



# Maybank

BASEL II  
PILLAR 3 DISCLOSURE



**Strong  
Net Profit**  
of RM8.23 billion

One of the  
**Best Capitalised  
Banks in ASEAN**  
with Group CET1 Capital  
Ratio of 15.67%

**Largest Bank  
in Malaysia**  
with RM947.81 billion  
in Total Assets

# Inside This Report

## 01 OVERVIEW

## 01 SCOPE OF APPLICATION

## 02 CAPITAL MANAGEMENT

## 15 RISK MANAGEMENT

## 16 CREDIT RISK

Regulatory Capital Requirement	16
Management of Credit Risk	16
Credit Impairment Policy and Classification and Impairment Provisions for Financial Assets	31
Basel II Requirements	37
Non-Retail Portfolio	38
Retail Portfolio	48
Independent Model Validation	56
Credit Risk Mitigation	56
Securitisation Exposures	63
Credit Exposures Subject to Standardised Approach	63
Counterparty Credit Risk	67
Country Risk	72

## 73 MARKET RISK

Traded Market Risk	73
Non-Traded Market Risk	73
Capital Treatment for Market Risk	75
Liquidity Risk	75
Equity Risk in the Banking Book	75

## 77 NON-FINANCIAL RISK

Management of Non-Financial Risk	77
Capital Treatment for Operational Risk	78

## 79 SHARIAH GOVERNANCE

## 80 INVESTMENT ACCOUNT ("IA")

## 81 FORWARD-LOOKING STATEMENTS

# Overview

The Pillar 3 Disclosure for the financial year ended 31 December 2022 for Malayan Banking Berhad (“Maybank” or the “Bank”) and its subsidiaries (“Maybank Group” or the “Group”) is in accordance with Bank Negara Malaysia’s (“BNM”) Risk-Weighted Capital Adequacy Framework (“RWCAF”) – Disclosure Requirements (“Pillar 3”) and Capital Adequacy Framework for Islamic Banks (“CAFIB”) – Disclosures Requirements (“Pillar 3”), which are the equivalent of that issued by the Basel Committee on Banking Supervision (“BCBS”) entitled International Convergence of Capital Measurement and Capital Standards.

The Group adopts the following approaches in determining the capital requirements of Pillar 1 in accordance with BNM’s Guidelines on Capital Adequacy Framework (Basel II – Risk Weighted Assets) and CAFIB (Basel II – Risk Weighted Assets):

- Credit Risk – Foundation Internal Ratings-Based (“FIRB”) Approach and supervisory slotting criteria to calculate credit risk-weighted assets (“RWA”) for major non-retail portfolios, and the Advanced Internal Ratings-Based (“AIRB”) Approach for major retail portfolios. Other credit portfolios, especially those in the Bank’s subsidiaries and some overseas units, are on the Standardised Approach and will migrate to the Internal Ratings-Based (“IRB”) approaches progressively.
- Market Risk – Standardised Approach (“SA”).
- Operational Risk – Basic Indicator Approach (“BIA”).

## MEDIUM AND LOCATION OF DISCLOSURE

The Pillar 3 Disclosure will be made available under the Investor Relations section of the Group’s website at [www.maybank.com](http://www.maybank.com) and as a separate report in the annual and half-yearly financial reports, after the notes to the Financial Statements.

## BASIS OF DISCLOSURE

This Pillar 3 Disclosure is prepared in accordance with BNM’s Pillar 3 Guidelines and the Group’s internal policy on Pillar 3 Disclosures, and is to be read in conjunction with the Group’s and the Bank’s Financial Statements for the financial year ended 31 December 2022. Whilst this document discloses the Group’s assets both in terms of exposures and capital requirements, the information disclosed herein may not be directly comparable with the information in the Financial Statements 2022 published by the Group and the Bank.

These disclosures have been reviewed and verified by an independent internal party and approved by the Risk Management Committee (“RMC”), as delegated by the Board of Directors (“Board”) of the Group.

## COMPARATIVE INFORMATION

This is the thirteenth full Pillar 3 Disclosure since the Group adopted the Basel II IRB Approach in July 2010. The corresponding Pillar 3 Disclosure in the preceding reporting period would be as at 31 December 2021.

# Scope of Application

The Pillar 3 Disclosure is prepared on a consolidated basis and comprises information of the Group, the Bank and Maybank Islamic Berhad (“Maybank Islamic”), a wholly-owned subsidiary of the Bank which provides Islamic banking financial services in Malaysia.

For regulatory reporting purposes, Maybank establishes two main levels of reporting namely at Maybank Group level, covering Maybank and its subsidiaries excluding the investments in insurance entities and associates; and at Maybank level, covering Maybank.

Information on subsidiaries and associates of the Group is available in the notes to the Financial Statements. The basis of consolidation for financial reporting is disclosed in the notes to the Financial Statements, which differs from that used for regulatory capital reporting purposes.

During the financial year, the Group did not experience any restrictions or other major impediments on the transfer of funds or regulatory capital within the Group.

# Capital Management

Effective capital management is fundamental to the sustainability of the Group. The Group proactively manages its capital to meet the expectations of key stakeholders such as regulators, shareholders, investors, rating agencies and analysts whilst ensuring that the returns on capital commensurate with risks undertaken by respective business units. The objectives are to:

- Maintain capital ratios at levels sufficiently above the regulatory minimum requirements;
- Support the Group's strong credit ratings from local and international rating agencies;
- Deploy capital efficiently to businesses and optimise returns on capital;
- Remain flexible to capitalise on future opportunities; and
- Build and invest in businesses, even in a stressed environment.

## Group Capital Management Framework

The Group formulates the Maybank Group Capital Management Framework ("Framework") to ensure capital management and planning are integrated and aligned across the Group.

The Framework, which is approved by the Board, incorporates governance, identification, assessment, monitoring and escalation policies and procedures to ensure that capital is managed effectively and optimised across the Group.

The Framework also contains guidance for implementation of Risk Adjusted Performance Measurement ("RAPM") to allocate capital optimally across the Group and measure the returns from the capital. The RAPM tool is implemented to promote optimal capital levels for business sectors, subsidiaries and overseas branches to minimise cost of capital and create value to the Group as a whole.

Overall responsibility for the management of capital rests with the Board whilst Group Executive Committee ("EXCO") is responsible for capital management policies on an ongoing basis.

## Annual Group Capital and Funding Plan

The Annual Group Capital and Funding Plan ("Plan") aims to ensure the Group (inclusive of subsidiaries and overseas branches) has sufficient capital and optimal capital mix to support business plans and strategic objectives during the financial year.

The Plan is updated annually and is approved by the Board. It is comprehensively drawn up to cover at least a three-year horizon and takes into account, amongst others, the Group's strategic objectives and business plans, regulatory capital requirements, dividend plans, views from key stakeholders, peers benchmarking, new developments on capital guidelines and regulations both locally and overseas, available supply of capital and capital raising options, performance of business sectors based on RAPM approach, risks under Pillar 2 Internal Capital Adequacy Assessment Process ("ICAAP") as well as stress test results. Key issues pertaining to the capital position will be identified for discussion at the Board level and appropriate solutions are recommended for implementation.

Internal capital targets ("ICTs") are set for the Group, subsidiaries and overseas branches based on their respective risk profiles and regulatory requirements at the jurisdictions in which they are based. The ICTs are reviewed annually to ensure adequate capital buffers to support their risk profiles and business growth.

## Group Capital Contingency Plan

The Group Capital Contingency Plan is embedded within the Maybank Group Capital Management Framework that is approved by the Board. The plan provides a comprehensive approach to the management and restoration of capital across the Group in the unlikely event of a capital crisis by:

- Establishing policies, procedures and governance for capital contingency planning;
- Providing early warning signals and establishing monitoring and escalation process; and
- Establishing strategies and action plans to ensure that capital is managed promptly.

The capital adequacy ratios of the Group (including subsidiaries and overseas branches) are monitored actively by Senior Management and the relevant committees on a monthly basis. Appropriate trigger points and early warning indicators are established based on the capital adequacy ratios governed under BNM guidelines and other local regulators (where relevant) in order to facilitate monitoring and escalation, reporting, decision-making and action planning. The trigger points formalise the basis of escalation to the appropriate departments and committees and also provide clear action plans to ensure that capital is restored back to healthy levels in the event of a capital crisis.

## Capital Structure

The Group places strong emphasis on the quality of its capital and, accordingly, holds a significant amount of its capital in the form of common equity which is permanent and has the highest loss absorption capability on a going concern basis.

The common equity capital of the Group comprises of ordinary share capital, reserves and retained profits.

The Dividend Reinvestment Plan ("DRP") scheme was first announced by the Bank on 25 March 2010 to allow shareholders to reinvest their cash dividends into new ordinary shares in the Group. Based on the DRPs since its first implementation, the average reinvestment rates has been about 86%. There were 169,377,074 new shares issued under the DRP during the financial year.

In addition to common equity, the Group also maintains other types of capital instruments such as Additional Tier 1 capital instruments and Tier 2 subordinated notes in order to optimise and diversify capital mix as well as lower cost of capital.

Table 1 and 2 depict a summary of the Additional Tier 1 capital instruments and Tier 2 subordinated notes issued by the Bank, which are qualified in the capital computation in accordance with BNM's Capital Adequacy Framework (Capital Components) and Capital Adequacy Framework for Islamic Banks (Capital Components) issued on 9 December 2020. For further details of these capital instruments, please refer to Notes 31 and 32 of the Financial Statements.

**Table 1: Additional Tier 1 Capital Instruments**

Description	Issue Date	First Call Date (callable at the option of the Issuer)	Maturity Date	Nominal Value As at 31.12.2022 RM' Million
RM1.24 billion 4.08% Basel III-compliant Additional Tier 1 Sukuk Mudharabah Perpetual Non-Call 5	25 September 2019	25 September 2024	Perpetual	1,240
RM1.56 billion 4.13% Basel III-compliant Additional Tier 1 Sukuk Mudharabah Perpetual Non-Call 7	25 September 2019	25 September 2026	Perpetual	1,560

**Table 2: Tier 2 Capital Instruments**

Description	Issue Date	First Call Date (callable at the option of the Issuer)	Maturity Date	Nominal Value As at 31.12.2022 RM' Million
RM3.0 billion 3.41% Basel III-compliant Subordinated Sukuk Murabahah (10 Non-Call 5)	5 August 2021	5 August 2026	5 August 2031	3,000
RM2.3 billion 2.90% Basel III-compliant Subordinated Sukuk Murabahah (10 Non-Call 5)	9 October 2020	9 October 2025	9 October 2030	2,300
RM0.7 billion 3.10% Basel III-compliant Subordinated Sukuk Murabahah (12 Non-Call 7)	9 October 2020	8 October 2027	8 October 2032	700
RM2.0 billion 4.63% Basel III-compliant Subordinated Sukuk Murabahah (10 Non-Call 5)	31 January 2019	31 January 2024	31 January 2029	2,000
RM1.7 billion 4.71% Basel III-compliant Subordinated Sukuk Murabahah (12 Non-Call 7)	31 January 2019	30 January 2026	31 January 2031	1,700

**Minimum Regulatory Capital Requirement****Table 3: Minimum Regulatory Capital Requirement [Applicable from 2022 to 2024]**

From 1 January Minimum CAR	2022 %	2023 %	2024 %
CET1 (a)	4.500	4.500	4.500
CCB (b)	2.500	2.500	2.500
HLA (c)	1.000	1.000	1.000
CET1 including CCB and HLA (a)+(b)+(c)	8.000	8.000	8.000
Tier 1 Capital Ratio	9.500	9.500	9.500
Total Capital Ratio	11.500	11.500	11.500

Group is categorised as a Domestic Systemically Important Bank (“D-SIB”) under Bucket 2 by BNM with effect from 31 January 2021. As such, in addition to the Capital Conservation Buffer (“CCB”) of 2.5% and the Countercyclical Capital Buffer (“CCyB”) ranging between 0% – 2.5% of total RWA, the Group is also required to maintain a Higher Loss Absorbency (“HLA”) requirement of 1% of total RWA in the form of CET1 capital. With regards to CCyB, BNM will communicate its decision on the CCyB rate by up to 12 months before the date from which the rate applies.

## Capital Management

### CAPITAL ADEQUACY RATIO

Table 4 and 5 depicts the Capital Adequacy Ratios and Capital Adequacy Structure for the Group, the Bank and Maybank Islamic respectively.

**Table 4: Capital Adequacy Ratios for Maybank Group, Maybank and Maybank Islamic**

Capital Adequacy Ratios	As at 31 December 2022			As at 31 December 2021		
	Group	Maybank	Maybank Islamic	Group	Maybank	Maybank Islamic
CET1 Capital Ratio	15.669%	15.264%	14.100%	16.090%	15.462%	15.981%
Tier 1 Capital Ratio	16.376%	16.045%	15.171%	16.810%	16.223%	17.173%
Total Capital Ratio <sup>1</sup>	19.080%	18.635%	17.844%	19.518%	18.785%	20.077%

**Table 5: Capital Adequacy Structure for Maybank Group, Maybank and Maybank Islamic**

	Group RM'000	Maybank RM'000	Maybank Islamic RM'000
<b>As at 31.12.2022</b>			
Total Capital	77,963,093	42,968,389	16,664,533
Credit RWA	337,699,623	190,996,711	92,108,470
Credit RWA absorbed by the parent and Investment Account Holders ("IAH") <sup>2</sup>	–	–	(10,496,635)
Market RWA	23,805,235	17,268,631	781,233
Operational RWA	47,103,833	22,310,241	10,996,646
Total RWA	408,608,691	230,575,583	93,389,714
<b>As at 31.12.2021</b>			
Total Capital	78,946,879	44,421,827	16,840,371
Credit RWA	329,855,488	192,833,309	85,813,423
Credit RWA absorbed by the parent and Investment Account Holders ("IAH") <sup>2</sup>	–	–	(12,759,358)
Market RWA	30,188,261	22,637,025	1,316,769
Operational RWA	44,431,300	21,010,913	9,507,656
Total RWA	404,475,049	236,481,247	83,878,490

Notes:

<sup>1</sup> Before declared second interim dividend for the financial year ended ("FYE") 2022 and FYE 2021 respectively.

<sup>2</sup> In accordance to the BNM Investment Account policy, the credit risk weighted assets funded by investment accounts are excluded from the calculation of capital adequacy ratio of the Islamic Financial Institution.

The Total Capital Ratio of the Group as at 31 December 2022 stood at 19.080%, which is a slight reduction from the previous financial year's ratio of 19.518%. At entity level, the Bank's Total Capital Ratio remains strong at 18.635% and Maybank Islamic registered a healthy ratio of 17.844%.

The Group is poised to maintain healthy capital ratios above the minimum regulatory capital requirement under BNM's Capital Adequacy Framework (Capital Components), a testament of the Group's resilience and strength in meeting its obligations. With the continued conservation of capital from the DRP coupled with active capital management across the Group, CET1 Capital Ratio will be maintained comfortably well ahead of the minimum level of 8% (inclusive of capital conservation buffer).

Table 6 discloses Capital Adequacy under IRB Approach for the Group, the Bank and Maybank Islamic respectively.

Table 7 to 9 disclose the risk weighted assets and minimum regulatory capital requirement for credit risk under the IRB Approach for the Group, the Bank and Maybank Islamic, respectively. These tables tabulate the total RWA under the various exposure classes under the IRB approach and apply the minimum capital requirement at 8% as set by BNM to ascertain the minimum capital required for each of the portfolio assessed.

Please refer to Note 60 in the Financial Statements for detailed discussion on the Capital Adequacy Ratios.

**Table 6: Disclosure on Capital Adequacy under IRB Approach**

As at 31.12.2022	Group RM'000	Maybank RM'000	Maybank Islamic RM'000
<b>CET1 Capital</b>			
Share Capital	54,619,344	54,619,344	11,029,955
Retained profits <sup>1</sup>	22,007,168	14,937,554	2,655,423
Other reserves <sup>1</sup>	1,349,642	3,018,421	727,027
Qualifying non-controlling interests	113,735	-	-
CET1 capital before regulatory adjustments	78,089,889	72,575,319	14,412,405
Less: Regulatory adjustments applied on CET1 Capital	(14,065,528)	(37,380,391)	(1,244,216)
Deferred tax assets	(2,169,271)	(1,099,262)	(288,433)
Goodwill	(5,583,795)	(81,015)	-
Other intangibles	(993,569)	(344,781)	-
Gains on financial instruments classified as 'fair value through other comprehensive income'	(61,980)	(36,096)	(51,129)
Regulatory reserve	(2,465,059)	(1,549,033)	(904,654)
Investment in ordinary shares of unconsolidated financial and insurance/takaful entities <sup>2</sup>	(2,791,854)	(34,270,204)	-
<b>Total CET1 capital</b>	<b>64,024,361</b>	<b>35,194,928</b>	<b>13,168,189</b>
<b>Additional Tier 1 Capital</b>			
Capital securities	2,800,000	2,800,000	1,000,000
Qualifying CET1 and Additional Tier 1 capital instruments held by third parties	90,601	-	-
Less: Investment in capital instruments of unconsolidated financial and insurance/takaful entities <sup>2</sup>	-	(1,000,000)	-
<b>Total Tier 1 Capital</b>	<b>66,914,962</b>	<b>36,994,928</b>	<b>14,168,189</b>
<b>Tier 2 Capital</b>			
Subordinated obligations	9,700,000	9,700,000	2,000,000
Qualifying CET1, Additional Tier 1 and Tier 2 capital instruments held by third parties	35,759	-	-
General provision <sup>3</sup>	273,100	36,059	23,001
Surplus of total eligible provision over total expected loss	1,730,272	1,028,820	473,343
Less: Investment in capital instruments of unconsolidated financial and insurance/takaful entities <sup>2</sup>	(691,000)	(4,791,418)	-
<b>Total Tier 2 Capital</b>	<b>11,048,131</b>	<b>5,973,461</b>	<b>2,496,344</b>
<b>Total Capital</b>	<b>77,963,093</b>	<b>42,968,389</b>	<b>16,664,533</b>

## Notes:

- 1 For the Group, the amount excludes retained profits and other reserves from insurance and takaful business. For the Bank, the amount includes retained profits and other reserves of Maybank International (L) Ltd.
- 2 For the Bank, the regulatory adjustment includes cost of investment in subsidiaries and associates, except for: (i) Myfin Berhad of RM18,994,000 as its business, assets and liabilities have been transferred to the Bank and (ii) Maybank International (L) Ltd. of RM10,289,000 as its assets are included in the Bank's RWA. For the Group, the regulatory adjustment includes carrying amount of associates and investment in insurance and takaful entities.
- 3 Refers to loss allowance measured at an amount equal to 12-month and lifetime expected credit losses and regulatory reserve, to the extent they are ascribed to non-credit impaired exposures, determined under Standardised Approach for credit risk.

The capital adequacy ratios of the Group are derived from consolidated balances of the Bank and its subsidiaries, excluding the investments in insurance and takaful entities and associates.



## Capital Management

**Table 6: Disclosure on Capital Adequacy under IRB Approach (cont'd.)**

As at 31.12.2021	Group RM'000	Maybank RM'000	Maybank Islamic RM'000
<b>CET1 Capital</b>			
Share Capital	53,156,473	53,156,473	10,322,374
Retained profits <sup>1</sup>	22,116,695	15,237,128	3,247,267
Other reserves <sup>1</sup>	2,375,413	4,144,604	193,984
Qualifying non-controlling interests	114,198	-	-
CET1 capital before regulatory adjustments	77,762,779	72,538,205	13,763,625
Less: Regulatory adjustments applied on CET1 Capital	(12,682,495)	(35,974,034)	(359,160)
Deferred tax assets	(1,411,183)	(468,101)	(190,616)
Goodwill	(5,613,782)	(81,015)	-
Other intangibles	(894,736)	(325,666)	-
Gains on financial instruments classified as 'fair value through other comprehensive income'	(371,487)	(301,887)	(47,530)
Regulatory reserve	(1,315,261)	(1,180,201)	(121,014)
Investment in ordinary shares of unconsolidated financial and insurance/takaful entities <sup>2</sup>	(3,076,046)	(33,617,164)	-
<b>Total CET1 capital</b>	65,080,284	36,564,171	13,404,465
<b>Additional Tier 1 Capital</b>			
Capital securities	2,800,000	2,800,000	1,000,000
Qualifying CET1 and Additional Tier 1 capital instruments held by third parties	113,077	-	-
Less: Investment in capital instruments of unconsolidated financial and insurance/takaful entities <sup>2</sup>	-	(1,000,000)	-
<b>Total Tier 1 Capital</b>	67,993,361	38,364,171	14,404,465
<b>Tier 2 Capital</b>			
Subordinated obligations	9,700,000	9,700,000	2,000,000
Qualifying CET1, Additional Tier 1 and Tier 2 capital instruments held by third parties	41,180	-	-
General provision <sup>3</sup>	239,683	28,571	10,735
Surplus of total eligible provision over total expected loss	1,663,655	1,025,761	425,171
Less: Investment in capital instruments of unconsolidated financial and insurance/takaful entities <sup>2</sup>	(691,000)	(4,696,676)	-
<b>Total Tier 2 Capital</b>	10,953,518	6,057,656	2,435,906
<b>Total Capital</b>	78,946,879	44,421,827	16,840,371

Notes:

- For the Group, the amount excludes retained profits and other reserves from insurance and takaful business. For the Bank, the amount includes retained profits and other reserves of Maybank International (L) Ltd.
- For the Bank, the regulatory adjustment includes cost of investment in subsidiaries and associates, except for: (i) Myfin Berhad of RM18,994,000 as its business, assets and liabilities have been transferred to the Bank and (ii) Maybank International (L) Ltd. of RM10,289,000 as its assets are included in the Bank's RWA. For the Group, the regulatory adjustment includes carrying amount of associates and investment in insurance and takaful entities.
- Refers to loss allowance measured at an amount equal to 12-month and lifetime expected credit losses and regulatory reserve, to the extent they are ascribed to non-credit impaired exposures, determined under Standardised Approach for credit risk.

The capital adequacy ratios of the Group are derived from consolidated balances of the Bank and its subsidiaries, excluding the investments in insurance and takaful entities and associates.



Table 7: Disclosure on Capital Adequacy under IRB Approach for Maybank Group

Item	Exposure Class As at 31.12.2022	Gross Exposures/ EAD before CRM RM'000	Net Exposures/ EAD after CRM RM'000	Risk- Weighted Assets RM'000	Minimum Capital Requirement at 8% RM'000
<b>1.0</b>	<b>Credit Risk</b>				
<b>1.1</b>	<b>Exempted Exposures (Standardised Approach)</b>				
	<u>On-Balance Sheet Exposures</u>				
	Sovereigns/Central Banks	169,759,341	169,759,341	4,516,404	361,312
	Public Sector Entities	3,921,009	3,920,641	233,144	18,652
	Banks, Development Financial Institutions & MDBs	686,662	686,662	5,847	468
	Insurance Cos, Securities Firms & Fund Managers	526,415	526,415	526,409	42,113
	Corporates	20,626,532	15,604,276	14,969,946	1,197,596
	Regulatory Retail	24,071,534	22,655,281	15,789,391	1,263,151
	Residential Mortgages	1,634,613	1,629,517	586,590	46,927
	Higher Risk Assets	2,965	2,965	4,447	356
	Other Assets	18,177,541	18,177,541	8,537,711	683,017
	Securitisation Exposures	-	-	-	-
	Equity Exposures	415,286	415,286	539,467	43,157
	Defaulted Exposures	297,164	296,582	289,342	23,147
	<b>Total On-Balance Sheet Exposures</b>	<b>240,119,062</b>	<b>233,674,507</b>	<b>45,998,698</b>	<b>3,679,896</b>
	<u>Off-Balance Sheet Exposures</u>				
	OTC Derivatives	1,840,048	1,784,874	1,105,825	88,466
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	3,325,925	3,099,430	2,206,609	176,529
	Defaulted Exposures	6,574	6,574	9,859	789
	<b>Total Off-Balance Sheet Exposures</b>	<b>5,172,547</b>	<b>4,890,878</b>	<b>3,322,293</b>	<b>265,784</b>
	<b>Total On and Off-Balance Sheet Exposures</b>	<b>245,291,609</b>	<b>238,565,385</b>	<b>49,320,991</b>	<b>3,945,680</b>
<b>1.2</b>	<b>Exposures under the IRB Approach</b>				
	<u>On-Balance Sheet Exposures</u>				
	Public Sector Entities	26,852,435	26,852,435	1,195,782	95,663
	Banks, Development Financial Institutions & MDBs	27,987,163	27,987,163	7,401,461	592,117
	Corporate Exposures	240,789,193	240,789,193	157,115,705	12,569,256
	a) Corporates (excluding Specialised Lending and firm-size adjustment)	178,671,231	178,671,231	112,824,552	9,025,964
	b) Corporates (with firm-size adjustment)	56,581,534	56,581,534	39,276,858	3,142,149
	c) Specialised Lending (Own PD Approach)				
	- Project Finance	5,280,604	5,280,604	4,947,142	395,771
	d) Specialised Lending (Slotting Approach)				
	- Project Finance	255,824	255,824	67,153	5,372
	Retail Exposures	275,997,686	275,997,686	57,689,300	4,615,145
	a) Residential Mortgages	124,831,035	124,831,035	21,729,048	1,738,324
	b) Qualifying Revolving Retail Exposures	10,496,395	10,496,395	4,174,998	334,000
	c) Hire Purchase Exposures	54,220,515	54,220,515	13,588,732	1,087,099
	d) Other Retail Exposures	86,449,741	86,449,741	18,196,522	1,455,722
	Defaulted Exposures	11,320,209	11,320,209	1,451,366	116,109
	<b>Total On-Balance Sheet Exposures</b>	<b>582,946,686</b>	<b>582,946,686</b>	<b>224,853,614</b>	<b>17,988,290</b>
	<u>Off-Balance Sheet Exposures</u>				
	OTC Derivatives	14,186,754	14,186,754	4,715,703	377,256
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	96,016,155	96,016,155	42,458,094	3,396,647
	Defaulted Exposures	660,925	660,925	27,905	2,232
	<b>Total Off-Balance Sheet Exposures</b>	<b>110,863,834</b>	<b>110,863,834</b>	<b>47,201,702</b>	<b>3,776,135</b>
	<b>Total On and Off-Balance Sheet Exposures</b>	<b>693,810,520</b>	<b>693,810,520</b>	<b>272,055,316</b>	<b>21,764,425</b>
	<b>Total IRB Approach after Scaling Factor of 1.06</b>			<b>288,378,632</b>	<b>23,070,291</b>
	<b>Total (Exposures under Standardised Approach &amp; IRB Approach)</b>	<b>939,102,129</b>	<b>932,375,905</b>	<b>337,699,623</b>	<b>27,015,971</b>
<b>2.0</b>	<b>Market Risk</b>				
	Interest Rate Risk			7,725,568	618,045
	Foreign Currency Risk			8,441,495	675,320
	Equity Risk			1,095,982	87,679
	Commodity Risk			-	-
	Option Risk			6,542,190	523,375
<b>3.0</b>	<b>Operational Risk</b>			<b>47,103,833</b>	<b>3,768,307</b>
<b>4.0</b>	<b>Total RWA and Capital Requirements</b>			<b>408,608,691</b>	<b>32,688,697</b>

## Capital Management

Table 7: Disclosure on Capital Adequacy under IRB Approach for Maybank Group (cont'd.)

Item	Exposure Class As at 31.12.2021	Gross Exposures/ EAD before CRM RM'000	Net Exposures/ EAD after CRM RM'000	Risk- Weighted Assets RM'000	Minimum Capital Requirement at 8% RM'000
<b>1.0</b>	<b>Credit Risk</b>				
<b>1.1</b>	<b>Exempted Exposures (Standardised Approach)</b>				
	<u>On-Balance Sheet Exposures</u>				
	Sovereigns/Central Banks	159,491,847	159,491,847	5,522,907	441,833
	Public Sector Entities	3,920,232	3,918,719	1,283,459	102,677
	Banks, Development Financial Institutions & MDBs	2,513,306	2,513,306	453,577	36,286
	Insurance Cos, Securities Firms & Fund Managers	1,366,208	1,366,208	808,263	64,661
	Corporates	21,262,572	15,112,962	14,147,097	1,131,768
	Regulatory Retail	23,379,335	21,912,686	16,761,191	1,340,895
	Residential Mortgages	1,979,659	1,977,687	737,393	58,991
	Higher Risk Assets	2,827	2,827	4,241	339
	Other Assets	15,577,103	15,576,937	8,097,511	647,801
	Securitisation Exposures	20,075	20,075	4,015	321
	Equity Exposures	348,582	348,582	440,864	35,269
	Defaulted Exposures	1,292,839	1,289,908	1,373,843	109,907
	<b>Total On-Balance Sheet Exposures</b>	<b>231,154,585</b>	<b>223,531,744</b>	<b>49,634,361</b>	<b>3,970,748</b>
	<u>Off-Balance Sheet Exposures</u>				
	OTC Derivatives	811,346	782,974	594,941	47,595
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	2,444,311	2,162,248	2,074,703	165,976
	Defaulted Exposures	211,641	211,641	275,592	22,047
	<b>Total Off-Balance Sheet Exposures</b>	<b>3,467,298</b>	<b>3,156,863</b>	<b>2,945,236</b>	<b>235,618</b>
	<b>Total On and Off-Balance Sheet Exposures</b>	<b>234,621,883</b>	<b>226,688,607</b>	<b>52,579,597</b>	<b>4,206,366</b>
<b>1.2</b>	<b>Exposures under the IRB Approach</b>				
	<u>On-Balance Sheet Exposures</u>				
	Public Sector Entities	24,775,878	24,775,878	832,467	66,597
	Banks, Development Financial Institutions & MDBs	23,252,141	23,252,141	6,945,690	555,655
	Corporate Exposures	224,816,959	224,816,959	155,119,061	12,409,526
	a) Corporates (excluding Specialised Lending and firm-size adjustment)	167,626,093	167,626,093	113,376,970	9,070,158
	b) Corporates (with firm-size adjustment)	51,794,724	51,794,724	36,968,197	2,957,456
	c) Specialised Lending (Own PD Approach)				
	– Project Finance	4,879,872	4,879,872	4,582,771	366,622
	d) Specialised Lending (Slotting Approach)				
	– Project Finance	516,270	516,270	191,123	15,290
	Retail Exposures	252,055,991	252,055,991	51,782,043	4,142,564
	a) Residential Mortgages	107,851,215	107,851,215	18,385,857	1,470,869
	b) Qualifying Revolving Retail Exposures	9,078,923	9,078,923	3,407,050	272,564
	c) Hire Purchase Exposures	53,055,059	53,055,059	12,952,939	1,036,235
	d) Other Retail Exposures	82,070,794	82,070,794	17,036,197	1,362,896
	Defaulted Exposures	12,211,686	12,211,686	1,342,118	107,369
	<b>Total On-Balance Sheet Exposures</b>	<b>537,112,655</b>	<b>537,112,655</b>	<b>216,021,379</b>	<b>17,281,711</b>
	<u>Off-Balance Sheet Exposures</u>				
	OTC Derivatives	10,990,980	10,990,980	4,323,970	345,918
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	87,474,229	87,474,229	41,203,760	3,296,301
	Defaulted Exposures	874,420	874,420	31,921	2,554
	<b>Total Off-Balance Sheet Exposures</b>	<b>99,339,629</b>	<b>99,339,629</b>	<b>45,559,651</b>	<b>3,644,773</b>
	<b>Total On and Off-Balance Sheet Exposures</b>	<b>636,452,284</b>	<b>636,452,284</b>	<b>261,581,030</b>	<b>20,926,484</b>
	<b>Total IRB Approach after Scaling Factor of 1.06</b>			<b>277,275,891</b>	<b>22,182,071</b>
	<b>Total (Exposures under Standardised Approach &amp; IRB Approach)</b>	<b>871,074,167</b>	<b>863,140,891</b>	<b>329,855,488</b>	<b>26,388,437</b>
<b>2.0</b>	<b>Market Risk</b>				
	Interest Rate Risk			8,682,479	694,598
	Foreign Currency Risk			6,816,342	545,307
	Equity Risk			1,207,183	96,575
	Commodity Risk			–	–
	Option Risk			13,482,257	1,078,581
<b>3.0</b>	<b>Operational Risk</b>			44,431,300	3,554,504
<b>4.0</b>	<b>Total RWA and Capital Requirements</b>			<b>404,475,049</b>	<b>32,358,002</b>

Table 8: Disclosure on Capital Adequacy under IRB Approach for Maybank

Item	Exposure Class As at 31.12.2022	Gross Exposures/ EAD before CRM RM'000	Net Exposures/ EAD after CRM RM'000	Risk- Weighted Assets RM'000	Minimum Capital Requirement at 8% RM'000
<b>1.0</b>	<b>Credit Risk</b>				
<b>1.1</b>	<b>Exempted Exposures (Standardised Approach)</b>				
	<u>On-Balance Sheet Exposures</u>				
	Sovereigns/Central Banks	101,128,389	101,128,390	2,505,159	200,413
	Public Sector Entities	3,209,989	3,209,989	178,047	14,244
	Banks, Development Financial Institutions & MDBs	677,791	677,791	4,073	326
	Insurance Cos, Securities Firms & Fund Managers	160,273	160,273	160,267	12,821
	Corporates	11,491,510	10,135,736	9,546,821	763,746
	Regulatory Retail	1,617,238	1,398,436	1,089,887	87,191
	Residential Mortgages	1,034,404	1,029,846	369,305	29,544
	Higher Risk Assets	-	-	-	-
	Other Assets	10,801,107	10,801,107	3,242,206	259,376
	Securitisation Exposures	-	-	-	-
	Equity Exposures	359,874	359,874	457,078	36,566
	Defaulted Exposures	29,303	28,853	26,756	2,141
	<b>Total On-Balance Sheet Exposures</b>	<b>130,509,878</b>	<b>128,930,295</b>	<b>17,579,599</b>	<b>1,406,368</b>
	<u>Off-Balance Sheet Exposures</u>				
	OTC Derivatives	1,266,278	1,266,278	595,602	47,648
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	2,209,997	2,073,525	1,351,456	108,117
	Defaulted Exposures	-	-	-	-
	<b>Total Off-Balance Sheet Exposures</b>	<b>3,476,275</b>	<b>3,339,803</b>	<b>1,947,058</b>	<b>155,765</b>
	<b>Total On and Off-Balance Sheet Exposures</b>	<b>133,986,153</b>	<b>132,270,098</b>	<b>19,526,657</b>	<b>1,562,133</b>
<b>1.2</b>	<b>Exposures under the IRB Approach</b>				
	<u>On-Balance Sheet Exposures</u>				
	Public Sector Entities	18,797,051	18,797,051	394,930	31,594
	Banks, Development Financial Institutions & MDBs	56,656,244	56,656,244	13,129,077	1,050,326
	Corporate Exposures	162,244,191	162,244,191	102,163,054	8,173,045
	a) Corporates (excluding Specialised Lending and firm-size adjustment)	130,436,791	130,436,791	79,569,899	6,365,592
	b) Corporates (with firm-size adjustment)	27,956,701	27,956,701	19,176,774	1,534,142
	c) Specialised Lending (Own PD Approach)				
	- Project Finance	3,648,386	3,648,386	3,393,170	271,454
	d) Specialised Lending (Slotting Approach)				
	- Project Finance	202,313	202,313	23,211	1,857
	Retail Exposures	69,185,249	69,185,249	13,370,070	1,069,607
	a) Residential Mortgages	35,049,365	35,049,365	5,426,532	434,123
	b) Qualifying Revolving Retail Exposures	6,039,045	6,039,045	2,114,297	169,144
	c) Hire Purchase Exposures	4,521,263	4,521,263	1,219,808	97,585
	d) Other Retail Exposures	23,575,576	23,575,576	4,609,433	368,755
	Defaulted Exposures	7,969,397	7,969,397	451,487	36,119
	<b>Total On-Balance Sheet Exposures</b>	<b>314,852,132</b>	<b>314,852,132</b>	<b>129,508,618</b>	<b>10,360,691</b>
	<u>Off-Balance Sheet Exposures</u>				
	OTC Derivatives	14,290,606	14,290,606	4,585,767	366,861
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	59,357,026	59,357,026	27,664,857	2,213,189
	Defaulted Exposures	620,783	620,783	4,960	397
	<b>Total Off-Balance Sheet Exposures</b>	<b>74,268,415</b>	<b>74,268,415</b>	<b>32,255,584</b>	<b>2,580,447</b>
	<b>Total On and Off-Balance Sheet Exposures</b>	<b>389,120,547</b>	<b>389,120,547</b>	<b>161,764,202</b>	<b>12,941,138</b>
	<b>Total IRB Approach after Scaling Factor of 1.06</b>			<b>171,470,054</b>	<b>13,717,604</b>
	<b>Total (Exposures under Standardised Approach &amp; IRB Approach)</b>	<b>523,106,700</b>	<b>521,390,645</b>	<b>190,996,711</b>	<b>15,279,737</b>
<b>2.0</b>	<b>Market Risk</b>				
	Interest Rate Risk			7,259,666	580,773
	Foreign Currency Risk			3,659,884	292,791
	Equity Risk			4,276	342
	Commodity Risk			-	-
	Option Risk			6,344,805	507,584
<b>3.0</b>	<b>Operational Risk</b>			22,310,241	1,784,819
<b>4.0</b>	<b>Total RWA and Capital Requirements</b>			<b>230,575,583</b>	<b>18,446,046</b>

## Capital Management

Table 8: Disclosure on Capital Adequacy under IRB Approach for Maybank (cont'd.)

