

UNITED OVERSEAS BANK (MALAYSIA) BHD
(Company No. 271809 K)
AND ITS SUBSIDIARY COMPANIES
(Incorporated in Malaysia)

PILLAR 3 DISCLOSURE
31 DECEMBER 2020

Domiciled in Malaysia
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**Attestation by Chief Executive Officer pursuant to BASEL II – Pillar 3 Disclosures
for the financial year ended 31 December 2020**

I hereby confirm that the Pillar 3 disclosures for the financial year ended 31 December 2020 have been prepared in accordance with Bank Negara Malaysia's Risk Weighted Capital Adequacy Framework (Basel II) - Disclosure Requirements (Pillar 3) and Capital Adequacy Framework for Islamic Banks (CAFIB) - Disclosure Requirements (Pillar 3). The Pillar 3 disclosures are consistent with the manner that the risks are assessed and managed, and are not misleading in any particular way.



Wong Kim Choong
Chief Executive Officer

Date: 10 February 2021

1. INTRODUCTION

Pillar 3 Disclosure

This Pillar 3 Disclosure document is prepared in accordance with the requirements under Bank Negara Malaysia Risk Weighted Capital Adequacy Framework (Basel II) - Disclosure Requirements (Pillar 3) and Capital Adequacy Framework for Islamic Banks (CAFIB) - Disclosure Requirements (Pillar 3). The disclosures are to facilitate the understanding of United Overseas Bank (Malaysia) Bhd (UOBM)'s risk profile and assessment of the Bank's capital adequacy. This is to be read in conjunction with the Bank's financial statements.

Effective July 2016, UOBM started to offer Islamic financial services under its Islamic Banking Window.

Scope of Application

In accordance with the accounting standards for financial reporting, all subsidiaries of the Bank are fully consolidated from the date the Bank obtains control until the date such control ceases. The Bank's investment in an associate is accounted for using the equity method from the date the Bank obtains significant influence over the associate until the date such significant influence ceases. For the purpose of computing capital adequacy requirements at the Bank level, investment in subsidiaries and investment in an associate are deducted from regulatory capital in compliance with Bank Negara Malaysia's Capital Adequacy Framework (Capital Components).

The transfer of funds or regulatory capital within the UOBM Group is generally subject to regulatory approval.

2. CAPITAL ADEQUACY

Our approach to capital management is to ensure that the UOBM Group maintains strong capital levels to support our businesses and growth, meet regulatory capital requirements at all times and maintain a good credit rating.

We achieve these objectives through the UOBM Group's Internal Capital Adequacy Assessment Process (ICAAP) whereby we actively monitor and manage the Group's capital position over a medium-term horizon, involving the following:

- setting capital targets for the Bank. As part of this, we take into account future regulatory changes and stakeholder expectations;
- forecasting capital demand for material risks based on the Bank's risk appetite. This is evaluated across all business segments and includes the UOBM Group's capital position before and after mitigation actions under adverse but plausible stressed conditions; and
- determining the availability and composition of different capital components.

Two committees oversee our capital planning and assessment process. The Risk Management Committee assists the Board with the management of risks arising from the business of the UOBM Group while the Risk and Capital Committee manages the UOBM Group's ICAAP, overall risk profile and capital requirements. The UOBM Group's capital position, capital management plan, contingency capital plan, as well as any capital management actions, are submitted to the senior management and/or to the Board for approval.

2. CAPITAL ADEQUACY (Cont'd.)

The aggregate breakdown of Risk-Weighted Assets (RWA) by exposures in each category of the Bank for the financial year ended 31 December 2020 was as follows:

