointly approve credits to ensure objectivity and shared risk ownership.<br>• Take prompt remedial actions through timely and disciplined execution of margin calls, top-up provisions, stop-loss and force-selling. |

### Counterparty Credit Risk Management

Counterparty credit risk emerges from the potential default of a counterparty during our trading and/or banking activities in derivatives and debt securities. The credit exposure to a counterparty is measured as the sum of current mark-to-market value of the transactions plus an appropriate add-on for potential future exposures in response to market prices fluctuations. The risk also covers settlement risk, which is the potential loss incurred if a counterparty fails to fulfil its obligation after the Bank has performed its obligation under a contract or agreement at the settlement date.

Each counterparty undergoes robust credit assessment, including the suitability and appropriateness of the product offered. Credit risk mitigation tools are also used to manage counterparty credit risk where appropriate. Please refer to the Credit Risk Mitigation Section for details.

We manage our credit exposures independently through daily limit excess monitoring, excess escalation, pre-deal excess approval and timely risk reporting.

### Credit Portfolio Management

Credit portfolio management focuses on managing the collective or aggregate risk of our credit portfolios, instead of the credit risk of individual borrowers. We have developed and implemented a range of capabilities to better understand, measure and monitor credit risk at a portfolio level. These capabilities include:

- **Portfolio Segmentation:** This is the process of grouping credit exposures that are similar in nature. It involves the use of attributes that represent common business drivers such as location, industry and business segment, as well as common risk drivers such as exposure to material downside risks like a property price correction, a sharp hike in interest rates, or a country risk event.

- **Portfolio Modelling:** This includes the use of internal rating models to quantify the exposure risk, default risk and potential losses of our borrowers. Please refer to Table 4 for information on our internal rating models. We also use stress testing models to simulate the potential increase in our credit losses and Credit Risk-Weighted Assets (CRWA) under stressed scenarios.

  <u>Overview of Internal Rating Models</u>
  Internal credit rating models and their components such as probability of default (PD), loss given default (LGD) and exposure at default (EAD) – are used in limit setting, credit approval, portfolio monitoring and reporting, remedial management, stress testing and the internal assessment of the capital adequacy and portfolio allowances.

  Our model risk management framework governs the development, validation, application and maintenance of rating models. Models are assessed against internal and regulatory requirements and approved by regulators for use in capital assessment. Approval for the adoption and continued use of material models rests with the RMC.

  While our internal risk grades are not explicitly mapped to external credit ratings, they may correlate with external credit ratings in terms of the PD ranges as factors used to rate obligors would be similar. As such, an obligor rated poorly by an external credit rating agency is likely to have a weak internal risk rating.

  The table below describes the approach used to estimate the key parameters for Advanced Internal Ratings Based (A-IRB) and Foundation Internal Ratings Based (F-IRB) credit risk models used to calculate CRWA.

**Table 4: Key Components of Internal Ratings Based (IRB) Models**

| IRB Models and Portfolios | PD | LGD and EAD |
|---|---|---|
| **A-IRB approach** covers major retail portfolios such as residential mortgages, credit cards and small businesses lending | • Estimated based on the application and behaviour scores of obligors.<br>• PD models are calibrated to reflect the expected long-run average one-year default rate over an economic cycle. | • Product and collateral characteristics are major factors.<br>• LGD models are calibrated to reflect the economic loss under downturn conditions.<br>• EAD models are calibrated to reflect the default-weighted average and economic downturn conditions. |
| **F-IRB (Non-Supervisory Slotting) approach** covers major wholesale portfolios such as bank, non-bank financial institutions, corporate real estate (including income producing real estate) and general corporates | • PD models are statistical based or expert judgement models that use both quantitative and qualitative factors to assess an obligor's repayment capacity and calibrated to reflect the expected long-run average one-year default rate over an economic cycle.<br>• Expert judgement models based on inputs from internal credit experts are typically used for portfolios with low default rates. | • Estimated based on rules prescribed in Bank Negara Malaysia (BNM) Risk-Weighted Capital Adequacy Framework (RWCAF). |

| | | |
|---|---|---|
| **F-IRB (Supervisory Slotting) approach** covers other specialised lending portfolios such as project finance, object finance and commodities finance | • Risk grades derived from internal models are mapped to the five supervisory slotting categories prescribed in BNM RWCAF. | • Estimated based on rules prescribed in BNM RWCAF. |

- **Portfolio Reporting:** This includes internal and external reporting of portfolio risk information to respective stakeholders. These reports provide a better understanding of how the quality of our credit portfolio is evolving in response to the changing operating environment and downside risks. Regular risk reports covering detailed credit exposures, credit migration, expected losses and risk concentrations by business segment are provided to Senior Management and Board for making timely and better-informed decisions.

Using insights from portfolio modelling and reporting, we allocate appropriate risk and financial resources such as funding and capital to support growth opportunities. We use these insights to set credit concentration limits to manage the potential downside risks from adverse changes in the operating environment. The design of these limits considers direct and indirect risk drivers, such as economic sector, industry and geographic location, collateral type or other credit risk mitigation.