Item	Exposure Class As at 31.12.2021	Gross Exposures/ EAD before CRM RM'000	Net Exposures/ EAD after CRM RM'000	Risk- Weighted Assets RM'000	Minimum Capital Requirement at 8% RM'000
<b>1.0</b>	<b>Credit Risk</b>				
<b>1.1</b>	<b>Exempted Exposures (Standardised Approach)</b>				
	<u>On-Balance Sheet Exposures</u>				
	Sovereigns/Central Banks	91,825,167	91,825,167	2,290,553	183,244
	Public Sector Entities	3,344,633	3,344,612	1,116,472	89,318
	Banks, Development Financial Institutions & MDBs	1,004,617	1,004,617	105,602	8,448
	Insurance Cos, Securities Firms & Fund Managers	985,688	985,688	427,743	34,219
	Corporates	11,780,997	10,232,524	9,696,747	775,740
	Regulatory Retail	1,674,050	1,439,278	1,120,194	89,616
	Residential Mortgages	1,173,886	1,172,535	439,298	35,144
	Higher Risk Assets	-	-	-	-
	Other Assets	7,872,187	7,872,187	3,205,260	256,421
	Securitisation Exposures	20,075	20,075	4,015	321
	Equity Exposures	337,693	337,693	425,470	34,038
	Defaulted Exposures	840,333	839,174	817,019	65,362
	<b>Total On-Balance Sheet Exposures</b>	<b>120,859,326</b>	<b>119,073,550</b>	<b>19,648,373</b>	<b>1,571,871</b>
	<u>Off-Balance Sheet Exposures</u>				
	OTC Derivatives	629,410	629,410	431,039	34,483
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	1,664,315	1,522,369	1,518,246	121,460
	Defaulted Exposures	211,512	211,512	275,398	22,032
	<b>Total Off-Balance Sheet Exposures</b>	<b>2,505,237</b>	<b>2,363,291</b>	<b>2,224,683</b>	<b>177,975</b>
	<b>Total On and Off-Balance Sheet Exposures</b>	<b>123,364,563</b>	<b>121,436,841</b>	<b>21,873,056</b>	<b>1,749,846</b>
<b>1.2</b>	<b>Exposures under the IRB Approach</b>				
	<u>On-Balance Sheet Exposures</u>				
	Public Sector Entities	17,053,270	17,053,270	335,780	26,862
	Banks, Development Financial Institutions & MDBs	52,933,640	52,933,640	14,914,174	1,193,134
	Corporate Exposures	152,005,905	152,005,905	101,312,749	8,105,020
	a) Corporates (excluding Specialised Lending and firm-size adjustment)	120,689,101	120,689,101	78,519,486	6,281,559
	b) Corporates (with firm-size adjustment)	27,009,729	27,009,729	19,107,974	1,528,638
	c) Specialised Lending (Own PD Approach)				
	- Project Finance	3,814,650	3,814,650	3,508,662	280,693
	d) Specialised Lending (Slotting Approach)				
	- Project Finance	492,425	492,425	176,627	14,130
	Retail Exposures	69,159,820	69,159,820	13,354,311	1,068,345
	a) Residential Mortgages	33,338,863	33,338,863	5,304,402	424,352
	b) Qualifying Revolving Retail Exposures	5,164,396	5,164,396	1,688,007	135,041
	c) Hire Purchase Exposures	5,852,880	5,852,880	1,588,100	127,048
	d) Other Retail Exposures	24,803,681	24,803,681	4,773,802	381,904
	Defaulted Exposures	9,067,496	9,067,496	403,651	32,292
	<b>Total On-Balance Sheet Exposures</b>	<b>300,220,131</b>	<b>300,220,131</b>	<b>130,320,665</b>	<b>10,425,653</b>
	<u>Off-Balance Sheet Exposures</u>				
	OTC Derivatives	10,906,000	10,906,000	4,180,065	334,405
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	53,236,755	53,236,755	26,777,930	2,142,234
	Defaulted Exposures	794,301	794,301	4,596	368
	<b>Total Off-Balance Sheet Exposures</b>	<b>64,937,056</b>	<b>64,937,056</b>	<b>30,962,591</b>	<b>2,477,007</b>
	<b>Total On and Off-Balance Sheet Exposures</b>	<b>365,157,187</b>	<b>365,157,187</b>	<b>161,283,256</b>	<b>12,902,660</b>
	<b>Total IRB Approach after Scaling Factor of 1.06</b>			<b>170,960,253</b>	<b>13,676,820</b>
	<b>Total (Exposures under Standardised Approach &amp; IRB Approach)</b>	<b>488,521,750</b>	<b>486,594,028</b>	<b>192,833,309</b>	<b>15,426,666</b>
<b>2.0</b>	<b>Market Risk</b>				
	Interest Rate Risk			7,242,964	579,437
	Foreign Currency Risk			2,466,717	197,337
	Equity Risk			-	-
	Commodity Risk			-	-
	Option Risk			12,927,344	1,034,188
<b>3.0</b>	<b>Operational Risk</b>			21,010,913	1,680,873
<b>4.0</b>	<b>Total RWA and Capital Requirements</b>			<b>236,481,247</b>	<b>18,918,501</b>

Table 9: Disclosure on Capital Adequacy under IRB Approach for Maybank Islamic

Item	Exposure Class As at 31.12.2022	Gross Exposures/ EAD before CRM RM'000	Net Exposures/ EAD after CRM RM'000	Risk- Weighted Assets RM'000	Risk- Weighted Assets Absorbed by PSIA RM'000	Total Risk- Weighted Assets after effects of PSIA RM'000	Minimum Capital Requirement at 8% RM'000
<b>1.0</b>	<b>Credit Risk</b>						
<b>1.1</b>	<b>Exempted Exposures (Standardised Approach)</b>						
	<u>On-Balance Sheet Exposures</u>						
	Sovereigns/Central Banks	40,548,253	40,548,253	486,520	-	486,520	38,922
	Public Sector Entities	60,462	60,095	55,097	-	55,097	4,408
	Banks, Development Financial Institutions & MDBs	-	-	-	-	-	-
	Insurance Cos, Securities Firms & Fund Managers	14	14	14	-	14	1
	Corporates	592,350	459,006	457,791	-	457,791	36,623
	Regulatory Retail	1,722,566	1,105,404	1,003,910	-	1,003,910	80,313
	Residential Mortgages	578,756	578,217	207,408	-	207,408	16,593
	Higher Risk Assets	36	36	54	-	54	4
	Other Assets	1,219,344	1,219,344	450,344	-	450,344	36,027
	Equity Exposures	1,250	1,250	1,875	-	1,875	150
	Defaulted Exposures	29,519	29,407	25,184	-	25,184	2,015
	<b>Total On-Balance Sheet Exposures</b>	<b>44,752,550</b>	<b>44,001,026</b>	<b>2,688,197</b>	<b>-</b>	<b>2,688,197</b>	<b>215,056</b>
	<u>Off-Balance Sheet Exposures</u>						
	OTC Derivatives	6,238	6,238	6,238	-	6,238	499
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	102,608	79,189	26,955	-	26,955	2,156
	Defaulted Exposures	-	-	-	-	-	-
	<b>Total Off-Balance Sheet Exposures</b>	<b>108,846</b>	<b>85,427</b>	<b>33,193</b>	<b>-</b>	<b>33,193</b>	<b>2,655</b>
	<b>Total On and Off-Balance Sheet Exposures</b>	<b>44,861,396</b>	<b>44,086,453</b>	<b>2,721,390</b>	<b>-</b>	<b>2,721,390</b>	<b>217,711</b>
<b>1.2</b>	<b>Exposures under the IRB Approach</b>						
	<u>On-Balance Sheet Exposures</u>						
	Public Sector Entities	21,613,110	21,613,110	800,852	-	800,852	64,068
	Banks, Development Financial Institutions & MDBs	16,744,683	16,744,683	1,870,899	-	1,870,899	149,672
	Corporate Exposures	63,232,857	63,232,857	35,544,640	(6,526,164)	29,018,476	2,843,571
	a) Corporates (excluding Specialised Lending and firm-size adjustment)	42,872,502	42,872,502	21,078,050	(6,526,164)	14,551,886	1,686,244
	b) Corporates (with firm-size adjustment)	18,674,626	18,674,626	12,868,677	-	12,868,677	1,029,494
	c) Specialised Lending (Own PD Approach)						
	- Project Finance	1,632,218	1,632,218	1,553,972	-	1,553,972	124,318
	d) Specialised Lending (Slotting Approach)						
	- Project Finance	53,511	53,511	43,941	-	43,941	3,515
	Retail Exposures	171,595,906	171,595,906	34,039,388	(3,230,429)	30,808,959	2,723,151
	a) Residential Mortgages	56,541,623	56,541,623	10,310,696	(432,249)	9,878,447	824,856
	b) Qualifying Revolving Retail Exposures	2,846,520	2,846,520	934,690	(45,971)	888,719	74,775
	c) Hire Purchase Exposures	46,305,207	46,305,207	10,327,099	(1,719,825)	8,607,274	826,168
	d) Other Retail Exposures	65,902,556	65,902,556	12,466,903	(1,032,384)	11,434,519	997,352
	Defaulted Exposures	6,648,775	6,648,775	753,649	-	753,649	60,292
	<b>Total On-Balance Sheet Exposures</b>	<b>279,835,331</b>	<b>279,835,331</b>	<b>73,009,428</b>	<b>(9,756,593)</b>	<b>63,252,835</b>	<b>5,840,754</b>
	<u>Off-Balance Sheet Exposures</u>						
	OTC Derivatives	630,656	630,656	198,033	-	198,033	15,843
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	28,107,579	28,107,579	11,111,379	(145,893)	10,965,485	888,910
	Defaulted Exposures	255,641	255,641	8,593	-	8,593	687
	<b>Total Off-Balance Sheet Exposures</b>	<b>28,993,876</b>	<b>28,993,876</b>	<b>11,318,005</b>	<b>(145,893)</b>	<b>11,172,111</b>	<b>905,440</b>
	<b>Total On and Off-Balance Sheet Exposures</b>	<b>308,829,207</b>	<b>308,829,207</b>	<b>84,327,433</b>	<b>(9,902,486)</b>	<b>74,424,946</b>	<b>6,746,194</b>
	<b>Total IRB Approach after Scaling Factor of 1.06</b>			<b>89,387,080</b>	<b>(10,496,635)</b>	<b>78,890,445</b>	<b>7,150,966</b>
	<b>Total (Exposures under Standardised Approach &amp; IRB Approach)</b>	<b>353,690,603</b>	<b>352,915,660</b>	<b>92,108,470</b>	<b>(10,496,635)</b>	<b>81,611,835</b>	<b>7,368,677</b>
<b>2.0</b>	<b>Market Risk</b>						
	Benchmark Rate Risk			287,921	-	287,921	23,034
	Equity Risk			-	-	-	-
	Foreign Exchange Risk			493,312	-	493,312	39,465
	Option Risk			-	-	-	-
<b>3.0</b>	<b>Operational Risk</b>			10,996,646	-	10,996,646	879,732
<b>4.0</b>	<b>Total RWA and Capital Requirements</b>			<b>103,886,349</b>	<b>(10,496,635)</b>	<b>93,389,714</b>	<b>8,310,908</b>



## Capital Management

Table 9: Disclosure on Capital Adequacy under IRB Approach for Maybank Islamic (cont'd.)

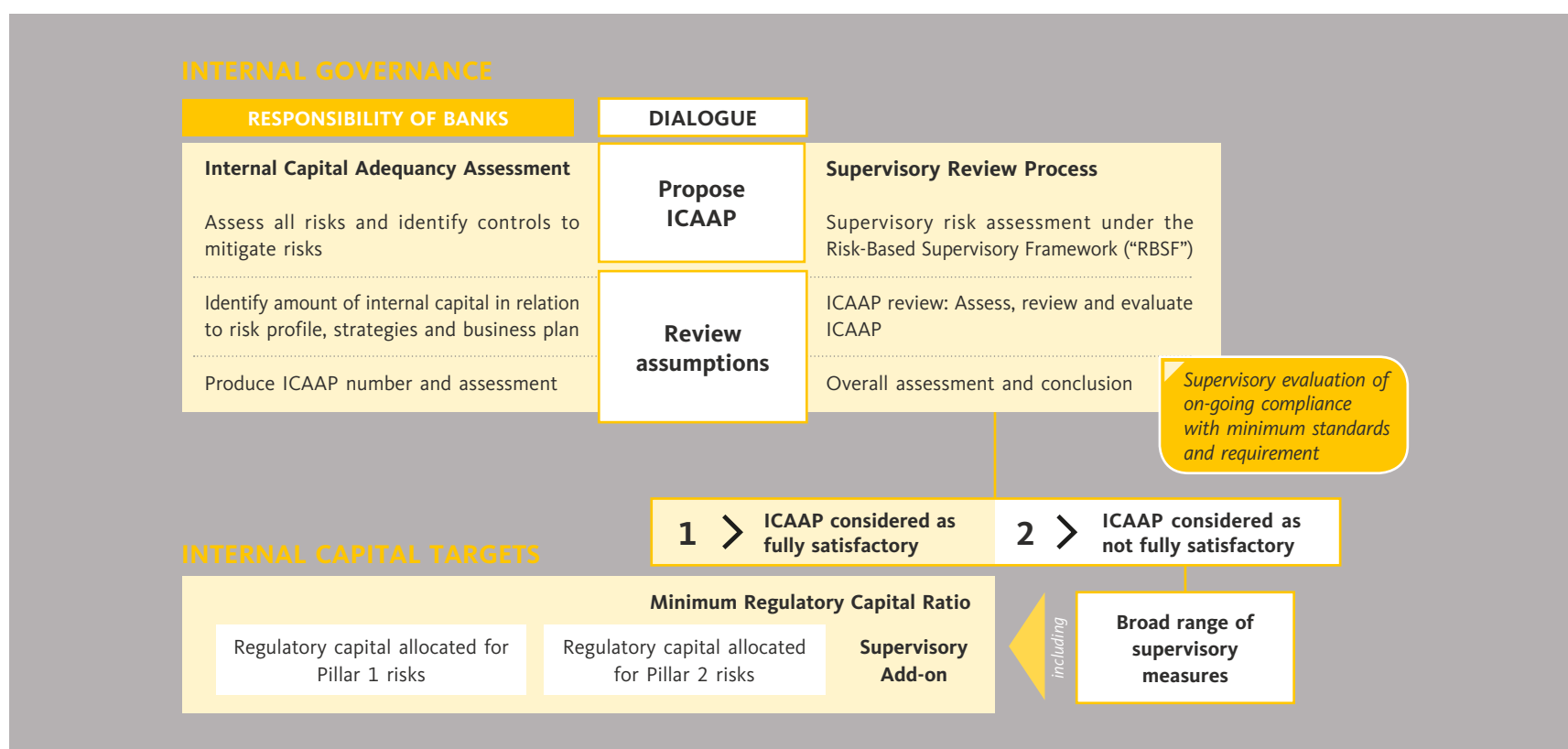
Item	Exposure Class As at 31.12.2021	Gross Exposures/ EAD before CRM RM'000	Net Exposures/ EAD after CRM RM'000	Risk- Weighted Assets RM'000	Risk- Weighted Assets Absorbed by PSIA RM'000	Total Risk- Weighted Assets after effects of PSIA RM'000	Minimum Capital Requirement at 8% RM'000
<b>1.0</b>	<b>Credit Risk</b>						
<b>1.1</b>	<b>Exempted Exposures (Standardised Approach)</b>						
	<u>On-Balance Sheet Exposures</u>						
	Sovereigns/Central Banks	33,446,124	33,446,124	-	-	-	-
	Public Sector Entities	88,708	87,217	69,608	-	69,608	5,569
	Banks, Development Financial Institutions & MDBs	-	-	-	-	-	-
	Insurance Cos, Securities Firms & Fund Managers	71	71	71	-	71	6
	Corporates	1,036,060	823,834	393,746	-	393,746	31,500
	Regulatory Retail	1,835,434	1,192,960	1,091,365	-	1,091,365	87,309
	Residential Mortgages	661,453	660,831	243,373	-	243,373	19,470
	Higher Risk Assets	36	36	54	-	54	4
	Other Assets	1,786,584	1,786,584	302,365	-	302,365	24,189
	Equity Exposures	1,250	1,250	1,875	-	1,875	150
	Defaulted Exposures	36,295	36,184	33,462	-	33,462	2,677
	<b>Total On-Balance Sheet Exposures</b>	<b>38,892,015</b>	<b>38,035,091</b>	<b>2,135,919</b>	<b>-</b>	<b>2,135,919</b>	<b>170,874</b>
	<u>Off-Balance Sheet Exposures</u>						
	OTC Derivatives	39,019	39,019	39,019	-	39,019	3,121
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	32,763	17,575	17,259	-	17,259	1,381
	<b>Total Off-Balance Sheet Exposures</b>	<b>71,782</b>	<b>56,594</b>	<b>56,278</b>	<b>-</b>	<b>56,278</b>	<b>4,502</b>
	<b>Total On and Off-Balance Sheet Exposures</b>	<b>38,963,797</b>	<b>38,091,685</b>	<b>2,192,197</b>	<b>-</b>	<b>2,192,197</b>	<b>175,376</b>
<b>1.2</b>	<b>Exposures under the IRB Approach</b>						
	<u>On-Balance Sheet Exposures</u>						
	Public Sector Entities	20,415,679	20,415,679	784,134	(287,446)	496,688	62,731
	Banks, Development Financial Institutions & MDBs	9,491,893	9,491,893	1,622,366	-	1,622,366	129,789
	Corporate Exposures	58,258,613	58,258,613	34,395,642	(7,311,671)	27,083,971	2,751,651
	a) Corporates (excluding Specialised Lending and firm-size adjustment)	41,130,767	41,130,767	22,049,890	(6,901,074)	15,148,816	1,763,991
	b) Corporates (with firm-size adjustment)	15,626,235	15,626,235	10,846,550	-	10,846,550	867,724
	c) Specialised Lending (Own PD Approach) - Project Finance	1,477,766	1,477,766	1,484,706	(410,597)	1,074,109	118,776
	d) Specialised Lending (Slotting Approach) - Project Finance	23,845	23,845	14,496	-	14,496	1,160
	Retail Exposures	153,780,406	153,780,406	29,940,855	(3,226,688)	26,714,167	2,395,268
	a) Residential Mortgages	49,825,115	49,825,115	8,701,762	(727,035)	7,974,727	696,141
	b) Qualifying Revolving Retail Exposures	2,358,364	2,358,364	664,418	-	664,418	53,153
	c) Hire Purchase Exposures	41,860,490	41,860,490	9,968,509	(1,201,172)	8,767,337	797,481
	d) Other Retail Exposures	59,736,437	59,736,437	10,606,166	(1,298,481)	9,307,685	848,493
	Defaulted Exposures	5,976,306	5,976,306	575,205	-	575,205	46,016
	<b>Total On-Balance Sheet Exposures</b>	<b>247,922,897</b>	<b>247,922,897</b>	<b>67,318,202</b>	<b>(10,825,805)</b>	<b>56,492,397</b>	<b>5,385,455</b>
	<u>Off-Balance Sheet Exposures</u>						
	OTC Derivatives	483,280	483,280	206,325	-	206,325	16,506
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	25,901,610	25,901,610	11,355,666	(1,211,326)	10,144,340	908,453
	Defaulted Exposures	187,232	187,232	7,757	-	7,757	621
	<b>Total Off-Balance Sheet Exposures</b>	<b>26,572,122</b>	<b>26,572,122</b>	<b>11,569,748</b>	<b>(1,211,326)</b>	<b>10,358,422</b>	<b>925,580</b>
	<b>Total On and Off-Balance Sheet Exposures</b>	<b>274,495,019</b>	<b>274,495,019</b>	<b>78,887,950</b>	<b>(12,037,131)</b>	<b>66,850,819</b>	<b>6,311,035</b>
	<b>Total IRB Approach after Scaling Factor of 1.06</b>			<b>83,621,226</b>	<b>(12,759,358)</b>	<b>70,861,868</b>	<b>6,689,698</b>
	<b>Total (Exposures under Standardised Approach &amp; IRB Approach)</b>	<b>313,458,816</b>	<b>312,586,704</b>	<b>85,813,423</b>	<b>(12,759,358)</b>	<b>73,054,065</b>	<b>6,865,074</b>
<b>2.0</b>	<b>Market Risk</b>						
	Benchmark Rate Risk			766,795	-	766,795	61,344
	Equity Risk			-	-	-	-
	Foreign Exchange Risk			549,974	-	549,974	43,998
	Option Risk			-	-	-	-
<b>3.0</b>	<b>Operational Risk</b>			9,507,656	-	9,507,656	760,613
<b>4.0</b>	<b>Total RWA and Capital Requirements</b>			<b>96,637,848</b>	<b>(12,759,358)</b>	<b>83,878,490</b>	<b>7,731,029</b>

### INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS (“ICAAP”)

The Group’s overall capital adequacy in relation to its risk profile is assessed through a process articulated in the Maybank Group ICAAP Policy (“ICAAP Policy”). The ICAAP Policy is designed to ensure that adequate levels of capital, including capital buffers, are held to support the Group’s current and projected demand for capital under existing and stressed conditions. Regular ICAAP reports are submitted to the Group Executive Risk Committee (“GERC”) on quarterly basis and Risk Management Committee (“RMC”) and the Board on half-yearly basis for comprehensive review of all material risks faced by the Group and assessment of the adequacy of capital to support them. The ICAAP closely integrates the risk and capital planning and management processes.

Since March 2013, the Group has prepared a Board-approved ICAAP document to fulfil the requirements under the BNM Pillar 2 guideline, which came into effect on 31 March 2013. The document includes an overview of ICAAP, current and projected financial and capital position, ICAAP governance, risk assessment models and processes, risk appetite and capital management, stress testing and capital planning and the use of ICAAP. Annually, the Group submits an update of the material changes made to the document to BNM.

**Diagram 1: ICAAP and Supervisory Review Process**



Supplementing the ICAAP reports is the Group Capital and Funding Plan, which is updated on an annual basis, where the internal capital targets are set and reviewed, among others as part of a sound capital management.



## Capital Management

### Comprehensive Risk Assessment under ICAAP Policy

Under the Group's ICAAP methodology, the following risk types are identified and measured:

- Risks captured under Pillar 1 (credit risk, market risk and operational risk);
- Risks not fully captured under Pillar 1 (e.g. model risk);
- Risks not specifically addressed under Pillar 1 (e.g. interest rate risk/rate of return risk (both banking and trading book), liquidity risk, business and strategic risk, reputational risk, credit concentration risk, Information Technology ("IT") risk, cyber risk, regulatory risk, country risk, compliance risk, capital risk, profitability risk, Shariah non-compliance risk, information risk, conduct risk, workforce risk and data quality risk, amongst others); and
- External factors, including changes in economic environment (i.e. emerging risk, regulations and accounting rules).

A key process emplaced within the Group provides for the identification of material risks that may arise through the introduction of new products and services. Material risks are defined as risks which would materially impact the financial performance (profitability), capital adequacy, asset quality and/or reputation of the Group should the risk occur.

In the ICAAP Policy, the Material Risk Assessment Process ("MRAP") is designed to identify key risks from the Group's Risk Universe. Annually, a group-wide risk landscape survey is carried out as part of a robust risk management approach to identify and prioritise the key risks based on potential impact of the risks on earnings and capital faced by the Group. The survey results provide a synthesis of perceptions of current and future market outlook, based on perspectives of the key stakeholders across retail, commercial, investment banking and insurance operations across the Group's major entities. In addition, the outcomes of the survey assist in identifying major risk scenarios over the near future.

Risks deemed "material" are reported to the GERC and RMC via the ICAAP report. For each material risk identified, the Group will ensure appropriate risk mitigation is in place to address these key risks, which include regular risk monitoring through Group Chief Risk Officer ("GCRO") Letter reporting, stress testing, risk mitigation, capital planning and crisis management strategies.

### Assessment of Pillar 1 and Pillar 2 Risks

In line with industry best practices, the Group quantifies its risks using methodologies that have been reasonably tested and determined to be fit-for-purpose.

Where risks may not be easily quantified due to lack of commonly accepted risk measurement techniques, expert judgement is used to determine the size and materiality of risk. The Group has also incorporated trending analysis (based on historical information) and forward-looking element to strengthen the Pillar 2 scorecard assessment. The Group's ICAAP would then focus on the qualitative controls in managing such material non-quantifiable risks. These qualitative measures include the following:

- Adequate governance process;
- Adequate systems, procedures and internal controls;
- Effective risk mitigation strategies; and
- Regular monitoring and reporting.

### Regular and Robust Stress Testing

The Group's stress testing programme is embedded within the risk and capital management process of the Group and is a key function of capital and business planning processes. The programme serves as a forward-looking risk and capital management tool to understand the risk profile under exceptional but plausible and worst-case scenarios. Such scenarios may arise mainly from economic, political and/or environmental factors.

Under Maybank Group Stress Testing ("GST") Policy, the potential unfavourable effects of stressed scenarios on the Group's profitability, asset quality, RWA, capital adequacy, liquidity and ability to comply with the risk appetites set, are considered.

Specifically, the stress test programme is designed to:

- Highlight the dynamics of stress events and their potential implications on the Group's trading and banking book exposures, liquidity positions and likely reputational impacts;
- Proactively identify key strategies to mitigate the effects of stress events;
- Produce stress results as inputs into the Group Capital and Funding Plan in determining capital adequacy and capital targets;
- Produce scenario analysis for Group's recovery planning to evaluate overall recovery capacity, identify preferred recovery strategies and ultimately link to risk appetite setting; and
- Provide insights on risk return profile by entity and by line of business under stress.

There are several types of stress tests conducted across the Group:

- Group-wide stress tests – Using a common scenario approved by RMC of which the results are submitted to BNM. It also includes periodic industry-wide stress tests organised by BNM where the scenarios are specified by the Central Bank.
- Localised stress tests – Limited scope stress tests undertaken at portfolio, branch/sector or entity levels based on scenarios relevant to specific localities.
- Ad-hoc stress tests – Stress tests conducted in response to emerging risk events.
- Reverse stress tests – Identification of a range of adverse scenarios which could threaten the viability of Maybank.
- Rapid exposure drills – Assessment of direct impact or potential contagion effect including upside and downside risks.
- Scenario analysis for Maybank Group Recovery Plan – Requirements according to BNM's Recovery Planning.

Stress test themes reviewed by the Stress Test Working Group in the past include Global Recession & Debt Crisis, Stagflation & Aggressive Interest Rate Hikes, Malaysia's Sovereign Rating Downgrade & Prolonged COVID-19 Pandemic, US-China trade war, Eurozone financial crisis, tightening of monetary policies, global economic turmoil, impact on liquidity risk due to cyberattack, digital disruption, impact of external geopolitical events on ASEAN and Asia, impact of weakening Malaysian ringgit and higher bond yields, Post-Brexit risk on ASEAN economies, the Perfect Storm: Impact of low oil price, weak currencies and slower Chinese GDP growth on ASEAN economies, Federal Reserve rate hike, idiosyncratic event's implication to the Group, intensified capital outflows from emerging markets including ASEAN, rising inflation and interest rate hikes in ASEAN, impact of Federal Reserve Quantitative Easing tapering, sovereign rating downgrades, slowing Chinese economy, a repeat of Asian Financial Crisis, US dollar depreciation, asset price collapse, a global double-dip recession scenario, Japan disasters, crude oil price hike, the Eurozone and US debt crises, amongst others.

The Stress Test Working Group, which comprises of business, countries and risk management teams, tables the stress test reports to the Senior Management and Board committees and discusses the results with the regulators on a regular basis.

# Risk Management

Risk management is an integral part of the Group's culture and is embedded within its business, operations and decision-making processes. As the Group has been facilitating customers to navigate through the pandemic, Group Risk remains committed to being a proactive assurance partner to ensure portfolio sustainability by enhancing operational resilience with risk-informed solutions. In the ongoing response to managing impact and changes from COVID-19, the Maybank Group Pandemic Preparation Framework remains in place to ensure the continuity of business operations, staff safety as well as safety of our customers and communities as countries move to endemic phase.

## RISK MANAGEMENT FRAMEWORK

Risk management has evolved into an important driver for strategic decisions in support of business strategies while balancing the appropriate level of risk taken to the desired level of returns. As risk management is a core discipline of the Group, it is underpinned by a set of building blocks which serves as the foundation in driving strong risk management culture, encompassing practices and processes:

Building Blocks	Description
1 Risk Culture	Risk culture is a vital component in strengthening risk governance and forms a fundamental principle of strong risk management.
2 Risk Coverage	The Group must determine its business strategy and assess the risks to ensure the appropriate risk strategies are put in place to give a greater level of assurance on achieving its business strategy.
3 Risk Appetite	The risk appetite defines the types and levels of risk that the Group is willing to accept within its risk capacity in pursuit of its business and strategic goals.
4 Risk Response	Selection of the appropriate risk response is imperative to align the risks with the Group's risk tolerance and risk appetite.
5 Governance & Risk Oversight	There is a clear, effective and robust governance structure with well-defined, transparent and consistent lines of responsibility.
6 Risk Management Practices & Processes	Robust risk management processes are in place to actively identify, measure, control, monitor and report risks inherent in all products and activities undertaken by the Group.
7 Stress Test	Stress testing is used to test the resilience of the Group's exposure against potential future financial scenarios and gauge the resulting risk and adequacy of capital.
8 Resources & System Infrastructure	Ensure sufficient resources, infrastructure and techniques are established to enable effective risk management.

## RISK APPETITE

The Group's risk appetite is an integral component of the Group's robust risk management framework and is driven by both top-down Board leadership and bottom-up involvement of management at all levels. The risk appetite enables the Board and Senior Management to communicate and assess the types and levels of risk that the Group is willing to accept in pursuit of its business and strategic goals while taking into consideration the constraints under a stressed environment. The Group's risk appetite translates our risk capacity into risk limits and/or tolerances as guidance, which are then used to regularly measure and evaluate our risk profile.

The risk appetite is integrated into the strategic planning process, and remains dynamic and responsive to the changing internal and external drivers such as market conditions, stakeholders' expectations and internal capabilities. In addition, the Group's annual budgeting process is aligned to the risk appetite in ensuring that projected revenues arising from business transactions are consistent with the risk profiles established. The risk appetite also provides a consistent structure in understanding risk and is embedded in day-to-day business activities and decisions throughout the Group.

## RISK GOVERNANCE AND OVERSIGHT

The governance model adopted in the Group provides a formalised, transparent and effective governance structure that promotes active involvement from the Board and Senior Management in the risk management process to ensure a uniform view of risk across the Group.

Our governance model places accountability and ownership in ensuring an appropriate level of independence and segregation of duties between the three lines of defence. The management of risk broadly takes place at different hierarchical levels and is emphasised through various levels of committees, business lines, control and reporting functions.

The chart illustrating the risk governance structure of the Group can be found in the Statement on Risk Management and Internal Control write-up under the Corporate Book.

## INDEPENDENT GROUP RISK FUNCTION

In 2022, we have continued to focus on value creation and supporting the Group in meeting its strategic and business objectives. Group Risk provides oversight of risk management on an enterprise-wide level through the establishment of the Group's risk strategies, frameworks and policies, with independent assessment and monitoring of all risks challenges.

The key pillars of Group Risk functions are as below:

- Provides close support and oversight within key businesses and countries in managing day-to-day risk;
- Drives and manages specific risk areas on an enterprise-wide level for a holistic risk view within the Group; and
- Supports sustainable and quality asset growth with optimal returns.

In the continuous pursuit to drive effectiveness, the Risk Centres of Excellence ("COEs") were created, building on specialisation of risk professionals, providing value-added risk insights in support of business decision-making. The identified COEs set consistent standards in relation to risk policies, risk reporting, risk modelling, specialise in the management of specific risk areas within the Group and manage all risks associated with our external environment and material matters strategically.

# Credit Risk

Credit risk is the risk that a counterparty fails to meet its obligations in accordance with the agreed terms of a credit facility. The exposures to credit risk are unilateral and only the lending bank faces the risk of loss.

## REGULATORY CAPITAL REQUIREMENT

Amongst the various risk types the Group engages in, credit risk continues to attract the largest regulatory capital requirement.

## MANAGEMENT OF CREDIT RISK

The Group manages its credit risk at both the counterparty and portfolio levels to ensure that they remain within the boundaries of the Group's approved credit risk appetite.

Non-retail credit risks are jointly assessed by the business and credit units, where each counterparty is assigned a credit rating based on the assessment of relevant qualitative and quantitative factors, including the counterparty's financial position, future cash flows, types of facilities and collateral offered. These credits are jointly approved by authorised Business and Credit personnel.

Reviews for non-retail counterparties are conducted at least once a year with updated information on the counterparty's financial position, market position, industry and economic conditions, as well as conduct of account. On top of these reviews, these counterparties are subject to periodic credit classification and impairment assessment to determine if any early intervention is required. Appropriate corrective actions are taken when the counterparties show signs of credit deterioration.

Retail credits are predicated on data analytics and are programme-driven which are governed by the Product Development Assessment ("PDA") or Universal Product Development Assessment ("UPDA"). Credit programmes are jointly assessed by the business and credit units. Reviews for retail credits are generally conducted at the portfolio level where the PDAs or UPDAs of each retail product are reviewed, at minimum, on an annual basis.

The Group's credit structure is based on joint approvals by Business and Credit, with complex credits of higher risk approved by the Group Management Credit Committee. The authority limits are based on the Expected Loss principle, and are directly related to the counterparty's rating and credit exposure.

The Group's credit approving process encompasses assessment, approval and post approval credit review. Group Risk is responsible for developing, enhancing and communicating effective and consistent credit risk management policies, tools and methodologies across the Group to ensure that appropriate standards are in place to identify, measure, control, monitor and report such risks.