Item	Exposure class 2020	Exposures pre Credit Risk Mitigation (CRM)	Exposures post Credit Risk Mitigation (CRM)	RWA	Minimum capital requirement at 8%
		RM'000	RM'000	RM'000	RM'000
1.0	Credit risk				
1.1	Exempted exposures under the Standardised Approach (SA)				
	<i>On-balance sheet exposures</i>				
	Sovereigns/Central Banks	23,059,910	22,859,553	229,862	18,389
	Public Sector Entities	179,046	179,046	-	-
	Insurance Cos, Securities Firms and Fund Managers	62	62	62	5
	Corporates	294,798	292,128	291,658	23,333
	Regulatory Retail	9,965	9,965	9,965	797
	Other Assets	1,321,778	1,321,778	702,149	56,172
	Equity Exposure	155,929	155,929	155,929	12,474
	Defaulted exposures	3,950	3,950	5,922	474
	Total on-balance sheet exposures	25,025,438	24,822,411	1,395,547	111,644
	<i>Off-balance sheet exposures</i>				
	OTC derivatives	98,390	98,390	56,255	4,500
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	90,766	89,748	88,198	7,056
	Total off-balance sheet exposures	189,156	188,138	144,453	11,556
	Total on and off-balance sheet exposures (SA)	25,214,594	25,010,549	1,540,000	123,200
1.2	Exposures under the Foundation IRB Approach (FIRB)				
	<i>On-balance sheet exposures</i>				
	Banks, Development Financial Institutions and MDBs	8,545,328	7,696,678	743,093	59,447
	Insurance Cos, Securities Firms and Fund Managers	1,130,296	1,120,279	278,386	22,271
	Corporates	34,219,891	30,171,147	30,587,833	2,447,027
	Equity (simple risk weight)	2,456	2,456	7,369	590
	Defaulted exposures	983,679	965,294	-	-
	Total on-balance sheet exposures	44,881,649	39,955,855	31,616,681	2,529,334
	<i>Off-balance sheet exposures</i>				
	OTC derivatives	2,201,029	2,197,675	883,199	70,656
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	7,546,399	6,555,912	6,106,505	488,520
	Defaulted exposures	16,613	15,446	-	-
	Total off-balance sheet exposures	9,764,041	8,769,033	6,989,704	559,176
	Total on and off-balance sheet exposures (FIRB)	54,645,690	48,724,888	38,606,385	3,088,511

2. CAPITAL ADEQUACY (Cont'd.)

Item	Exposure class 2020	Exposures pre CRM	Exposures post CRM	RWA	Min. capital requirement at 8%
		RM'000	RM'000	RM'000	RM'000
1.3	<u>Exposures under the Advance IRB Approach (AIRB)</u>				
	<i>On-balance sheet exposures</i>				
	Corporates	-	-	-	-
	Residential mortgages	35,534,166	35,534,166	3,822,943	305,835
	Qualifying revolving retail	2,548,509	2,548,509	929,284	74,343
	Other retail	15,730,978	15,730,978	2,836,203	226,896
	Defaulted exposures	745,269	745,269	358,289	28,663
	Total on-balance sheet exposures	54,558,922	54,558,922	7,946,719	635,738
	<i>Off-balance sheet exposures</i>				
	OTC derivatives	482	482	110	9
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	9,347,069	9,347,069	1,251,725	100,138
	Defaulted exposures	-	-	-	-
	Total off-balance sheet exposures	9,347,551	9,347,551	1,251,836	100,147
	Total on and off-balance sheet exposures (AIRB)	63,906,473	63,906,473	9,198,555	735,884
	Total exposures under IRB Approach	118,552,163	112,631,361	47,804,940	3,824,395
	Total (exempted exposures and exposures under the IRB Approach) after scaling factor			52,213,236	4,177,059
2.0	<u>Large exposures risk requirement</u>	-	-	-	-
3.0	<u>Market risk</u>	Long position	Short position		
	Interest rate risk	121,706	88,261	907,177	72,574
	Foreign currency risk	498,504	570,773	94,230	7,538
	Commodity risk	1,622	-	3,041	243
	Options risk	-	-	62,200	4,976
4.0	<u>Operational risk (Basic Indicator Approach)</u>			5,658,697	452,696
5.0	<u>Total RWA and capital requirements</u>			58,938,581	4,715,087

2. CAPITAL ADEQUACY (Cont'd.)

The aggregate breakdown of RWA by exposures in each category of the Bank for the financial year ended 31 December 2019 was as follows:

Item	Exposure class 2019	Exposures pre CRM	Exposures post CRM	RWA	Min. capital requirement at 8%
		RM'000	RM'000	RM'000	RM'000
1.0	<u>Credit risk</u>				
1.1	<u>Exempted exposures under the Standardised Approach (SA)</u>				
	<i>On-balance sheet exposures</i>				
	Sovereigns/ Central Banks	13,070,835	13,070,835	-	-
	Public Sector Entities	25,709	25,709	-	-
	Insurance Cos, Securities Firms and Fund Managers	172	172	172	14
	Corporates	331,674	329,427	329,028	26,322
	Other Assets	910,065	910,065	631,665	50,533
	Equity Exposure	131,809	131,809	131,809	10,545
	Defaulted Exposures	3,184	3,184	3,486	279
	Total on-balance sheet exposures	14,473,448	14,471,202	1,096,161	87,693
	<i>Off-balance sheet exposures</i>				
	OTC derivatives	81,756	81,756	92,504	7,400
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	105,764	104,760	49,149	3,932
	Total off-balance sheet exposures	187,520	186,516	141,653	11,332
	Total on and off-balance sheet exposures (SA)	14,660,968	14,657,717	1,237,814	99,025
1.2	<u>Exposures under the Foundation IRB Approach (FIRB)</u>				
	<i>On-balance sheet exposures</i>				
	Banks, Development Financial Institutions and MDBs	12,669,954	9,090,009	1,120,300	89,624
	Insurance Cos, Securities Firms and Fund Managers	82,072	50,556	14,669	1,174
	Corporates	33,570,499	29,801,343	30,455,041	2,436,403
	Equity (simple risk weight)	2,075	2,075	6,226	498
	Defaulted exposures	816,872	786,326	-	-
	Total on-balance sheet exposures	47,141,471	39,730,310	31,596,236	2,527,699
	<i>Off-balance sheet exposures</i>				
	OTC derivatives	1,530,158	1,527,706	739,461	59,157
	Off-Balance sheet exposures other than OTC derivatives or credit derivatives	8,017,459	6,970,951	6,894,161	551,533
	Defaulted exposures	11,882	11,413	-	-
	Total off-balance sheet exposures	9,559,499	8,510,069	7,633,622	610,690
	Total on and off-balance sheet exposures (FIRB)	56,700,970	48,240,380	39,229,858	3,138,389