**Credit Risk Mitigation**

We use various credit risk mitigation measures such as requiring collateral, buying credit protection and setting netting arrangements to reduce credit risk exposures. However, risk mitigation does not replace our proper assessment of the obligor's ability to repay, which remains the primary repayment source.

Our credit policies outline the key considerations for eligible credit risk mitigants. Including legal certainty and enforceability, correlation, liquidity, marketability, counterparty risk of the credit protection provider and collateral-specific minimum operational requirements. Eligible physical and financial collateral types include cash, real estate, marketable securities, standby letters of credit and credit insurance.

Appropriate haircuts to the collateral's market value to reflect its inherent nature, quality, liquidity and volatility. Regular independent valuations of the collateral are conducted. We also monitor our collateral holdings to maintain diversification across asset classes and markets. We accept guarantees from individuals, corporates, and institutions as a form of support. Where guarantees are recognised as credit risk mitigants via the PD substitution approach, we have established eligibility criteria and guidelines.

Netting, collateral arrangements, early termination options and central clearing mechanisms are common risk mitigation tools for managing counterparty credit risk. In approved netting jurisdictions, netting agreements allow us to offset our obligations against what is due from that counterparty in the event of a default, thereby reducing credit risk exposure. Collateral arrangements are typically governed under market standard documentation such as International Swaps and Derivatives Association (ISDA) and Credit Support Annexes (CSA) or Global Master Repurchase Agreements (GMRA). Such arrangements will require the posting of additional collateral if the mark-to-market exposures exceed the agreed threshold amount. We apply a haircut to the value of the eligible collateral to cover potential adverse market volatility. Regulatory margin requirements may apply to the agreed threshold amount. ISDA agreements may also include rating triggers to allow for transaction termination or require additional collateral if a rating downgrade occurs.

**Remedial Management**

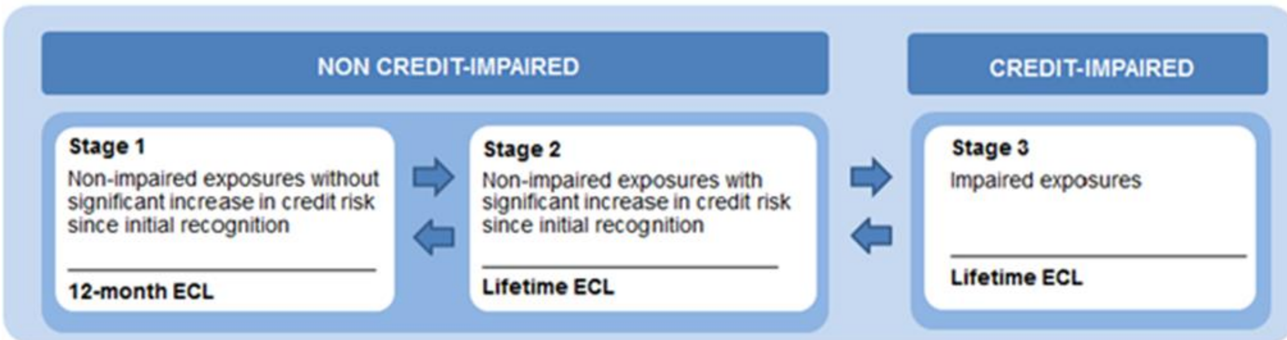
Processes are in place to foster early identification of vulnerable borrowers. The quality of our credit portfolios is proactively monitored and deliberated at various credit risk forums. Action plans to remediate deteriorating trends are worked out and reviewed at such forums.

We classify our credit exposures as restructured assets when we grant non-commercial concessions to borrowers who are unable to meet their original repayment obligations. We further classify a restructured credit exposure into the appropriate impaired loans grade based on the assessment of the borrower's financial condition and ability to repay under the restructured terms. Such credit exposure must comply fully with the restructured terms before it can be restored to non-impaired status.

Dedicated remedial management units manage the restructuring and recovery of Impaired Loans (ILs) for wholesale portfolios. The objective is to rehabilitate ILs where possible or maximise recoveries for ILs that are on exit strategy. For the retail portfolios, we develop appropriate risk-based and time-based collection strategies to maximise recoveries. We use data such as delinquency buckets and adverse status tags for delinquent retail loans to constantly analyse, fine-tune and prioritise our collection efforts.

*Impairment Allowances for Loans*
Sufficient impairment allowances are maintained to absorb credit losses inherent in our credit portfolio. Allowance for Expected Credit Losses (ECL) is recognised for credit impaired and non-credit impaired exposures in accordance with Malaysian Financial Reporting Standard (MFRS) 9 - Financial Instruments through a forward looking ECL model. ECL allowances are assessed on a forward-looking basis and based on the three stages of credit risk under this framework.

**Stages of Credit Risk and Expected Credit Losses**




## MARKET RISK MANAGEMENT

Market risk arises primarily from our trading, client servicing and balance sheet management activities. Given the high interest rates and volatile geopolitical environment, it is paramount that the management of market risk is robust and timely. This is achieved with the following market risk management approach, identification, and measures for monitoring, reporting and control.

**Market Risk Management Approach**
Market risk policies and procedures have been established to provide common guidelines and standards for managing market risks. We regularly review our market risk management strategy and limits established within our risk appetite and in line with our business strategies taking into account prevailing macroeconomic and market conditions.