### Management of Concentration Risk

Concentration risk materialises from excessive exposures to a single counterparty group, country, economic sector or product, leading to disproportionate deterioration to the risk profile of the Group's credit exposures. In managing large exposures and to avoid undue concentration of credit risk in its credit portfolio, the Group has emplaced, amongst others, limits/thresholds or related lending guidelines for:-

- Countries;
- Product or facility types;
- Economic sectors;
- Single counterparty groups;
- Collaterals; and
- Connected parties.

Reviews of the aforesaid limits/thresholds or related lending guidelines are undertaken on a periodic basis, whereupon any emerging concentration risks are addressed accordingly. Any breach/excess of limits/thresholds are escalated for approvals, and any deviations to the lending guidelines are to be justified with strong mitigations.

### Asset Quality Management

The Group has dedicated teams to effectively manage vulnerable non-retail and retail credits. Special attention is given to these vulnerable credits where more frequent and intensive reviews are performed in order to prevent further deterioration or, where necessary, accelerate for remedial actions. Asset Quality Committees provide guidance and oversight in ensuring these are complied with.

Tables 10 to 12 present the geographic analysis and distribution of credit exposures under both the Standardised Approach and IRB Approach for the Group, the Bank and Maybank Islamic, respectively.

Tables 13 to 15 present the disclosure on credit risk exposures by various industries for the Group, the Bank and Maybank Islamic, respectively.

Tables 16 to 18 present the credit risk exposures by maturity periods of one year or less, one to five years and over five years for the Group, the Bank and Maybank Islamic, respectively.

Table 10: Disclosure on Credit Risk Exposure – Geographical Analysis for Maybank Group

Exposure Class	Malaysia RM'000	Singapore RM'000	Indonesia RM'000	Other Overseas Units RM'000	Total RM'000
<b>As at 31.12.2022</b>					
<b>Exempted Exposures (Standardised Approach)</b>					
Sovereigns/Central Banks	107,674,459	36,496,978	10,000,446	17,055,967	171,227,850
Public Sector Entities	763,527	3,161,269	–	–	3,924,796
Banks, Development Financial Institutions & MDBs	455,365	251,820	–	5,354	712,539
Insurance Cos, Securities Firms & Fund Managers	309,200	366,386	–	41,557	717,143
Corporates	5,313,236	8,625,375	2,266,647	6,779,888	22,985,146
Regulatory Retail	3,274,509	11,916,741	4,532,754	5,122,805	24,846,809
Residential Mortgages	1,333,818	–	–	317,294	1,651,112
Higher Risk Assets	1,352	1,675	–	–	3,027
Other Assets	11,106,603	3,549,007	2,513,257	1,639,034	18,807,901
Securitisation Exposures	–	–	–	–	–
Equity Exposures	364,365	731	48,213	1,977	415,286
<b>Total Standardised Approach</b>	<b>130,596,434</b>	<b>64,369,982</b>	<b>19,361,317</b>	<b>30,963,876</b>	<b>245,291,609</b>
<b>Exposures under the IRB Approach</b>					
Public Sector Entities	29,124,977	–	–	–	29,124,977
Banks, Development Financial Institutions & MDBs	15,884,771	12,326,972	1,619,212	11,897,152	41,728,107
Corporate Exposures	172,563,937	79,431,730	16,366,149	46,218,466	314,580,282
a) Corporates (excluding Specialised Lending and firm-size adjustment)	117,289,136	63,141,150	16,366,149	43,371,358	240,167,793
b) Corporates (with firm-size adjustment)	48,807,966	16,290,580	–	2,534,089	67,632,635
c) Specialised Lending (Own PD Approach)					
– Project Finance	6,162,521	–	–	313,019	6,475,540
d) Specialised Lending (Slotting Approach)					
– Project Finance	304,314	–	–	–	304,314
Retail Exposures	238,361,159	60,364,546	9,651,449	–	308,377,154
a) Residential Mortgages	91,000,563	33,351,627	2,434,947	–	126,787,137
b) Qualifying Revolving Retail Exposures	16,362,385	5,950,925	1,090,657	–	23,403,967
c) Hire Purchase Exposures	43,328,772	7,195,152	3,840,216	–	54,364,140
d) Other Retail Exposures	87,669,439	13,866,842	2,285,629	–	103,821,910
<b>Total IRB Approach</b>	<b>455,934,844</b>	<b>152,123,248</b>	<b>27,636,810</b>	<b>58,115,618</b>	<b>693,810,520</b>
<b>Total Standardised and IRB Approaches</b>	<b>586,531,278</b>	<b>216,493,230</b>	<b>46,998,127</b>	<b>89,079,494</b>	<b>939,102,129</b>

## Credit Risk

**Table 10: Disclosure on Credit Risk Exposure – Geographical Analysis for Maybank Group (cont'd.)**

Exposure Class	Malaysia RM'000	Singapore RM'000	Indonesia RM'000	Other Overseas Units RM'000	Total RM'000
<b>As at 31.12.2021</b>					
<b>Exempted Exposures (Standardised Approach)</b>					
Sovereigns/Central Banks	89,649,445	39,581,905	11,844,472	18,629,280	159,705,102
Public Sector Entities	910,765	3,013,110	–	–	3,923,875
Banks, Development Financial Institutions & MDBs	2,437,743	67,748	–	7,815	2,513,306
Insurance Cos, Securities Firms & Fund Managers	1,382,708	381,222	–	183,562	1,947,492
Corporates	5,918,929	7,708,491	2,735,792	7,793,846	24,157,058
Regulatory Retail	3,427,396	11,150,342	4,240,508	5,419,112	24,237,358
Residential Mortgages	1,517,739	2,988	81,528	417,989	2,020,244
Higher Risk Assets	1,252	1,607	–	–	2,859
Other Assets	9,550,899	1,538,732	2,593,345	2,062,956	15,745,932
Securitisation Exposures	20,075	–	–	–	20,075
Equity Exposures	340,869	2,052	3,711	1,950	348,582
<b>Total Standardised Approach</b>	<b>115,157,820</b>	<b>63,448,197</b>	<b>21,499,356</b>	<b>34,516,510</b>	<b>234,621,883</b>
<b>Exposures under the IRB Approach</b>					
Public Sector Entities	26,906,997	–	–	–	26,906,997
Banks, Development Financial Institutions & MDBs	11,916,935	9,929,897	2,077,621	10,264,676	34,189,129
Corporate Exposures	165,038,386	68,608,130	17,090,030	41,659,747	292,396,293
a) Corporates (excluding Specialised Lending and firm-size adjustment)	113,477,150	53,704,486	17,090,030	40,149,568	224,421,234
b) Corporates (with firm-size adjustment)	45,109,064	14,903,644	–	1,187,264	61,199,972
c) Specialised Lending (Own PD Approach)					
– Project Finance	5,893,009	–	–	322,915	6,215,924
d) Specialised Lending (Slotting Approach)					
– Project Finance	559,163	–	–	–	559,163
Retail Exposures	215,447,890	58,681,914	8,830,061	–	282,959,865
a) Residential Mortgages	79,601,758	26,693,614	2,373,578	–	108,668,950
b) Qualifying Revolving Retail Exposures	14,446,983	5,403,038	998,123	–	20,848,144
c) Hire Purchase Exposures	42,881,365	7,138,405	3,203,563	–	53,223,333
d) Other Retail Exposures	78,517,784	19,446,857	2,254,797	–	100,219,438
<b>Total IRB Approach</b>	<b>419,310,208</b>	<b>137,219,941</b>	<b>27,997,712</b>	<b>51,924,423</b>	<b>636,452,284</b>
<b>Total Standardised and IRB Approaches</b>	<b>534,468,028</b>	<b>200,668,138</b>	<b>49,497,068</b>	<b>86,440,933</b>	<b>871,074,167</b>

Table 11: Disclosure on Credit Risk Exposure – Geographical Analysis for Maybank

Exposure Class	Malaysia RM'000	Singapore RM'000	Other Overseas Units RM'000	Total RM'000
<b>As at 31.12.2022</b>				
<b>Exempted Exposures (Standardised Approach)</b>				
Sovereigns/Central Banks	66,481,199	23,077,630	12,968,971	102,527,800
Public Sector Entities	700,775	2,510,711	–	3,211,486
Banks, Development Financial Institutions & MDBs	451,851	251,817	–	703,668
Insurance Cos, Securities Firms & Fund Managers	301,195	–	41,557	342,752
Corporates	4,640,196	6,728,836	1,874,498	13,243,530
Regulatory Retail	1,451,826	–	215,490	1,667,316
Residential Mortgages	746,219	–	295,484	1,041,703
Higher Risk Assets	62	–	–	62
Other Assets	9,136,073	1,271,264	480,625	10,887,962
Securitisation Exposures	–	–	–	–
Equity Exposures	359,143	731	–	359,874
<b>Total Standardised Approach</b>	<b>84,268,539</b>	<b>33,840,989</b>	<b>15,876,625</b>	<b>133,986,153</b>
<b>Exposures under the IRB Approach</b>				
Public Sector Entities	20,435,292	–	–	20,435,292
Banks, Development Financial Institutions & MDBs	47,327,049	12,043,627	11,891,839	71,262,515
Corporate Exposures	110,224,068	62,628,271	44,218,348	217,070,687
a) Corporates (excluding Specialised Lending and firm-size adjustment)	80,003,285	56,341,513	41,963,292	178,308,090
b) Corporates (with firm-size adjustment)	26,168,542	6,286,758	1,942,038	34,397,338
c) Specialised Lending (Own PD Approach)				
– Project Finance	3,825,851	–	313,018	4,138,869
d) Specialised Lending (Slotting Approach)				
– Project Finance	226,390	–	–	226,390
Retail Exposures	80,352,053	–	–	80,352,053
a) Residential Mortgages	35,243,488	–	–	35,243,488
b) Qualifying Revolving Retail Exposures	11,907,395	–	–	11,907,395
c) Hire Purchase Exposures	4,546,427	–	–	4,546,427
d) Other Retail Exposures	28,654,743	–	–	28,654,743
<b>Total IRB Approach</b>	<b>258,338,462</b>	<b>74,671,898</b>	<b>56,110,187</b>	<b>389,120,547</b>
<b>Total Standardised and IRB Approaches</b>	<b>342,607,001</b>	<b>108,512,887</b>	<b>71,986,812</b>	<b>523,106,700</b>

## Credit Risk

Table 11: Disclosure on Credit Risk Exposure – Geographical Analysis for Maybank (cont'd.)

Exposure Class	Malaysia RM'000	Singapore RM'000	Other Overseas Units RM'000	Total RM'000
<b>As at 31.12.2021</b>				
<b>Exempted Exposures (Standardised Approach)</b>				
Sovereigns/Central Banks	55,629,909	22,274,387	14,130,637	92,034,933
Public Sector Entities	820,025	2,526,219	–	3,346,244
Banks, Development Financial Institutions & MDBs	936,872	67,745	–	1,004,617
Insurance Cos, Securities Firms & Fund Managers	1,376,679	–	183,562	1,560,241
Corporates	4,790,922	6,628,660	2,741,176	14,160,758
Regulatory Retail	1,517,785	–	231,279	1,749,064
Residential Mortgages	846,910	–	343,344	1,190,254
Higher Risk Assets	32	–	–	32
Other Assets	7,071,643	345,880	543,130	7,960,653
Securitisation Exposures	20,075	–	–	20,075
Equity Exposures	335,640	2,052	–	337,692
<b>Total Standardised Approach</b>	<b>73,346,492</b>	<b>31,844,943</b>	<b>18,173,128</b>	<b>123,364,563</b>
<b>Exposures under the IRB Approach</b>				
Public Sector Entities	18,484,154	–	–	18,484,154
Banks, Development Financial Institutions & MDBs	44,882,052	8,654,456	10,851,446	64,387,954
Corporate Exposures	109,379,123	53,413,840	39,518,317	202,311,280
a) Corporates (excluding Specialised Lending and firm-size adjustment)	78,374,291	48,022,151	38,347,130	164,743,572
b) Corporates (with firm-size adjustment)	26,484,924	5,391,689	848,272	32,724,885
c) Specialised Lending (Own PD Approach)				
– Project Finance	4,010,129	–	322,915	4,333,044
d) Specialised Lending (Slotting Approach)				
– Project Finance	509,779	–	–	509,779
Retail Exposures	79,973,799	–	–	79,973,799
a) Residential Mortgages	33,559,484	–	–	33,559,484
b) Qualifying Revolving Retail Exposures	10,625,875	–	–	10,625,875
c) Hire Purchase Exposures	5,889,455	–	–	5,889,455
d) Other Retail Exposures	29,898,985	–	–	29,898,985
<b>Total IRB Approach</b>	<b>252,719,128</b>	<b>62,068,296</b>	<b>50,369,763</b>	<b>365,157,187</b>
<b>Total Standardised and IRB Approaches</b>	<b>326,065,620</b>	<b>93,913,239</b>	<b>68,542,891</b>	<b>488,521,750</b>



Table 12: Disclosure on Credit Risk Exposure – Geographical Analysis for Maybank Islamic

Exposure Class	As at 31.12.2022 Total RM'000	As at 31.12.2021 Total RM'000
<b>Exposures under Standardised Approach</b>		
Sovereigns/Central Banks	40,600,602	33,446,430
Public Sector Entities	62,752	90,742
Banks, Development Financial Institutions & MDBs	-	-
Insurance Cos, Securities Firms & Fund Managers	8,006	6,031
Corporates	646,837	1,113,231
Regulatory Retail	1,734,905	1,848,598
Residential Mortgages	587,599	670,830
Higher Risk Assets	36	36
Other Assets	1,219,409	1,786,649
Equity Exposure	1,250	1,250
<b>Total Standardised Approach</b>	<b>44,861,396</b>	<b>38,963,797</b>
<b>Exposures under IRB Approach</b>		
Public Sector Entities	23,775,808	22,493,526
Banks, Development Financial Institutions & MDBs	17,140,088	9,735,780
Corporate Exposures	85,656,337	79,412,417
a) Corporates (excluding Specialised Lending and firm-size adjustment)	60,437,244	58,278,349
b) Corporates (with firm-size adjustment)	22,804,499	18,789,261
c) Specialised Lending (Own PD Approach)		
– Project Finance	2,336,670	2,295,423
d) Specialised Lending (Slotting Approach)		
– Project Finance	77,924	49,384
Retail Exposures	182,256,974	162,853,296
a) Residential Mortgages	58,133,137	50,192,119
b) Qualifying Revolving Retail Exposures	4,593,173	3,821,108
c) Hire Purchase Exposures	46,412,585	41,977,904
d) Other Retail Exposures	73,118,079	66,862,165
<b>Total IRB Approach</b>	<b>308,829,207</b>	<b>274,495,019</b>
<b>Total Standardised and IRB Approaches</b>	<b>353,690,603</b>	<b>313,458,816</b>

## Credit Risk

**Table 13: Disclosure on Credit Risk Exposure – Industry Analysis for Maybank Group**

Exposure Class	Agriculture RM'000	Mining & Quarrying RM'000	Manufacturing RM'000	Construction RM'000	Electricity, Gas & Water Supply RM'000	Wholesale, Retail Trade, Restaurants & Hotels RM'000	Finance, Insurance, Real Estate & Business RM'000	Transport, Storage & Communication RM'000	Education, Health & Others RM'000	Household RM'000	Others RM'000	Total RM'000
<b>As at 31.12.2022</b>												
<b>Exempted Exposures (Standardised Approach)</b>												
Sovereigns/Central Banks	1,377	-	10,510	-	36,871	640	63,567,655	18,743	264	-	107,591,790	171,227,850
Public Sector Entities	120,562	-	-	88	-	-	3,112,633	20	125	-	691,368	3,924,796
Banks, Development Financial Institutions & MDBs	-	-	-	-	-	-	624,296	-	-	-	88,243	712,539
Insurance Cos, Securities Firms & Fund Managers	48	-	-	-	-	57	711,285	5,739	-	-	14	717,143
Corporates	43,681	330,954	469,071	413,563	4,875,815	1,063,042	3,196,362	1,034,159	241,318	19,403	11,297,778	22,985,146
Regulatory Retail	-	-	-	-	-	-	-	-	-	24,846,809	-	24,846,809
Residential Mortgages	-	-	-	-	-	-	-	-	-	1,651,112	-	1,651,112
Higher Risk Assets	-	-	-	-	-	-	1,253	-	-	-	1,774	3,027
Other Assets	-	-	15	1	-	1	927,386	-	-	-	17,880,498	18,807,901
Securitisation Exposures	-	-	-	-	-	-	-	-	-	-	-	-
Equity Exposures	-	-	-	23	17,833	731	-	-	-	-	396,699	415,286
<b>Total Standardised Approach</b>	<b>165,668</b>	<b>330,954</b>	<b>479,596</b>	<b>413,675</b>	<b>4,930,519</b>	<b>1,064,471</b>	<b>72,140,870</b>	<b>1,058,661</b>	<b>241,707</b>	<b>26,517,324</b>	<b>137,948,164</b>	<b>245,291,609</b>
<b>Exposures under the IRB Approach</b>												
Public Sector Entities	4,639,140	11,145	2	124,860	127,585	2,335	23,402,033	985	4,987	-	811,905	29,124,977
Banks, Development Financial Institutions & MDBs	-	-	-	-	-	-	41,127,656	-	-	-	600,451	41,728,107
Corporate Exposures	7,356,055	10,870,083	45,124,025	36,303,483	11,459,147	47,397,177	119,906,861	18,255,288	3,526,783	14,754	14,366,626	314,580,282
a) Corporates (excluding Specialised Lending and firm-size adjustment)	5,886,911	10,263,647	34,932,391	22,387,356	8,235,955	30,972,977	99,517,831	14,946,903	2,165,455	13,145	10,845,222	240,167,793
b) Corporates (with firm-size adjustment)	1,469,144	333,928	8,271,377	12,238,999	695,184	16,424,200	20,389,030	2,956,559	1,361,328	1,609	3,491,277	67,632,635
c) Specialised Lending (Own PD Approach)	-	-	-	-	-	-	-	-	-	-	-	-
- Project Finance	-	272,508	1,920,257	1,409,855	2,490,967	-	-	351,826	-	-	30,127	6,475,540
d) Specialised Lending (Slotting Approach)	-	-	-	-	-	-	-	-	-	-	-	-
- Project Finance	-	-	-	267,273	37,041	-	-	-	-	-	-	304,314
Retail Exposures	-	-	-	-	-	-	-	-	-	308,377,154	-	308,377,154
a) Residential Mortgages	-	-	-	-	-	-	-	-	-	126,787,137	-	126,787,137
b) Qualifying Revolving Retail Exposures	-	-	-	-	-	-	-	-	-	23,403,967	-	23,403,967
c) Hire Purchase Exposures	-	-	-	-	-	-	-	-	-	54,364,140	-	54,364,140
d) Other Retail Exposures	-	-	-	-	-	-	-	-	-	103,821,910	-	103,821,910
<b>Total IRB Approach</b>	<b>11,995,195</b>	<b>10,881,228</b>	<b>45,124,027</b>	<b>36,428,343</b>	<b>11,586,732</b>	<b>47,399,512</b>	<b>184,436,550</b>	<b>18,256,273</b>	<b>3,531,770</b>	<b>308,391,908</b>	<b>15,778,982</b>	<b>693,810,520</b>
<b>Total Standardised and IRB Approaches</b>	<b>12,160,863</b>	<b>11,212,182</b>	<b>45,603,623</b>	<b>36,842,018</b>	<b>16,517,251</b>	<b>48,463,983</b>	<b>256,577,420</b>	<b>19,314,934</b>	<b>3,773,477</b>	<b>334,909,232</b>	<b>153,727,146</b>	<b>939,102,129</b>

Exposure Class	Agriculture RM'000	Mining & Quarrying RM'000	Manufacturing RM'000	Construction RM'000	Electricity, Gas & Water Supply RM'000	Wholesale, Retail Trade, Restaurants & Hotels RM'000	Finance, Insurance, Real Estate & Business RM'000	Transport, Storage & Communication RM'000	Education, Health & Others RM'000	Household RM'000	Others RM'000	Total RM'000
<b>As at 31.12.2021</b>												
<b>Exempted Exposures (Standardised Approach)</b>												
Sovereigns/Central Banks	299	-	-	-	36,273	640	72,622,238	65	225	-	87,045,362	159,705,102
Public Sector Entities	117,026	11	-	88	-	-	2,458,104	20	195	-	1,348,431	3,923,875
Banks, Development Financial Institutions & MDBs	-	-	-	-	-	-	2,513,306	-	-	-	-	2,513,306
Insurance Cos, Securities Firms & Fund Managers	62	-	-	39	-	77	1,941,885	5,405	-	-	24	1,947,492
Corporates	39,804	1,081,677	425,439	352,388	4,059,392	1,001,924	3,802,708	978,782	373,174	36,945	12,004,825	24,157,058
Regulatory Retail	-	-	-	-	-	-	-	-	-	24,237,358	-	24,237,358
Residential Mortgages	-	-	-	-	-	-	-	-	-	2,020,244	-	2,020,244
Higher Risk Assets	-	-	-	-	-	-	2,791	-	-	-	68	2,859
Other Assets	9	-	140	1	-	53	2,786,465	2,697	-	787	12,955,780	15,745,932
Securitisation Exposures	-	-	-	-	-	-	20,075	-	-	-	-	20,075
Equity Exposures	-	-	-	26	15,232	2,052	-	-	-	-	331,272	348,582
<b>Total Standardised Approach</b>	<b>157,200</b>	<b>1,081,688</b>	<b>425,579</b>	<b>352,542</b>	<b>4,110,897</b>	<b>1,004,746</b>	<b>86,147,572</b>	<b>986,969</b>	<b>373,594</b>	<b>26,295,334</b>	<b>113,685,762</b>	<b>234,621,883</b>
<b>Exposures under the IRB Approach</b>												
Public Sector Entities	3,272,815	25,636	-	560,213	123,813	2,530	22,772,040	957	6,126	-	142,867	26,906,997
Banks, Development Financial Institutions & MDBs	-	-	-	-	-	-	34,189,129	-	-	-	-	34,189,129
Corporate Exposures	8,119,106	10,950,999	44,134,937	39,251,064	10,482,174	41,568,641	104,111,530	18,208,103	2,373,315	46,074	13,150,350	292,396,293
a) Corporates (excluding Specialised Lending and firm-size adjustment)	6,630,616	10,044,607	34,474,571	24,389,314	7,525,611	28,356,472	86,264,626	15,200,119	1,079,704	44,680	10,410,914	224,421,234
b) Corporates (with firm-size adjustment)	1,488,490	579,026	7,730,152	13,249,972	514,390	13,212,169	17,846,904	2,590,534	1,293,611	1,394	2,693,330	61,199,972
c) Specialised Lending (Own PD Approach)	-	-	-	-	-	-	-	-	-	-	-	-
- Project Finance	-	327,366	1,930,214	1,320,989	2,173,799	-	-	417,450	-	-	46,106	6,215,924
d) Specialised Lending (Slotting Approach)	-	-	-	-	-	-	-	-	-	-	-	-
- Project Finance	-	-	-	290,789	268,374	-	-	-	-	-	-	559,163
Retail Exposures	-	-	-	-	-	-	-	-	-	282,959,865	-	282,959,865
a) Residential Mortgages	-	-	-	-	-	-	-	-	-	108,668,950	-	108,668,950
b) Qualifying Revolving Retail Exposures	-	-	-	-	-	-	-	-	-	20,848,144	-	20,848,144
c) Hire Purchase Exposures	-	-	-	-	-	-	-	-	-	53,223,333	-	53,223,333
d) Other Retail Exposures	-	-	-	-	-	-	-	-	-	100,219,438	-	100,219,438
<b>Total IRB Approach</b>	<b>11,391,921</b>	<b>10,976,635</b>	<b>44,134,937</b>	<b>39,811,277</b>	<b>10,605,987</b>	<b>41,571,171</b>	<b>161,072,699</b>	<b>18,209,060</b>	<b>2,379,441</b>	<b>283,005,939</b>	<b>13,293,217</b>	<b>636,452,284</b>
<b>Total Standardised and IRB Approaches</b>	<b>11,549,121</b>	<b>12,058,323</b>	<b>44,560,516</b>	<b>40,163,819</b>	<b>14,716,884</b>	<b>42,575,917</b>	<b>247,220,271</b>	<b>19,196,029</b>	<b>2,753,035</b>	<b>309,301,273</b>	<b>126,978,979</b>	<b>871,074,167</b>

Table 14: Disclosure on Credit Risk Exposure – Industry Analysis for Maybank

Exposure Class	Agriculture RM'000	Mining & Quarrying RM'000	Manufacturing RM'000	Construction RM'000	Electricity, Gas & Water Supply RM'000	Wholesale, Retail Trade, Restaurants & Hotels RM'000	Finance, Insurance, Real Estate & Business RM'000	Transport, Storage & Communication RM'000	Education, Health & Others RM'000	Household RM'000	Others RM'000	Total RM'000
<b>As at 31.12.2022</b>												
<b>Exempted Exposures (Standardised Approach)</b>												
Sovereigns/Central Banks	340	-	10,510	-	36,871	640	32,204,342	18,743	264	-	70,256,090	102,527,800
Public Sector Entities	116,225	-	-	88	-	-	2,462,075	20	20	-	633,058	3,211,486
Banks, Development Financial Institutions & MDBs	-	-	-	-	-	-	615,426	-	-	-	88,242	703,668
Insurance Cos, Securities Firms & Fund Managers	48	-	-	-	-	57	336,906	5,740	-	-	1	342,752
Corporates	31,240	317,867	238,475	47,962	4,867,367	320,362	3,210,404	886,120	178,314	2,278	3,143,141	13,243,530
Regulatory Retail	-	-	-	-	-	-	-	-	-	1,667,316	-	1,667,316
Residential Mortgages	-	-	-	-	-	-	-	-	-	1,041,703	-	1,041,703
Higher Risk Assets	-	-	-	-	-	-	-	-	-	-	62	62
Other Assets	-	-	-	-	-	-	880,565	-	-	-	10,007,397	10,887,962
Securitisation Exposures	-	-	-	-	-	-	-	-	-	-	-	-
Equity Exposures	-	-	-	23	17,833	731	-	-	-	-	341,287	359,874
<b>Total Standardised Approach</b>	<b>147,853</b>	<b>317,867</b>	<b>248,985</b>	<b>48,073</b>	<b>4,922,071</b>	<b>321,790</b>	<b>39,709,718</b>	<b>910,623</b>	<b>178,598</b>	<b>2,711,297</b>	<b>84,469,278</b>	<b>133,986,153</b>
<b>Exposures under the IRB Approach</b>												
Public Sector Entities	4,597,144	6,122	2	51,101	-	2,335	15,722,392	832	-	-	55,364	20,435,292
Banks, Development Financial Institutions & MDBs	-	-	-	-	-	-	70,662,064	-	-	-	600,451	71,262,515
Corporate Exposures	3,545,488	7,743,877	25,287,328	20,306,535	8,283,035	32,111,588	97,611,463	9,838,069	2,448,000	2,229	9,893,075	217,070,687
a) Corporates (excluding Specialised Lending and firm-size adjustment)	2,851,886	7,248,312	19,544,057	13,486,111	6,823,706	23,907,724	85,411,924	8,335,238	1,758,861	620	8,939,651	178,308,090
b) Corporates (with firm-size adjustment)	693,602	223,057	3,823,014	6,140,225	348,987	8,203,864	12,199,539	1,151,005	689,139	1,609	923,297	34,397,338
c) Specialised Lending (Own PD Approach)	-	-	-	-	-	-	-	-	-	-	-	-
- Project Finance	-	272,508	1,920,257	453,812	1,110,339	-	-	351,826	-	-	30,127	4,138,869
d) Specialised Lending (Slotting Approach)	-	-	-	-	-	-	-	-	-	-	-	-
- Project Finance	-	-	-	226,387	3	-	-	-	-	-	-	226,390
Retail Exposures	-	-	-	-	-	-	-	-	-	80,352,053	-	80,352,053
a) Residential Mortgages	-	-	-	-	-	-	-	-	-	35,243,488	-	35,243,488
b) Qualifying Revolving Retail Exposures	-	-	-	-	-	-	-	-	-	11,907,395	-	11,907,395
c) Hire Purchase Exposures	-	-	-	-	-	-	-	-	-	4,546,427	-	4,546,427
d) Other Retail Exposures	-	-	-	-	-	-	-	-	-	28,654,743	-	28,654,743
<b>Total IRB Approach</b>	<b>8,142,632</b>	<b>7,749,999</b>	<b>25,287,330</b>	<b>20,357,636</b>	<b>8,283,035</b>	<b>32,113,923</b>	<b>183,995,919</b>	<b>9,838,901</b>	<b>2,448,000</b>	<b>80,354,282</b>	<b>10,548,890</b>	<b>389,120,547</b>
<b>Total Standardised and IRB Approaches</b>	<b>8,290,485</b>	<b>8,067,866</b>	<b>25,536,315</b>	<b>20,405,709</b>	<b>13,205,106</b>	<b>32,435,713</b>	<b>223,705,637</b>	<b>10,749,524</b>	<b>2,626,598</b>	<b>83,065,579</b>	<b>95,018,168</b>	<b>523,106,700</b>

Exposure Class	Agriculture RM'000	Mining & Quarrying RM'000	Manufacturing RM'000	Construction RM'000	Electricity, Gas & Water Supply RM'000	Wholesale, Retail Trade, Restaurants & Hotels RM'000	Finance, Insurance, Real Estate & Business RM'000	Transport, Storage & Communication RM'000	Education, Health & Others RM'000	Household RM'000	Others RM'000	Total RM'000
<b>As at 31.12.2021</b>												
<b>Exempted Exposures (Standardised Approach)</b>												
Sovereigns/Central Banks	300	-	-	-	36,273	640	34,583,461	65	225	-	57,413,969	92,034,933
Public Sector Entities	116,239	88	-	-	-	-	1,971,046	20	20	-	1,258,831	3,346,244
Banks, Development Financial Institutions & MDBs	-	-	-	-	-	-	1,004,617	-	-	-	-	1,004,617
Insurance Cos, Securities Firms & Fund Managers	-	-	-	-	-	-	1,560,241	-	-	-	-	1,560,241
Corporates	28,264	804,998	204,979	32,533	4,016,001	213,462	3,955,603	867,461	168,659	2,386	3,866,412	14,160,758
Regulatory Retail	-	-	-	-	-	-	-	-	-	1,749,064	-	1,749,064
Residential Mortgages	-	-	-	-	-	-	-	-	-	1,190,254	-	1,190,254
Higher Risk Assets	-	-	-	-	-	-	-	-	-	-	32	32
Other Assets	-	-	-	-	-	-	233,860	-	-	-	7,726,792	7,960,652
Securitisation Exposures	-	-	-	-	-	-	20,075	-	-	-	-	20,075
Equity Exposures	-	-	-	26	15,232	2,053	-	-	-	-	320,382	337,693
<b>Total Standardised Approach</b>	<b>144,803</b>	<b>805,086</b>	<b>204,979</b>	<b>32,559</b>	<b>4,067,506</b>	<b>216,155</b>	<b>43,328,903</b>	<b>867,546</b>	<b>168,904</b>	<b>2,941,704</b>	<b>70,586,418</b>	<b>123,364,563</b>
<b>Exposures under the IRB Approach</b>												
Public Sector Entities	3,230,985	8,279	-	351,001	-	2,530	14,794,063	839	-	-	96,457	18,484,154
Banks, Development Financial Institutions & MDBs	-	-	-	-	-	-	64,387,954	-	-	-	-	64,387,954
Corporate Exposures	3,950,481	8,522,329	25,408,547	23,090,929	6,427,944	27,453,462	84,613,672	11,295,175	1,170,561	2,356	10,375,824	202,311,280
a) Corporates (excluding Specialised Lending and firm-size adjustment)	3,198,324	7,954,380	19,614,664	15,167,186	4,770,713	20,771,252	73,537,503	9,803,155	520,544	962	9,404,889	164,743,572
b) Corporates (with firm-size adjustment)	752,157	240,583	3,863,670	7,230,928	228,358	6,682,210	11,076,169	1,074,570	650,017	1,394	924,829	32,724,885
c) Specialised Lending (Own PD Approach)	-	-	-	-	-	-	-	-	-	-	-	-
- Project Finance	-	327,366	1,930,213	414,792	1,197,117	-	-	417,450	-	-	46,106	4,333,044
d) Specialised Lending (Slotting Approach)	-	-	-	-	-	-	-	-	-	-	-	-
- Project Finance	-	-	-	278,023	231,756	-	-	-	-	-	-	509,779
Retail Exposures	-	-	-	-	-	-	-	-	-	79,973,799	-	79,973,799
a) Residential Mortgages	-	-	-	-	-	-	-	-	-	33,559,484	-	33,559,484
b) Qualifying Revolving Retail Exposures	-	-	-	-	-	-	-	-	-	10,625,875	-	10,625,875
c) Hire Purchase Exposures	-	-	-	-	-	-	-	-	-	5,889,455	-	5,889,455
d) Other Retail Exposures	-	-	-	-	-	-	-	-	-	29,898,985	-	29,898,985
<b>Total IRB Approach</b>	<b>7,181,466</b>	<b>8,530,608</b>	<b>25,408,547</b>	<b>23,441,930</b>	<b>6,427,944</b>	<b>27,455,992</b>	<b>163,795,689</b>	<b>11,296,014</b>	<b>1,170,561</b>	<b>79,976,155</b>	<b>10,472,281</b>	<b>365,157,187</b>
<b>Total Standardised and IRB Approaches</b>	<b>7,326,269</b>	<b>9,335,694</b>	<b>25,613,526</b>	<b>23,474,489</b>	<b>10,495,450</b>	<b>27,672,147</b>	<b>207,124,592</b>	<b>12,163,560</b>	<b>1,339,465</b>	<b>82,917,859</b>	<b>81,058,699</b>	<b>488,521,750</b>