2. CAPITAL ADEQUACY (Cont'd.)

Item	Exposure class 2019	Exposures pre CRM	Exposures post CRM	RWA	Min. capital requirement at 8%
		RM'000	RM'000	RM'000	RM'000
1.3	<u>Exposures under the Advance IRB Approach (AIRB)</u>				
	<i><u>On-balance sheet exposures</u></i>				
	Corporates	-	-	-	-
	Residential mortgages	34,676,718	34,676,718	3,785,056	302,804
	Qualifying revolving retail	2,841,248	2,841,248	1,237,859	99,029
	Other retail	15,843,438	15,843,307	2,892,586	231,407
	Defaulted exposures	794,160	794,160	713,153	57,052
	Total on-balance sheet exposures	54,155,565	54,155,433	8,628,654	690,292
	<i><u>Off-balance sheet exposures</u></i>				
	OTC derivatives	390	390	118	9
	Off-Balance sheet exposures other than OTC derivatives or credit derivatives	9,796,241	9,796,090	1,357,946	108,636
	Defaulted exposures	145	145	0	0
	Total off-balance sheet exposures	9,796,775	9,796,624	1,358,065	108,645
Total on and off-balance sheet exposures (AIRB)	63,952,340	63,952,057	9,986,719	798,938	
Total exposures under IRB Approach	120,653,310	112,192,437	49,216,577	3,937,326	
Total (exempted exposures and exposures under the IRB Approach) after scaling factor			53,407,386	4,272,591	
2.0	<u>Large exposures risk requirement</u>	-	-	-	-
3.0	<u>Market risk</u>				
		Long position	Short position		
	Interest rate risk	46,650,258	31,936,667	1,539,174	123,134
	Foreign currency risk	285,838	584,747	312,290	24,983
	Commodity risk	290,120	301,901	138,735	11,099
Options risk	-	-	21,693	1,735	
4.0	<u>Operational risk (Basic Indicator Approach)</u>			5,590,647	447,252
5.0	<u>Total RWA and capital requirements</u>			61,009,925	4,880,794

2. CAPITAL ADEQUACY (Cont'd.)

The aggregate breakdown of RWA by exposures in each category of the Islamic Banking Window for the financial year ended 31 December 2020 was as follows:

Item	Exposure class 2020	Exposures pre CRM	Exposures post CRM	RWA	RWA absorbed by PSIA	Total RWA after effects of PSIA	Min. capital requirement at 8%
		RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
1.0	<u>Credit risk</u>						
1.1	<u>Exempted exposures under the Standardised Approach (SA)</u>						
	<i>On-balance sheet</i>						
	Sovereigns/central banks	1,338,772	1,338,772	-	-	-	-
	Corporate	535	95	95	-	95	8
	Other assets	6,486	6,486	6,486	-	6,486	519
	Total on-balance sheet exposures	1,345,793	1,345,353	6,581	-	6,581	526
	<i>Off-balance sheet exposures</i>						
	OTC derivatives	5,627	5,627	2,013	-	2,013	161
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	-	-	-	-	-	-
	Total off-balance sheet exposures	5,627	5,627	2,013	-	2,013	161
	Total on and off-balance sheet exposures (SA)	1,351,421	1,350,981	8,594	-	8,594	688
1.2	<u>Exposures under the FIRB Approach</u>						
	<i>On-balance sheet exposures</i>						
	Banks, Development Financial Institutions and MDBs	115,504	115,504	11,893	-	11,893	951
	Insurance Cos, Securities Firms & Fund Managers	1,001,476	1,001,476	238,004	238,004	238,004	19,040
	Corporates	2,092,581	1,966,802	2,457,216	527,369	1,691,844	135,348
	Defaulted Exposures	15,486	15,486	-	-	-	-
	Total on-balance sheet exposures	3,225,048	3,099,269	2,707,113	765,372	1,941,741	155,339
	<i>Off-balance sheet exposures</i>						
	OTC Derivatives	637	612	804	-	804	64
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	131,255	124,533	160,743	-	160,743	12,859
	Total off-balance sheet exposures	131,892	125,145	161,547	-	161,547	12,924
	Total on and off-balance sheet exposures (FIRB)	3,356,940	3,224,414	2,868,660	765,372	2,103,288	168,263