**Market Risk Identification**
The Group's internal approval processes ensure that market risk is properly identified and quantified, allowing us to manage and mitigate such risks.

**Market Risk Measurements**
*Value-At-Risk*
Value-at-risk (VaR) is a key metric used to quantify market risk exposures arising from our trading activities. VaR is measured and monitored by its individual market risk components, namely interest rate risk, foreign exchange risk, equity risk and credit spread risk, as well as at the aggregate level. Our VaR model is based on the historical simulation approach, calibrated at the 99% confidence level and the one-day holding period. A 99% confidence level means that, statistically, losses on a single trading day may exceed VaR on average, once every 100 days.

*Other Risk Measures*
Apart from VaR, there are numerous other market risk measures used in monitoring the market risk of the Treasury positions. Present Value of a Basis Point (PV01) - which measures the change in value of interest rate sensitive exposures resulting from one basis point increase across the entire yield curve - is an important interest rate risk measure monitored on a daily basis. FX Net Open Position (NOP) measures the exposure to each currency while Equity Net Open Position (NOP) measures the exposure to each equity instrument. Present value of a basis point increase in Credit Spreads (CS01) measures the change in value of credit sensitive exposures resulting from one basis point increase in the credit spread. Risk measures used also include spread/basis sensitivity limits, notional limits and derivative greeks for specific exposure types.

*Stress Testing and Scenario Analysis*
We perform stress testing and scenario analysis to assess and quantify potential losses from unlikely but plausible extreme market conditions. We regularly review and adjust the stress scenarios to ensure that their relevance to our trading activities and risk profile, as well as current and forecasted economic conditions. This analysis determines if the potential losses from such extreme market conditions are within our risk tolerance. In addition to regular stress scenarios, we also use ad-hoc event-specific stress scenarios to assess the potential impact of specific market conditions on our market risk exposures.

**Risk Monitoring and Control**
*Limits*
Trading units may only undertake authorised trading activities for approved products. All trading risk positions are monitored on a daily basis against approved and allocated limits. Trading activities are conducted within approved mandates and dynamically hedged to remain within limits. High utilisations alert are sent to traders and head of desk when utilisations exceeds 70%. Limit excesses and triggers are promptly reported and escalated to senior management and committees.

*Model Validation*
Model validation is also an integral part of our risk control process. Financial models are used to price financial instruments and calculate VaR. We ensure that the models used are fit for their intended purpose through periodic independent verification and reviews. To enhance the integrity of the trading P&L and risk measures generated, we source market rates independently for risk measurement and valuation.

*Back-Testing*
To ensure the continued integrity of our VaR model, we regularly back-test the VaR estimates against actual daily trading P&Ls and hypothetical P&Ls to confirm that the models do not underestimate our market risk exposures Back-test exceptions are promptly investigated and results are escalated to senior management.

## ASSET LIABILITY MANAGEMENT

Asset liability management is the strategic management of the Group’s balance sheet structure and liquidity requirements. It covers liquidity sourcing and diversification as well as interest rate risk management.

**Asset Liability Management Approach**
Our asset liability management framework focuses on managing the balance sheet exposures that give rise to liquidity risk and Interest Rate risk in the Banking Book (IRRBB). The asset liability framework consists of key elements that facilitate the asset liability management risk process, including comprehensive risk measures, actively monitored risk limits, all supported by strong data capabilities and risk systems.

**Liquidity Risk**
Liquidity risk refers to the risk of being unable to meet our contractual and regulatory financial obligations. The objective of liquidity risk management is to ensure that we continue to fulfil our financial obligations and to undertake new transactions, through the management of liquidity and funding risks within our risk appetite.

*Liquidity Risk Identification*

Liquidity risks arise from cashflow mismatches in maturing assets, liabilities and off-balance sheet items. Liquidity risks are also identified through the monitoring of early warning indicators of potential liquidity risk, which take account of the market environment as well as any other financial risks that could potentially trigger a liquidity risk event. Early identification of liquidity risk is crucial for effective management of our funding requirements and liquidity risks.

*Liquidity Risk Measurements*

Liquidity risk metrics, consist of a framework for projecting cash flows on both contractual and behavioural bases under business as usual and stressed market scenarios. Liquidity and funding concentration ratios are also established to measure and manage the effective diversification of funding sources, and the adequacy of sources of liquidity under stressed conditions.

*Liquidity Stress testing*

We perform stress testing and scenario analyses under a range of scenarios to assess the potential impact of extreme market events on our liquidity risk profile. We regularly review these stress scenarios in the context of the prevailing risk climate, financial conditions and liquidity strategies. Stress testing bolsters our resilience to liquidity stresses, helping the Group anticipate and set aside sufficient liquidity buffers while applying the relevant stress testing outcomes to develop effective funding strategies, policies and contingency funding plans.

*Liquidity Risk Monitoring, Reporting and Control*

Liquidity risk positions are monitored and reported against approved liquidity risk limits and triggers. Limits are established in alignment with our risk appetite, taking into account our funding capacity, business requirements and the liquidity environment we operate in. There is also an established review, oversight and escalation process to facilitate prompt escalation and remediation of any limit exceptions. To facilitate the risk monitoring and reporting processes, we continually invest in the development of risk and management information systems and analysis to support the liquidity risk framework.