## Credit Risk

**Table 15: Disclosure on Credit Risk Exposure – Industry Analysis for Maybank Islamic**

Exposure Class	Agriculture RM'000	Mining & Quarrying RM'000	Manufacturing RM'000	Construction RM'000	Electricity, Gas & Water Supply RM'000	Wholesale, Retail Trade, Restaurants & Hotels RM'000	Finance, Insurance, Real Estate & Business RM'000	Transport, Storage & Communication RM'000	Education, Health & Others RM'000	Household RM'000	Others RM'000	Total RM'000
<b>As at 31.12.2022</b>												
<b>Exempted Exposures (Standardised Approach)</b>												
Sovereigns/Central Banks	1,037	-	-	-	-	-	12,474,845	-	-	-	28,124,720	40,600,602
Public Sector Entities	4,337	-	-	-	-	-	-	-	105	-	58,310	62,752
Banks, Development Financial Institutions & MDBs	-	-	-	-	-	-	-	-	-	-	-	-
Insurance Cos, Securities Firms & Fund Managers	-	-	-	-	-	-	7,992	-	-	-	14	8,006
Corporates	8,203	2,025	17,658	32,206	2,471	50,572	43,652	12,404	7,567	260	469,819	646,837
Regulatory Retail	-	-	-	-	-	-	-	-	-	1,734,905	-	1,734,905
Residential Mortgages	-	-	-	-	-	-	-	-	-	587,599	-	587,599
Higher Risk Assets	-	-	-	-	-	-	-	-	-	-	36	36
Other Assets	-	-	-	-	-	-	-	-	-	-	1,219,409	1,219,409
Equity Exposures	-	-	-	-	-	-	-	-	-	-	1,250	1,250
<b>Total Standardised Approach</b>	<b>13,577</b>	<b>2,025</b>	<b>17,658</b>	<b>32,206</b>	<b>2,471</b>	<b>50,572</b>	<b>12,526,489</b>	<b>12,404</b>	<b>7,672</b>	<b>2,322,764</b>	<b>29,873,558</b>	<b>44,861,396</b>
<b>Exposures under the IRB Approach</b>												
Public Sector Entities	4,185,061	5,023	-	73,759	127,585	-	18,622,700	152	4,987	-	756,541	23,775,808
Banks, Development Financial Institutions & MDBs	-	-	-	-	-	-	17,140,060	-	-	-	28	17,140,088
Corporate Exposures	4,206,858	5,688,024	14,936,720	14,567,809	6,754,728	8,352,840	20,538,257	7,997,259	912,032	-	1,701,810	85,656,337
a) Corporates (excluding Specialised Lending and firm-size adjustment)	3,468,391	5,600,570	11,542,601	8,895,706	5,042,839	3,838,409	14,809,711	6,712,160	356,635	-	170,222	60,437,244
b) Corporates (with firm-size adjustment)	738,467	87,454	3,394,119	4,675,174	294,224	4,514,431	5,728,546	1,285,099	555,397	-	1,531,588	22,804,499
c) Specialised Lending (Own PD Approach)	-	-	-	-	-	-	-	-	-	-	-	-
- Project Finance	-	-	-	956,043	1,380,627	-	-	-	-	-	-	2,336,670
d) Specialised Lending (Slotting Approach)	-	-	-	-	-	-	-	-	-	-	-	-
- Project Finance	-	-	-	40,886	37,038	-	-	-	-	-	-	77,924
Retail Exposures	-	-	-	-	-	-	-	-	-	182,256,974	-	182,256,974
a) Residential Mortgages	-	-	-	-	-	-	-	-	-	58,133,137	-	58,133,137
b) Qualifying Revolving Retail Exposures	-	-	-	-	-	-	-	-	-	4,593,173	-	4,593,173
c) Hire Purchase Exposures	-	-	-	-	-	-	-	-	-	46,412,585	-	46,412,585
d) Other Retail Exposures	-	-	-	-	-	-	-	-	-	73,118,079	-	73,118,079
<b>Total IRB Approach</b>	<b>8,391,919</b>	<b>5,693,047</b>	<b>14,936,720</b>	<b>14,641,568</b>	<b>6,882,313</b>	<b>8,352,840</b>	<b>56,301,017</b>	<b>7,997,411</b>	<b>917,019</b>	<b>182,256,974</b>	<b>2,458,379</b>	<b>308,829,207</b>
<b>Total Standardised and IRB Approaches</b>	<b>8,405,496</b>	<b>5,695,072</b>	<b>14,954,378</b>	<b>14,673,774</b>	<b>6,884,784</b>	<b>8,403,412</b>	<b>68,827,506</b>	<b>8,009,815</b>	<b>924,691</b>	<b>184,579,738</b>	<b>32,331,937</b>	<b>353,690,603</b>

Exposure Class	Agriculture RM'000	Mining & Quarrying RM'000	Manufacturing RM'000	Construction RM'000	Electricity, Gas & Water Supply RM'000	Wholesale, Retail Trade, Restaurants & Hotels RM'000	Finance, Insurance, Real Estate & Business RM'000	Transport, Storage & Communication RM'000	Education, Health & Others RM'000	Household RM'000	Others RM'000	Total RM'000
<b>As at 31.12.2021</b>												
<b>Exempted Exposures (Standardised Approach)</b>												
Sovereigns/Central Banks	-	-	-	-	-	-	11,392,976	-	-	-	22,053,454	33,446,430
Public Sector Entities	788	11	-	-	-	-	168	-	175	-	89,600	90,742
Banks, Development Financial Institutions & MDBs	-	-	-	-	-	-	-	-	-	-	-	-
Insurance Cos, Securities Firms & Fund Managers	-	-	-	39	-	-	5,968	-	-	-	24	6,031
Corporates	7,872	2,509	6,472	23,078	36,405	38,728	454,449	7,847	6,806	350	528,715	1,113,231
Regulatory Retail	-	-	-	-	-	-	-	-	-	1,848,598	-	1,848,598
Residential Mortgages	-	-	-	-	-	-	-	-	-	670,830	-	670,830
Higher Risk Assets	-	-	-	-	-	-	-	-	-	-	36	36
Other Assets	-	-	-	-	-	-	928,267	-	-	-	858,382	1,786,649
Equity Exposures	-	-	-	-	-	-	-	-	-	-	1,250	1,250
<b>Total Standardised Approach</b>	<b>8,660</b>	<b>2,520</b>	<b>6,472</b>	<b>23,117</b>	<b>36,405</b>	<b>38,728</b>	<b>12,781,828</b>	<b>7,847</b>	<b>6,981</b>	<b>2,519,778</b>	<b>23,531,461</b>	<b>38,963,797</b>
<b>Exposures under the IRB Approach</b>												
Public Sector Entities	2,818,655	17,358	-	560,103	123,813	-	18,920,943	118	6,126	-	46,410	22,493,526
Banks, Development Financial Institutions & MDBs	-	-	-	-	-	-	9,735,774	-	-	-	6	9,735,780
Corporate Exposures	4,624,740	5,807,843	14,167,997	14,776,097	3,898,751	7,240,856	18,629,552	8,079,441	931,845	-	1,255,295	79,412,417
a) Corporates (excluding Specialised Lending and firm-size adjustment)	3,929,854	5,481,675	11,437,078	9,244,147	2,251,458	3,905,253	14,239,458	7,124,079	368,808	-	296,540	58,278,350
b) Corporates (with firm-size adjustment)	694,886	326,168	2,730,919	4,612,987	221,449	3,335,603	4,390,094	955,362	563,037	-	958,755	18,789,260
c) Specialised Lending (Own PD Approach)	-	-	-	-	-	-	-	-	-	-	-	-
- Project Finance	-	-	-	906,197	1,389,226	-	-	-	-	-	-	2,295,423
d) Specialised Lending (Slotting Approach)	-	-	-	-	-	-	-	-	-	-	-	-
- Project Finance	-	-	-	12,766	36,618	-	-	-	-	-	-	49,384
Retail Exposures	-	-	-	-	-	-	-	-	-	162,853,296	-	162,853,296
a) Residential Mortgages	-	-	-	-	-	-	-	-	-	50,192,119	-	50,192,119
b) Qualifying Revolving Retail Exposures	-	-	-	-	-	-	-	-	-	3,821,108	-	3,821,108
c) Hire Purchase Exposures	-	-	-	-	-	-	-	-	-	41,977,904	-	41,977,904
d) Other Retail Exposures	-	-	-	-	-	-	-	-	-	66,862,165	-	66,862,165
<b>Total IRB Approach</b>	<b>7,443,395</b>	<b>5,825,201</b>	<b>14,167,997</b>	<b>15,336,200</b>	<b>4,022,564</b>	<b>7,240,856</b>	<b>47,286,269</b>	<b>8,079,559</b>	<b>937,971</b>	<b>162,853,296</b>	<b>1,301,711</b>	<b>274,495,019</b>
<b>Total Standardised and IRB Approaches</b>	<b>7,452,055</b>	<b>5,827,721</b>	<b>14,174,469</b>	<b>15,359,317</b>	<b>4,058,969</b>	<b>7,279,584</b>	<b>60,068,097</b>	<b>8,087,406</b>	<b>944,952</b>	<b>165,373,074</b>	<b>24,833,172</b>	<b>313,458,816</b>

Table 16: Disclosure on Credit Risk Exposure – Maturity Analysis for Maybank Group

Exposure Class	One year or less RM'000	One to five years RM'000	Over five years RM'000	Total RM'000
<b>As at 31.12.2022</b>				
<b>Exempted Exposures (Standardised Approach)</b>				
Sovereigns/Central Banks	49,156,909	38,369,015	83,701,926	171,227,850
Public Sector Entities	840,575	1,908,271	1,175,950	3,924,796
Banks, Development Financial Institutions & MDBs	90,373	469,307	152,859	712,539
Insurance Cos, Securities Firms & Fund Managers	248,185	464,884	4,074	717,143
Corporates	8,119,426	6,381,701	8,484,019	22,985,146
Regulatory Retail	6,575,507	7,436,232	10,835,070	24,846,809
Residential Mortgages	727,748	58,032	865,332	1,651,112
Higher Risk Assets	1,253	1,675	99	3,027
Other Assets	1,470,347	1,541,895	15,795,659	18,807,901
Securitisation Exposures	-	-	-	-
Equity Exposures	364,199	-	51,087	415,286
<b>Total Standardised Approach</b>	<b>67,594,522</b>	<b>56,631,012</b>	<b>121,066,075</b>	<b>245,291,609</b>
<b>Exposures under the IRB Approach</b>				
Public Sector Entities	5,290,688	6,190,468	17,643,821	29,124,977
Banks, Development Financial Institutions & MDBs	30,161,424	7,618,637	3,948,046	41,728,107
Corporate Exposures	135,180,930	102,858,748	76,540,604	314,580,282
a) Corporates (excluding Specialised Lending and firm-size adjustment)	108,413,759	81,458,513	50,295,521	240,167,793
b) Corporates (with firm-size adjustment)	26,050,238	19,974,290	21,608,107	67,632,635
c) Specialised Lending (Own PD Approach)				
– Project Finance	654,828	1,414,121	4,406,591	6,475,540
d) Specialised Lending (Slotting Approach)				
– Project Finance	62,105	11,824	230,385	304,314
Retail Exposures	17,781,484	44,751,001	245,844,669	308,377,154
a) Residential Mortgages	518,461	2,836,788	123,431,888	126,787,137
b) Qualifying Revolving Retail Exposures	10,753,322	11,088,429	1,562,216	23,403,967
c) Hire Purchase Exposures	959,273	21,180,807	32,224,060	54,364,140
d) Other Retail Exposures	5,550,428	9,644,977	88,626,505	103,821,910
<b>Total IRB Approach</b>	<b>188,414,526</b>	<b>161,418,854</b>	<b>343,977,140</b>	<b>693,810,520</b>
<b>Total Standardised and IRB Approaches</b>	<b>256,009,048</b>	<b>218,049,866</b>	<b>465,043,215</b>	<b>939,102,129</b>

## Credit Risk

**Table 16: Disclosure on Credit Risk Exposure – Maturity Analysis for Maybank Group (cont'd.)**

Exposure Class	One year or less RM'000	One to five years RM'000	Over five years RM'000	Total RM'000
<b>As at 31.12.2021</b>				
<b>Exempted Exposures (Standardised Approach)</b>				
Sovereigns/Central Banks	56,649,124	39,651,306	63,404,672	159,705,102
Public Sector Entities	228,417	2,013,890	1,681,568	3,923,875
Banks, Development Financial Institutions & MDBs	1,529,577	838,986	144,743	2,513,306
Insurance Cos, Securities Firms & Fund Managers	774,269	475,560	697,663	1,947,492
Corporates	8,595,786	4,342,435	11,218,837	24,157,058
Regulatory Retail	6,363,549	7,355,943	10,517,866	24,237,358
Residential Mortgages	857,634	79,760	1,082,850	2,020,244
Higher Risk Assets	1,184	1,607	68	2,859
Other Assets	1,563,396	1,774,497	12,408,039	15,745,932
Securitisation Exposures	20,075	–	–	20,075
Equity Exposures	342,597	–	5,985	348,582
<b>Total Standardised Approach</b>	<b>76,925,608</b>	<b>56,533,984</b>	<b>101,162,291</b>	<b>234,621,883</b>
<b>Exposures under the IRB Approach</b>				
Public Sector Entities	5,416,350	4,615,973	16,874,674	26,906,997
Banks, Development Financial Institutions & MDBs	23,270,614	7,860,125	3,058,390	34,189,129
Corporate Exposures	129,203,059	94,544,502	68,648,732	292,396,293
a) Corporates (excluding Specialised Lending and firm-size adjustment)	105,729,508	75,200,883	43,490,843	224,421,234
b) Corporates (with firm-size adjustment)	22,637,467	18,160,915	20,401,590	61,199,972
c) Specialised Lending (Own PD Approach)				
– Project Finance	710,016	963,014	4,542,894	6,215,924
d) Specialised Lending (Slotting Approach)				
– Project Finance	126,068	219,690	213,405	559,163
Retail Exposures	16,024,488	41,163,566	225,771,811	282,959,865
a) Residential Mortgages	450,227	1,893,088	106,325,635	108,668,950
b) Qualifying Revolving Retail Exposures	10,591,457	9,726,561	530,126	20,848,144
c) Hire Purchase Exposures	864,039	20,207,668	32,151,626	53,223,333
d) Other Retail Exposures	4,118,765	9,336,249	86,764,424	100,219,438
<b>Total IRB Approach</b>	<b>173,914,511</b>	<b>148,184,166</b>	<b>314,353,607</b>	<b>636,452,284</b>
<b>Total Standardised and IRB Approaches</b>	<b>250,840,119</b>	<b>204,718,150</b>	<b>415,515,898</b>	<b>871,074,167</b>

Table 17: Disclosure on Credit Risk Exposure – Maturity Analysis for Maybank

Exposure Class	One year or less RM'000	One to five years RM'000	Over five years RM'000	Total RM'000
<b>As at 31.12.2022</b>				
<b>Exempted Exposures (Standardised Approach)</b>				
Sovereigns/Central Banks	26,179,791	26,727,927	49,620,082	102,527,800
Public Sector Entities	836,811	1,538,803	835,872	3,211,486
Banks, Development Financial Institutions & MDBs	81,502	469,307	152,859	703,668
Insurance Cos, Securities Firms & Fund Managers	240,290	98,542	3,920	342,752
Corporates	6,240,581	4,563,024	2,439,925	13,243,530
Regulatory Retail	1,035,722	213,577	418,017	1,667,316
Residential Mortgages	623,277	27,890	390,536	1,041,703
Higher Risk Assets	-	-	62	62
Other Assets	929,386	79,439	9,879,137	10,887,962
Securitisation Exposures	-	-	-	-
Equity Exposures	359,874	-	-	359,874
<b>Total Standardised Approach</b>	<b>36,527,234</b>	<b>33,718,509</b>	<b>63,740,410</b>	<b>133,986,153</b>
<b>Exposures under the IRB Approach</b>				
Public Sector Entities	4,263,948	5,614,659	10,556,685	20,435,292
Banks, Development Financial Institutions & MDBs	57,017,440	9,853,350	4,391,725	71,262,515
Corporate Exposures	94,186,359	77,054,210	45,830,118	217,070,687
a) Corporates (excluding Specialised Lending and firm-size adjustment)	79,722,655	63,728,943	34,856,492	178,308,090
b) Corporates (with firm-size adjustment)	13,915,845	12,110,599	8,370,894	34,397,338
c) Specialised Lending (Own PD Approach)				
– Project Finance	524,829	1,203,274	2,410,766	4,138,869
d) Specialised Lending (Slotting Approach)				
– Project Finance	23,030	11,394	191,966	226,390
Retail Exposures	5,105,732	15,036,975	60,209,346	80,352,053
a) Residential Mortgages	453,432	573,482	34,216,574	35,243,488
b) Qualifying Revolving Retail Exposures	2,680,270	7,996,759	1,230,366	11,907,395
c) Hire Purchase Exposures	82,654	2,661,280	1,802,493	4,546,427
d) Other Retail Exposures	1,889,376	3,805,454	22,959,913	28,654,743
<b>Total IRB Approach</b>	<b>160,573,479</b>	<b>107,559,194</b>	<b>120,987,874</b>	<b>389,120,547</b>
<b>Total Standardised and IRB Approaches</b>	<b>197,100,713</b>	<b>141,277,703</b>	<b>184,728,284</b>	<b>523,106,700</b>



## Credit Risk

**Table 17: Disclosure on Credit Risk Exposure – Maturity Analysis for Maybank (cont'd.)**

Exposure Class	One year or less RM'000	One to five years RM'000	Over five years RM'000	Total RM'000
<b>As at 31.12.2021</b>				
<b>Exempted Exposures (Standardised Approach)</b>				
Sovereigns/Central Banks	26,571,426	24,029,815	41,433,692	92,034,933
Public Sector Entities	203,091	1,852,435	1,290,718	3,346,244
Banks, Development Financial Institutions & MDBs	20,888	838,986	144,743	1,004,617
Insurance Cos, Securities Firms & Fund Managers	769,271	93,307	697,663	1,560,241
Corporates	7,360,224	2,122,220	4,678,314	14,160,758
Regulatory Retail	1,128,781	183,694	436,589	1,749,064
Residential Mortgages	710,543	16,411	463,300	1,190,254
Higher Risk Assets	-	-	32	32
Other Assets	271,737	143,911	7,545,004	7,960,652
Securitisation Exposures	20,075	-	-	20,075
Equity Exposures	337,636	-	57	337,693
<b>Total Standardised Approach</b>	<b>37,393,672</b>	<b>29,280,779</b>	<b>56,690,112</b>	<b>123,364,563</b>
<b>Exposures under the IRB Approach</b>				
Public Sector Entities	3,301,299	4,031,834	11,151,021	18,484,154
Banks, Development Financial Institutions & MDBs	52,161,376	7,630,716	4,595,862	64,387,954
Corporate Exposures	89,897,806	70,724,070	41,689,404	202,311,280
a) Corporates (excluding Specialised Lending and firm-size adjustment)	76,613,568	59,014,859	29,115,145	164,743,572
b) Corporates (with firm-size adjustment)	12,724,584	10,691,512	9,308,789	32,724,885
c) Specialised Lending (Own PD Approach)				
– Project Finance	472,225	798,125	3,062,694	4,333,044
d) Specialised Lending (Slotting Approach)				
– Project Finance	87,429	219,574	202,776	509,779
Retail Exposures	5,309,198	14,303,554	60,361,047	79,973,799
a) Residential Mortgages	383,641	596,375	32,579,468	33,559,484
b) Qualifying Revolving Retail Exposures	3,259,665	6,988,961	377,249	10,625,875
c) Hire Purchase Exposures	84,151	2,883,479	2,921,825	5,889,455
d) Other Retail Exposures	1,581,741	3,834,739	24,482,505	29,898,985
<b>Total IRB Approach</b>	<b>150,669,679</b>	<b>96,690,174</b>	<b>117,797,334</b>	<b>365,157,187</b>
<b>Total Standardised and IRB Approaches</b>	<b>188,063,351</b>	<b>125,970,953</b>	<b>174,487,446</b>	<b>488,521,750</b>

Table 18: Disclosure on Credit Risk Exposure – Maturity Analysis for Maybank Islamic

Exposure Class	One year or less RM'000	One to five years RM'000	Over five years RM'000	Total RM'000
<b>As at 31.12.2022</b>				
<b>Exempted Exposures (Standardised Approach)</b>				
Sovereigns/Central Banks	12,693,502	1,894,249	26,012,851	40,600,602
Public Sector Entities	3,764	51,243	7,745	62,752
Banks, Development Financial Institutions & MDBs	-	-	-	-
Insurance Cos, Securities Firms & Fund Managers	7,637	214	155	8,006
Corporates	241,625	138,529	266,683	646,837
Regulatory Retail	390,772	410,162	933,971	1,734,905
Residential Mortgages	104,114	24,957	458,528	587,599
Higher Risk Assets	-	-	36	36
Other Assets	41	30	1,219,338	1,219,409
Equity Exposures	1,250	-	-	1,250
<b>Total Standardised Approach</b>	<b>13,442,705</b>	<b>2,519,384</b>	<b>28,899,307</b>	<b>44,861,396</b>
<b>Exposures under the IRB Approach</b>				
Public Sector Entities	5,169,805	5,096,657	13,509,346	23,775,808
Banks, Development Financial Institutions & MDBs	16,333,325	771,584	35,179	17,140,088
Corporate Exposures	42,033,369	15,157,244	28,465,724	85,656,337
a) Corporates (excluding Specialised Lending and firm-size adjustment)	32,114,239	10,925,487	17,397,518	60,437,244
b) Corporates (with firm-size adjustment)	9,750,056	4,020,481	9,033,962	22,804,499
c) Specialised Lending (Own PD Approach)				
– Project Finance	129,999	210,846	1,995,825	2,336,670
d) Specialised Lending (Slotting Approach)				
– Project Finance	39,075	430	38,419	77,924
Retail Exposures	5,735,295	20,121,638	156,400,041	182,256,974
a) Residential Mortgages	38,769	1,400,269	56,694,099	58,133,137
b) Qualifying Revolving Retail Exposures	1,822,337	2,494,215	276,621	4,593,173
c) Hire Purchase Exposures	333,152	10,895,061	35,184,372	46,412,585
d) Other Retail Exposures	3,541,037	5,332,093	64,244,949	73,118,079
<b>Total IRB Approach</b>	<b>69,271,794</b>	<b>41,147,123</b>	<b>198,410,290</b>	<b>308,829,207</b>
<b>Total Standardised and IRB Approaches</b>	<b>82,714,499</b>	<b>43,666,507</b>	<b>227,309,597</b>	<b>353,690,603</b>

## Credit Risk

**Table 18: Disclosure on Credit Risk Exposure – Maturity Analysis for Maybank Islamic (cont'd.)**

Exposure Class	One year or less RM'000	One to five years RM'000	Over five years RM'000	Total RM'000
<b>As at 31.12.2021</b>				
<b>Exempted Exposures (Standardised Approach)</b>				
Sovereigns/Central Banks	12,210,691	5,946,235	15,289,504	33,446,430
Public Sector Entities	25,327	26,019	39,396	90,742
Banks, Development Financial Institutions & MDBs	–	–	–	–
Insurance Cos, Securities Firms & Fund Managers	4,227	1,804	–	6,031
Corporates	340,408	355,259	417,564	1,113,231
Regulatory Retail	401,731	468,573	978,294	1,848,598
Residential Mortgages	113,980	26,582	530,268	670,830
Higher Risk Assets	–	–	36	36
Other Assets	928,307	102	858,240	1,786,649
Equity Exposures	1,250	–	–	1,250
<b>Total Standardised Approach</b>	<b>14,025,921</b>	<b>6,824,574</b>	<b>18,113,302</b>	<b>38,963,797</b>
<b>Exposures under the IRB Approach</b>				
Public Sector Entities	5,242,766	4,094,812	13,155,948	22,493,526
Banks, Development Financial Institutions & MDBs	8,941,014	722,940	71,826	9,735,780
Corporate Exposures	38,297,167	15,898,345	25,216,905	79,412,417
a) Corporates (excluding Specialised Lending and firm-size adjustment)	30,350,806	11,908,399	16,019,143	58,278,348
b) Corporates (with firm-size adjustment)	7,669,931	3,824,941	7,294,390	18,789,262
c) Specialised Lending (Own PD Approach)				
– Project Finance	237,791	164,889	1,892,743	2,295,423
d) Specialised Lending (Slotting Approach)				
– Project Finance	38,639	116	10,629	49,384
Retail Exposures	4,331,599	17,887,269	140,634,428	162,853,296
a) Residential Mortgages	42,111	579,943	49,570,065	50,192,119
b) Qualifying Revolving Retail Exposures	1,574,047	2,131,663	115,398	3,821,108
c) Hire Purchase Exposures	283,782	10,213,563	31,480,559	41,977,904
d) Other Retail Exposures	2,431,659	4,962,100	59,468,406	66,862,165
<b>Total IRB Approach</b>	<b>56,812,546</b>	<b>38,603,366</b>	<b>179,079,107</b>	<b>274,495,019</b>
<b>Total Standardised and IRB Approaches</b>	<b>70,838,467</b>	<b>45,427,940</b>	<b>197,192,409</b>	<b>313,458,816</b>

## CREDIT IMPAIRMENT POLICY AND CLASSIFICATION AND IMPAIRMENT PROVISIONS FOR FINANCIAL ASSETS

The MFRS 9 impairment requirements are based on an Expected Credit Loss (“ECL”) model. The ECL model applies to financial assets measured at amortised cost or at fair value through other comprehensive income (“FVOCI”), irrevocable loan/financing commitments and financial guarantee contracts, which include loans, advances and financing and debt instruments held by the Group and the Bank. The ECL model also applies to contract assets under MFRS 15 *Revenue from Contracts with Customers* and lease receivables under MFRS 16 *Leases*.

The measurement of ECL involves complexity and judgement that include:

### 1. Determination of significant increase in credit risk (“SICR”) since initial recognition

The assessment of SICR is key in establishing the point of switching between the requirement to measure an allowance based on 12-month ECL and one that is based on lifetime ECL. The Group and the Bank performed quantitative and qualitative assessments to determine the SICR by comparing the risk of a default occurring on the financial assets as at reporting date with the risk of default occurring on the financial assets as at the date of initial recognition.

The Group and the Bank apply a three-stage approach based on the change in credit quality since initial recognition:

3-Stage approach	Stage 1	Stage 2	Stage 3
	Performing	Under-performing	Non-performing
ECL Approach	12-month ECL	Lifetime ECL	Lifetime ECL
Criterion	No significant increase in credit risk	Credit risk increased significantly	Credit-impaired assets
Recognition of interest/ profit income	On gross carrying amount	On gross carrying amount	On net carrying amount

### 2. ECL measurement

There are three main components to measure ECL which are a probability of default model (“PD”), a loss given default model (“LGD”) and the exposure at default model (“EAD”). The Group and the Bank have leveraged as much as possible on its existing Basel II models and performed the required adjustments to produce MFRS 9 compliant models.

MFRS 9 does not distinguish between individual assessment and collective assessment. Therefore, the Group and the Bank have decided to continue measuring impairment mainly on an individual transaction basis for financial assets that are deemed to be individually significant, and collectively assess for other financial assets.

### 3. Expected life

Lifetime expected credit losses must be measured over the expected life of the asset. This is restricted to the maximum contractual life and takes into account expected prepayments, extensions, calls and similar options, except for certain revolving financial instruments such as credit cards and overdrafts. The expected life for these revolving facilities generally refers to their behavioural life.

### 4. Financial investments at FVOCI

The ECL for financial investments measured at FVOCI do not reduce the carrying amount of these financial assets in the statement of financial position, which remains at fair value. Instead, an amount equivalent to the allowance that would arise if the assets were measured at amortised cost is recognised in other comprehensive income (“OCI”) as an accumulated impairment amount, with a corresponding charge to profit or loss. The accumulated loss recognised in OCI is recycled to the profit or loss upon derecognition of the assets.

## Credit Risk

### CREDIT IMPAIRMENT POLICY AND CLASSIFICATION AND IMPAIRMENT PROVISIONS FOR FINANCIAL ASSETS (CONT'D.)

#### 5. Forward-looking information

ECL measurement is based on unbiased probability-weighted credit losses determined by evaluating a range of possible outcomes and considering future economic conditions. The reasonable and supportable forward-looking information is obtained from the Group's and the Bank's research arm, Maybank Research Pte. Ltd. ("Maybank IBG Research"). Maybank IBG Research assumptions and analyses are based on the collation of macroeconomic data obtained from various sources such as, but not limited to, regulators, government and foreign ministries as well as independent research organisations.

Where applicable, the Group and the Bank incorporate forward-looking adjustments in credit risk factors of PD and LGD used in ECL calculation, taking into account the impact of multiple probability-weighted future forecast economic scenarios.

Embedded in ECL is a broad range of forward-looking information as economic inputs, such as:

- Gross Domestic Product ("GDP") growth;
- Unemployment rates;
- House Price indices; and
- Central Banks' policy rates.

The Group and the Bank apply the following three alternatives macroeconomic scenarios to reflect an unbiased probability-weighted range of possible future outcomes in estimating ECL:

- Base scenario: This scenario reflects that current macroeconomic conditions continue to prevail; and
- Upside and Downside scenarios: These scenarios are set relative to the base scenario; reflecting best and worst-case macroeconomic conditions based on subject matter expert's best judgement of current economic conditions.

#### 6. Valuation of collateral held as security for financial assets

The Group's and the Bank's valuation policies for collateral assigned to its financial assets are dependent on its lending arrangements.

Further details on the Group's accounting policies and accounting estimates on impairment assessment for financial assets can be found in Note 2.3 to Note 2.5 and Note 3.4 of the Financial Statements. The disclosures on reconciliation of impairment/allowance can be found in Note 10 for financial investment at FVOCI, Note 11 for financial investments at amortised cost, Note 12 for loans, advances and financing, and Note 27 for other liabilities for the allowances for impairment losses on loan commitments and financial guarantee contracts of the financial statements. This credit impairment policy is applicable to the Group.

Table 19 (a) to 19 (f) provide details on impaired loans, advances and financing for the Group, the Bank and Maybank Islamic, respectively.

Table 19 (a): Impaired and Past Due Loans, Advances and Financing and Allowances – Industry Analysis for Maybank Group

	Impaired Loans, Advances and Financing RM'000	Past Due Loans RM'000	<sup>2</sup> Specific Provision RM'000	<sup>1</sup> General Provision RM'000	Specific Provision Charges/ Write Back RM'000	Specific Provision Write-Offs RM'000
<b>As at 31.12.2022</b>						
Agriculture	809,630	236,938	973,889	25,880	490,058	(114,562)
Mining & quarrying	547,803	9,848	390,845	45,567	1,293,504	(780)
Manufacturing	731,815	885,720	443,400	460,373	95,883	(32,163)
Construction	1,382,598	2,133,878	1,051,714	391,198	242,630	(620,576)
Electricity, gas & water supply	141,197	785,786	102,042	311,061	(176,308)	(116,118)
Wholesale, retail trade, restaurants & hotels	1,310,158	2,097,161	657,126	841,742	359,764	(266,121)
Finance, insurance, real estate & business	1,192,424	3,816,189	940,898	1,326,008	674,719	(200,152)
Transport, storage & communication	300,288	376,358	148,087	366,788	(7,992)	(684,528)
Education, health & others	1,465,041	305,913	1,399,153	179,553	380,192	(585,229)
Household	1,290,666	8,776,265	465,712	1,511,324	343,989	(411,595)
Others	33,239	12,502	17,341	28,591	(929,118)	(46,939)
<b>Total</b>	<b>9,204,859</b>	<b>19,436,558</b>	<b>6,590,207</b>	<b>5,488,085</b>	<b>2,767,321</b>	<b>(3,078,763)</b>
<b>As at 31.12.2021</b>						
Agriculture	869,721	227,589	722,517	198,733	(1,925)	(10,070)
Mining & quarrying	256,154	34,908	582,126	50,392	(375,452)	(92,986)
Manufacturing	728,974	828,562	386,731	472,079	(280,644)	(344,354)
Construction	975,250	2,460,923	458,638	555,786	477,130	(216,528)
Electricity, gas & water supply	1,134,735	3,189,944	386,033	575,635	(94,619)	(38,826)
Wholesale, retail trade, restaurants & hotels	1,204,455	4,373,130	555,867	629,619	310,917	(1,092,971)
Finance, insurance, real estate & business	824,373	4,562,850	322,049	1,246,066	607,965	(441,655)
Transport, storage & communication	983,614	273,930	809,447	379,411	(338,470)	(474,144)
Education, health & others	2,459,191	254,138	1,722,022	94,469	1,486,370	(4,521)
Household	1,580,429	5,999,912	467,491	1,701,565	71,428	(249,112)
Others	26,637	18,545	13,645	29,236	1,009,560	(87,016)
<b>Total</b>	<b>11,043,533</b>	<b>22,224,431</b>	<b>6,426,566</b>	<b>5,932,991</b>	<b>2,872,260</b>	<b>(3,052,183)</b>

## Notes:

<sup>1</sup> General provision refers to loss allowance measured at an amount equal to 12-month and lifetime expected credit losses as defined under the Malaysian Financial Reporting Standards 9 (these provisions are commonly known as Stage 1 and Stage 2 provisions).

<sup>2</sup> Specific provisions refer to loss allowance measured at an amount equal to lifetime expected credit losses for credit-impaired exposures as defined under the Malaysian Financial Reporting Standards 9. These provisions are commonly known as Stage 3 provisions.

## Credit Risk

**Table 19 (b): Impaired and Past Due Loans, Advances and Financing and Allowances – Industry Analysis for Maybank**

	Impaired Loans, Advances and Financing RM'000	Past Due Loans RM'000	<sup>2</sup> Specific Provision RM'000	<sup>1</sup> General Provision RM'000	Specific Provision Charges/Write Back RM'000	Specific Provision Write-Offs RM'000
<b>As at 31.12.2022</b>						
Agriculture	375,176	7,890	345,808	21,933	28,735	(15,386)
Mining & quarrying	3,268,647	6,215	1,853,478	21,982	1,835,087	(370)
Manufacturing	229,365	92,635	186,115	223,161	24,732	(10,695)
Construction	883,557	304,788	708,480	119,326	247,217	(572,778)
Electricity, gas & water supply	94,810	611,673	94,466	173,146	(161,323)	(74,007)
Wholesale, retail trade, restaurants & hotels	415,553	988,238	233,641	376,494	228,886	(100,132)
Finance, insurance, real estate & business	966,382	3,124,084	825,618	916,165	577,051	(110,136)
Transport, storage & communication	172,110	42,258	95,479	44,178	(9,446)	(517,513)
Education, health & others	1,393,195	34,616	1,374,527	61,359	363,182	(570,911)
Household	404,649	1,989,147	172,501	414,459	177,135	(140,993)
Others	1,659	808	344	19,964	(965,679)	(18,034)
<b>Total</b>	<b>8,205,103</b>	<b>7,202,352</b>	<b>5,890,457</b>	<b>2,392,167</b>	<b>2,345,577</b>	<b>(2,130,955)</b>
<b>As at 31.12.2021</b>						
Agriculture	450,246	3,446	339,037	35,638	4,641	(3,142)
Mining & quarrying	3,204,999	1,423	1,503,708	27,348	589,629	(92,930)
Manufacturing	249,128	146,310	165,144	225,524	(373,417)	(93,655)
Construction	753,131	287,691	368,048	149,153	413,669	(173,577)
Electricity, gas & water supply	1,015,237	3,031,006	321,381	464,648	(108,229)	(36,590)
Wholesale, retail trade, restaurants & hotels	217,475	2,990,037	98,812	295,602	112,309	(990,669)
Finance, insurance, real estate & business	621,532	3,380,561	242,724	840,938	504,613	(286,879)
Transport, storage & communication	670,466	72,718	590,430	43,274	(266,901)	(400,812)
Education, health & others	2,416,351	116,066	1,708,082	32,793	1,521,621	(1,506)
Household	500,548	1,195,890	146,146	426,114	(218,209)	(53,603)
Others	4,590	28	1,785	19,173	1,012,556	(86,830)
<b>Total</b>	<b>10,103,703</b>	<b>11,225,176</b>	<b>5,485,297</b>	<b>2,560,205</b>	<b>3,192,282</b>	<b>(2,220,193)</b>

Notes:

- 1 General provision refers to loss allowance measured at an amount equal to 12-month and lifetime expected credit losses as defined under the Malaysian Financial Reporting Standards 9 (these provisions are commonly known as Stage 1 and Stage 2 provisions).
- 2 Specific provisions refer to loss allowance measured at an amount equal to lifetime expected credit losses for credit-impaired exposures as defined under the Malaysian Financial Reporting Standards 9. These provisions are commonly known as Stage 3 provisions.