2. CAPITAL ADEQUACY (Cont'd.)

Item	Exposure class 2020	Exposures pre CRM	Exposures post CRM	RWA	RWA absorbed by PSIA	Total RWA after effects of PSIA	Min. capital requirement at 8%
		RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
1.3	<u>Exposures under the AIRB Approach</u>						
	<u>On-balance sheet exposures</u>						
	Corporate	-	-	-	-	-	-
	Residential mortgages	2,539,930	2,539,930	408,690	-	408,690	32,695
	Other retail	1,087,704	1,087,704	294,283	-	294,283	23,543
	Defaulted exposures	59,951	59,951	18,139	-	18,139	1,451
	Total on-balance sheet exposures	3,687,585	3,687,585	721,111	-	721,111	57,689
	<u>Off-balance sheet exposures</u>						
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	457,948	457,948	73,259	-	73,259	5,861
	Total off-balance sheet exposures	457,948	457,948	73,259	-	73,259	5,861
	Total on and off-balance sheet exposures (AIRB)	4,145,532	4,145,532	794,370	-	794,370	63,550
	Total exposures under IRB Approach	7,502,472	7,369,946	3,663,030	765,372	2,897,658	231,813
	Total (exempted exposures and exposures under the IRB Approach) after scaling factor			3,891,406	811,295	3,080,111	246,409
2.0	<u>Large exposures risk requirement</u>	-	-	-	-	-	-
3.0	<u>Market risk</u>						
		Long position	Short position				
	Interest Rate Risk	256	256	5,221	-	5,221	418
	Foreign Currency Risk	62	339	339	-	339	27
	Commodity Risk	-	-	-	-	-	-
	Options Risk	-	-	-	-	-	-
4.0	<u>Operational risk (Basic Indicator Approach)</u>			93,714	-	93,714	7,497
5.0	<u>Total RWA and capital requirements</u>			3,990,680	811,295	3,179,385	254,351

2. CAPITAL ADEQUACY (Cont'd.)

The aggregate breakdown of RWA by exposures in each category of the Islamic Banking Window for the financial year ended 31 December 2019 was as follows:

Item	Exposure class 2019	Exposures pre CRM	Exposures post CRM	RWA	RWA absorbed by PSIA	Total RWA after effects of PSIA	Min. capital requirement at 8%
		RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
1.0	Credit risk						
1.1	Exempted exposures under the Standardised Approach (SA)						
	<i>On-balance sheet exposures</i>						
	Sovereigns/central banks	1,755,374	1,755,374	-	-	-	-
	Other assets	6,491	6,491	6,491	-	6,491	519
	Total on-balance sheet exposures	1,761,865	1,761,865	6,491	-	6,491	519
	<i>Off-balance sheet exposures</i>						
	OTC derivatives	2,277	2,277	1,049	-	1,049	84
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	-	-	-	-	-	-
	Total off-balance sheet exposures	2,277	2,277	1,049	-	1,049	84
	Total on and off-balance sheet exposures (SA)	1,764,142	1,764,142	7,540	-	7,540	603
1.2	Exposures under the FIRB Approach						
	<i>On-balance sheet exposures</i>						
	Banks, DFIs and MDBs	50,529	50,529	5,339	-	5,339	427
	Corporates	1,446,443	1,394,480	1,674,863	481,869	1,192,994	95,440
	Total on-balance sheet exposures	1,496,972	1,445,008	1,680,202	481,869	1,198,333	95,867
	<i>Off-balance sheet exposures</i>						
	OTC Derivatives	-	-	-	-	-	-
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	139,756	135,203	169,760	-	169,760	13,581
	Total off-balance sheet exposures	139,756	135,203	169,760	-	169,760	13,581
	Total on and off-balance sheet exposures (FIRB)	1,636,728	1,580,211	1,849,962	481,869	1,368,093	109,447