**Interest Rate Risk in the Banking Book (IRRBB)**

IRRBB refers to the current and prospective risk of interest rates to the Bank’s capital and earnings. The primary goal of the management of IRRBB is to ensure that interest rate risk exposures are consistent with our risk appetite and maintained within defined risk tolerances.

*Interest rate risk identification*

Interest rate risks arise from interest rate sensitive instruments which are repriced at different timing (gap risk), referenced to different interest rate benchmarks (basis risks), or possess optionality with respect to the timing or level of cashflows under different interest rate environments (optionality risk).

*Interest rate risk measurements*

We measure IRRBB from the perspective of both the earnings and capital. Net Interest Income (NII) sensitivity estimates the potential change in earnings over a one-year horizon, and Economic Value of Equity (EVE) sensitivity estimates the potential impact on the Bank’s capital under various interest rate shock scenarios. Interest rate sensitivity measures such as PV01 and repricing gap profile analysis are also part of the risk metrics employed. Behavioural models are adopted to assess interest rate risks in relation to loan prepayment, time deposit early redemption and the profile of non-maturity deposits. Appropriate systems and standards are used in the quantification and measurement of IRRBB.

*Interest rate risk stress testing*

The Bank performs IRRBB stress testing under a range of scenarios encompassing historical and hypothetical scenarios, and regulatory prescribed interest rate shock scenarios. The stress tests assess the potential impact of adverse scenarios on the Bank’s financial condition, where stress limits and management actions are integrated with the stress test results.

*Interest rate risk monitoring, reporting and control*
Interest rate risk positions and metrices are comprehensively monitored against approved risk limits and triggers. Interest rate risk limits are aligned with the risk appetite and prevailing risk outlook. There is also an established review, oversight and escalation process to facilitate prompt escalation and remediation of any limit exceptions. We invest in the development of risk systems to support the monitoring and analysis of interest rate risks.

## OPERATIONAL RISK MANAGEMENT

Operational risk is the risk of loss caused by failures in internal processes, systems, poor management, human error or external events. This risk is inherent in all banking products, activities, processes and systems. It covers various non-financial risks including fraud; money laundering, terrorism financing and sanctions risk; third-party risk; physical and people security risk; conduct risk; business continuity risk; unauthorised trading risk; regulatory, legal and reputational risk.

**Operational Risk Management Approach**
We recognise the heightened risk of business disruptions arising from operational failures and the importance to strengthen our operational resiliency. We continue to anticipate and prevent potential operational events through robust risk management practices.

Our operational risk framework sets out the approach to manage and control the operational risks arising from the Group's business activities and operations.
This includes regular review of our operational risk profile, comprising of operational risk events, key risk indicators, material issues and trends. Senior Management and Board receive regular updates on the operational risk profile and an annual assurance report assessing the adequacy and effectiveness of our internal controls and risk management systems.

In addition, the operational risk management framework is supported by various programmes to ensure preparedness, minimise the impact of adverse events through timely response, recovery, and adaptability, thus ensuring the continued provision of essential services. The table below shows the key components of operational risk management.

| **Table 6: Key Components of Operational Risk Management** | |
|---|---|
| **Risk Management Capabilities** | New Product Approval |
| | • tringent process to identify and mitigate risks inherent in new products or the distribution/marketing of new products, ensure prudent allocation of resources and capital, and compliance with regulatory requirements. |
| | Third-Party Risk Management |
| | • utsourced and third-party service providers are scrutinised through stringent onboarding and ongoing due diligence assessments. |
| | Business Continuity Management |
| | • egular reviews to identify the Bank's Critical Business Services and Service Recovery Time Objective.<br>• ecovery strategies and business recovery plans are established, reviewed and tested annually. |
| | Anti-Money Laundering/ Countering the Financing of Terrorism |
| | • Enhanced risk assessment methodologies that overlay on existing monitoring and screening platforms to assess customer, product and geographical risks. |

| | |
|---|---|
| | • Robust risk surveillance capabilities that leverage on artificial intelligence and data analytics for dynamic monitoring and detection of emerging financial crime trends and typologies. |
| | Anti-Fraud |
| | • Transaction monitoring capabilities to detect and alert customers on suspicious account activities, and to prevent the completion of such transactions.<br>• Ongoing efforts to strengthen the fraud surveillance systems in response to changes in fraud/scam typologies and the regulatory landscape. |
| **Incident Response and Crisis Response** | • risis Management procedures and playbooks to guide the Bank's responses to potential crisis events such as pandemic situations, surge in fraud and scams, cyber-attacks.<br>• omprehensive governance and anti-fraud response model to expedite incident handling through the Dynamic Response Committee (DRC) and Anti-Fraud Standing Committee (AFSC). |
| **Insurance** | Financial lines insurance programmes in place to cover key operational risks:<br>• Bankers Blanket Bond Professional Indemnity Programme<br>• Cyber and Network Security Liability Insurance Programme |
| **Awareness and Training** | • perational Risk Working Group to foster continuous engagement with stakeholders across the organisation, facilitating awareness and understanding of operational risk.<br>• argeted and specialised training, including certified courses, are available to raise staff competency. |
| **Industry Collaboration** | • Active participation in the industry committees and working groups to share and stay abreast of the developments in the operational risk landscape. |

## INFORMATION SECURITY AND DIGITAL RISK MANAGEMENT

Information security and digital risk is a business risk that comprises the risk domains of information, cyber and technology risks. Effective management of information security and digital risk is critical to minimising any impact on our customers and any financial, operational, reputational, legal and/or regulatory impact on the Group.