Table 19 (c): Impaired and Past Due Loans, Advances and Financing and Allowances – Industry Analysis for Maybank Islamic

	Impaired Loans, Advances and Financing RM'000	Past Due Loans RM'000	<sup>2</sup> Specific Provision RM'000	<sup>1</sup> General Provision RM'000	Specific Provision Charges/ Write Back RM'000	Specific Provision Write-Offs RM'000
<b>As at 31.12.2022</b>						
Agriculture	751,858	51,116	787,116	(167,279)	459,565	(97,093)
Mining & quarrying	12,909	3,314	4,626	18,004	2,156	(189)
Manufacturing	114,098	371,034	61,524	108,923	37,953	(8,339)
Construction	316,301	197,226	108,607	244,257	(56,776)	(7,127)
Electricity, gas & water supply	45,195	9,809	7,084	30,360	(14,985)	(41,660)
Wholesale, retail trade, restaurants & hotels	162,171	261,694	42,839	167,556	43,107	(37,939)
Finance, insurance, real estate & business	118,719	236,003	56,973	234,724	34,614	(12,561)
Transport, storage & communication	68,188	62,865	25,799	207,831	12,765	(25,031)
Education, health & others	27,427	28,205	8,918	24,609	4,962	(2,249)
Household	444,213	5,851,146	133,749	890,525	96,615	(121,057)
Others	1	–	77	28	32,099	(26,887)
<b>Total</b>	<b>2,061,080</b>	<b>7,072,412</b>	<b>1,237,312</b>	<b>1,759,538</b>	<b>652,075</b>	<b>(380,132)</b>
<b>As at 31.12.2021</b>						
Agriculture	475,555	3,790	368,129	149,725	(4,016)	(5,471)
Mining & quarrying	3,656	18,825	1,455	23,126	(40,444)	(24)
Manufacturing	65,817	9,788	28,405	106,531	(276)	(19,256)
Construction	58,798	181,087	16,429	286,064	45,629	(30,188)
Electricity, gas & water supply	117,065	191	63,732	30,373	13,610	(2,110)
Wholesale, retail trade, restaurants & hotels	121,996	46,600	30,735	154,193	71,002	(42,779)
Finance, insurance, real estate & business	64,588	110,472	19,385	245,005	(14,664)	(36,473)
Transport, storage & communication	78,506	17,471	37,275	224,121	(92,557)	(46,625)
Education, health & others	7,056	8,671	750	41,219	(41,070)	(1,513)
Household	499,712	3,597,224	143,141	976,554	158,499	(49,319)
Others	5	12	1	9	(2,009)	(52)
<b>Total</b>	<b>1,492,754</b>	<b>3,994,131</b>	<b>709,437</b>	<b>2,236,920</b>	<b>93,704</b>	<b>(233,810)</b>

## Notes:

- 1 General provision refers to loss allowance measured at an amount equal to 12-month and lifetime expected credit losses as defined under the Malaysian Financial Reporting Standards 9 (these provisions are commonly known as Stage 1 and Stage 2 provisions).
- 2 Specific provisions refer to loss allowance measured at an amount equal to lifetime expected credit losses for credit-impaired exposures as defined under the Malaysian Financial Reporting Standards 9. These provisions are commonly known as Stage 3 provisions.

## Credit Risk

Table 19 (d): Impaired and Past Due Loans, Advances and Financing and Allowances – Geographical Analysis for Maybank Group

	Impaired Loans, Advances and Financing RM'000	Past Due Loans RM'000	<sup>2</sup> Specific Provision RM'000	<sup>1</sup> General Provision RM'000	Specific Provision Charges/ Write Back RM'000	Specific Provision Write-Offs RM'000
<b>As at 31.12.2022</b>						
Malaysia	5,030,783	9,654,174	3,708,578	2,866,156	1,724,197	(801,536)
Singapore	823,840	6,608,321	622,400	1,730,424	34,660	(715,718)
Indonesia	1,314,119	2,993,585	483,918	572,673	235,984	(354,283)
Others Overseas Unit	2,036,117	180,478	1,775,311	318,832	772,480	(1,207,226)
<b>Total</b>	<b>9,204,859</b>	<b>19,436,558</b>	<b>6,590,207</b>	<b>5,488,085</b>	<b>2,767,321</b>	<b>(3,078,763)</b>
<b>As at 31.12.2021</b>						
Malaysia	4,069,285	5,568,834	2,412,000	3,631,754	693,773	(982,966)
Singapore	2,257,333	12,726,173	1,294,296	1,342,273	170,256	(1,285,262)
Indonesia	1,572,988	3,666,899	618,012	531,367	325,803	(436,143)
Others Overseas Unit	3,143,927	262,525	2,102,258	427,597	1,682,428	(347,812)
<b>Total</b>	<b>11,043,533</b>	<b>22,224,431</b>	<b>6,426,566</b>	<b>5,932,991</b>	<b>2,872,260</b>	<b>(3,052,183)</b>

Notes:

<sup>1</sup> General provision refers to loss allowance measured at an amount equal to 12-month and lifetime expected credit losses as defined under the Malaysian Financial Reporting Standards 9 (these provisions are commonly known as Stage 1 and Stage 2 provisions).

<sup>2</sup> Specific provisions refer to loss allowance measured at an amount equal to lifetime expected credit losses for credit-impaired exposures as defined under the Malaysian Financial Reporting Standards 9. These provisions are commonly known as Stage 3 provisions.

Table 19 (e): Impaired and Past Due Loans, Advances and Financing and Allowances – Geographical Analysis for Maybank

	Impaired Loans, Advances and Financing RM'000	Past Due Loans RM'000	<sup>2</sup> Specific Provision RM'000	<sup>1</sup> General Provision RM'000	Specific Provision Charges/ Write Back RM'000	Specific Provision Write-Offs RM'000
<b>As at 31.12.2022</b>						
Malaysia	6,072,338	2,581,762	3,931,836	1,144,347	1,615,610	(421,404)
Singapore	476,616	4,582,814	413,933	1,061,629	(22,472)	(586,332)
Others Overseas Unit	1,656,149	37,776	1,544,688	186,191	752,439	(1,123,219)
<b>Total</b>	<b>8,205,103</b>	<b>7,202,352</b>	<b>5,890,457</b>	<b>2,392,167</b>	<b>2,345,577</b>	<b>(2,130,955)</b>
<b>As at 31.12.2021</b>						
Malaysia	5,639,384	1,574,048	2,629,382	1,409,908	1,524,853	(749,156)
Singapore	1,825,988	9,644,910	1,046,798	887,224	85,871	(1,175,477)
Others Overseas Unit	2,638,331	6,218	1,809,117	263,073	1,581,558	(295,560)
<b>Total</b>	<b>10,103,703</b>	<b>11,225,176</b>	<b>5,485,297</b>	<b>2,560,205</b>	<b>3,192,282</b>	<b>(2,220,193)</b>

Notes:

<sup>1</sup> General provision refers to loss allowance measured at an amount equal to 12-month and lifetime expected credit losses as defined under the Malaysian Financial Reporting Standards 9 (these provisions are commonly known as Stage 1 and Stage 2 provisions).

<sup>2</sup> Specific provisions refer to loss allowance measured at an amount equal to lifetime expected credit losses for credit-impaired exposures as defined under the Malaysian Financial Reporting Standards 9. These provisions are commonly known as Stage 3 provisions.

**Table 19 (f): Impaired and Past Due Loans, Advances and Financing and Allowances – Geographical Analysis for Maybank Islamic**

	Impaired Loans, Advances and Financing RM'000	Past Due Loans RM'000	<sup>2</sup> Specific Provision RM'000	<sup>1</sup> General Provision RM'000	Specific Provision Charges/ Write Back RM'000	Specific Provision Write-Offs RM'000
<b>As at 31.12.2022</b>						
Malaysia	2,061,080	7,072,412	1,237,312	1,759,538	652,075	(380,132)
<b>Total</b>	<b>2,061,080</b>	<b>7,072,412</b>	<b>1,237,312</b>	<b>1,759,538</b>	<b>652,075</b>	<b>(380,132)</b>
<b>As at 31.12.2021</b>						
Malaysia	1,492,754	3,994,131	709,437	2,236,920	93,704	(233,810)
<b>Total</b>	<b>1,492,754</b>	<b>3,994,131</b>	<b>709,437</b>	<b>2,236,920</b>	<b>93,704</b>	<b>(233,810)</b>

Notes:

- <sup>1</sup> General provision refers to loss allowance measured at an amount equal to 12-month and lifetime expected credit losses as defined under the Malaysian Financial Reporting Standards 9 (these provisions are commonly known as Stage 1 and Stage 2 provisions).
- <sup>2</sup> Specific provisions refer to loss allowance measured at an amount equal to lifetime expected credit losses for credit-impaired exposures as defined under the Malaysian Financial Reporting Standards 9. These provisions are commonly known as Stage 3 provisions.

## BASEL II REQUIREMENTS

The Group has obtained BNM's approval to use internal credit models for evaluating the majority of its credit risk exposures. For the RWA computation of Corporate and Bank portfolios, the Group adopts the FIRB Approach, which relies on its own internal PD estimates and applies supervisory estimates of LGD and EAD, while the Retail and Retail Small-Medium Enterprises ("RSME") portfolios adopt the AIRB Approach relying on internal estimates of PD, LGD, and EAD.

In line with Basel II requirements for capital adequacy purposes, the parameters are calibrated to a full economic cycle experience to reflect the long-run, cycle neutral estimations:

- **Probability of Default ("PD")**

PD represents the probability of a borrower defaulting within the next 12 months. The first level estimation is based on portfolio's Observed Default Rate of the recent years' data. The average long-run default experience covering crisis periods including the major Asian crisis in 1997 is reflected through Central Tendency calibration for the Basel estimated PD.

- **Loss Given Default ("LGD")**

LGD measures the economic loss the Group would incur in the event of a borrower defaulting. Among others, it takes into account post default pathways, cure probability, direct and indirect costs associated with the workout, recoveries from borrower and collateral liquidation. For Basel II purpose, LGD is calibrated to loss experiences during period of economic crisis whereby for most portfolios, the estimated loss during crisis years is expected to be higher than that during normal economic period. The crisis period LGD, known as Downturn LGD, is used as an input for RWA calculation.

- **Exposure at Default ("EAD")**

EAD is linked to facility risk, namely the expected gross exposure of a facility should a borrower defaults. The "race-to-default" is captured by Credit Conversion Factor ("CCF"), which should reflect the expected increase in exposure amount due to additional drawdown by a borrower facing financial difficulties leading to default.

Internal experience during crisis period is being taken into consideration for EAD estimations and where there is a material difference in EAD during downturn period as compared to normal period, downturn EAD would be used in RWA computation.

## Credit Risk

### BASEL II REQUIREMENTS (CONT'D.)

#### Application of Internal Ratings

Since the development and implementation of the Group's internal rating models, internal ratings are used in the following areas:

- **Credit Approval**

The level of approval for a loan application is determined based on the internal rating of the borrower and the quantum of exposure being requested.

- **Policy**

Under the Review Policy, borrowers with higher risk grades are subjected to additional semi-annual reviews to ensure close monitoring and tracking of these borrowers.

- **Reporting**

Regular reporting on the risk rating portfolio distribution and sectoral outlook versus borrower risk profile within sector are being produced and monitored by the Group.

- **Capital Management**

The Group has emplaced risk-based capital management, ICAAP programme and uses regulatory capital charge for decision-making and budgeting process.

- **Risk Governance**

Internal ratings are used for various risk governance activities such as the setting of group exposure limits under the Maybank Group Sectoral ("MGS") Policy, threshold limit for Credit Review Committee ("CRC") review, sectoral limit policy, sampling methodology for credit review and policy breach.

- **Pricing Decision**

Internal ratings are being used as a basis for pricing credit facilities.

### NON-RETAIL PORTFOLIO

Non-retail exposures comprise of Corporate, Commercial, Small Business, Real Estate, Non-Bank Financial Institutions ("NBFIs") and Special Purpose Vehicles whereas for bank exposures, they include Commercial, Investment, Savings and Co-operative Banks apart from the Development Financial Institutions ("DFIs") portfolios.

The general approach adopted by the Group can be categorised into the following three categories:

- **Default History Based ("Good-Bad" analysis)**

This approach is adopted when the Group has sufficient default data. Under this approach, statistical method is employed to determine the likelihood of default on existing exposures. Scorecards under the Group's Credit Risk Rating System ("CRRS") models were developed using this approach.

- **Shadow Rating Approach**

This approach is usually applied when there are few or no default data available or also known as "low default portfolio" category. The objective of this methodology is to replicate the risk ranking applied by the external rating agencies. The Group's Bank Risk Rating Scorecards ("BRRS") were developed using this approach.

- **Experts Judgement Approach**

The default experience for some exposures, for example Holding Companies and Specialised Lending are insufficient for the Group to perform the required analyses to develop a robust statistical model. Hence, another approach known as experts' judgement approach is opted to develop the scorecard. Under this approach, the qualitative, quantitative and factor weights are determined by the Group's credit experts.

## Credit Risk Models and Tools

### Credit Risk Rating System (“CRRS”)

The Borrower Risk Rating (“BRR”), which is a component of CRRS, is a borrower-specific rating element that provides an estimate on the likelihood of the borrower going into default over the next twelve months. The BRR estimates the borrower risk and is independent of the type/nature of facilities and collaterals offered.

For reference, each grade can be mapped to ratings by external agencies such as Standard & Poor’s (“S&P”), as illustrated in Table 20 below that contains mapping of internal rating grades of corporate borrowers with S&P’s and Rating Agency of Malaysia’s (“RAM”) rating grades.

**Table 20: Rating Grades**

Risk Category	Rating Grade	S&P Equivalent	RAM Equivalent
Very Low	1-5	AAA to BBB+	AAA to AA1
Low	6-10	BBB+ to BB+	AA1 to A3
Medium	11-15	BB+ to B+	A3 to BB1
High	16-21	B+ to C	BB1 to C

### International Risk Rating Scorecard (“IRRS”)

IRRS is used to rate Corporate and Commercial borrowers of the Group’s branches and subsidiaries, incorporated outside Malaysia, Singapore and Indonesia.

### Bank Risk Rating Scorecard (“BRRS”)

The Group has developed BRRS to risk grade the bank counterparties. As the Group’s bank portfolio fall under low default portfolio category, the shadow-bond rating technique is used in developing the scorecards. A different masterscale known as Global Masterscale is used to map the PD generated from BRRS to the scale. There are altogether 17 performing grades in the BRRS Masterscale with Grade 1 being the best performing grade and Grade 17 being the worst performing grade. For defaulted borrowers, the applicable grade is Grade 18. The BRRS Global Masterscale and its mapping to S&P’s and RAM’s ratings are shown in Table 21 below:

**Table 21: BRRS Global Masterscale**

Rating Grade	S&P Equivalent	RAM Equivalent
1 – 4	AAA to AA-	AAA
5 – 8	A+ to BBB+	AAA to AA
9 – 12	BBB to BB	AA to BBB
13 – 17	BB- to CCC	BBB to C

Tables 22 to 24 show the exposures by PD bands for Non-Retail Portfolios of the Group, the Bank and Maybank Islamic, respectively.

## Credit Risk

Table 22: Disclosure on Exposures by PD Band (IRB Approach) for Non-Retail for Maybank Group

PD Range (%)	EAD Post CRM RM'000	Exposure Weighted Average LGD (%)	Exposure Weighted Average Risk Weight (%)	Undrawn Commitments RM'000	RWA RM'000
<b>As at 31.12.2022</b>					
<b>Non-Retail Exposures</b>					
<b>Bank</b>					
0.0000 – 0.0470	8,616,179	43.51	9.08	50	782,404
0.0470 – 0.1460	26,493,773	43.57	20.17	896,631	5,343,886
0.1460 – 0.9280	3,839,536	44.80	48.14	1,448	1,848,182
0.9280 – 100	2,778,619	40.31	102.71	186,697	2,853,965
100	–	–	–	–	–
<b>Total for Bank Exposures</b>	<b>41,728,107</b>			<b>1,084,826</b>	<b>10,828,437</b>
<b>Public Sector Entities</b>					
0.0000 – 0.1200	18,547,763	44.98	1.67	548,355	309,977
0.1200 – 0.6440	4,848,634	33.91	3.73	2,104,007	180,791
0.6440 – 3.4650	5,727,660	44.93	17.16	303,664	983,136
3.4650 – 100	920	44.61	211.31	516	1,944
100	–	–	–	–	–
<b>Total for Public Sector Entities</b>	<b>29,124,977</b>			<b>2,956,542</b>	<b>1,475,848</b>
<b>Corporate (excluding Specialised Lending and firm-size adjustment)</b>					
0.0000 – 0.1200	36,953,730	44.88	21.56	10,702,714	7,965,476
0.1200 – 0.6440	107,099,816	43.03	53.64	41,641,467	57,452,027
0.6440 – 3.4650	75,375,997	42.24	85.98	24,112,078	64,805,946
3.4650 – 100	10,941,209	29.78	112.90	3,256,293	12,352,333
100	9,797,041	44.19	–	155,880	–
<b>Total for Corporate (excluding Specialised Lending and firm-size adjustment)</b>	<b>240,167,793</b>			<b>79,868,432</b>	<b>142,575,782</b>
<b>Corporate (with firm-size adjustment)</b>					
0.0000 – 0.1200	1,822,546	42.28	18.64	974,202	339,705
0.1200 – 0.6440	20,784,671	40.13	45.53	7,308,131	9,462,314
0.6440 – 3.4650	36,550,574	39.06	72.90	9,990,620	26,645,722
3.4650 – 100	7,900,924	37.84	110.00	1,931,508	8,690,653
100	573,920	39.32	–	13,404	–
<b>Total for Corporate (with firm-size adjustment)</b>	<b>67,632,635</b>			<b>20,217,865</b>	<b>45,138,394</b>
<b>Specialised Lending (Own PD Approach)</b>					
0.0000 – 0.1200	–	–	–	–	–
0.1200 – 0.6440	2,813,350	44.95	70.03	56,166	1,970,217
0.6440 – 3.4650	2,709,908	44.75	108.37	88,254	2,936,717
3.4650 – 100	952,282	45.00	151.40	171	1,441,797
100	–	–	–	–	–
<b>Total for Specialised Lending (Own PD Approach)</b>	<b>6,475,540</b>			<b>144,591</b>	<b>6,348,731</b>
<b>Total Non-Retail Exposures</b>	<b>385,129,052</b>			<b>104,272,256</b>	<b>206,367,192</b>

Table 22: Disclosure on Exposures by PD Band (IRB Approach) for Non-Retail for Maybank Group (cont'd.)

PD Range (%)	EAD Post CRM RM'000	Exposure Weighted Average LGD (%)	Exposure Weighted Average Risk Weight (%)	Undrawn Commitments RM'000	RWA RM'000
<b>As at 31.12.2021</b>					
<b>Non-Retail Exposures</b>					
<b>Bank</b>					
0.0000 – 0.0470	4,110,475	43.52	8.87	–	364,749
0.0470 – 0.1460	22,611,758	43.97	20.23	1,260,658	4,573,853
0.1460 – 0.9280	5,386,337	43.30	49.27	100,000	2,653,609
0.9280 – 100	2,080,559	45.00	126.01	–	2,621,719
100	–	–	–	–	–
<b>Total for Bank Exposures</b>	<b>34,189,129</b>			<b>1,360,658</b>	<b>10,213,930</b>
<b>Public Sector Entities</b>					
0.0000 – 0.1200	16,646,213	44.98	0.18	500,271	30,351
0.1200 – 0.6440	3,483,949	30.08	38.37	1,709,644	1,336,770
0.6440 – 3.4650	6,749,535	44.68	8.34	524,663	563,014
3.4650 – 100	27,300	38.37	160.14	4,079	43,719
100	–	–	–	–	–
<b>Total for Public Sector Entities</b>	<b>26,906,997</b>			<b>2,738,657</b>	<b>1,973,854</b>
<b>Corporate (excluding Specialised Lending and firm-size adjustment)</b>					
0.0000 – 0.1200	24,191,218	44.19	19.99	11,894,907	4,835,918
0.1200 – 0.6440	105,686,679	43.45	54.13	34,601,235	57,208,127
0.6440 – 3.4650	70,909,159	42.15	87.68	16,557,764	62,175,283
3.4650 – 100	12,514,251	38.32	138.97	2,472,639	17,391,403
100	11,119,927	44.45	–	725,227	–
<b>Total for Corporate (excluding Specialised Lending and firm-size adjustment)</b>	<b>224,421,234</b>			<b>66,251,772</b>	<b>141,610,731</b>
<b>Corporate (with firm-size adjustment)</b>					
0.0000 – 0.1200	523,986	41.14	87.40	591,986	457,943
0.1200 – 0.6440	19,072,804	39.36	69.12	8,416,117	13,182,795
0.6440 – 3.4650	34,012,373	39.03	67.38	13,052,838	22,916,180
3.4650 – 100	7,208,164	37.02	81.34	1,877,524	5,862,912
100	382,645	40.84	–	103,572	–
<b>Total for Corporate (with firm-size adjustment)</b>	<b>61,199,972</b>			<b>24,042,037</b>	<b>42,419,830</b>
<b>Specialised Lending (Own PD Approach)</b>					
0.0000 – 0.1200	–	–	–	–	–
0.1200 – 0.6440	2,599,380	45.00	72.42	7,141	1,882,423
0.6440 – 3.4650	3,203,085	44.87	108.34	600,127	3,470,120
3.4650 – 100	413,459	45.00	151.07	232	624,612
100	–	–	–	–	–
<b>Total for Specialised Lending (Own PD Approach)</b>	<b>6,215,924</b>			<b>607,500</b>	<b>5,977,155</b>
<b>Total Non-Retail Exposures</b>	<b>352,933,256</b>			<b>95,000,624</b>	<b>202,195,500</b>



## Credit Risk

Table 22 (a): Specialised Lending Exposures under the Supervisory Slotting Criteria

31 December 2022						
<u>Supervisory Categories/Risk-Weights (RM'000)</u>	Strong	Good	Satisfactory	Weak	Default	Total
<b>Specialised Lending Exposures</b>						
Project Finance	10,686	52,101	42,750	-	-	105,537
Object Finance	-	-	-	-	-	-
Commodities Finance	-	-	-	-	-	-
Income Producing Real Estate	-	-	-	-	-	-
<b>Risk-Weighted Assets</b>	<b>10,686</b>	<b>52,101</b>	<b>42,750</b>	<b>-</b>	<b>-</b>	<b>105,537</b>

31 December 2021						
<u>Supervisory Categories/Risk-Weights (RM'000)</u>	Strong	Good	Satisfactory	Weak	Default	Total
<b>Specialised Lending Exposures</b>						
Project Finance	144,899	71,951	-	-	-	216,850
Object Finance	-	-	-	-	-	-
Commodities Finance	-	-	-	-	-	-
Income Producing Real Estate	-	-	-	-	-	-
<b>Risk-Weighted Assets</b>	<b>144,899</b>	<b>71,951</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>216,850</b>

Table 23: Disclosure on Exposures by PD Band (IRB Approach) for Non-Retail for Maybank

PD Range (%)	EAD Post CRM RM'000	Exposure Weighted Average LGD (%)	Exposure Weighted Average Risk Weight (%)	Undrawn Commitments RM'000	RWA RM'000
<b>As at 31.12.2022</b>					
<b>Non-Retail Exposures</b>					
<b>Bank</b>					
0.0000 – 0.0470	7,384,194	43.80	9.50	–	701,262
0.0470 – 0.1460	57,087,056	44.32	19.25	853,419	10,988,039
0.1460 – 0.9280	3,871,049	44.67	46.17	–	1,787,278
0.9280 – 100	2,920,216	45.00	111.11	1,026	3,244,634
100	–	–	–	–	–
<b>Total for Bank Exposures</b>	<b>71,262,515</b>			<b>854,445</b>	<b>16,721,213</b>
<b>Public Sector Entities</b>					
0.0000 – 0.1200	11,601,893	45.00	0.10	2,075	11,536
0.1200 – 0.6440	4,670,886	33.50	1.21	2,287,298	56,357
0.6440 – 3.4650	4,161,992	45.00	9.39	200,926	390,811
3.4650 – 100	521	44.31	237.64	1,165	1,239
100	–	–	–	–	–
<b>Total for Public Sector Entities</b>	<b>20,435,292</b>			<b>2,491,464</b>	<b>459,943</b>
<b>Corporate (excluding Specialised Lending and firm-size adjustment)</b>					
0.0000 – 0.1200	31,801,949	44.93	23.23	9,701,586	7,386,106
0.1200 – 0.6440	81,849,352	42.82	54.89	33,037,175	44,928,589
0.6440 – 3.4650	49,757,617	42.48	86.13	14,189,815	42,857,383
3.4650 – 100	7,250,409	26.96	103.59	2,091,612	7,510,644
100	7,648,763	44.39	–	39,114	–
<b>Total for Corporate (excluding Specialised Lending and firm-size adjustment)</b>	<b>178,308,090</b>			<b>59,059,302</b>	<b>102,682,722</b>
<b>Corporate (with firm-size adjustment)</b>					
0.0000 – 0.1200	578,836	41.00	19.20	293,035	111,114
0.1200 – 0.6440	11,440,548	40.32	45.58	3,550,139	5,215,058
0.6440 – 3.4650	18,512,688	38.74	73.29	4,966,177	13,568,313
3.4650 – 100	3,438,615	35.86	106.37	875,119	3,657,783
100	426,651	38.33	–	3,345	–
<b>Total for Corporate (with firm-size adjustment)</b>	<b>34,397,338</b>			<b>9,687,815</b>	<b>22,552,268</b>
<b>Specialised Lending (Own PD Approach)</b>					
0.0000 – 0.1200	–	–	–	–	–
0.1200 – 0.6440	2,342,238	44.93	73.28	2,736	1,716,302
0.6440 – 3.4650	1,345,173	44.78	108.14	349,128	1,454,658
3.4650 – 100	451,458	45.00	144.97	256	654,462
100	–	–	–	–	–
<b>Total for Specialised Lending (Own PD Approach)</b>	<b>4,138,869</b>			<b>352,120</b>	<b>3,825,422</b>
<b>Total Non-Retail Exposures</b>	<b>308,542,104</b>			<b>72,445,146</b>	<b>146,241,568</b>

## Credit Risk

Table 23: Disclosure on Exposures by PD Band (IRB Approach) for Non-Retail for Maybank (cont'd.)

PD Range (%)	EAD Post CRM RM'000	Exposure Weighted Average LGD (%)	Exposure Weighted Average Risk Weight (%)	Undrawn Commitments RM'000	RWA RM'000
<b>As at 31.12.2021</b>					
<b>Non-Retail Exposures</b>					
<b>Bank</b>					
0.0000 – 0.0470	3,164,027	43.07	8.99	–	284,575
0.0470 – 0.1460	53,777,634	44.74	23.43	1,214,646	12,601,463
0.1460 – 0.9280	5,360,904	43.47	51.81	–	2,777,675
0.9280 – 100	2,085,389	45.00	127.67	1,000	2,662,390
100	–	–	–	–	–
<b>Total for Bank Exposures</b>	<b>64,387,954</b>			<b>1,215,646</b>	<b>18,326,103</b>
<b>Public Sector Entities</b>					
0.0000 – 0.1200	11,065,226	45.00	0.10	271	11,087
0.1200 – 0.6440	3,310,700	29.32	36.70	1,651,962	1,215,172
0.6440 – 3.4650	4,098,649	45.00	0.01	201,263	228
3.4650 – 100	9,579	44.96	188.05	4,079	18,014
100	–	–	–	–	–
<b>Total for Public Sector Entities</b>	<b>18,484,154</b>			<b>1,857,575</b>	<b>1,244,501</b>
<b>Corporate (excluding Specialised Lending and firm-size adjustment)</b>					
0.0000 – 0.1200	20,213,496	44.03	21.47	11,029,457	4,339,443
0.1200 – 0.6440	81,717,586	43.43	55.07	28,109,008	45,001,792
0.6440 – 3.4650	45,597,728	42.12	86.48	12,177,184	39,434,161
3.4650 – 100	8,111,458	39.59	136.57	1,447,238	11,077,659
100	9,103,304	44.53	–	661,145	–
<b>Total for Corporate (excluding Specialised Lending and firm-size adjustment)</b>	<b>164,743,572</b>			<b>53,424,032</b>	<b>99,853,055</b>
<b>Corporate (with firm-size adjustment)</b>					
0.0000 – 0.1200	275,485	41.97	22.05	295,217	60,748
0.1200 – 0.6440	9,817,934	39.33	44.59	3,757,057	4,377,411
0.6440 – 3.4650	18,529,006	38.93	73.71	5,209,192	13,657,132
3.4650 – 100	3,851,262	35.86	111.95	1,021,675	4,311,435
100	251,198	42.21	–	2,390	–
<b>Total for Corporate (with firm-size adjustment)</b>	<b>32,724,885</b>			<b>10,285,531</b>	<b>22,406,726</b>
<b>Specialised Lending (Own PD Approach)</b>					
0.0000 – 0.1200	–	–	–	–	–
0.1200 – 0.6440	2,178,318	45.00	71.49	2,711	1,557,341
0.6440 – 3.4650	1,742,295	44.90	102.62	380,836	1,787,959
3.4650 – 100	412,431	45.00	150.88	232	622,297
100	–	–	–	–	–
<b>Total for Specialised Lending (Own PD Approach)</b>	<b>4,333,044</b>			<b>383,779</b>	<b>3,967,597</b>
<b>Total Non-Retail Exposures</b>	<b>284,673,609</b>			<b>67,166,563</b>	<b>145,797,982</b>

Table 23 (a): Specialised Lending Exposures under the Supervisory Slotting Criteria

31 December 2022						
<u>Supervisory Categories/Risk-Weights</u> (RM'000)	Strong	Good	Satisfactory	Weak	Default	Total
<b>Specialised Lending Exposures</b>						
Project Finance	10,609	25,208	4	-	-	35,821
Object Finance	-	-	-	-	-	-
Commodities Finance	-	-	-	-	-	-
Income Producing Real Estate	-	-	-	-	-	-
<b>Risk-Weighted Assets</b>	<b>10,609</b>	<b>25,208</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>35,821</b>

31 December 2021						
<u>Supervisory Categories/Risk-Weights</u> (RM'000)	Strong	Good	Satisfactory	Weak	Default	Total
<b>Specialised Lending Exposures</b>						
Project Finance	139,585	46,292	-	-	-	185,877
Object Finance	-	-	-	-	-	-
Commodities Finance	-	-	-	-	-	-
Income Producing Real Estate	-	-	-	-	-	-
<b>Risk-Weighted Assets</b>	<b>139,585</b>	<b>46,292</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>185,877</b>

## Credit Risk

Table 24: Disclosure on Exposures by PD Band (IRB Approach) for Non-Retail for Maybank Islamic

PD Range (%)	EAD Post CRM RM'000	Exposure Weighted Average LGD (%)	Exposure Weighted Average Risk Weight (%)	Undrawn Commitments RM'000	RWA RM'000
<b>As at 31.12.2022</b>					
<b>Non-Retail Exposures</b>					
<b>Bank</b>					
0.0000 – 0.0470	-	-	-	-	-
0.0470 – 0.1460	17,138,677	44.47	11.38	100,047	1,949,554
0.1460 – 0.9280	198	45.00	32.96	-	65
0.9280 – 100	1,213	45.00	142.62	78	1,730
100	-	-	-	-	-
<b>Total for Bank Exposures</b>	<b>17,140,088</b>			<b>100,125</b>	<b>1,951,349</b>
<b>Public Sector Entities</b>					
0.0000 – 0.1200	15,386,175	44.98	1.94	547,878	298,441
0.1200 – 0.6440	4,320,813	32.57	3.47	2,042,791	150,134
0.6440 – 3.4650	4,068,421	44.90	14.56	302,076	592,324
3.4650 – 100	399	45.00	176.93	-	706
100	-	-	-	-	-
<b>Total for Public Sector Entities</b>	<b>23,775,808</b>			<b>2,892,745</b>	<b>1,041,605</b>
<b>Corporate (excluding Specialised Lending and firm-size adjustment)</b>					
0.0000 – 0.1200	14,914,570	45.00	16.29	2,346,696	2,429,364
0.1200 – 0.6440	23,696,799	43.93	47.78	6,354,489	11,378,147
0.6440 – 3.4650	15,070,653	42.65	81.03	3,058,678	12,211,019
3.4650 – 100	715,833	29.96	122.21	207,982	874,802
100	6,039,389	44.72	-	332,228	-
<b>Total for Corporate (excluding Specialised Lending and firm-size adjustment)</b>	<b>60,437,244</b>			<b>12,300,073</b>	<b>26,893,332</b>
<b>Corporate (with firm-size adjustment)</b>					
0.0000 – 0.1200	1,112,537	43.41	18.66	329,290	207,558
0.1200 – 0.6440	7,093,587	40.23	46.39	2,339,604	3,290,563
0.6440 – 3.4650	12,479,303	38.86	73.12	3,123,701	9,125,350
3.4650 – 100	2,082,503	37.69	118.47	283,054	2,467,127
100	36,569	36.74	-	157	-
<b>Total for Corporate (with firm-size adjustment)</b>	<b>22,804,499</b>			<b>6,075,806</b>	<b>15,090,598</b>
<b>Specialised Lending (Own PD Approach)</b>					
0.0000 – 0.1200	-	-	-	-	-
0.1200 – 0.6440	471,112	45.00	53.90	4,430	253,915
0.6440 – 3.4650	1,364,734	44.72	108.60	80,071	1,482,060
3.4650 – 100	500,824	45.00	157.21	-	787,335
100	-	-	-	-	-
<b>Total for Specialised Lending (Own PD Approach)</b>	<b>2,336,670</b>			<b>84,501</b>	<b>2,523,310</b>
<b>Total Non-Retail Exposures</b>	<b>126,494,309</b>			<b>21,453,250</b>	<b>47,500,194</b>

Table 24: Disclosure on Exposures by PD Band (IRB Approach) for Non-Retail for Maybank Islamic (cont'd.)