2. CAPITAL ADEQUACY (Cont'd.)

Item	Exposure class 2019	Exposures pre CRM	Exposures post CRM	RWA	RWA absorbed by PSIA	Total RWA after effects of PSIA	Min. capital requirement at 8%
		RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
1.3	<u>Exposures under the AIRB Approach</u>						
	<u>On-balance sheet exposures</u>						
	Corporate	-	-	-	-	-	-
	Residential mortgages	2,079,890	2,079,890	343,309	-	343,309	27,465
	Other retail	835,470	835,470	222,587	-	222,587	17,807
	Defaulted exposures	38,366	38,366	9,656	-	9,656	773
	Total on-balance sheet exposures	2,953,726	2,953,726	575,552	-	575,552	46,044
	<u>Off-balance sheet exposures</u>						
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	539,462	539,462	80,410	-	80,410	6,433
	Total off-balance sheet exposures	539,462	539,462	80,410	-	80,410	6,433
	Total on and off-balance sheet exposures (AIRB)	3,493,189	3,493,189	655,962	-	655,962	52,477
	Total exposures under IRB Approach	5,129,916	5,073,400	2,505,924	481,869	2,024,055	161,924
	Total (exempted exposures and exposures under the IRB Approach) after scaling factor			2,663,820	510,781	2,153,039	172,243
2.0	<u>Large exposures risk</u>	-	-	-	-	-	-
3.0	<u>Market risk</u>	Long position	Short position				
	Benchmark Rate Risk	219,345	138,988	2,349		2,349	188
	Foreign Currency Risk	17	12	17		17	1
	Commodity Risk	-	-	-	-	-	-
	Options Risk	-	-	-	-	-	-
4.0	<u>Operational risk (Basic Indicator Approach)</u>			66,532	-	66,532	5,323
5.0	<u>Total RWA and capital requirements</u>			2,732,718	510,781	2,221,936	177,755

3. CAPITAL STRUCTURE

As at 31 December 2020, the Bank had issued the following subordinated notes under the RM8 billion Medium Term Notes and/or Senior Medium Term Notes Programme :

- (1) On 25 July 2018, the Bank issued RM600 million subordinated notes at 4.80% p.a maturing on 25 July 2028;
- (2) On 3 August 2020, the Bank issued RM750 million subordinated notes at 3.00% p.a. maturing on 2 August 2030.

For the main features of the subordinated notes, please refer to Note 22 in the financial statements.

The capital adequacy ratios of the Group and the Bank are computed in accordance with BNM's Capital Adequacy Framework (Capital Components) and Capital Adequacy Framework (Basel II – Risk-Weighted Assets).

The capital structure of the Group and the Bank was as follows:

	Group		Bank	
	31-Dec-20 RM'000	31-Dec-19 RM'000	31-Dec-20 RM'000	31-Dec-19 RM'000
<u>Common Equity Tier 1 (CET1)/</u>				
<u>Tier 1 Capital</u>				
Paid-up share capital	792,555	792,555	792,555	792,555
Retained profits	10,174,394	9,763,631	10,236,774	9,830,387
Other reserves	493,176	353,866	302,144	162,834
Regulatory adjustments applied in the calculation of CET1 Capital	(469,918)	(374,785)	(704,740)	(438,805)
Total CET1/Tier 1 Capital	<u>10,990,207</u>	<u>10,535,267</u>	<u>10,626,733</u>	<u>10,346,971</u>
<u>Tier 2 Capital</u>				
Tier 2 Capital instruments	1,350,000	1,600,000	1,350,000	1,600,000
Loan/financing loss provision				
- Surplus eligible provisions over expected losses	298,644	309,252	299,172	309,953
- General provisions	30,000	25,764	19,249	15,472
Regulatory adjustments applied in the calculation of Tier 2 Capital	82,858	85,508	-	-
Total Tier 2 Capital	<u>1,761,502</u>	<u>2,020,524</u>	<u>1,668,421</u>	<u>1,925,425</u>
Total Capital	<u>12,751,709</u>	<u>12,555,791</u>	<u>12,295,154</u>	<u>12,272,396</u>

The capital adequacy ratios of the Group and the Bank were as follows:

	Group		Bank	
	31-Dec-20	31-Dec-19	31-Dec-20	31-Dec-19
CET1/Tier 1 Capital	18.407%	17.073%	18.030%	16.959%
Total Capital	<u>21.358%</u>	<u>20.347%</u>	<u>20.861%</u>	<u>20.115%</u>
CET1/Tier 1 Capital (net of proposed dividends)	17.558%	16.089%	17.170%	15.964%
Total Capital (net of proposed dividends)	<u>20.508%</u>	<u>19.363%</u>	<u>20.001%</u>	<u>19.120%</u>

3. CAPITAL STRUCTURE (Cont'd.)

The capital adequacy ratios of Islamic Banking Window are computed in accordance with BNM Capital Adequacy Framework for Islamic Banking (Capital Components) and Capital Adequacy Framework for Islamic Banks (Risk Weighted Assets).