**Information Security and Digital Risk Management Approach**
Robust management of information security and digital risks remains a key focus in view of the Bank's continued digitalisation efforts and the evolving cyber threat landscape, further exacerbated by factors such as adoption of new technology by threat actors (e.g., using generative AI to develop more realistic phishing emails) and geopolitical conflicts (e.g., resulted surge in cyber-attacks and hacktivism).

To achieve resilience for the Group, our information security and digital risk framework sets out a comprehensive approach towards governing and managing information security and digital risks. This includes regular review of key risk areas, considering other factors such as incidents, regulatory expectations and emerging risks, to facilitate the prioritisation of risk management activities including risk monitoring and risk reporting (e.g., group-wide risk profiles, related key trends and significant incidents) to Senior Management and the Board.

In addition, an organisation strategy comprising the following key components is adopted:

| Table 7: Key Components of Information Security and Digital Risk Management | |
|---|---|
| **Preventive, detective and response capabilities** | • A 24-by-7 Cybersecurity Operations Centre and a Technology Command Centre monitor our networks and systems for potential cyber threats or disruptions to our financial services.<br>• Ongoing monitoring of cyber threat intel to remain watchful of any indication of potential cyber events that could target or impact the Bank.<br>• Regular review and testing of existing controls, with new capabilities added where necessary to mitigate against evolving threats. |
| **Awareness & Vigilance Uplift & Testing Programmes** | • Mandatory cyber & information security awareness e-learning, regular risk awareness broadcasts and social engineering testing programmes covering all staff.<br>• Group-wide internal Cyber Smart Programme to improve related knowledge, skills, and behaviours, through gamification and curated activities.<br>• Refreshed Cyber Certification Pathway to further uplift the proficiency level of selected staff.<br>• Regular security advisories to raise awareness of customers, as well as initiatives to familiarise selected outsourced services providers with control expectations of the Group. |
| **Incident Response and Crisis Management** | • Robust incident response and crisis management processes to mitigate impact from disruption of essential financial services during times of crisis.<br>• Regular simulation exercises to improve readiness of our cybersecurity incident response team, as well as crisis management exercises to enhance the preparedness of senior management.<br>• Established processes to facilitate prompt response arising from cyber-attack on our third-party providers. |
| **Cyber and Network Security Insurance** | • Relevant cyber and network security insurance to cover damages arising from specific cyber-attacks and technology disruption scenarios.<br>• These scenarios include cyber extortion and business interruption losses due to a security breach or system failure. |
| **Collaboration with regulators and industry partners** | • Actively engagement with regulatory agencies in Singapore, Malaysia and Hong Kong and the Financial Services Information Sharing and Analysis Centre (FS-ISAC) to exchange cyber threat intel.<br>• Participation in industry committees and working group to share information security and digital risk-related updates. |

## SHARIAH GOVERNANCE

*Overview*

OCBC Al-Amin Bank Berhad (OABB) is governed under Islamic Financial Services Act 2013 (IFSA) which requires Islamic Financial Institutions (IFI) to ensure that its aims and operations, business, affairs and activities are Shariah compliant and in accordance with the advice or ruling issued by the Shariah Advisory Council (SAC). BNM has issued the Shariah Governance Framework (SGF) that sets out the expectations on an IFI's Shariah governance structures, processes and arrangements to ensure that all its operations and business activities are in accordance with Shariah. SGF also provides a comprehensive guidance to the board, Shariah Committee and management of the IFI in discharging its duties in matters relating to Shariah and outlines the functions relating to Shariah review, Shariah audit, Shariah risk management and Shariah research. In 2019, BNM issued the Shariah Governance Policy Document (SGPD), superseding SGF, that outlines strengthened regulatory expectations for effective Shariah governance arrangements that are well-integrated with business and risk strategies of the IFI. In this respect, OABB operationalizes the SGPD requirements in its internal Shariah Governance Framework.

*Shariah Risk Management*
Shariah risk management is a function that systematically identifies, measures, monitors and reports Shariah non-compliance risks in the operations, business, affairs and activities of OABB. Shariah non-compliance risk refer to the risk of legal or regulatory sanctions, financial loss or non-financial implications including reputational damage, which OABB may suffer arising from failure to comply with the rulings of the Shariah Advisory Council of Bank Negara Malaysia (SAC), standards on Shariah matters issued by BNM pursuant to section 29(1) of the IFSA, or decisions or advice of the OABB's Shariah Committee. The Shariah risk management function involves:

(i) integrate Shariah non-compliance risk considerations with enterprise-wide risk management;
(ii) identify Shariah non-compliance risk exposures in the business operations and activities of OABB;
(iii) assess Shariah non-compliance risk and measure the potential impact of the risk exposures to OABB;
(iv) establish appropriate risk mitigation measures;
(v) monitor Shariah non-compliance risk exposures and effectiveness of the risk mitigation measures;
(vi) report to the Board, Shariah Committee and senior management on the Shariah non-compliance risk exposures; and
(vii) constructively challenge decisions that may give rise to Shariah non-compliance risks.