PD Range (%)	EAD Post CRM RM'000	Exposure Weighted Average LGD (%)	Exposure Weighted Average Risk Weight (%)	Undrawn Commitments RM'000	RWA RM'000
<b>As at 31.12.2021</b>					
<b>Non-Retail Exposures</b>					
<b>Bank</b>					
0.0000 – 0.0470	-	-	-	-	-
0.0470 – 0.1460	9,526,541	45.00	17.69	41,449	1,685,025
0.1460 – 0.9280	209,233	1.99	1.46	100,000	3,051
0.9280 – 100	6	45.00	212.04	-	14
100	-	-	-	-	-
<b>Total for Bank Exposures</b>	<b>9,735,780</b>			<b>141,449</b>	<b>1,688,090</b>
<b>Public Sector Entities</b>					
0.0000 – 0.1200	14,022,318	44.98	0.14	500,000	19,263
0.1200 – 0.6440	2,950,073	27.41	43.97	1,694,497	1,297,274
0.6440 – 3.4650	5,503,414	44.61	10.23	523,400	562,785
3.4650 – 100	17,721	34.81	145.06	1	25,705
100	-	-	-	-	-
<b>Total for Public Sector Entities</b>	<b>22,493,526</b>			<b>2,717,898</b>	<b>1,905,027</b>
<b>Corporate (excluding Specialised Lending and firm-size adjustment)</b>					
0.0000 – 0.1200	10,267,265	45.01	15.36	3,571,988	1,577,030
0.1200 – 0.6440	25,450,218	43.62	50.59	6,025,469	12,875,078
0.6440 – 3.4650	16,013,030	43.20	73.15	3,222,659	11,713,738
3.4650 – 100	1,170,311	38.55	160.03	130,875	1,872,866
100	5,377,525	44.80	-	181,454	-
<b>Total for Corporate (excluding Specialised Lending and firm-size adjustment)</b>	<b>58,278,349</b>			<b>13,132,445</b>	<b>28,038,712</b>
<b>Corporate (with firm-size adjustment)</b>					
0.0000 – 0.1200	106,230	41.04	23.25	79,318	24,698
0.1200 – 0.6440	6,576,296	39.43	45.08	2,087,979	2,964,562
0.6440 – 3.4650	9,959,424	38.55	73.08	2,545,703	7,278,005
3.4650 – 100	2,092,615	36.95	113.44	285,856	2,373,868
100	54,696	34.45	-	206	-
<b>Total for Corporate (with firm-size adjustment)</b>	<b>18,789,261</b>			<b>4,999,062</b>	<b>12,641,133</b>
<b>Specialised Lending (Own PD Approach)</b>					
0.0000 – 0.1200	-	-	-	-	-
0.1200 – 0.6440	421,063	45.00	77.21	4,430	325,082
0.6440 – 3.4650	1,873,333	44.86	111.71	219,291	2,092,758
3.4650 – 100	1,027	45.00	225.42	-	2,315
100	-	-	-	-	-
<b>Total for Specialised Lending (Own PD Approach)</b>	<b>2,295,423</b>			<b>223,721</b>	<b>2,420,155</b>
<b>Total Non-Retail Exposures</b>	<b>111,592,339</b>			<b>21,214,575</b>	<b>46,693,117</b>

## Credit Risk

**Table 24 (a): Specialised Lending Exposures under the Supervisory Slotting Criteria**

31 December 2022						
Supervisory Categories/Risk-Weights (RM'000)	Strong	Good	Satisfactory	Weak	Default	Total
<b>Specialised Lending Exposures</b>						
Project Finance	77	26,893	42,746	-	-	69,716
Object Finance	-	-	-	-	-	-
Commodities Finance	-	-	-	-	-	-
Income Producing Real Estate	-	-	-	-	-	-
<b>Risk-Weighted Assets</b>	<b>77</b>	<b>26,893</b>	<b>42,746</b>	<b>-</b>	<b>-</b>	<b>69,716</b>

31 December 2021						
Supervisory Categories/Risk-Weights (RM'000)	Strong	Good	Satisfactory	Weak	Default	Total
<b>Specialised Lending Exposures</b>						
Project Finance	5,314	25,659	-	-	-	30,974
Object Finance	-	-	-	-	-	-
Commodities Finance	-	-	-	-	-	-
Income Producing Real Estate	-	-	-	-	-	-
<b>Risk-Weighted Assets</b>	<b>5,314</b>	<b>25,659</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>30,974</b>

### RETAIL PORTFOLIO

The Group's retail portfolios are under the AIRB Approach. This approach calls for a more extensive reliance on the Bank's own internal experience (based on historical data) by estimating all three main components of RWA calculation namely PD, EAD and LGD which are based on its own historical data.

Separate PD, EAD and LGD statistical models are developed at the respective retail portfolio level, with each model covering borrowers with fundamentally similar risk profiles in a portfolio. The estimates derived from such models are used as input for RWA calculations.

#### AIRB Coverage for Retail Portfolios

Currently the following material retail portfolios are under Retail IRB:

Basel II Retail Sub-Portfolio Category	Maybank Retail Portfolios
Residential Mortgage	<ul style="list-style-type: none"> <li>• Housing Loan (Malaysia, Singapore and Indonesia)</li> <li>• Other Property Based Loan (Malaysia)</li> <li>• Staff Housing Loan (Malaysia)</li> <li>• Equity Term Loan (Singapore)</li> </ul>
Qualifying Revolving Retail Exposure ("QRRE")	<ul style="list-style-type: none"> <li>• Credit Card (Malaysia, Singapore and Indonesia)</li> </ul>
Other Retail	<ul style="list-style-type: none"> <li>• Auto Loan (Malaysia, Singapore and Indonesia)</li> <li>• Unit Trust Loan (Malaysia)</li> <li>• Commercial Property Loan (Malaysia)</li> </ul>

#### RSME Portfolio

Legal entities that carry a maximum exposure of RM5 million and are eligible for treatment as 'retail' exposure, are rated under the RSME scorecard. Similar to retail portfolios, separate PD, EAD and LGD statistical models are developed at the portfolio level; each model covering borrowers with fundamentally similar risk profiles in a portfolio.



### Retail and RSME Masterscale

A retail and RSME masterscale with mapping to PD is used to promote a common risk language across the Group's retail portfolios as shown in the table below:

**Table 25: Retail and RSME Masterscale**

Rating Grade	PD range
R1 to R2	0.25% to 0.44%
R3 to R5	0.79% to 2.50%
R6 to R8	4.45% to 14.06%
R9 to R11	25% to 79.06%

### Risk Measurement for Retail Portfolio

Application and behaviour scorecards are part of Basel II Retail IRB models and are used to estimate the probability that a customer will fail to make full and timely repayment of credit obligations. Business decisions and strategies are then built around the scores.

#### *Application Scorecard*

With application scorecards, at the point of time when an applicant applies for the credit facility, each applicant is assigned a score that corresponds to the probability of future repayment. Scores are designed to rank-order the riskiness of the applicants, whereby higher score represents lower risk.

Application scorecards benefit both risk management and business acquisition process through:

- Consistency in credit risk assessment;
- Improved turnaround time;
- Better management control of the portfolios; and
- Improved revenue and profit through the identification and acceptance of additional business.

Currently, application scorecards are deployed for all major retail portfolios in Malaysia, Singapore and Indonesia.

#### *Behaviour Scorecard*

The Credit Card product is subject to variable utilisation and payment patterns; a customer is able to utilise any portion of the granted limit and pay any amount of the outstanding balance. Due to the volatile nature of the product, a more robust risk measurement tool is required to manage the portfolio.

Behavioural Scorecards are therefore developed for Credit Card portfolios in Malaysia, Singapore and Indonesia. Behaviour score measures the borrower's riskiness based on transaction information and behavioural pattern of customer's utilisation and payment of the credit card. The scores are generated on a monthly basis and amongst others, are being used for the following purposes:

- Collection Strategies;
- Limit Management; and
- Transaction Authorisation.

With the use of Behaviour score, the Credit Card portfolio is able to be closely managed to reduce defaulters, increase collection and ultimately increase profitability.

Tables 26 to 28 show the exposures by "PD bands" for Retail Portfolios of the Group, the Bank and Maybank Islamic, respectively. A summary of the PD distribution of these exposures are also provided.

## Credit Risk

Table 26: Disclosure on Exposures by PD Band (IRB Approach) for Retail for Maybank Group

PD Range (%)	EAD Post CRM RM'000	Exposure Weighted Average LGD (%)	Exposure Weighted Average Risk Weight (%)	Undrawn Commitments RM'000	RWA RM'000
<b>As at 31.12.2022</b>					
<b>Retail Exposures</b>					
<b>Residential Mortgages</b>					
0.0000 – 0.5900	79,651,029	18.88	13.38	943,104	10,659,654
0.5900 – 3.3330	43,395,434	18.07	20.07	774,207	8,708,508
3.3330 – 18.7500	2,510,964	21.80	78.82	118,322	1,979,191
18.7500 – 100	779,607	16.07	91.26	6,810	711,488
100	450,103	33.29	80.12	1,325	360,640
<b>Total for Residential Mortgages Exposures</b>	<b>126,787,137</b>			<b>1,843,768</b>	<b>22,419,481</b>
<b>Qualifying Revolving Retail Exposures</b>					
0.0000 – 0.5900	10,243,301	66.15	11.08	14,374,888	1,135,022
0.5900 – 3.3330	10,266,031	67.13	31.71	9,408,643	3,255,732
3.3330 – 18.7500	2,552,095	66.50	96.02	865,990	2,450,428
18.7500 – 100	236,014	67.96	179.71	81,304	424,146
100	106,526	65.07	127.91	4,131	136,256
<b>Total for Qualifying Revolving Retail Exposures</b>	<b>23,403,967</b>			<b>24,734,956</b>	<b>7,401,584</b>
<b>Hire Purchase Exposures</b>					
0.0000 – 0.5900	45,065,384	46.92	17.68	–	7,966,392
0.5900 – 3.3330	6,634,015	50.71	51.80	–	3,436,489
3.3330 – 18.7500	2,213,215	54.51	81.57	–	1,805,345
18.7500 – 100	325,508	55.66	123.66	–	402,531
100	126,018	80.97	132.87	–	167,437
<b>Total Hire Purchase Exposures</b>	<b>54,364,140</b>			<b>–</b>	<b>13,778,194</b>
<b>Other Retail Exposures</b>					
0.0000 – 0.5900	40,015,142	23.01	15.06	8,662,044	6,026,655
0.5900 – 3.3330	53,371,854	24.28	22.75	8,868,684	12,142,285
3.3330 – 18.7500	7,882,482	20.47	27.45	1,441,187	2,163,595
18.7500 – 100	1,675,525	23.91	51.58	63,162	864,203
100	876,907	35.89	89.70	18,710	786,583
<b>Total Other Retail Exposures</b>	<b>103,821,910</b>			<b>19,053,787</b>	<b>21,983,321</b>
<b>Total Retail Exposures</b>	<b>308,377,154</b>			<b>45,632,511</b>	<b>65,582,580</b>

Table 26: Disclosure on Exposures by PD Band (IRB Approach) for Retail for Maybank Group (cont'd.)

PD Range (%)	EAD Post CRM RM'000	Exposure Weighted Average LGD (%)	Exposure Weighted Average Risk Weight (%)	Undrawn Commitments RM'000	RWA RM'000
<b>As at 31.12.2021</b>					
<b>Retail Exposures</b>					
<b>Residential Mortgages</b>					
0.0000 – 0.5900	66,720,099	19.05	13.20	93,798	8,804,381
0.5900 – 3.3330	38,264,169	18.07	18.95	390,082	7,251,571
3.3330 – 18.7500	2,392,246	20.97	73.76	41,028	1,764,536
18.7500 – 100	759,230	16.66	88.20	34,860	669,608
100	533,206	33.63	87.70	1,252	467,619
<b>Total for Residential Mortgages Exposures</b>	<b>108,668,950</b>			<b>561,020</b>	<b>18,957,715</b>
<b>Qualifying Revolving Retail Exposures</b>					
0.0000 – 0.5900	9,269,312	64.68	10.78	13,676,508	999,277
0.5900 – 3.3330	9,307,952	67.35	31.65	9,406,199	2,946,311
3.3330 – 18.7500	2,002,284	66.91	98.66	832,445	1,975,421
18.7500 – 100	168,878	71.49	190.62	87,140	321,915
100	99,718	66.81	116.73	6,556	116,405
<b>Total for Qualifying Revolving Retail Exposures</b>	<b>20,848,144</b>			<b>24,008,848</b>	<b>6,359,329</b>
<b>Hire Purchase Exposures</b>					
0.0000 – 0.5900	43,943,154	44.21	17.09	–	7,511,515
0.5900 – 3.3330	5,780,756	45.14	45.89	–	2,652,555
3.3330 – 18.7500	2,642,902	49.09	76.43	–	2,020,044
18.7500 – 100	665,043	50.58	116.73	–	776,313
100	191,478	75.96	110.24	–	211,086
<b>Total Hire Purchase Exposures</b>	<b>53,223,333</b>			<b>–</b>	<b>13,171,513</b>
<b>Other Retail Exposures</b>					
0.0000 – 0.5900	44,105,776	22.43	14.32	10,038,506	6,315,597
0.5900 – 3.3330	47,319,271	25.34	23.51	7,271,288	11,126,351
3.3330 – 18.7500	6,625,808	23.62	30.27	1,335,197	2,005,561
18.7500 – 100	1,422,247	22.19	47.19	448,532	671,117
100	746,336	34.69	75.23	18,143	561,496
<b>Total Other Retail Exposures</b>	<b>100,219,438</b>			<b>19,111,666</b>	<b>20,680,122</b>
<b>Total Retail Exposures</b>	<b>282,959,865</b>			<b>43,681,534</b>	<b>59,168,679</b>

## Credit Risk

Table 27: Disclosure on Exposures by PD Band (IRB Approach) for Retail for Maybank

PD Range (%)	EAD Post CRM RM'000	Exposure Weighted Average LGD (%)	Exposure Weighted Average Risk Weight (%)	Undrawn Commitments RM'000	RWA RM'000
<b>As at 31.12.2022</b>					
<b>Retail Exposures</b>					
<b>Residential Mortgages</b>					
0.0000 – 0.5900	20,178,177	15.69	12.30	43,703	2,482,437
0.5900 – 3.3330	14,136,330	15.79	16.78	293,723	2,372,248
3.3330 – 18.7500	501,831	18.01	71.22	4,692	357,411
18.7500 – 100	281,126	14.19	79.78	390	224,283
100	146,024	37.69	67.22	904	98,153
<b>Total for Residential Mortgages Exposures</b>	<b>35,243,488</b>			<b>343,412</b>	<b>5,534,532</b>
<b>Qualifying Revolving Retail Exposures</b>					
0.0000 – 0.5900	5,775,936	57.61	8.74	8,610,731	504,994
0.5900 – 3.3330	4,708,196	56.76	27.47	3,589,866	1,293,507
3.3330 – 18.7500	1,272,404	57.66	84.53	262,794	1,075,579
18.7500 – 100	106,354	57.65	160.58	44,975	170,781
100	44,505	56.52	145.43	492	64,722
<b>Total for Qualifying Revolving Retail Exposures</b>	<b>11,907,395</b>			<b>12,508,858</b>	<b>3,109,583</b>
<b>Hire Purchase Exposures</b>					
0.0000 – 0.5900	3,732,358	39.73	18.95	–	707,211
0.5900 – 3.3330	460,438	43.94	50.16	–	230,965
3.3330 – 18.7500	281,622	46.05	79.72	–	224,509
18.7500 – 100	46,845	47.60	121.94	–	57,123
100	25,164	72.37	123.16	–	30,991
<b>Total Hire Purchase Exposures</b>	<b>4,546,427</b>			<b>–</b>	<b>1,250,799</b>
<b>Other Retail Exposures</b>					
0.0000 – 0.5900	12,384,808	19.76	13.45	3,433,031	1,666,361
0.5900 – 3.3330	13,912,502	22.09	21.13	1,873,232	2,939,372
3.3330 – 18.7500	1,604,438	18.42	28.24	357,000	453,026
18.7500 – 100	453,922	25.52	59.60	36,655	270,558
100	299,073	37.30	87.80	7,372	262,581
<b>Total Other Retail Exposures</b>	<b>28,654,743</b>			<b>5,707,290</b>	<b>5,591,898</b>
<b>Total Retail Exposures</b>	<b>80,352,053</b>			<b>18,559,560</b>	<b>15,486,812</b>

Table 27: Disclosure on Exposures by PD Band (IRB Approach) for Retail for Maybank (cont'd.)

PD Range (%)	EAD Post CRM RM'000	Exposure Weighted Average LGD (%)	Exposure Weighted Average Risk Weight (%)	Undrawn Commitments RM'000	RWA RM'000
<b>As at 31.12.2021</b>					
<b>Retail Exposures</b>					
<b>Residential Mortgages</b>					
0.0000 – 0.5900	18,295,834	15.75	12.27	41,152	2,245,277
0.5900 – 3.3330	14,076,531	15.85	16.84	282,397	2,370,978
3.3330 – 18.7500	697,921	16.54	65.64	4,386	458,117
18.7500 – 100	314,494	13.73	76.03	549	239,104
100	174,704	34.57	64.66	953	112,964
<b>Total for Residential Mortgages Exposures</b>	<b>33,559,484</b>			<b>329,437</b>	<b>5,426,440</b>
<b>Qualifying Revolving Retail Exposures</b>					
0.0000 – 0.5900	5,468,687	57.54	8.71	8,315,905	476,429
0.5900 – 3.3330	4,066,793	56.55	26.67	3,416,680	1,084,808
3.3330 – 18.7500	982,016	57.65	86.38	264,082	848,269
18.7500 – 100	76,497	58.39	162.20	52,693	124,079
100	31,882	54.51	147.25	684	46,948
<b>Total for Qualifying Revolving Retail Exposures</b>	<b>10,625,875</b>			<b>12,050,044</b>	<b>2,580,533</b>
<b>Hire Purchase Exposures</b>					
0.0000 – 0.5900	4,753,484	38.89	18.24	–	867,187
0.5900 – 3.3330	534,390	42.24	46.99	–	251,089
3.3330 – 18.7500	446,055	43.52	75.02	–	334,641
18.7500 – 100	118,952	44.39	113.64	–	135,182
100	36,574	68.30	115.03	–	42,071
<b>Total Hire Purchase Exposures</b>	<b>5,889,455</b>			<b>–</b>	<b>1,630,170</b>
<b>Other Retail Exposures</b>					
0.0000 – 0.5900	13,579,124	19.32	12.98	3,725,539	1,762,140
0.5900 – 3.3330	13,912,000	22.29	21.41	1,544,601	2,978,771
3.3330 – 18.7500	1,818,413	19.16	29.41	312,484	534,832
18.7500 – 100	325,314	23.67	55.41	17,564	180,249
100	264,134	36.72	78.09	6,663	206,264
<b>Total Other Retail Exposures</b>	<b>29,898,985</b>			<b>5,606,851</b>	<b>5,662,256</b>
<b>Total Retail Exposures</b>	<b>79,973,799</b>			<b>17,986,332</b>	<b>15,299,399</b>

## Credit Risk

Table 28: Disclosure on Exposures by PD Band (IRB Approach) for Retail for Maybank Islamic

PD Range (%)	EAD Post CRM RM'000	Exposure Weighted Average LGD (%)	Exposure Weighted Average Risk Weight (%)	Undrawn Commitments RM'000	RWA RM'000
<b>As at 31.12.2022</b>					
<b>Retail Exposures</b>					
<b>Residential Mortgages</b>					
0.0000 – 0.5900	30,498,013	16.68	13.08	893,317	3,987,837
0.5900 – 3.3330	25,605,177	17.65	19.78	425,559	5,065,430
3.3330 – 18.7500	1,502,729	21.58	81.03	114,306	1,217,671
18.7500 – 100	367,515	16.77	95.41	6,348	350,638
100	159,703	38.97	74.02	336	118,216
<b>Total for Residential Mortgages Exposures</b>	<b>58,133,137</b>			<b>1,439,866</b>	<b>10,739,792</b>
<b>Qualifying Revolving Retail Exposures</b>					
0.0000 – 0.5900	1,658,155	52.71	8.31	2,215,318	137,781
0.5900 – 3.3330	2,219,212	51.36	25.57	1,682,506	567,350
3.3330 – 18.7500	630,899	56.21	77.28	171,022	487,557
18.7500 – 100	53,978	52.62	144.93	8,950	78,233
100	30,929	48.86	139.32	147	43,090
<b>Total for Qualifying Revolving Retail Exposures</b>	<b>4,593,173</b>			<b>4,077,943</b>	<b>1,314,011</b>
<b>Hire Purchase Exposures</b>					
0.0000 – 0.5900	40,213,508	41.03	16.31	–	6,557,293
0.5900 – 3.3330	3,907,113	43.61	48.40	–	1,891,021
3.3330 – 18.7500	1,897,706	46.03	80.39	–	1,525,551
18.7500 – 100	286,880	48.12	123.13	–	353,234
100	107,378	72.33	124.90	–	134,111
<b>Total Hire Purchase Exposures</b>	<b>46,412,585</b>			<b>–</b>	<b>10,461,210</b>
<b>Other Retail Exposures</b>					
0.0000 – 0.5900	20,095,236	23.90	15.99	3,288,833	3,214,219
0.5900 – 3.3330	41,915,349	19.65	19.51	4,104,141	8,176,269
3.3330 – 18.7500	8,880,755	12.94	19.75	871,290	1,753,783
18.7500 – 100	1,696,292	15.84	37.22	46,177	631,417
100	530,447	34.49	88.01	10,395	466,825
<b>Total Other Retail Exposures</b>	<b>73,118,079</b>			<b>8,320,836</b>	<b>14,242,513</b>
<b>Total Retail Exposures</b>	<b>182,256,974</b>			<b>13,838,645</b>	<b>36,757,526</b>

Table 28: Disclosure on Exposures by PD Band (IRB Approach) for Retail for Maybank Islamic (cont'd.)

PD Range (%)	EAD Post CRM RM'000	Exposure Weighted Average LGD (%)	Exposure Weighted Average Risk Weight (%)	Undrawn Commitments RM'000	RWA RM'000
<b>As at 31.12.2021</b>					
<b>Retail Exposures</b>					
<b>Residential Mortgages</b>					
0.0000 – 0.5900	26,106,431	16.58	12.90	31,721	3,368,891
0.5900 – 3.3330	22,369,095	17.26	18.85	98,315	4,216,648
3.3330 – 18.7500	1,257,439	20.64	75.78	36,642	952,920
18.7500 – 100	286,131	15.89	85.20	34,311	243,773
100	173,023	39.92	68.25	299	118,092
<b>Total for Residential Mortgages Exposures</b>	<b>50,192,119</b>			<b>201,288</b>	<b>8,900,324</b>
<b>Qualifying Revolving Retail Exposures</b>					
0.0000 – 0.5900	1,502,142	51.81	8.03	2,318,751	120,646
0.5900 – 3.3330	1,847,342	48.81	24.07	1,652,777	444,590
3.3330 – 18.7500	424,190	54.27	74.99	145,994	318,089
18.7500 – 100	22,428	53.16	147.25	9,194	33,026
100	25,006	41.56	116.01	767	29,008
<b>Total for Qualifying Revolving Retail Exposures</b>	<b>3,821,108</b>			<b>4,127,483</b>	<b>945,359</b>
<b>Hire Purchase Exposures</b>					
0.0000 – 0.5900	35,606,619	41.04	16.59	–	5,906,160
0.5900 – 3.3330	3,357,940	43.13	47.48	–	1,594,257
3.3330 – 18.7500	2,320,401	44.66	77.17	–	1,790,580
18.7500 – 100	575,530	46.06	117.72	–	677,513
100	117,414	72.45	122.94	–	144,351
<b>Total Hire Purchase Exposures</b>	<b>41,977,904</b>			<b>–</b>	<b>10,112,861</b>
<b>Other Retail Exposures</b>					
0.0000 – 0.5900	19,313,498	22.55	14.94	3,440,077	2,885,855
0.5900 – 3.3330	37,500,632	18.63	18.56	2,951,345	6,958,428
3.3330 – 18.7500	8,133,139	12.56	19.17	801,500	1,558,809
18.7500 – 100	1,499,021	14.54	34.07	430,812	510,709
100	415,875	32.74	70.10	10,626	291,511
<b>Total Other Retail Exposures</b>	<b>66,862,165</b>			<b>7,634,360</b>	<b>12,205,312</b>
<b>Total Retail Exposures</b>	<b>162,853,296</b>			<b>11,963,131</b>	<b>32,163,856</b>

## Credit Risk

### INDEPENDENT MODEL VALIDATION

The use of models will give rise to model risk, which is defined as the risk of a model not performing the tasks or able to capture the risks it was designed to. Any model not performing in line with expectations may potentially result in financial loss, incorrect business decisions, misstatement of external financial disclosures, or damage to the reputation.

To manage this risk, Model Risk Management (“MRM”) framework provides an overall governance as well as clear roles and responsibilities throughout a model lifetime in order to manage models used throughout Maybank Group. In line with the Group’s digitalisation target, new models are being introduced to support business analytics and decision making. These models require proper governance, oversight and monitoring to ensure they remain fit-for-use for the purpose they are designed for. As part of the MRM, model validation is performed to assess whether the model is performing according to expectations. The model validation function at the Group is distinct from the model development function and model users, with the objective to provide the required independence in performing the function. In line with regulatory requirements, all credit IRB models used for capital calculation and finance models for MFRS 9 are subject to independent validation by the Model Validation team. Additionally, as part of best practices, other significant models such as market risk models used for valuation and pricing are also subject to validation. Approval and oversight of model validation are governed by the technical committee and the relevant risk committees. The technical committee known as Model Validation and Acceptance Committee (“MVAC”) meets regularly and its membership is drawn from Risk and Business stakeholders.

#### Scope and Frequency of Model Validation

In general, validation techniques include both quantitative and qualitative analysis to test the appropriateness and robustness of the models used. Validation of the models covers activities that evaluate and examine the rating system and the estimation process and methods for deriving the risk components. For instance, the risk components for credit risk models are known as PD, LGD and EAD. The process involves validating whether the risk models are capable of discriminating (‘discriminatory or rank ordering power’) and are giving consistent and predictive estimates (‘calibration’) of the relevant risk parameters.

Model validation is conducted at two stages:

- Pre-implementation model validation which is conducted prior to launch of the model; and
- Post-implementation validation which is performed at least on an annual basis for models used for IRB capital calculation. For other types of models which are deemed less risky and not subject to regulatory requirements, post-implementation validation may be performed on a less frequent basis.

In addition to annual review, frequent monitoring are performed by the model owners to ensure that the models are performing as expected, and that the assumptions used in model development remain appropriate.

As part of overall governance, validation processes are also subject to regular independent review by Internal Audit.

### CREDIT RISK MITIGATION

The Group takes a holistic approach when granting credit facilities, and credit assessment is based on the repayment capacity of the counterparty, and not the credit risk mitigation, as the primary source of repayment. As a fundamental credit principle, the Group generally does not grant facilities solely on the basis of collaterals provided. Credit facilities are granted based on the credit standing of the counterparty, source of repayment and debt servicing ability.

Depending on the counterparty’s credit standing and the type of product, facilities may be granted on an unsecured basis. Nevertheless, collateral is taken whenever possible to mitigate the credit risk assumed. The Group’s general requirement is to promote the use of credit risk mitigation, justified by commercial prudence and good practice as well as capital efficiency. The value of collateral taken is also monitored periodically. The frequency of valuation depends on the type, liquidity and volatility of the collateral value. The main types of acceptable collaterals for the Group include cash, marketable securities, real estate and equipment.

Corporate guarantees are often obtained when the counterparty’s credit worthiness is inadequate to accommodate an extension of credit. To recognise the effects of guarantees under the FIRB approach, the Group adopts the Probability of Default substitution approach whereby exposures guaranteed by an eligible guarantor will utilise the PD of the guarantor in the computation of its capital requirement.

As a general rule-of-thumb, the following eligibility criteria must be met before the collateral can be accepted for IRB purposes:

- **Legal Certainty**

The documentation must be legally binding and enforceable in all relevant jurisdictions.

- **Material Positive Correlation**

The value of the collateral must not be significantly affected by the deterioration of the borrower’s credit worthiness.

- **Third-party Custodian**

The collateral that is held by a third-party custodian must be segregated from the custodian’s own assets.

Tables 29 to 31 show the credit risk mitigation analysis under the Standardised Approach for the Group, the Bank and Maybank Islamic, respectively, whilst Tables 32 to 34 show the credit risk mitigation analysis under the IRB Approach.



Table 29: Disclosure on Credit Risk Mitigation Analysis (Standardised Approach) for Maybank Group

Exposure Class	Exposures before CRM RM'000	Exposures Covered by Guarantees/ Credit Derivatives RM'000	Exposures Covered by Eligible Financial Collateral RM'000	Exposures Covered by Other Eligible Collateral RM'000
<b>As at 31.12.2022</b>				
<u>On-Balance Sheet Exposures</u>				
Sovereigns/Central Banks	169,759,341	-	-	-
Public Sector Entities	3,921,009	35,295	368	-
Banks, Development Financial Institutions & MDBs	686,662	-	-	-
Insurance Cos, Securities Firms & Fund Managers	526,415	-	-	-
Corporates	20,626,532	79,621	5,022,256	-
Regulatory Retail	24,071,534	1,922,995	1,416,252	-
Residential Mortgages	1,634,613	-	5,096	-
Higher Risk Assets	2,965	-	-	-
Other Assets	18,177,541	361	-	-
Securitisation Exposures	-	-	-	-
Equity Exposures	415,286	-	-	-
Defaulted Exposures	297,164	-	581	-
<b>Total On-Balance Sheet Exposures</b>	<b>240,119,062</b>	<b>2,038,272</b>	<b>6,444,553</b>	<b>-</b>
<u>Off-Balance Sheet Exposures</u>				
OTC Derivatives	1,840,048	-	55,174	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	3,325,925	279	226,496	-
Defaulted Exposures	6,574	-	-	-
<b>Total Off-Balance Sheet Exposures</b>	<b>5,172,547</b>	<b>279</b>	<b>281,670</b>	<b>-</b>
<b>Total On and Off-Balance Sheet Exposures</b>	<b>245,291,609</b>	<b>2,038,551</b>	<b>6,726,223</b>	<b>-</b>
<b>As at 31.12.2021</b>				
<u>On-Balance Sheet Exposures</u>				
Sovereigns/Central Banks	159,491,847	-	-	-
Public Sector Entities	3,920,232	33,412	1,512	-
Banks, Development Financial Institutions & MDBs	2,513,306	-	-	-
Insurance Cos, Securities Firms & Fund Managers	1,366,208	-	-	-
Corporates	21,262,572	468,108	6,156,193	-
Regulatory Retail	23,379,335	-	1,506,357	-
Residential Mortgages	1,979,659	-	1,973	-
Higher Risk Assets	2,827	-	-	-
Other Assets	15,577,103	-	166	-
Securitisation Exposures	20,075	-	-	-
Equity Exposures	348,582	-	-	-
Defaulted Exposures	1,292,839	-	2,278	-
<b>Total On-Balance Sheet Exposures</b>	<b>231,154,585</b>	<b>501,520</b>	<b>7,668,479</b>	<b>-</b>
<u>Off-Balance Sheet Exposures</u>				
OTC Derivatives	811,346	-	28,372	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	2,444,311	93	235,731	-
Defaulted Exposures	211,641	-	-	-
<b>Total Off-Balance Sheet Exposures</b>	<b>3,467,298</b>	<b>93</b>	<b>264,103</b>	<b>-</b>
<b>Total On and Off-Balance Sheet Exposures</b>	<b>234,621,883</b>	<b>501,613</b>	<b>7,932,582</b>	<b>-</b>

## Credit Risk

**Table 30: Disclosure on Credit Risk Mitigation Analysis (Standardised Approach) for Maybank**

Exposure Class	Exposures before CRM RM'000	Exposures Covered by Guarantees/ Credit Derivatives RM'000	Exposures Covered by Eligible Financial Collateral RM'000	Exposures Covered by Other Eligible Collateral RM'000
<b>As at 31.12.2022</b>				
<u>On-Balance Sheet Exposures</u>				
Sovereigns/Central Banks	101,128,389	-	-	-
Public Sector Entities	3,209,989	35,295	-	-
Banks, Development Financial Institutions & MDBs	677,791	-	-	-
Insurance Cos, Securities Firms & Fund Managers	160,273	-	-	-
Corporates	11,491,510	34,113	1,355,774	-
Regulatory Retail	1,617,238	-	218,802	-
Residential Mortgages	1,034,404	-	4,557	-
Higher Risk Assets	-	-	-	-
Other Assets	10,801,107	-	-	-
Securitisation Exposures	-	-	-	-
Equity Exposures	359,874	-	-	-
Defaulted Exposures	29,303	-	450	-
<b>Total On-Balance Sheet Exposures</b>	<b>130,509,878</b>	<b>69,408</b>	<b>1,579,583</b>	<b>-</b>
<u>Off-Balance Sheet Exposures</u>				
OTC Derivatives	1,266,278	-	-	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	2,209,997	-	136,472	-
Defaulted Exposures	-	-	-	-
<b>Total Off-Balance Sheet Exposures</b>	<b>3,476,275</b>	<b>-</b>	<b>136,472</b>	<b>-</b>
<b>Total On and Off-Balance Sheet Exposures</b>	<b>133,986,153</b>	<b>69,408</b>	<b>1,716,055</b>	<b>-</b>
<b>As at 31.12.2021</b>				
<u>On-Balance Sheet Exposures</u>				
Sovereigns/Central Banks	91,825,167	-	-	-
Public Sector Entities	3,344,633	33,412	21	-
Banks, Development Financial Institutions & MDBs	1,004,617	-	-	-
Insurance Cos, Securities Firms & Fund Managers	985,688	-	-	-
Corporates	11,780,997	37,783	1,548,473	-
Regulatory Retail	1,674,050	-	234,772	-
Residential Mortgages	1,173,886	-	1,351	-
Higher Risk Assets	-	-	-	-
Other Assets	7,872,187	-	-	-
Securitisation Exposures	20,075	-	-	-
Equity Exposures	337,693	-	-	-
Defaulted Exposures	840,333	-	1,159	-
<b>Total On-Balance Sheet Exposures</b>	<b>120,859,326</b>	<b>71,195</b>	<b>1,785,776</b>	<b>-</b>
<u>Off-Balance Sheet Exposures</u>				
OTC Derivatives	629,410	-	-	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	1,664,315	93	141,946	-
Defaulted Exposures	211,512	-	-	-
<b>Total Off-Balance Sheet Exposures</b>	<b>2,505,237</b>	<b>93</b>	<b>141,946</b>	<b>-</b>
<b>Total On and Off-Balance Sheet Exposures</b>	<b>123,364,563</b>	<b>71,288</b>	<b>1,927,722</b>	<b>-</b>

Table 31: Disclosure on Credit Risk Mitigation Analysis (Standardised Approach) for Maybank Islamic

Exposure Class	Exposures before CRM RM'000	Exposures Covered by Guarantees/ Credit Derivatives RM'000	Exposures Covered by Eligible Financial Collateral RM'000	Exposures Covered by Other Eligible Collateral RM'000
<b>As at 31.12.2022</b>				
<u>On-Balance Sheet Exposures</u>				
Sovereigns/Central Banks	40,548,253	-	-	-
Public Sector Entities	60,462	-	368	-
Banks, Development Financial Institutions & MDBs	-	-	-	-
Insurance Cos, Securities Firms & Fund Managers	14	-	-	-
Corporates	592,350	1,309	133,343	-
Regulatory Retail	1,722,566	-	617,163	-
Residential Mortgages	578,756	-	539	-
Higher Risk Assets	36	-	-	-
Other Assets	1,219,344	-	-	-
Equity Exposures	1,250	-	-	-
Defaulted Exposures	29,519	-	112	-
<b>Total On-Balance Sheet Exposures</b>	<b>44,752,550</b>	<b>1,309</b>	<b>751,525</b>	<b>-</b>
<u>Off-Balance Sheet Exposures</u>				
OTC Derivatives	6,238	-	-	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	102,608	-	23,419	-
<b>Total Off-Balance Sheet Exposures</b>	<b>108,846</b>	<b>-</b>	<b>23,419</b>	<b>-</b>
<b>Total On and Off-Balance Sheet Exposures</b>	<b>44,861,396</b>	<b>1,309</b>	<b>774,944</b>	<b>-</b>
<b>As at 31.12.2021</b>				
<u>On-Balance Sheet Exposures</u>				
Sovereigns/Central Banks	33,446,124	-	-	-
Public Sector Entities	88,708	-	1,491	-
Banks, Development Financial Institutions & MDBs	-	-	-	-
Insurance Cos, Securities Firms & Fund Managers	71	-	-	-
Corporates	1,036,060	430,325	212,225	-
Regulatory Retail	1,835,434	-	642,475	-
Residential Mortgages	661,453	-	622	-
Higher Risk Assets	36	-	-	-
Other Assets	1,786,584	-	-	-
Equity Exposures	1,250	-	-	-
Defaulted Exposures	36,295	-	111	-
<b>Total On-Balance Sheet Exposures</b>	<b>38,892,015</b>	<b>430,325</b>	<b>856,924</b>	<b>-</b>
<u>Off-Balance Sheet Exposures</u>				
OTC Derivatives	39,019	-	-	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	32,763	-	15,187	-
<b>Total Off-Balance Sheet Exposures</b>	<b>71,782</b>	<b>-</b>	<b>15,187</b>	<b>-</b>
<b>Total On and Off-Balance Sheet Exposures</b>	<b>38,963,797</b>	<b>430,325</b>	<b>872,111</b>	<b>-</b>