The capital structure of the Islamic Banking Window was as follows:

	31-Dec-20	31-Dec-19
	RM'000	RM'000
<u>Common Equity Tier 1 (CET1)/ Tier 1 Capital</u>		
Capital fund	450,000	450,000
Retained profits	6,311	6,602
Other reserves	262	1,170
Regulatory adjustments applied in the calculation of CET1 Capital	(10,130)	(5,698)
Total CET1/Tier 1 Capital	<u>446,443</u>	<u>452,074</u>
<u>Tier 2 Capital</u>		
Financing loss provision		
- Surplus eligible provisions over expected losses	18,173	12,873
- General provisions	107	94
Total Tier 2 Capital	<u>18,280</u>	<u>12,967</u>
Total Capital	<u>464,723</u>	<u>465,041</u>

The capital adequacy ratios of the Islamic Banking Window were as follows:

	31-Dec-20	31-Dec-19
Before the effects of RSIA		
CET1/Tier 1 Capital	11.187%	16.543%
Total Capital	<u>11.645%</u>	<u>17.018%</u>
After the effects of RSIA		
CET1/Tier 1 Capital	14.042%	20.346%
Total Capital	<u>14.617%</u>	<u>20.930%</u>

In accordance with BNM's Guidelines on the Investment Account, the credit and market risk weighted assets funded by the Restricted Specific Investment Account (RSIA) which qualify as risk absorbent are excluded from the calculation of capital adequacy ratio. As at 31 December 2020, credit risks related to RSIA assets excluded from the total capital ratio calculation amounting to RM811,295,000 (2019: RM510,781,000).

4. RISK MANAGEMENT

Risk Management Overview

Managing risk is an integral part of our business strategy. Our risk management approach focuses on ensuring continued financial soundness and safeguarding the interests of our stakeholders, while remaining nimble to seize value-creating business opportunities in a fast changing environment. The Bank is committed to upholding high standards of corporate governance, sound risk management principles and business practices to achieve sustainable, long-term growth. The Bank continually strives towards strengthening our risk management practices to support our strategic objectives.

Risk Culture

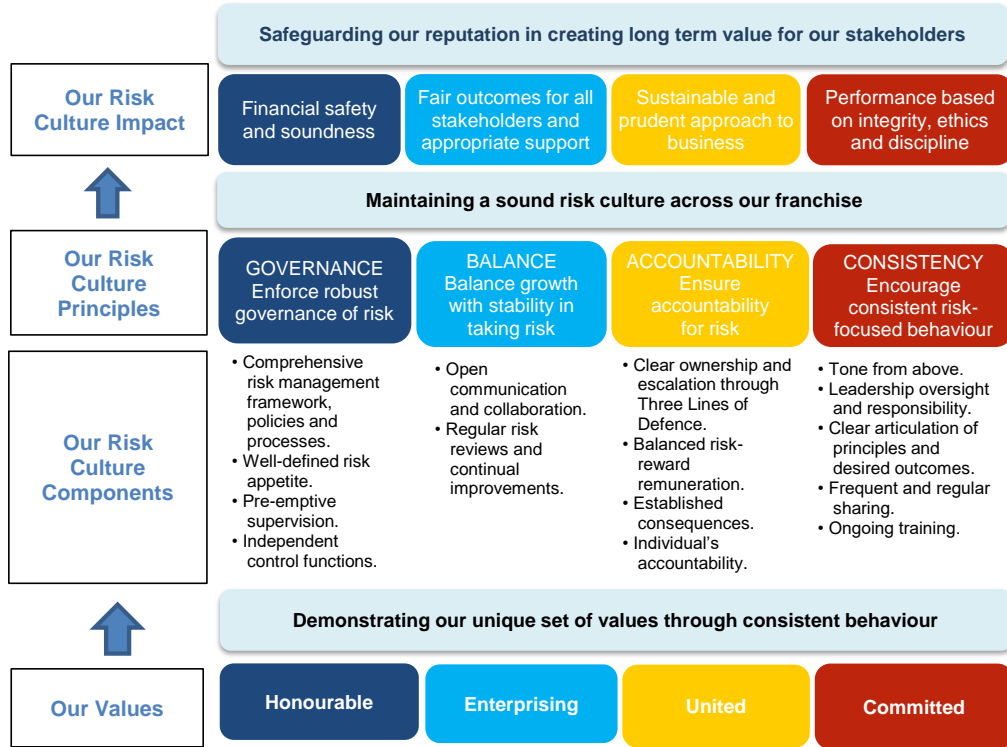
The Bank believes that a strong risk culture is vital to the long-term sustainability of the Bank's business franchise. Specifically, risk culture refers to the norms, attitudes and behaviours related to risk awareness, risk-taking and risk management, and controls that shape decisions on risks. The Bank's risk culture is based on the Bank's values. A strong risk culture ensures that the Bank's decisions and actions are considered and focused on our customers, and that the Bank is not distracted by short-term gains.