All potential Shariah Non-Compliance Events (SNCEs) are initially assessed by Shariah Review Department (SRD) as the control function that is responsible for the assessment and submitted to OABB's Shariah Committee for confirmation and decision in order to determine the status of the events and potential Shariah non-compliant income. All potential and actual SNCEs upon confirmation by SRD and Shariah Committee are to be reported to BNM within the required timeframe set by BNM. In ensuring a robust oversight on Shariah non-compliance risk, periodic reporting on Shariah non-compliance risk is submitted to Risk Management Committee.

Note:
In this document, for whatever that is related to Islamic Banking, the following terms shall apply:

1. Risk Weighted Capital Adequacy Framework (RWCAF) also refers to Capital Adequacy Framework for Islamic Bank (CAFIB) (inclusive of Disclosure Requirements for Pillar 3 where applicable);
2. Loan also refers to Financing;
3. Borrower also refers to Customer;
4. Interest also refers to Profit;
5. Interest Rate also refers to Profit Rate;
6. Lending also refers to Financing.

# Basel II Pillar 3 Market Disclosure

(OCBC Bank (M) Berhad Group – Position as at 31 December 2023)

The purpose of this disclosure is to provide the information in accordance with BNM Risk Weighted Capital Adequacy Framework (Basel II) – Disclosure Requirements (Pillar 3) and Capital Adequacy Framework for Islamic Bank (CAFIB - Basel II) – Disclosure Requirements (Pillar 3) Guidelines. This supplements the disclosure in the Risk Management Chapter as well as related information in the Notes to the Financial Statements.

### Exposures and Risk Weighted Assets (RWA) by Portfolio

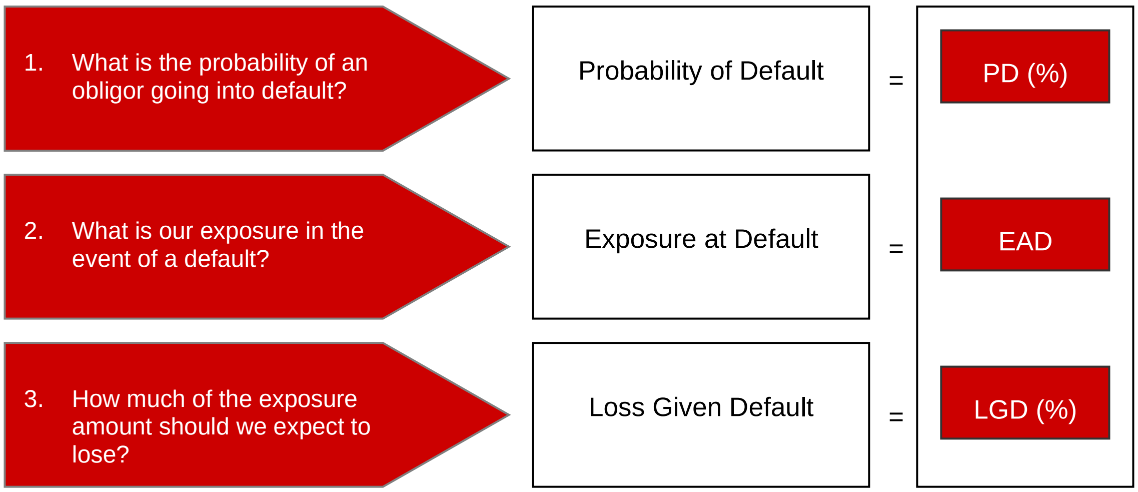
| | EAD[1] RM million | RWA RM million |
|---|---|---|
| **Credit Risk** | | |
| Standardised Approach | | |
| Corporate | 630 | 488 |
| Sovereign & Central Bank | 19,687 | 115 |
| Public Sector Entities | 1,023 | 350 |
| Retail | 90 | 80 |
| Equity | 113 | 113 |
| Securitisation | - | - |
| Others | 628 | 495 |
| Total Standardised | **22,171** | **1,641** |
| Internal Ratings-Based (IRB) Approach | | |
| Foundation IRB | | |
| Corporate | 47,735 | 40,020 |
| Bank | 6,848 | 1,046 |
| Advanced IRB | | |
| Residential Mortgage | 21,197 | 2,734 |
| Qualifying Revolving Retail | 1,760 | 430 |
| Other Retail - Small Business | 8,056 | 2,439 |
| Specialised Lending under Supervisory Slotting Criteria | 178 | 216 |
| Total IRB | **85,774** | **46,885** |
| Total Credit Risk | **107,945** | **48,526** |
| **Market Risk** | | |
| Standardised Approach | | 846 |
| Total Market Risk | | **846** |
| **Operational Risk** | | |
| Standardised Approach[2] | | 5,880 |
| Total Operational Risk | | **5,880** |
| **Total RWA** | | **55,252** |

Note:

[1] EAD refers to exposure at default after credit risk mitigation
[2] OCBC Bank (M) Berhad Group and OCBC Bank (M) Berhad have adopted the Standardised Approach, while OCBC Al-Amin Bank Berhad is on the Basic Indicator Approach.