## Credit Risk

**Table 32: Disclosure on Credit Risk Mitigation Analysis (IRB Approach) for Maybank Group**

Exposure Class	Exposures before CRM RM'000	Exposures Covered by Guarantees/ Credit Derivatives RM'000	Exposures Covered by Eligible Financial Collateral RM'000	Exposures Covered by Other Eligible Collateral RM'000
<b>As at 31.12.2022</b>				
<u>On-Balance Sheet Exposures</u>				
Public Sector Entities	26,852,435	25,211,756	1,974	40,393
Banks, Development Financial Institutions & MDBs	27,987,163	244,330	387,372	-
Corporate Exposures	240,789,193	21,695,261	4,609,313	51,636,205
a) Corporates (excluding Specialised Lending and firm-size adjustment)	178,671,231	19,138,566	2,818,108	29,156,929
b) Corporates (with firm-size adjustment)	56,581,534	2,556,695	1,781,491	22,439,199
c) Specialised Lending (Own PD Approach)				
- Project Finance	5,280,604	-	9,714	40,077
d) Specialised Lending (Slotting Approach)				
- Project Finance	255,824	-	-	-
Retail Exposures	275,997,686	-	-	-
a) Residential Mortgages	124,831,035	-	-	-
b) Qualifying Revolving Retail Exposures	10,496,395	-	-	-
c) Hire Purchase Exposures	54,220,515	-	-	-
d) Other Retail Exposures	86,449,741	-	-	-
Defaulted Exposures	11,320,209	-	6,457	1,062,399
<b>Total On-Balance Sheet Exposures</b>	<b>582,946,686</b>	<b>47,151,347</b>	<b>5,005,116</b>	<b>52,738,997</b>
<u>Off-Balance Sheet Exposures</u>				
OTC Derivatives	14,186,754	-	880,031	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	96,016,155	1,613,177	5,243,444	4,569,474
Defaulted Exposures	660,925	-	4,244	26,208
<b>Total Off-Balance Sheet Exposures</b>	<b>110,863,834</b>	<b>1,613,177</b>	<b>6,127,719</b>	<b>4,595,682</b>
<b>Total On and Off-Balance Sheet Exposures</b>	<b>693,810,520</b>	<b>48,764,524</b>	<b>11,132,835</b>	<b>57,334,679</b>
<b>As at 31.12.2021</b>				
<u>On-Balance Sheet Exposures</u>				
Public Sector Entities	24,775,878	22,571,977	1,151,989	55,790
Banks, Development Financial Institutions & MDBs	23,252,141	262,872	200,000	-
Corporate Exposures	224,816,959	16,627,930	4,183,480	51,211,315
a) Corporates (excluding Specialised Lending and firm-size adjustment)	167,626,093	16,017,112	2,591,114	26,919,757
b) Corporates (with firm-size adjustment)	51,794,724	566,655	1,592,366	24,249,701
c) Specialised Lending (Own PD Approach)				
- Project Finance	4,879,872	44,163	-	41,857
d) Specialised Lending (Slotting Approach)				
- Project Finance	516,270	-	-	-
Retail Exposures	252,055,991	-	-	-
a) Residential Mortgages	107,851,215	-	-	-
b) Qualifying Revolving Retail Exposures	9,078,923	-	-	-
c) Hire Purchase Exposures	53,055,059	-	-	-
d) Other Retail Exposures	82,070,794	-	-	-
Defaulted Exposures	12,211,686	-	8,957	694,902
<b>Total On-Balance Sheet Exposures</b>	<b>537,112,655</b>	<b>39,462,779</b>	<b>5,544,426</b>	<b>51,962,007</b>
<u>Off-Balance Sheet Exposures</u>				
OTC Derivatives	10,990,980	-	472,197	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	87,474,229	2,064,881	2,213,991	4,042,391
Defaulted Exposures	874,420	-	8,264	2,468
<b>Total Off-Balance Sheet Exposures</b>	<b>99,339,629</b>	<b>2,064,881</b>	<b>2,694,452</b>	<b>4,044,859</b>
<b>Total On and Off-Balance Sheet Exposures</b>	<b>636,452,284</b>	<b>41,527,660</b>	<b>8,238,878</b>	<b>56,006,866</b>

Table 33: Disclosure on Credit Risk Mitigation Analysis (IRB Approach) for Maybank

Exposure Class	Exposures before CRM RM'000	Exposures Covered by Guarantees/ Credit Derivatives RM'000	Exposures Covered by Eligible Financial Collateral RM'000	Exposures Covered by Other Eligible Collateral RM'000
<b>As at 31.12.2022</b>				
<u>On-Balance Sheet Exposures</u>				
Public Sector Entities	18,797,051	18,455,513	-	-
Banks, Development Financial Institutions & MDBs	56,656,244	244,330	-	-
Corporate Exposures	162,244,191	13,195,207	2,349,830	33,917,077
a) Corporates (excluding Specialised Lending and firm-size adjustment)	130,436,791	12,884,751	1,309,961	22,770,942
b) Corporates (with firm-size adjustment)	27,956,701	310,456	1,033,228	11,130,778
c) Specialised Lending (Own PD Approach)				
- Project Finance	3,648,386	-	6,641	15,357
d) Specialised Lending (Slotting Approach)				
- Project Finance	202,313	-	-	-
Retail Exposures	69,185,249	-	-	-
a) Residential Mortgages	35,049,365	-	-	-
b) Qualifying Revolving Retail Exposures	6,039,045	-	-	-
c) Hire Purchase Exposures	4,521,263	-	-	-
d) Other Retail Exposures	23,575,576	-	-	-
Defaulted Exposures	7,969,397	-	2,279	717,671
<b>Total On-Balance Sheet Exposures</b>	<b>314,852,132</b>	<b>31,895,050</b>	<b>2,352,109</b>	<b>34,634,748</b>
<u>Off-Balance Sheet Exposures</u>				
OTC Derivatives	14,290,606	-	1,089,289	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	59,357,026	1,179,493	4,333,004	3,442,435
Defaulted Exposures	620,783	-	4,204	20,482
<b>Total Off-Balance Sheet Exposures</b>	<b>74,268,415</b>	<b>1,179,493</b>	<b>5,426,497</b>	<b>3,462,917</b>
<b>Total On and Off-Balance Sheet Exposures</b>	<b>389,120,547</b>	<b>33,074,543</b>	<b>7,778,606</b>	<b>38,097,665</b>
<b>As at 31.12.2021</b>				
<u>On-Balance Sheet Exposures</u>				
Public Sector Entities	17,053,270	15,400,838	1,151,938	-
Banks, Development Financial Institutions & MDBs	52,933,640	242,587	-	-
Corporate Exposures	152,005,905	11,151,291	2,036,428	33,563,844
a) Corporates (excluding Specialised Lending and firm-size adjustment)	120,689,101	10,876,980	1,100,709	20,930,874
b) Corporates (with firm-size adjustment)	27,009,729	230,148	935,719	12,617,613
c) Specialised Lending (Own PD Approach)				
- Project Finance	3,814,650	44,163	-	15,357
d) Specialised Lending (Slotting Approach)				
- Project Finance	492,425	-	-	-
Retail Exposures	69,159,820	-	-	-
a) Residential Mortgages	33,338,863	-	-	-
b) Qualifying Revolving Retail Exposures	5,164,396	-	-	-
c) Hire Purchase Exposures	5,852,880	-	-	-
d) Other Retail Exposures	24,803,681	-	-	-
Defaulted Exposures	9,067,496	-	-	-
<b>Total On-Balance Sheet Exposures</b>	<b>300,220,131</b>	<b>26,794,716</b>	<b>3,188,366</b>	<b>33,563,844</b>
<u>Off-Balance Sheet Exposures</u>				
OTC Derivatives	10,906,000	-	630,991	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	53,236,755	1,623,726	1,563,054	3,154,135
Defaulted Exposures	794,301	-	8,090	478,779
<b>Total Off-Balance Sheet Exposures</b>	<b>64,937,056</b>	<b>1,623,726</b>	<b>2,202,135</b>	<b>3,632,914</b>
<b>Total On and Off-Balance Sheet Exposures</b>	<b>365,157,187</b>	<b>28,418,442</b>	<b>5,390,501</b>	<b>37,196,758</b>

## Credit Risk

**Table 34: Disclosure on Credit Risk Mitigation Analysis (IRB Approach) for Maybank Islamic**

Exposure Class	Exposures before CRM RM'000	Exposures Covered by Guarantees/ Credit Derivatives RM'000	Exposures Covered by Eligible Financial Collateral RM'000	Exposures Covered by Other Eligible Collateral RM'000
<b>As at 31.12.2022</b>				
<u>On-Balance Sheet Exposures</u>				
Public Sector Entities	21,613,110	20,313,968	1,974	40,393
Banks, Development Financial Institutions & MDBs	16,744,683	-	200,000	-
Corporate Exposures	63,232,857	9,053,521	895,297	12,382,346
a) Corporates (excluding Specialised Lending and firm-size adjustment)	42,872,502	8,201,298	324,774	4,800,062
b) Corporates (with firm-size adjustment)	18,674,626	852,223	567,450	7,557,564
c) Specialised Lending (Own PD Approach)				
- Project Finance	1,632,218	-	3,073	24,720
d) Specialised Lending (Slotting Approach)				
- Project Finance	53,511	-	-	-
Retail Exposures	171,595,906	-	-	-
a) Residential Mortgages	56,541,623	-	-	-
b) Qualifying Revolving Retail Exposures	2,846,520	-	-	-
c) Hire Purchase Exposures	46,305,207	-	-	-
d) Other Retail Exposures	65,902,556	-	-	-
Defaulted Exposures	6,648,775	-	4,149	171,754
<b>Total On-Balance Sheet Exposures</b>	<b>279,835,331</b>	<b>29,367,489</b>	<b>1,101,420</b>	<b>12,594,493</b>
<u>Off-Balance Sheet Exposures</u>				
OTC Derivatives	630,656	-	-	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	28,107,579	1,590,203	1,774,040	942,537
Defaulted Exposures	255,641	-	40	5,727
<b>Total Off-Balance Sheet Exposures</b>	<b>28,993,876</b>	<b>1,590,203</b>	<b>1,774,080</b>	<b>948,264</b>
<b>Total On and Off-Balance Sheet Exposures</b>	<b>308,829,207</b>	<b>30,957,692</b>	<b>2,875,500</b>	<b>13,542,757</b>
<b>As at 31.12.2021</b>				
<u>On-Balance Sheet Exposures</u>				
Public Sector Entities	20,415,679	18,314,996	1,151,989	55,790
Banks, Development Financial Institutions & MDBs	9,491,893	20,285	200,000	-
Corporate Exposures	58,258,613	8,350,703	816,097	12,822,384
a) Corporates (excluding Specialised Lending and firm-size adjustment)	41,130,767	8,014,196	336,302	4,837,193
b) Corporates (with firm-size adjustment)	15,626,235	336,507	479,795	7,958,691
c) Specialised Lending (Own PD Approach)				
- Project Finance	1,477,766	-	-	26,500
d) Specialised Lending (Slotting Approach)				
- Project Finance	23,845	-	-	-
Retail Exposures	153,780,406	-	-	-
a) Residential Mortgages	49,825,115	-	-	-
b) Qualifying Revolving Retail Exposures	2,358,364	-	-	-
c) Hire Purchase Exposures	41,860,490	-	-	-
d) Other Retail Exposures	59,736,437	-	-	-
Defaulted Exposures	5,976,306	-	643	129,481
<b>Total On-Balance Sheet Exposures</b>	<b>247,922,897</b>	<b>26,685,984</b>	<b>2,168,729</b>	<b>13,007,655</b>
<u>Off-Balance Sheet Exposures</u>				
OTC Derivatives	483,280	-	-	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	25,901,610	2,086,155	435,156	766,532
Defaulted Exposures	187,232	-	6,803	-
<b>Total Off-Balance Sheet Exposures</b>	<b>26,572,122</b>	<b>2,086,155</b>	<b>441,959</b>	<b>766,532</b>
<b>Total On and Off-Balance Sheet Exposures</b>	<b>274,495,019</b>	<b>28,772,139</b>	<b>2,610,688</b>	<b>13,774,187</b>

## SECURITISATION EXPOSURES

The Group does not actively engage in securitisation activities which are driven by strategic considerations including credit risk transfer. As such, the Group currently does not originate any securitisation, nor does it provide facilities and services for securitisation. Instead, the Group is involved in the investment of securities which include the purchase of securitised bonds in the secondary markets. These are primarily legacy exposures that are being held in the banking book. Similar to non-securitised assets, these securitisation exposures are governed by and managed in accordance to credit risk and market risk policies. The valuation of our investment in securitisation exposures mainly focuses on quotations from external parties.

Table 35 shows the securitisation exposures under the Standardised Approach for the Group and the Bank.

**Table 35: Disclosure on Securitisation under the Standardised Approach for Maybank Group and Maybank**

Type of Securitisation Exposures	Exposures after CRM RM'000	Risk-Weights of Securitisation Exposures 20%	RWA RM'000
<b>As at 31.12.2022</b>			
<b>Originated by Third Party</b>			
On Balance Sheet Exposure	-	-	-
<b>TOTAL (TRADITIONAL SECURITISATION)</b>	-	-	-
<b>As at 31.12.2021</b>			
<b>Originated by Third Party</b>			
On Balance Sheet Exposure	20,075	20,075	4,015
<b>TOTAL (TRADITIONAL SECURITISATION)</b>	20,075	20,075	4,015

## CREDIT EXPOSURES SUBJECT TO STANDARDISED APPROACH

The Standardised Approach is applied to portfolios that are classified as permanently exempted from the IRB Approach, and those portfolios that are currently in transition to the IRB Approach.

The Standardised Approach measures credit risk pursuant to fixed risk-weights and is the least sophisticated of the capital calculation methodologies. The risk-weights applied under Standardised Approach are prescribed by BNM and is based on the asset class to which the exposure is assigned. For exposures subject to Standardised Approach, approved External Credit Assessment Institutions ("ECAI") ratings and the prescribed risk-weights based on asset classes are used in the computation of regulatory capital.

The ECAI used by the Group include S&P, Moody's Investor Services, Fitch Ratings, RAM, Malaysia Rating Corporation ("MARC") and Rating & Investment Inc. Assessments provided by approved ECAs are mapped to credit quality grades prescribed by the regulator.

Table 36 shows the risk-weights applicable for Banking Institutions and Corporates under the Standardised Approach.

**Table 36: Risk-Weights under Standardised Approach**

Rating Category	S&P	Moody's	Fitch	RAM	MARC	Rating & Investment Inc.
1	AAA to AA-	Aaa to Aa3	AAA to AA-	AAA to AA3	AAA to AA-	AAA to AA-
2	A+ to A-	A1 to A3	A+ to A-	A+ to A3	A+ to A-	A+ to A-
3	BBB+ to BB-	Baa1 to Ba3	BBB+ to BB-	BBB1 to BB3	BBB+ to BB-	BBB+ to BB-
4	B+ and below	B1 to below	B+ and below	B1 and below	B+ and below	B+ and below
5				Unrated		

Table 37 shows the risk-weights applicable for Banking Institutions and Corporates under the Standardised Approach for Short-term ratings.

**Table 37: Risk-Weights under Standardised Approach for Short-Term Ratings**

Rating Category	S&P	Moody's	Fitch	RAM	MARC	Rating & Investment Inc.
1	A-1	P-1	F1+, F1	P-1	MARC-1	a-1+, a-1
2	A-2	P-2	F2	P-2	MARC-2	a-2
3	A-3	P-3	F3	P-3	MARC-3	a-3
4	Others	Others	B to D	NP	MARC-4	b, c
5				Unrated		



## Credit Risk

Tables 38 to 40 show the disclosure on risk-weights under Standardised Approach for the Group, the Bank and Maybank Islamic, respectively. Tables 41 to 43 further show the rated exposures by ECAs for the Group, the Bank and Maybank Islamic, respectively.

**Table 38: Disclosure on Credit Risk – Disclosure on Risk-Weights under the Standardised Approach for Maybank Group**

Risk-Weights	Exposures after Netting and Credit Risk Mitigation											Total Exposures after Netting & Credit Risk Mitigation* RM'000	Total Risk Weighted Assets* RM'000	
	Sovereigns & Central Banks RM'000	PSEs RM'000	Banks, MDBs & FDIs RM'000	Insurance Cos, Securities Firms & Fund Managers RM'000	Corporates RM'000	Regulatory Retail RM'000	Residential Mortgages RM'000	Higher Risk Assets RM'000	Other Assets RM'000	Securitisation RM'000	Equity RM'000			
<b>As at 31.12.2022</b>														
0%	161,025,449	3,458,793	657,426	-	79,141	1,923,274	-	-	8,897,370	-	-	-	176,041,453	-
20%	5,040,448	286,371	29,236	15	688,078	-	-	-	930,272	-	-	-	6,974,420	1,394,884
35%	-	-	-	-	-	-	1,526,225	-	-	-	-	-	1,526,225	534,179
50%	3,694,781	-	25,877	-	9,529	13,522	116,111	-	-	-	-	-	3,859,820	1,929,910
75%	-	-	-	-	-	20,247,159	3,041	-	-	-	-	-	20,250,200	15,187,650
100%	1,020,921	179,232	-	716,878	17,003,420	1,181,483	638	-	8,921,572	-	166,924	-	29,191,068	29,191,068
150%	445,845	-	-	-	11,535	9,917	-	3,027	3,513	-	248,362	-	722,199	1,083,300
<b>Total</b>	<b>171,227,444</b>	<b>3,924,396</b>	<b>712,539</b>	<b>716,893</b>	<b>17,791,703</b>	<b>23,375,355</b>	<b>1,646,015</b>	<b>3,027</b>	<b>18,752,727</b>	<b>-</b>	<b>415,286</b>	<b>-</b>	<b>238,565,385</b>	<b>49,320,991</b>
<b>As at 31.12.2021</b>														
0%	149,747,070	-	476,609	-	466,061	-	-	-	6,532,470	-	-	-	157,222,210	-
20%	1,634,621	3,204,696	1,882,570	697,440	605,424	-	-	-	1,188,133	-	-	-	9,212,884	1,842,577
35%	-	-	-	-	-	-	1,805,615	-	-	-	-	-	1,805,615	631,965
50%	6,676,680	143,009	154,127	-	128,646	24,952	150,970	-	-	-	-	-	7,278,384	3,639,191
75%	-	-	-	-	-	20,940,367	4,846	-	-	-	-	-	20,945,213	15,708,910
100%	1,204,412	574,472	-	1,250,051	16,380,098	1,487,224	56,840	-	7,989,690	-	164,020	-	29,106,807	29,106,807
150%	442,005	-	-	1	242,450	218,442	-	2,859	7,101	-	184,563	-	1,097,421	1,646,132
<b>Total</b>	<b>159,704,788</b>	<b>3,922,177</b>	<b>2,513,306</b>	<b>1,947,492</b>	<b>17,822,679</b>	<b>22,670,985</b>	<b>2,018,271</b>	<b>2,859</b>	<b>15,717,394</b>	<b>20,075</b>	<b>348,583</b>	<b>-</b>	<b>226,668,534*</b>	<b>52,575,582*</b>

\* Total Exposures after netting & credit risk mitigation and risk-weighted assets do not include securitisation.

**Table 39: Disclosure on Credit Risk – Disclosure on Risk-Weights under the Standardised Approach for Maybank**

Risk-Weights	Exposures after Netting and Credit Risk Mitigation											Total Exposures after Netting & Credit Risk Mitigation* RM'000	Total Risk Weighted Assets* RM'000	
	Sovereigns & Central Banks RM'000	PSEs RM'000	Banks, MDBs & FDIs RM'000	Insurance Cos, Securities Firms & Fund Managers RM'000	Corporates RM'000	Regulatory Retail RM'000	Residential Mortgages RM'000	Higher Risk Assets RM'000	Other Assets RM'000	Securitisation RM'000	Equity RM'000			
<b>As at 31.12.2022</b>														
0%	97,086,059	2,808,235	657,426	-	34,100	-	-	-	6,854,417	-	-	-	107,440,237	-
20%	2,554,658	280,125	20,365	15	687,612	-	-	-	880,606	-	-	-	4,423,381	884,676
35%	-	-	-	-	-	-	971,353	-	-	-	-	-	971,353	339,974
50%	2,190,195	-	25,877	-	9,453	379	65,220	-	-	-	-	-	2,291,124	1,145,562
75%	-	-	-	-	-	1,236,819	317	-	-	-	-	-	1,237,136	927,852
100%	250,752	123,104	-	342,487	11,046,489	181,925	256	-	3,152,939	-	165,465	-	15,263,417	15,263,417
150%	445,845	-	-	-	3,046	88	-	62	-	-	194,409	-	643,450	965,176
<b>Total</b>	<b>102,527,509</b>	<b>3,211,464</b>	<b>703,668</b>	<b>342,502</b>	<b>11,780,700</b>	<b>1,419,211</b>	<b>1,037,146</b>	<b>62</b>	<b>10,887,962</b>	<b>-</b>	<b>359,874</b>	<b>-</b>	<b>132,270,098</b>	<b>19,526,657</b>
<b>As at 31.12.2021</b>														
0%	87,737,729	-	476,609	-	36,921	-	-	-	4,479,813	-	-	-	92,731,072	-
20%	1,403,495	2,695,794	528,008	697,440	604,239	-	-	-	233,892	-	-	-	6,162,868	1,232,574
35%	-	-	-	-	-	-	1,065,460	-	-	-	-	-	1,065,460	372,911
50%	2,192,716	143,009	-	-	127,116	318	94,229	-	-	-	-	-	2,557,388	1,278,693
75%	-	-	-	-	-	1,281,213	2,217	-	-	-	-	-	1,283,430	962,572
100%	258,674	507,343	-	862,800	11,543,154	197,010	26,996	-	3,246,947	-	162,138	-	16,805,062	16,805,063
150%	442,005	-	-	1	188,847	5,045	-	32	-	-	175,555	-	811,485	1,217,228
<b>Total</b>	<b>92,034,619</b>	<b>3,346,146</b>	<b>1,004,617</b>	<b>1,560,241</b>	<b>12,500,277</b>	<b>1,483,586</b>	<b>1,188,902</b>	<b>32</b>	<b>7,960,652</b>	<b>20,075</b>	<b>337,693</b>	<b>-</b>	<b>121,416,765*</b>	<b>21,869,041*</b>

\* Total exposures after netting & credit risk mitigation and risk-weighted assets do not include securitisation.



Table 40: Disclosure on Credit Risk – Disclosure on Risk-Weights under the Standardised Approach for Maybank Islamic

Risk-Weights	Exposures after Netting and Credit Risk Mitigation									Total Exposures after Netting & Credit Risk Mitigation RM'000	Total Risk Weighted Assets RM'000
	Sovereigns & Central Banks RM'000	PSEs RM'000	Insurance Cos, Securities Firms & Fund Managers RM'000	Corporates RM'000	Regulatory Retail RM'000	Residential Mortgages RM'000	Higher Risk Assets RM'000	Other Assets RM'000	Equity RM'000		
<b>As at 31.12.2022</b>											
0%	38,167,887	-	-	842	-	-	-	769,000	-	38,937,729	-
20%	2,432,600	6,247	-	467	-	-	-	-	-	2,439,314	487,863
35%	-	-	-	-	-	549,212	-	-	-	549,212	192,224
50%	-	-	-	-	150	35,097	-	-	-	35,247	17,624
75%	-	-	-	-	405,975	2,724	-	-	-	408,699	306,524
100%	-	56,128	8,006	491,897	707,978	26	-	450,409	-	1,714,444	1,714,444
150%	-	-	-	397	125	-	36	-	1,250	1,808	2,711
<b>Total</b>	<b>40,600,487</b>	<b>62,375</b>	<b>8,006</b>	<b>493,603</b>	<b>1,114,228</b>	<b>587,059</b>	<b>36</b>	<b>1,219,409</b>	<b>1,250</b>	<b>44,086,453</b>	<b>2,721,390</b>
<b>As at 31.12.2021</b>											
0%	33,446,430	-	-	429,139	-	-	-	741,605	-	34,617,174	-
20%	-	22,011	-	1,185	-	-	-	928,267	-	951,463	190,294
35%	-	-	-	-	-	617,269	-	-	-	617,269	216,044
50%	-	-	-	-	1,589	36,256	-	-	-	37,845	18,922
75%	-	-	-	-	406,423	1,759	-	-	-	408,182	306,136
100%	-	67,129	6,030	456,037	796,756	14,925	-	116,777	-	1,457,654	1,457,653
150%	-	-	-	796	16	-	36	-	1,250	2,098	3,148
<b>Total</b>	<b>33,446,430</b>	<b>89,140</b>	<b>6,030</b>	<b>887,157</b>	<b>1,204,784</b>	<b>670,209</b>	<b>36</b>	<b>1,786,649</b>	<b>1,250</b>	<b>38,091,685</b>	<b>2,192,197</b>

Table 41: Disclosure on Rated Exposures according to Ratings by ECAs for Maybank Group

Exposure Class	Rating Categories					Total RM'000
	1 RM'000	2 RM'000	3 RM'000	4 RM'000	5 RM'000	
<b>As at 31.12.2022</b>						
<b>On and Off-Balance Sheet Exposures</b>						
Rated Exposures						
A) <u>Ratings of Corporate:</u>						
Public Sector Entities	3,458,793	286,371	-	-	179,232	3,924,396
Insurance Cos, Securities Firms & Fund Managers	-	15	-	-	716,878	716,893
Corporates	79,141	688,078	9,529	11,535	17,003,420	17,791,703
B) <u>Ratings of Sovereigns and Central Banks:</u>						
Sovereigns and Central Banks	161,025,449	5,040,448	3,694,781	445,845	1,020,921	171,227,444
C) <u>Ratings of Banking Institutions:</u>						
Banks, MDBs and FDIs	657,426	29,236	25,877	-	-	712,539
<b>Total Exposures</b>	<b>165,220,809</b>	<b>6,044,148</b>	<b>3,730,187</b>	<b>457,380</b>	<b>18,920,451</b>	<b>194,372,975</b>
<b>As at 31.12.2021</b>						
<b>On and Off-Balance Sheet Exposures</b>						
Rated Exposures						
A) <u>Ratings of Corporate:</u>						
Public Sector Entities	-	3,204,696	143,009	-	574,472	3,922,177
Insurance Cos, Securities Firms & Fund Managers	-	697,440	-	1	1,250,051	1,947,492
Corporates	466,061	605,424	128,646	242,450	16,380,098	17,822,679
B) <u>Ratings of Sovereigns and Central Banks:</u>						
Sovereigns and Central Banks	149,747,070	1,634,621	6,676,680	442,005	1,204,413	159,704,789
C) <u>Ratings of Banking Institutions:</u>						
Banks, MDBs and FDIs	476,609	1,882,570	154,127	-	-	2,513,306
<b>Total Exposures</b>	<b>150,689,740</b>	<b>8,024,751</b>	<b>7,102,462</b>	<b>684,456</b>	<b>19,409,034</b>	<b>185,910,443</b>

## Credit Risk

**Table 42: Disclosure on Rated Exposures according to Ratings by ECAs for Maybank**

Exposure Class	Rating Categories					Total RM'000
	1 RM'000	2 RM'000	3 RM'000	4 RM'000	5 RM'000	
<b>As at 31.12.2022</b>						
<b>On and Off-Balance Sheet Exposures</b>						
Rated Exposures						
A) <u>Ratings of Corporate:</u>						
Public Sector Entities	2,808,235	280,125	-	-	123,104	3,211,464
Insurance Cos, Securities Firms & Fund Managers	-	15	-	-	342,487	342,502
Corporates	34,100	687,612	9,453	3,046	11,046,489	11,780,700
B) <u>Ratings of Sovereigns and Central Banks:</u>						
Sovereigns and Central Banks	97,086,059	2,554,658	2,190,195	445,845	250,752	102,527,509
C) <u>Ratings of Banking Institutions:</u>						
Banks, MDBs and FDIs	657,426	20,365	25,877	-	-	703,668
<b>Total Exposures</b>	<b>100,585,820</b>	<b>3,542,775</b>	<b>2,225,525</b>	<b>448,891</b>	<b>11,762,832</b>	<b>118,565,843</b>

**As at 31.12.2021**

**On and Off-Balance Sheet Exposures**

Rated Exposures

A) Ratings of Corporate:

Public Sector Entities - 2,695,794 143,009 - 507,343 3,346,146

Insurance Cos, Securities Firms & Fund Managers - 697,440 - 1 862,800 1,560,241

Corporates 36,921 604,239 127,116 188,847 11,543,154 12,500,277

B) Ratings of Sovereigns and Central Banks:

Sovereigns and Central Banks 87,737,729 1,403,495 2,192,716 442,005 258,674 92,034,619

C) Ratings of Banking Institutions:

Banks, MDBs and FDIs 476,609 528,008 - - - 1,004,617

**Total Exposures** 88,251,259 5,928,976 2,462,841 630,853 13,171,971 110,445,900

**Table 43: Disclosure on Rated Exposures according to Ratings by ECAs for Maybank Islamic**

Exposure Class	Rating Categories					Total RM'000
	1 RM'000	2 RM'000	3 RM'000	4 RM'000	5 RM'000	
<b>As at 31.12.2022</b>						
<b>On and Off Balance-Sheet Exposures</b>						
Rated Exposures						
A) <u>Ratings of Corporate:</u>						
Public Sector Entities	-	6,247	-	-	56,128	62,375
Insurance Cos, Securities Firms & Fund Managers	-	-	-	-	8,006	8,006
Corporates	842	467	-	397	491,897	493,603
B) <u>Ratings of Sovereigns and Central Banks:</u>						
Sovereigns and Central Banks	38,167,887	2,432,600	-	-	-	40,600,487
<b>Total Exposures</b>	<b>38,168,729</b>	<b>2,439,314</b>	<b>-</b>	<b>397</b>	<b>556,031</b>	<b>41,164,471</b>

**As at 31.12.2021**

**On and Off Balance-Sheet Exposures**

Rated Exposures

A) Ratings of Corporate:

Public Sector Entities - 22,011 - - 67,129 89,140

Insurance Cos, Securities Firms & Fund Managers - - - - 6,030 6,030

Corporates 429,139 1,185 - 796 456,037 887,157

B) Ratings of Sovereigns and Central Banks:

Sovereigns and Central Banks 33,446,430 - - - - 33,446,430

**Total Exposures** 33,875,569 23,196 - 796 529,196 34,428,757

## COUNTERPARTY CREDIT RISK

Counterparty credit risk is the risk arising from the possibility that a counterparty may default on current and future payments as required by contracts for treasury-related activities.

Counterparty credit risk originates from the Group's lending business, as well as investment and treasury activities that impact the Group's trading and banking books through dealings in foreign exchange, money market instruments, fixed income securities, commodities, equities and over-the-counter derivatives. The primary distinguishing feature of counterparty credit risk compared to other forms of credit risk is that the future value of the underlying contract is uncertain, and may be either positive or negative depending on the value of all future cash flows.

### Limits

Counterparty credit risk exposures are managed via counterparty limits either on a single counterparty basis or on counterparty group basis, predicated on BNM's Single Counterparty Exposure Limits ("SCEL"). The Group actively monitors and manages its exposures to ensure that exposures to a single counterparty group are within prudent limits at all times. Counterparty credit risk exposures may be materially affected by market risk events. The Group has in place dedicated teams to promptly identify, review, and prescribe appropriate actions to the respective risk committees.

### Credit Risk Exposure Treatment

For on- and off-balance sheet exposures, the Group employs risk treatments in accordance with BNM and Basel guidelines. For derivatives and foreign exchange exposures, the Group measures the Credit Risk Equivalent via the Current Exposure Method. This method calculates the Group's credit risk exposure after considering both the mark-to-market exposures and the appropriate add-on factors for potential future exposures. The add-on factors employed are in accordance with BNM's guidelines and Basel II requirements.

### Counterparty Credit Risk Mitigation

The Group typically engages with entities of strong credit quality and utilises a comprehensive approach of limit setting by trade, counterparty and portfolio levels to diversify exposures across different counterparties. As a secondary recourse, the Group adopts credit risk mitigation methods using collateral netting with counterparties, where appropriate.

Counterparty credit risk exposures in derivatives are mitigated via master netting arrangements i.e. the International Swaps and Derivatives Association ("ISDA") Master Agreement which provides for settlement netting with counterparties, where possible.

The master agreement governs all transactions between the Group and counterparty, and enables the netting of outstanding obligations upon termination of outstanding transactions should an event of default or other predetermined events occur.

In certain cases, the Group may request for further mitigation by entering into a Credit Support Annex ("CSA") agreement with approved ISDA counterparties. This provides collateral margining in order to mitigate counterparty credit risk exposures.

Tables 44 to 46 show the off-balance sheet and counterparty credit risk exposures for the Group, the Bank and Maybank Islamic, respectively.

## Credit Risk

Table 44: Disclosure on Off-Balance Sheet and Counterparty Credit Risk Exposure for Maybank Group

Nature of Item	Principal/ Notional Amount RM'000	Credit Equivalent Amount RM'000	RWA RM'000
<b>As at 31.12.2022</b>			
Direct credit substitutes	11,792,332	11,792,332	6,488,154
Transaction related contingent items	14,553,805	7,370,135	3,999,055
Short-term self-liquidating trade-related contingencies	5,319,140	1,067,336	601,663
Forward asset purchases, forward deposits, partly paid shares and securities which represent commitments with certain drawdowns	-	-	-
Lending 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), and commitment to buy-back Islamic securities under Sell and Buy-Back	15,794,290	1,060,766	60,300
Foreign exchange related contracts	252,886,686	7,065,531	2,177,953
- One year or less	239,183,888	5,626,331	1,057,494
- Over one year to five years	9,811,965	872,024	668,379
- Over five years	3,890,833	567,176	452,080
Interest/profit rate related contracts	35,385,237	1,403,177	1,199,704
- One year or less	8,818,576	52,115	45,027
- Over one year to five years	21,676,288	838,860	727,310
- Over five years	4,890,373	512,202	427,367
Equity related contracts	1,087,602	143,968	30,904
- One year or less	1,087,602	143,968	30,904
- Over one year to five years	-	-	-
- Over five years	-	-	-
Commodity contracts	10,045,207	270,716	105,803
- One year or less	5,645,940	169,874	68,342
- Over one year to five years	4,399,267	100,842	37,461
- Over five years	-	-	-
OTC derivative transactions and credit derivative contracts subject to valid bilateral netting agreements	460,373,844	7,167,533	2,329,675
Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year	82,242,839	64,801,259	29,833,459
Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year	1,306,758	782,008	435,923
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 creditworthiness	104,013,454	13,017,453	3,190,290
Unutilised credit card lines (for portfolios under the Standardised Approach subject to 20% CCF)	470,834	94,166	71,113
<b>Total</b>	<b>995,272,028</b>	<b>116,036,380</b>	<b>50,523,996</b>

Table 44: Disclosure on Off-Balance Sheet and Counterparty Credit Risk Exposure for Maybank Group (cont'd.)