UOBM's Risk Culture Statement

Managing risk is integral to how the Bank creates long-term value for the customers and stakeholders. The Bank's risk culture is built on four principles: enforcing robust risk governance; balancing growth with stability; ensuring accountability for all the risk-based decisions and actions; and encouraging awareness, engagement and consistent behaviour in every employee.

Each of these principles is based on the Bank's distinctive set of values that guides every action the Bank takes. In maintaining a sound risk culture across our franchise, the Bank upholds the commitment to financial safety and soundness; fair outcomes and appropriate support for our stakeholders; sustainable and prudent business approach and performance based on integrity, ethics and discipline.

4. RISK MANAGEMENT (Cont'd.)



To manage conduct risk holistically, we have adopted a multi-faceted approach with the key components set out in the figure below.



4. RISK MANAGEMENT (Cont'd.)

Our risk management strategy is to embed our risk culture across the Bank to facilitate ongoing effective discovery, management and mitigation of risks arising from external factors and our business activities and to set aside adequate capital efficiently to address these risks. Risks are managed within levels established by the senior management committees and approved by the Board and its committees. The Bank has put in place a framework of policies, methodologies, tools and processes to identify, measure, monitor and manage material risks faced by the Bank.

The Bank's risk governance frameworks, policies and appetite provide the overarching principles and guidance for the Bank's risk management activities. Risk reports are regularly submitted to Management and the Board to keep them apprised of the Bank's risk profile.

Risk Governance

The Bank's responsibility for risk management starts with the Board overseeing a governance structure that is designed to ensure that the Bank's business activities are:

- conducted in a safe and sound manner and in line with the highest standards of professionalism;
- consistent with the Bank's overall business strategy and risk appetite; and
- subjected to adequate risk management and internal controls.

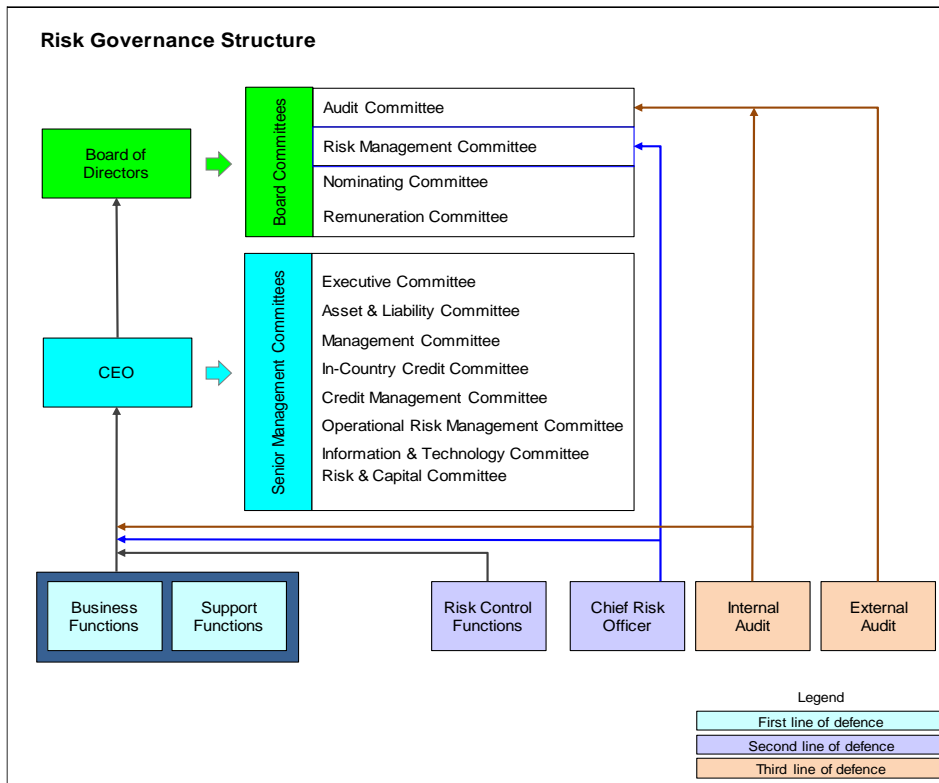
In this regard, the Board is primarily assisted by the Risk Management Committee (RMC).