## CREDIT RISK

With Basel II implementation, OCBC Bank (M) Berhad Group has adopted the Internal Ratings-Based (IRB) Approach for major credit portfolios, where 3 key parameters – Probability of Default (PD), Exposure at Default (EAD) and Loss Given Default (LGD) are used to quantify credit risk.




### Credit Exposures under Standardised Approach

Credit exposures under standardised approach are mainly exposures to sovereign and central bank. Rated exposures relate mainly to sovereign and central bank while unrated exposures relate mainly to Islamic personal financing and other assets.

| Risk Weight | EAD<br>RM million |
|---|---|
| 0% | 20,214 |
| 20% - 35% | 176 |
| 50% - 90% | 371 |
| 100% | 1,296 |
| >100% | 1 |
| **Total** | **22,058** |
| | |
| Rated exposures | 20,586 |
| Unrated exposures | 1,472 |

Note: Excludes Equity

## Equity Exposures under Standardised Approach

Equity exposures for regulatory capital computation are risk weighted in accordance with BNM Risk-Weighted Capital Adequacy Framework (Basel II – Risk-Weighted Assets Computation) under the standardised approach.

**Equity Exposures under Standardised Approach**

| Risk Weight | EAD RM million |
|---|---|
| 100% | 113 |
| 200% | - |
| **Total** | **113** |

## Securitisation Exposures

There was no securitisation and re-securitisation exposure in the banking and trading books as at 31 December 2023.

## Specialised Lending Exposures under Supervisory Slotting Criteria

Specialised lending exposures include project and object financing.

| | EAD RM million | Average Risk Weight |
|---|---|---|
| Strong | - | - |
| Good | - | - |
| Satisfactory | 178 | 122% |
| Weak | - | - |
| Default | - | NA |
| **Total** | **178** | **122%** |

## Credit Exposures under Foundation Internal Ratings-Based Approach (F-IRBA)

Corporate exposures are mainly exposures to corporate and institutional customers, major non-bank financial institutions as well as financing of income-producing real estate. Bank exposures are mainly exposures to commercial banks.

### *Corporate Exposures*

| PD Range | EAD RM million | Average Risk Weight |
| --- | --- | --- |
| up to 0.05% | 422 | 14% |
| > 0.05 to 0.5% | 16,358 | 48% |
| > 0.5 to 2.5% | 22,504 | 97% |
| > 2.5 to 9% | 5,951 | 132% |
| > 9% | 1,190 | 211% |
| Default | 1,310 | NA |
| **Total** | **47,735** | **84%** |

### *Bank Exposures*

| PD Range | EAD RM million | Average Risk Weight |
| --- | --- | --- |
| up to 0.05% | 2,511 | 9% |
| > 0.05 to 0.5% | 4,275 | 18% |
| > 0.5 to 2.5% | 62 | 64% |
| > 2.5 to 9% | - | - |
| > 9% | # | 182% |
| Default | # | NA |
| **Total** | **6,848** | **15%** |

“#” represents amount less than RM0.5 million

## Credit Exposures under Advanced Internal Ratings-Based Approach (A-IRBA)

Residential Mortgages are loans to individuals secured by residential properties. Qualifying Revolving Retail exposures are credit card facilities to individuals. Other Retail – Small Business exposures include lending to small businesses and commercial property loans to individuals.

### *Residential Mortgages*

| | EAD | Undrawn Commitment | EAD Weighted Average | |
|---|---|---|---|---|
| PD Range | RM million | RM million | LGD | Risk Weight |
| up to 0.5% | 12,382 | 1,418 | 7% | 5% |
| > 0.5 to 3% | 6,502 | 154 | 10% | 14% |
| > 3 to 10% | 320 | 4 | 12% | 49% |
| > 10% | 1,020 | 13 | 12% | 66% |
| 100% | 973 | 19 | 17% | 40% |
| **Total** | **21,197** | **1,608** | **9%** | **13%** |

### *Qualifying Revolving Retail Exposures*

| | EAD | Undrawn Commitment | EAD Weighted Average | |
|---|---|---|---|---|
| PD Range | RM million | RM million | LGD | Risk Weight |
| up to 0.5% | 1,327 | 2,226 | 75% | 10% |
| > 0.5 to 3% | 304 | 213 | 60% | 37% |
| > 3 to 10% | 93 | 24 | 76% | 129% |
| > 10% | 32 | 9 | 77% | 215% |
| 100% | 4 | - | 75% | 0% |
| **Total** | **1,760** | **2,472** | **73%** | **24%** |

### *Other Retail - Small Business Exposures*

| | EAD | Undrawn Commitment | EAD Weighted Average | |
|---|---|---|---|---|
| PD Range | RM million | RM million | LGD | Risk Weight |
| up to 0.5% | 5,299 | 1,581 | 27% | 14% |
| > 0.5 to 3% | 1,670 | 71 | 31% | 39% |
| > 3 to 10% | 262 | 8 | 30% | 49% |
| > 10% | 534 | 35 | 35% | 75% |
| 100% | 291 | 6 | 46% | 186% |
| **Total** | **8,056** | **1,701** | **29%** | **30%** |