Nature of Item	Principal/ Notional Amount RM'000	Credit Equivalent Amount RM'000	RWA RM'000
<b>As at 31.12.2021</b>			
Direct credit substitutes	9,619,014	9,619,014	6,400,730
Transaction related contingent items	14,356,458	7,262,583	4,741,385
Short-term self-liquidating trade-related contingencies	4,437,537	890,772	645,486
Forward asset purchases, forward deposits, partly paid shares and securities which represent commitments with certain drawdowns	-	-	-
Lending 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), and commitment to buy-back Islamic securities under Sell and Buy-Back	7,426,251	650,577	372,009
Foreign exchange related contracts	186,432,577	4,681,110	1,451,601
- One year or less	175,468,785	3,548,607	789,989
- Over one year to five years	7,668,366	712,122	449,958
- Over five years	3,295,426	420,381	211,654
Interest/profit rate related contracts	26,862,234	1,146,998	960,971
- One year or less	8,736,856	85,108	62,203
- Over one year to five years	14,656,667	442,674	310,545
- Over five years	3,468,711	619,216	588,223
Equity related contracts	1,561,612	176,767	33,474
- One year or less	1,561,612	176,767	33,474
- Over one year to five years	-	-	-
- Over five years	-	-	-
Commodity contracts	9,877,290	496,031	219,738
- One year or less	6,478,403	327,273	145,204
- Over one year to five years	3,398,887	168,758	74,534
- Over five years	-	-	-
OTC derivative transactions and credit derivative contracts subject to valid bilateral netting agreements	324,697,006	5,522,096	2,492,677
Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year	74,811,194	59,103,741	27,255,730
Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year	2,656,275	1,339,234	933,453
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 creditworthiness	98,589,506	11,822,979	2,925,894
Unutilised credit card lines (for portfolios under the Standardised Approach subject to 20% CCF)	475,132	95,026	71,741
<b>Total</b>	<b>761,802,086</b>	<b>102,806,928</b>	<b>48,504,889</b>

## Credit Risk

**Table 45: Disclosure on Off-Balance Sheet and Counterparty Credit Risk Exposure for Maybank**

Nature of Item	Principal/ Notional Amount RM'000	Credit Equivalent Amount RM'000	RWA RM'000
<b>As at 31.12.2022</b>			
Direct credit substitutes	8,417,835	8,417,835	4,113,690
Transaction related contingent items	10,650,510	5,393,107	2,815,646
Short-term self-liquidating trade-related contingencies	4,389,936	879,558	506,456
Forward asset purchases, forward deposits, partly paid shares and securities which represent commitments with certain drawdowns	-	-	-
Lending 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), and commitment to buy-back Islamic securities under Sell and Buy-Back	27,084,096	1,426,290	117,630
Foreign exchange related contracts	237,599,074	6,603,775	1,859,487
- One year or less	226,262,040	5,359,842	886,278
- Over one year to five years	7,701,720	705,831	547,387
- Over five years	3,635,314	538,102	425,822
Interest/profit rate related contracts	25,374,245	930,127	784,486
- One year or less	5,273,397	17,099	11,359
- Over one year to five years	15,320,475	410,726	350,067
- Over five years	4,780,373	502,302	423,060
Equity related contracts	-	-	-
- One year or less	-	-	-
- Over one year to five years	-	-	-
- Over five years	-	-	-
Commodity contracts	10,045,207	270,716	105,803
- One year or less	5,645,940	169,874	68,342
- Over one year to five years	4,399,267	100,842	37,461
- Over five years	-	-	-
OTC derivative transactions and credit derivative contracts subject to valid bilateral netting agreements	481,414,129	7,750,739	2,428,472
Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year	52,448,328	39,595,776	20,129,633
Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year	981,637	594,781	379,416
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 creditworthiness	53,204,225	5,877,647	958,706
Unutilised credit card lines (for portfolios under the Standardised Approach subject to 20% CCF)	21,695	4,339	3,217
<b>Total</b>	<b>911,630,917</b>	<b>77,744,690</b>	<b>34,202,642</b>

Table 45: Disclosure on Off-Balance Sheet and Counterparty Credit Risk Exposure for Maybank (cont'd.)

Nature of Item	Principal/ Notional Amount RM'000	Credit Equivalent Amount RM'000	RWA RM'000
<b>As at 31.12.2021</b>			
Direct credit substitutes	6,834,520	6,834,520	4,452,694
Transaction related contingent items	10,782,666	5,453,689	3,494,294
Short-term self-liquidating trade-related contingencies	3,193,014	639,758	474,809
Forward asset purchases, forward deposits, partly paid shares and securities which represent commitments with certain drawdowns	-	-	-
Lending 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), and commitment to buy-back Islamic securities under Sell and Buy-Back	24,443,213	923,855	426,129
Foreign exchange related contracts	168,230,499	4,039,358	1,111,660
- One year or less	160,732,341	3,245,752	675,615
- Over one year to five years	5,244,647	501,040	295,457
- Over five years	2,253,511	292,566	140,588
Interest/profit rate related contracts	17,853,802	977,887	825,870
- One year or less	4,153,280	25,501	24,849
- Over one year to five years	10,237,511	333,455	213,047
- Over five years	3,463,011	618,931	587,974
Equity related contracts	-	-	-
- One year or less	-	-	-
- Over one year to five years	-	-	-
- Over five years	-	-	-
Commodity contracts	9,877,290	496,031	219,738
- One year or less	6,478,403	327,273	145,204
- Over one year to five years	3,398,887	168,758	74,534
- Over five years	-	-	-
OTC derivative transactions and credit derivative contracts subject to valid bilateral netting agreements	350,584,945	6,195,057	2,674,649
Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year	47,136,382	35,418,448	18,005,342
Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year	2,078,047	990,356	630,466
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 creditworthiness	46,890,185	5,469,265	868,530
Unutilised credit card lines (for portfolios under the Standardised Approach subject to 20% CCF)	20,338	4,068	3,095
<b>Total</b>	<b>687,924,901</b>	<b>67,442,292</b>	<b>33,187,276</b>

## Credit Risk

**Table 46: Disclosure on Off-Balance Sheet and Counterparty Credit Risk Exposure for Maybank Islamic**

Nature of Item	Principal/ Notional Amount RM'000	Credit Equivalent Amount RM'000	RWA RM'000
<b>As at 31.12.2022</b>			
Direct credit substitutes	2,801,221	2,801,221	1,964,993
Transaction related contingent items	3,495,903	1,773,332	1,077,872
Short-term self-liquidating trade-related contingencies	460,706	94,078	28,023
Commitment to buy-back Islamic securities under Sell and Buy Back Agreement transactions	501,455	42,903	–
Foreign exchange related contracts	3,370,141	201,704	109,740
– One year or less	1,582,198	36,128	24,490
– Over one year to five years	1,532,424	137,469	75,052
– Over five years	255,519	28,107	10,198
Interest/profit rate related contracts	1,648,719	14,319	7,424
– One year or less	1,506,000	3,765	2,746
– Over one year to five years	32,719	654	372
– Over five years	110,000	9,900	4,306
OTC derivative transactions and credit derivative contracts subject to valid bilateral netting agreements	20,034,250	420,870	87,107
Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year	26,606,237	21,933,882	7,719,182
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 creditworthiness	7,874,756	1,819,903	356,347
Unutilised credit card lines (for portfolios under the Standardised Approach subject to 20% CCF)	2,550	510	510
<b>Total</b>	<b>66,795,938</b>	<b>29,102,722</b>	<b>11,351,198</b>
<b>As at 31.12.2021</b>			
Direct credit substitutes	2,236,690	2,236,690	1,589,255
Transaction related contingent items	3,202,225	1,623,110	1,120,828
Short-term self-liquidating trade-related contingencies	500,796	102,269	39,713
Commitment to buy-back Islamic securities under Sell and Buy Back Agreement transactions	–	–	–
Foreign exchange related contracts	5,040,170	256,770	127,783
– One year or less	3,223,268	65,914	27,980
– Over one year to five years	774,987	63,042	28,737
– Over five years	1,041,915	127,814	71,066
Interest/profit rate related contracts	1,857,485	51,123	51,361
– One year or less	–	–	–
– Over one year to five years	1,857,485	51,123	51,361
– Over five years	–	–	–
OTC derivative transactions and credit derivative contracts subject to valid bilateral netting agreements	28,846,916	238,931	66,199
Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year	25,259,614	20,641,532	8,367,833
Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year	4,916	4,916	2,714
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 creditworthiness	7,271,789	1,488,470	260,246
Unutilised credit card lines (for portfolios under the Standardised Approach subject to 20% CCF)	456	91	91
<b>Total</b>	<b>74,221,057</b>	<b>26,643,902</b>	<b>11,626,023</b>

### COUNTRY RISK

Country risk is the risk arising from changes in various political, financial or economic factors that may adversely cause a counterparty to default on their obligations. Limits for countries are set based on the country's credit rating, as well as strategic business considerations.



# Market Risk

Market risk is defined as the risk of loss or adverse impact on earnings or capital arising from movements of market rates or prices such as interest rates/profit rates, foreign exchange rates, commodity prices and equity prices.

The Group manages market risk of its trading and non-trading/banking activities by using a variety of measurement techniques and controls.

## TRADED MARKET RISK

The Group's traded market risk exposures are primarily from proprietary trading, flow trading and market making. The risk measurement techniques employed by the Group comprise both quantitative and qualitative measures.

The trading book portfolio is governed by trading book policies and procedures, along with trading limits that includes Value-at-Risk ("VaR") and risk sensitivity measures.

VaR measures the potential loss of value resulting from market movements over a specified period of time within a specified probability of occurrence. The methodology is based on historical simulation, at a 99.2% confidence level using a 1-day holding period. The VaR model is regularly backtested to evaluate its performance and accuracy. The Group also computes Stressed VaR based on a selected historical stress period.

Besides VaR, the Group utilises other non-statistical risk measures, such as exposure to price value of one basis point ("PV01") for managing portfolio sensitivity to market interest/profit rate movements, net open position ("NOP") limit for managing foreign currency exposure and Greek limits for controlling options risk. These measures provide granular information on the Group's market risk exposures and use for control and monitoring purposes.

Dealers are expected to adhere to the trading limits set at all times and are strictly prohibited from transacting in any non-permissible instruments/activities as stipulated in the approved policies. In the event that trading risks are required to be brought to management's attention, there is a robust escalation process to inform designated authorities to ensure that prompt action is taken for any non-adherence to the trading policies and limits. Monthly reports are presented to Senior Management/committee for information and further deliberation.

## NON-TRADED MARKET RISK

Non-traded market risk is primarily inherent risks arising from banking book activities. The major risk classes are interest rate risk/rate of return risk in the banking book and foreign exchange risk.

### Interest Rate Risk/Rate of Return Risk in the Banking Book ("IRR/RoRBB")

IRR/RoRBB is defined as risk of loss in earnings or economic value on banking book exposures arising from movements in interest rates. Sources of IRR/RoRBB include repricing risk, basis risk, yield curve risk and option risk.

Accepting IRR/RoRBB is a normal part of banking and can be an important source of profitability and shareholder value. However, excesses of this risk can be detrimental to the Group's earnings, capital, liquidity and solvency.

Banking book policies and limits are established to measure and manage non-traded market risk. Repricing gap analysis remains as one of the building blocks for IRR/RoRBB assessment for the Group. Earnings-at-Risk ("EaR") and Economic Value-at-Risk ("EVAR") are derived to gauge the maximum tolerance level of the adverse impact of market interest rate movements on earnings and capital respectively.

Through Group Asset & Liability Management Committee ("GALCO") supervision, the lines of businesses are insulated from IRR/RoRBB through fund transfer pricing whereby non-traded market and liquidity risks are centralised at the corporate treasury unit for active risk management and balance sheet optimisation. The corporate treasury unit reviews the risk exposures regularly and recommends strategies to mitigate any unwarranted risk exposures in accordance with the approved policies.

Certain portfolios such as products with non-deterministic characteristics are subjected to periodic statistical modelling to understand the customer/product's behavioural patterns in relation to changing rates and business cycles. Regular risk assessment and stress testing are applied to ensure that the portfolios can withstand the risk tolerance and adverse rate scenarios.

Tables 47 (a) and (b) show the impact of a change in IRR/RoRBB to earnings and capital for Maybank Group, Maybank and Maybank Islamic, respectively.

## Market Risk

**Table 47 (a): Interest Rate Risk/Rate of Return Risk in the Banking Book for Maybank Group, Maybank and Maybank Islamic (Impact on Earnings)**

	As at 31.12.2022			As at 31.12.2021		
	Group ±200bps RM'000	Bank ±200bps RM'000	Maybank Islamic ±200bps RM'000	Group ±200bps RM'000	Bank ±200bps RM'000	Maybank Islamic ±200bps RM'000
Impact on Earnings of which,	939,202	702,920	633,922	1,327,182	976,117	773,459
MYR	2,087,433	1,366,047	726,152	2,336,868	1,405,512	929,918
USD	(869,748)	(759,246)	(89,595)	(748,944)	(530,621)	(156,913)
SGD	(30,797)	165,895	-	(118,518)	156,136	-
IDR	(121,000)	9,830	-	(55,556)	8,767	-
OTHERS*	(126,686)	(79,606)	(2,635)	(86,668)	(63,677)	454

**Table 47 (b): Interest Rate Risk/Rate of Return Risk in the Banking Book for Maybank Group, Maybank and Maybank Islamic (Impact on Capital)**

	As at 31.12.2022			As at 31.12.2021		
	Group ±200bps RM'000	Bank ±200bps RM'000	Maybank Islamic ±200bps RM'000	Group ±200bps RM'000	Bank ±200bps RM'000	Maybank Islamic ±200bps RM'000
Impact on Capital of which,	(6,434,488)	(4,815,803)	(1,224,692)	(2,731,251)	(2,594,679)	(182,090)
MYR	(6,432,779)	(5,196,440)	(1,231,307)	(3,389,933)	(3,137,058)	(252,303)
USD	1,353,796	1,326,059	2,286	1,083,563	913,350	68,478
SGD	(645,408)	(649,160)	-	138,543	(71,334)	-
IDR	(352,525)	(22,151)	-	(313,141)	(31,380)	-
OTHERS*	(357,572)	(274,111)	4,329	(250,283)	(268,257)	1,735

## Notes:

1. All figures are in absolute amount except the total impact is in net aggregate amount (result from after netting off currency/position at different geographical location).
2. \*Inclusive of GBP, HKD, BND, VND, CNY, EUR, PHP and other currencies.

**Foreign Exchange Risk ("FX") in the Banking Book**

FX risk is the risk of loss in value arising from exchange rate movements.

FX risk exposures can be attributed to structural and non-structural positions. Structural FX positions are primarily net investments in overseas branches and subsidiaries whereas other FX positions are non-structural in nature. Generally, structural FX positions need not be hedged as these investments are by definition "perpetual" and revaluation losses will not materialise if they are not sold. The residual or unhedged FX positions are managed in accordance with the approved policies and limits.

Foreign currency assets in the banking book may be match-funded by the same currency to minimise FX NOP. In addition, the Group implements qualitative controls such as listing of permissible on/offshore currencies and hedging requirements for managing FX risk.

FX risk is primarily assessed from both earnings and capital perspectives. Group ALCO plays an active role in ensuring FX risk is managed within the stipulated limits.

### CAPITAL TREATMENT FOR MARKET RISK

The Group adopts the Standardised Approach to compute the minimum capital requirement for market risk as per BNM's Guidelines on Capital Adequacy Framework (Basel II – Risk-Weighted Assets) and CAFIB (Basel II – Risk-Weighted Assets). Tables 7 through 9 separately disclose the RWA and capital requirements for Market Risk for the Group, the Bank and Maybank Islamic, respectively.

Interest rate/profit rate, foreign exchange and options are the primary risk factors in the Group's trading activities, whilst equity is generally attributed to investment banking activities.

### LIQUIDITY RISK

Liquidity risk is defined as the risk of an adverse impact to the Group's financial condition or overall safety and soundness arising from the inability (or perceived inability) or unexpected higher cost to meet obligations.

It is also known as consequential risk, triggered by underlying problems which can be endogenous (e.g. credit risk deterioration, rating downgrade and operational risk events) or exogenous (e.g. market disruption, default in the banking payment system and deterioration of sovereign risk).

Balance sheet risk measures structurally maintain a diverse and stable funding base while achieving an optimal portfolio. These measures drive the desired targets for loans to deposits ratio, sources of funds through borrowing, wholesale borrowing and swaps markets in order to support the growing asset base regionally. Through these measures, the Group shapes its assets and liabilities profile to achieve its desired balance sheet state.

The net cash flow mismatch along different time horizons, also known as liquidity gap analysis, provides Senior Management with a clear picture of the imminent funding needs in the near term as well as the structural balance sheet for the medium term and long term tenors. The sources of fund providers are reviewed to maintain diversification by currency, provider, product and term, thus minimising excessive funding concentration.

The Group runs liquidity stress scenarios to assess the vulnerability of cash flows under stressed conditions. The Group continuously reviews the pool of unencumbered High Quality Liquid Assets ("HQLA") to determine the funding capacity to withstand stressed conditions.

In line with BNM requirements on Liquidity Coverage Ratio ("LCR") and Net Stable Funding ratio ("NSFR"), the Group ensures the LCR and NSFR remain above the specified regulatory minimum requirements.

LCR is a short-term resilience assessment to measure the adequacy of HQLA to withstand an acute liquidity stress scenario over a 30-day horizon. HQLA are liquid assets that can be easily and immediately converted into cash at little or no loss of value.

NSFR promotes long-term structural funding of the Balance Sheet and strengthens the long term resilience of the liquidity risk profile. It ensures that the Group maintains sufficient stable funds to support its asset growth over the medium to long-term horizon.

### EQUITY RISK IN THE BANKING BOOK

Equity price risk is the risk arising from movements in the price of equities. The objective of equity exposure is to determine the nature and extent of the Group's exposure to investment risk arising from equity positions and instruments held in its banking book.

Holding of equity investments comprises of quoted shares which are traded actively in the stock exchange ("Publicly Traded") and unquoted shares which are non-traded in the stock exchange ("Privately Held").

Equity instruments are normally measured at Fair Value Through Profit & Loss ("FVTPL"). However, for non-traded equity instruments, with an irrevocable option at inception, the Group and the Bank measure the changes through Fair Value Through Other Comprehensive Income ("FVOCI") (without recycling to profit or loss upon de-recognition).

Tables 48 and 49 show the equity exposures for banking book positions for the Group and the Bank respectively.

## Market Risk

**Table 48: Equities Disclosures for Banking Book Positions for Maybank Group**

Equity Type	As at 31.12.2022		As at 31.12.2021	
	EAD RM'000	RWA RM'000	EAD RM'000	RWA RM'000
Publicly traded	415,286	539,467	348,582	440,864
Privately held	3,027	4,541	2,859	4,289
Total Net Unrealised Gains/(Losses)		RM'000 2,560,614		RM'000 (53,639)
Cumulative realised gains arising from sales and liquidations in the reporting period		45,206		509,404

**Table 49: Equities Disclosures for Banking Book Positions for Maybank**

Equity Type	As at 31.12.2022		As at 31.12.2021	
	EAD RM'000	RWA RM'000	EAD RM'000	RWA RM'000
Publicly traded	359,874	457,078	337,693	425,470
Privately held	62	94	32	48
Total Net Unrealised Gains/(Losses)		RM'000 2,501,540		RM'000 (103,896)
Cumulative realised gains arising from sales and liquidations in the reporting period		32,567		509,406

# Non-Financial Risk

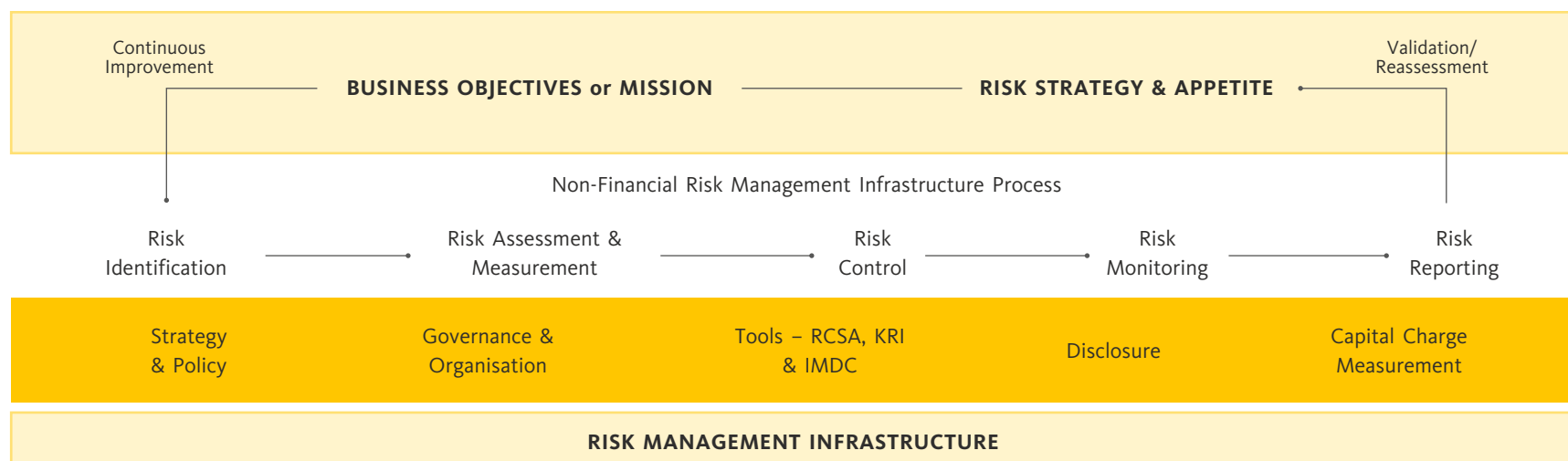
The Group has evolved and broadened its management of operational risk to encompass a wider range of emerging non-financial risk (“NFR”), from the changing risk landscape, heightened regulatory requirements, uncertainty and volatility in the business environment, rapid shifts in technology as well as environmental, social and governance (“ESG”) considerations including climate change. The growing recognition on non-financial risk management stems from the various conduct and compliance related incidents in recent years, such as market manipulation, information technology and cyber risk in the form of denial of service attacks, data theft or online fraud, and operational challenges.

## MANAGEMENT OF NON-FINANCIAL RISK

The management of non-financial risk is anchored on an established risk strategy that provides the overall principles and objectives, with defined risk appetite reflecting the Group’s acceptable tolerance level for non-financial risk. A sound risk governance model premised on the three lines of defence and a robust risk culture are vital in driving the management of non-financial risk in the Group. Further information on the risk governance model and risk culture can be found in the Group Risk write-up under the Corporate Book.

To further strengthen the management of non-financial risk, risk methodologies and tools are deployed and integrated into processes to support businesses from point of discovery of an incident until its resolution. The risk methodologies and tools complement each other for an effective process to identify, assess and measure, control, monitor and report non-financial risk exposures on a timely basis, in minimising the financial loss and reputational risk towards the Group. An integrated risk management system for non-financial risk forms the foundation to enable the implementation of the methodologies and tools.

**Diagram 2: Management of Non-Financial Risk**



### Risk Identification, Assessment and Measurement

- **Incident Management & Data Collection (“IMDC”)**

IMDC provides a structured and systematic platform for the management and reporting of non-financial risk incidents. The collection of consistent and standardised information on non-financial risk incidents in a centralised database enables a comprehensive analysis of operational lapses, focuses on operational ‘hotspots’ and minimises the risk impact of future operational losses.

- **Risk and Control Self-Assessment (“RCSA”)**

RCSA is a process of continuous assessment of non-financial risk inherent in the operations of the Group and the effectiveness of corresponding controls in place to mitigate the risk. It is a risk profiling tool which gives due emphasis to the review of business processes for the identification of control gaps and development of appropriate action plans to address these gaps.

RCSA is also integral to the management of risks arising from major changes in the business and operational environment of the Group, particularly around the identification and mitigation of interconnected risks arising from the introduction of new products, implementation of large scale change programme or IT projects.

- **Key Risk Indicator (“KRI”)**

KRI provides a structured process to measure and monitor critical non-financial risk exposures by way of establishing indicators that serves as early warning signals to increasing risk at the Group, Business and Operating levels. KRI enables close monitoring of non-financial risk to be within the tolerable level before the risk translates into operational losses.

## Non-Financial Risk

### **Risk Control and Mitigation**

The objective of non-financial risk controls and mitigation is to minimise or mitigate non-financial risk exposure to an acceptable level, as defined by the Group's risk appetite.

The key control and mitigation tools deployed in the Group are as follows:

- **Outsourcing**

Outsourcing minimises non-financial risk exposure by enabling the Group to focus on its core business with a view to enhance operational efficiency. An external party is engaged to perform an activity on behalf of the Group whilst the Group still maintains ownership and ultimate responsibility of the activity outsourced including meeting technology risk standards.

- **Anti-Fraud Management**

The Group has in place robust and comprehensive tools and programs aligned to the established vision, principles and strategies in ensuring that the risks arising from fraud are managed in a decisive, timely and systematic manner. Clear roles and responsibilities are outlined at every level of the organisation in promoting high standards of integrity in every employee.

- **Business Continuity Management ("BCM")**

BCM serves as a tool for a comprehensive and integrated approach in building organisational resilience in the event of disruptions, with the capability for an effective response in safeguarding the interests of its key stakeholders, reputation, brand and value-creating activities.

The BCM approach in the Group is premised upon the following key focus:

- To implement mitigating measures to minimise the impact of disruption (i.e. disaster/crisis/emergency) to business and critical operations; and
- To resume business and critical operations of the Group in a timely manner in the event of a disruption.

In the event of a disruption, the main priority for the Group is always the safety of people, followed by stabilisation of the disruptive incident and escalation to the appropriate stakeholder for response with the aim of minimising the potential impact of the disruption. The BCM approach encapsulates key components as further outlined in the diagram below, which includes identification of potential threats to the Group, assessment of the level of impact to the people and business operations should those threats be realised, and implementation of appropriate strategies to ensure people safety and business recovery against downtime. In the ongoing response to managing impact and changes from COVID-19, the Maybank Group Pandemic Preparation Framework remains in place to ensure the continuity of business operations, staff safety and safety of our customers and communities as countries move to endemic phase. Measures include continued activation of Business Continuity Plans and realignment of relevant Standard Operating Procedures ("SOP") to endemic phase.

**Diagram 3: BCM Approach**



The Group continuously reviews business operations' resilience through regular testing (planned and without prior notification), in ensuring the established BCM process and infrastructure have the required capability and resources to withstand and recover from during disruptions. Regular Crisis Simulation Exercise ("CSE") and Business Continuity Plan ("BCP") "Live Run" Activations are carried out for each critical business functions in the Group, in addition to simultaneous CSEs across the Group. Regular testing and exercises, validate amongst others on the preparedness of staff, the readiness of alternate worksites, reliability of IT system disaster recovery and effectiveness of communication, escalation and recovery procedures between all locations.

- **Other Non-Financial Risk – Information Technology ("IT") Risk**

The Group continues to focus on potential cyber threats, infrastructure resilience as well as data loss/theft and disruption that could impact delivery channels, business services, communications and the Group's digital agenda as a whole. This was especially pertinent as the volume and frequency of digital transactions surged due to the pandemic. Detailed analysis of the IT infrastructure and systems, as well as global trends in cyber risks, enable the IT Security team to identify potential threats and security breaches to ensure our systems remain resilient as the volume of online transaction increases. The cyber risk management framework and methodology have been enhanced and aligned with international standards, such as the Cybersecurity Framework and Risk Management Framework by the National Institute of Standards and Technology, to take into account of the emerging threats.

### **Risk Monitoring and Reporting**

Supporting the implementation of the methodologies and tools are clearly defined processes to facilitate timely escalation and reporting of non-financial risk exposures experienced by businesses and operations to designated stakeholders (i.e. Management and relevant risk committees) in the Group for effective oversight on non-financial risk exposure. This includes continuous review, monitoring and reporting and analyses of non-financial risk incidents and its trend, risk 'hotspots', RCSA risk profile, risk exposure level via KRIs and the performance of outsourced service providers.

### **CAPITAL TREATMENT FOR OPERATIONAL RISK**

The Group adopts the Basic Indicator Approach ("BIA") to compute the minimum capital requirement for operational risk as per BNM's Guidelines on Capital Adequacy Framework (Basel II – Risk-Weighted Assets) and CAFIB (Basel II – Risk-Weighted Assets). Tables 7 through 9 disclose separately the RWA and capital requirements for Operational Risk for the Group, the Bank and Maybank Islamic, respectively.

# Shariah Governance

Shariah principles are the foundation for the practice of Islamic finance through the observance of the tenets, conditions and principles prescribed by Shariah, as resolved by the Shariah Advisory Council (“SAC”) of BNM and Securities Commission Malaysia or the relevant regulators in the jurisdiction where the business is operating in, and the appointed Shariah Committee (“SC”) within Maybank Group. Comprehensive Shariah compliance infrastructure and governance arrangement will ensure stakeholders’ confidence in Islamic financial institutions’ business activities and operations.

In accordance with BNM’s requirements, the Group has established a comprehensive and sound Shariah Governance Framework to strengthen key responsibilities and accountabilities of the Board, Shariah Committee, Management and key stakeholders to promote end-to-end Shariah compliance on Islamic business operations. The Framework also relates to Shariah Committee’s objectivity to reinforce sound decision-making process and robustness of internal control functions for effective management of Shariah Non-Compliance (“SNC”) risks.

Underpinning the Shariah Governance Framework is the detailed policies and procedures that include the required steps and parameters to ensure that each transaction or business activity is executed by the Group in accordance with Shariah requirements, as well as the implications and reporting of SNC incidents.

## **IMPLEMENTATION OF THE SHARIAH GOVERNANCE FRAMEWORK (“SGF”)**

The implementation of sound and robust Shariah governance framework is reflected by effective and responsible Board, Management and independent SC that are both competent and accountable, supported by strong internal Shariah Control Functions to provide effective and efficient oversight. The end-to-end Shariah compliant governance mechanism are executed through three (3) lines of defence that cater for both pre-execution and post-execution.

The first line of defence is supported by the Business and Support Units who are responsible to manage day-to-day Shariah risks inherent in their business, activities and risk exposure; and the Shariah Secretariat function who provides day-to-day Shariah advice to relevant parties based on SC and SAC resolutions, and perform in-depth research and studies on Shariah matters and disseminate SC decisions and advices to relevant parties.

The second line of defence comprises of the Shariah Risk function to systematically identify, measure, monitor and control SNC risks to mitigate any possible non-compliance events; and the Shariah Review function who conducts regular assessment on the compliance of the business operations and activities with Shariah requirements.

The third line of defence is the Shariah Audit function who provides independent and periodic assessment to improve the degree of compliance in ensuring a sound and effective internal control system for Shariah compliance.

## **RECTIFICATION PROCESS OF SHARIAH NON-COMPLIANT INCOME**

Shariah non-compliance is the failure in fulfilling the required Shariah requirements and tenets as determined by the Shariah Advisory Council of BNM, Securities Commission Malaysia or the relevant host country regulators and the appointed Shariah Committee within the Group. The control structure for handling and reporting of Shariah non-compliance incidents has been emplaced in the Group. As at 31 December 2022, Maybank Islamic reported two (2) Shariah Non-Compliance incidents with profit totalling RM632,890.16 being purified.

# Investment Account (“IA”)

The Islamic Financial Services Act 2013 (“IFSA”) distinguishes investment account from Islamic deposits, where an investment account is defined by the application of Shariah contracts with a non-principal guarantee feature for the purpose of investment.

Mudarabah is a contract between a customer as the capital provider (rabbul mal) and the Bank as an entrepreneur (mudarib) under which the customer provides capital to be invested in a Mudarabah venture that is managed by the Bank. Any profit generated from the venture is distributed between the customer and the Bank according to a mutually agreed Profit Sharing Ratio (“PSR”) whilst financial losses are borne by the customer provided such losses are not due to the Bank’s misconduct (ta’addi), negligence (taqsir) or breach of specific terms (mukhalafah al-shurut).

The Mudarabah venture managed by the Bank in this instance refers to monies placed by the customers through various Mudarabah products offered by the Bank which are subsequently invested into a blended portfolio of the Bank’s assets.

Maybank Islamic offers two (2) types of Investment Account (“IA”) namely, Restricted Profit Sharing Investment Account (“RA”) which refers to an IA where the customer provides a specific investment mandate to the Bank and Unrestricted Investment Account (“UA”) which refers to an IA where the customer provides the Bank with the mandate to make the ultimate investment decision without specifying any particular restriction or condition. The IA is not protected by the Perbadanan Insurans Deposit Malaysia (“PIDM”).

## Maybank Islamic’s Investment Account (“IA”)

In line with the transition requirements by BNM, Maybank Islamic had undergone a reclassification exercise effective 16 July 2015 whereby eligible Mudarabah-based deposit accounts were reclassified to IA for customers who chose to do so.

The investment objective of IA places emphasis on capital preservation and stable returns with the risk profile varying from low risk to low-to-medium risk depending on the fund it is invested in.

Notwithstanding the above, customers are made aware, through the respective fund’s Product Disclosure Sheet, of the various risk factors associated with IA which include (but not limited to):

- Risk of capital reduction – Any investment carries the risk of reduction in the value of purchasing power. Hence, Maybank Islamic will only invest the fund in diversified assets with low risk attributes and apply sound investment management standards.
- Market Risk – Invested assets are subject to fluctuations in market rates, which may impact the overall income performance of the fund. This risk shall be managed by Maybank Islamic in accordance with its overall hedging strategy.
- Liquidity Risk – Such risk occurs when withdrawals/redemption exceed total investments. The risk shall be managed by Maybank Islamic in accordance with its overall liquidity management strategy.
- Credit Risk – This risk may arise when substantial amount of assets for the fund goes into default. This shall be managed by Maybank Islamic by prudent selection of diversified asset portfolios and close monitoring of the performance of the selected assets.

The investment mandate, strategy and parameters for IA are in accordance with the governance set up by Maybank Islamic to ensure effective and efficient oversight on the business activities and operations of UA in safeguarding the customer’s interest.

The roles and responsibilities of the respective committees are as below:

- Broad oversight, accountability and responsibility of Maybank Islamic Board, Group Shariah Committee and Board Committee;
- Oversight, guidance and observance by the Executive Committee;
- Accountability of the Senior Management in ensuring management, development and implementation of operational policies that govern the conduct of the IA; and
- Establishment of functions for the IA unit.

## UA Performance

The gross exposure of the financing funded by UA as at 31 December 2022 was RM25,637,701,930. The performance of UA is as described in the table below:

As at 31 December 2022	%
Return on Assets (ROA)	3.97%
Average Net Distributable Income	4.00%
Average Net Distributable Income Attributable to the IAH	1.28%
Average Profit Sharing Ratio to the IAH	32.04%
	RM’000
Impaired assets funded by UA	59,617
Financing funded by UA under Stage 1	26,422
Financing funded by UA under Stage 2	33,598
Financing funded by UA under Stage 3	12,540

Notes:

1. Return on Assets refers to total gross income/average amount of assets funded by UA.
2. Average Net Distributable Income refers to total average net distributable income/average amount of assets funded by UA.



# Forward-Looking Statements

This document could or may contain certain forward-looking statements that are based on current expectations or beliefs, as well as assumptions or anticipations of future events. These forward-looking statements can be identified by the fact that they do not relate only to historical or current facts. Forward-looking statements often use words such as anticipate, target, expect, estimate, plan, goal, believe, will, may, would, could, potentially, intend or other words of similar expressions. Undue reliance should not be placed solely on any of such statements because, by their very nature, they are subject to known and unknown risks and uncertainties and can be affected by other factors that could cause actual results, and the Group's plans and objectives, to differ materially from those expressed or implied in the forward-looking statements.

Forward-looking statements speak only as of the date they are made, and it should not be assumed that they have been revised or updated in light of changes in the global, political, economic, business, competitive, market and regulatory forces, future exchange and interest rates, changes in tax rates and future business combinations and dispositions.

The Group undertakes no obligation to revise or update any forward-looking statements contained in this document, regardless of whether those statements are affected as a result of new information, future events or otherwise.

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