## Actual Loss and Expected Loss for Exposures under Foundation and Advanced IRB Approaches

Actual loss refers to net impairment loss allowance and direct write-off to the statement of profit or loss during the year. Expected loss ("EL") represents model derived and/or regulatory prescribed estimates of future loss on potential defaults over a one-year time horizon. Comparison of the two measures has limitations because they are calculated using different methods. EL computations are based on LGD and EAD estimates that reflect downturn economic conditions and regulatory minimums, and PD estimates that reflect long run through-the-cycle approximation of default rates. Actual loss is based on accounting standards and represents the point-in-time impairment experience for the financial year.

| | Actual Loss for the 12 months ended 31 December 2023 RM million | Regulatory Expected Loss (Non-defaulted) as at 31 December 2022 RM million |
|---|---|---|
| Corporate | 203 | 301 |
| Bank | - | 3 |
| Other Retail - Small Business | (13) | 117 |
| Retail | (64) | 107 |
| **Total** | **126** | **528** |

## Exposures Covered by Credit Risk Mitigation

| | Eligible Financial Collateral RM million | Other Eligible Collateral RM million | Amount by which credit exposures have been reduced by eligible credit protection RM million |
|---|---|---|---|
| **Standardised Approach** | | | |
| Corporate | 124 | - | - |
| Sovereign & Central Bank | 1,399 | - | - |
| Public Sector Entities | - | - | 621 |
| Retail | 11 | - | - |
| Others | 76 | - | - |
| **Total** | **1,610** | **-** | **621** |
| | | | |
| **Foundation IRB Approach** | | | |
| Corporate | 925 | 9,540 | 159 |
| Bank | 517 | - | - |
| **Total** | **1,442** | **9,540** | **159** |

Note:
1. Not all forms of collateral or credit risk mitigation are included for regulatory capital calculations.
2. Does not include collateral for exposures under Advanced IRB Approach and Specialised Lending.

## Counterparty Credit Risk Exposures

| | RM million |
|---|---|
| Replacement Cost | 834 |
| Potential Future Exposure | 1,637 |
| Less: Effects of Netting | 925 |
| **EAD under Current Exposure Method** | **1,546** |
| Analysed by type: | |
| Foreign Exchange Contracts | 1,033 |
| Interest Rate Contracts | 489 |
| Equity Contracts | 24 |
| Gold and Precious Metals Contracts | - |
| Other Commodities Contracts | - |
| Credit Derivative Contracts | - |
| Less: Eligible Financial Collateral | 355 |
| **Net Derivatives Credit Exposure** | **1,191** |

Note: Not all forms of collateral or credit risk mitigation are included for regulatory capital calculations.

## Credit Derivatives

| | Notional Amount RM million | |
|---|---|---|
| | **Bought** | **Sold** |
| Credit Derivatives Swap | | |
| for own credit portfolio | - | - |
| for intermediation activities | 877 | 852 |
| **Total** | **877** | **852** |

Note: Credit derivatives for own credit portfolio include trading portfolio and hedges, if any.

## MARKET RISK

### Exposure, Risk Weighted Assets and Capital Requirement by Market Risk Type under Standardised Approach

| | Gross Exposure | | Risk Weighted | Min. Capital |
|---|---|---|---|---|
| | Long Position | Short Position | Assets | Requirement |
| | RM million | RM million | RM million | RM million |
| Interest Rate Risk | 133 | 160 | 692 | 55 |
| Foreign Currency Risk | 59 | 121 | 121 | 10 |
| Equity Risk | - | - | - | - |
| Commodity Risk | - | - | - | - |
| Inventory Risk | - | - | - | - |
| Options Risk | - | - | 33 | 3 |
| **Total** | **192** | **281** | **846** | **68** |

## EQUITY EXPOSURES

Equity exposures comprised investments in quoted and unquoted equity instruments.

Disclosures on accounting policy and fair value measurement of equity securities are the same with the audited financial statements for the financial year ended 31 December 2023.

**Carrying Value of Equity Exposures**

| | RM million |
|---|---|
| Quoted equity exposure - Fair value through profit or loss ("FVTPL") | - |
| Unquoted equity exposure - Fair value through other comprehensive income ("FVOCI") | 113 |
| Quoted equity exposure - Associates | - |
| Unquoted equity exposure - Associates | - |
| **Total** | **113** |

**Realised and Unrealised Gains and Losses**

| | RM million |
|---|---|
| Gains/(losses) from disposal of equities | |
| Unrealised gains/(losses) included in fair value | 100 |
| **Total** | **100** |

## Interest Rate Risk in Banking Book

Based on a 100 bps parallel rise in yield curves on the OCBCM's exposure to major currency i.e. Malaysian Ringgit and US Dollar, net interest income is estimated to increase by MYR158.0million, or approximately +8.8% of reported net interest income. The corresponding impact from a 100 bps decrease is an estimated reduction of MYR224.2 million in net interest income, or approximately -12.5% of reported net interest income.