The Chief Executive Officer has established senior management committees to assist in making business decisions with due consideration to risks and returns. The main senior management committees involved in this are the Executive Committee (EXCO), Management Committee (MC), Asset and Liability Committee (ALCO), In-Country Credit Committee (ICCC), Credit Management Committee (CMC), Information & Technology Committee (ITC), Operational Risk Management Committee (ORMC) and Risk and Capital Committee (RCC). These committees also assist the RMC in specific risk areas.

The RMC reviews the overall risk appetite and level of risk capital to be maintained for the Bank. Senior management and the senior management committees are authorised to delegate risk appetite limits by location, business lines, and/or broad product lines.

Risk management is the responsibility of every employee in the Bank. Risk awareness and accountability are embedded in our culture through an established framework that ensures appropriate oversight and accountability for the effective management of risk throughout the Bank and across risk types. This is executed through an organisation control structure that provides three "Lines of Defence" as follows:

4. RISK MANAGEMENT (Cont'd.)



First Line of Defence - The Risk Owner

The business and support functions have the primary responsibility for implementing and executing effective controls for the management of risks arising from their business activities. This include establishing adequate managerial and supervisory controls to ensure compliance with risk policies, appetite and limits as well as to highlight control breakdowns, inadequacy of processes and unexpected risk events.

Second Line of Defence - Risk Oversight

The risk and control oversight functions (Risk Management and Compliance) and the Chief Risk Officer (CRO) provide the Second Line of Defence.

The risk and control oversight functions support the Bank's strategy of balancing growth with stability by establishing risk frameworks, policies, appetite and limits within which the business functions must operate. The risk and control oversight functions are also responsible for the independent review and monitoring of the Bank's risk profile and highlighting significant vulnerabilities and risk issues to the respective management committees.

The independence of risk and control oversight functions from business functions ensures the necessary checks and balances are in place.

4. RISK MANAGEMENT (Cont'd.)

Third Line of Defence - Independent Audit

The Bank's internal and external auditors conduct risk-based audits covering all aspects of the First and Second Lines of Defence to provide independent assurance to the CEO, Audit Committee and the Board, on the effectiveness of the risk management and control structure, policies, frameworks, systems and processes.

The Bank, adopts and adapts the parent bank's governance structure, frameworks and policies accordingly to comply with local regulatory requirements. This ensures the approach across the regional UOB franchise is consistent and sufficiently flexible to suit local operating environments.

Risk Appetite

The Bank has established a risk appetite framework to define the amount of risk that the Bank is able and willing to take in pursuit of its business objectives. The objective of establishing a risk appetite framework is not to limit risk-taking but to ensure that the Bank's risk profile remains within well-defined and tolerable boundaries. The framework was formulated based on the following key criteria:

- relevance to respective stakeholders, with appropriate levels of granularity;
- practical, consistent and easy to understand metrics for communication and implementation;
- alignment to key elements of the Bank's business strategy; and
- analytically substantiated and measurable metrics.

The risk appetite defines suitable thresholds and limits across key areas including but not limited to credit risk, country risk, market risk, liquidity risk, operational risk, technology risk and reputation risk. Our risk-taking approach is focused on businesses which we understand and are well equipped to manage the risk involved. Through this approach, we aim to minimise earnings volatility and concentration risk and ensure that our high credit rating, strong capital and funding base remain intact. This enables us to remain a steadfast partner to our customers through changing economic conditions and cycles.

The Bank's risk appetite framework and risk appetite are reviewed and approved annually by the Board. Senior management monitors and reports the risk profiles and compliance with the risk appetite to the Board on a regular basis.

Basel Framework

The Bank has adopted the Basel Framework and observes the Bank Negara Malaysia (BNM) Risk Weighted Capital Adequacy Framework (Basel II) for banks incorporated in Malaysia. The Bank continues to adopt a prudent and proactive approach in navigating the evolving regulatory landscape, with emphasis on sound risk management principles in delivering sustainable returns.

The Bank has adopted the Foundation Internal Ratings-Based (FIRB) Approach for its non-retail exposures and the Advanced Internal Ratings-Based (AIRB) Approach for its retail exposures. For market risk, the Bank has adopted the Standardised Approach (SA). For operational risk, the Bank has adopted the Basic Indicator Approach (BIA).

The Bank has adopted the Internal Capital Adequacy Assessment Process (ICAAP) to assess on an ongoing basis the amount of capital necessary to support its activities. The ICAAP is reviewed periodically to ensure that the Bank remains well-capitalised after considering all material risks. Stress tests are conducted to determine capital adequacy under stressed conditions.

5. CREDIT RISK

Credit risk is the risk of loss arising from any failure by a borrower or counterparty to meet its financial obligations when such obligations fall due. Credit risk is the single largest risk that the Bank faces in its core business as a commercial bank, arising primarily from loans/ financing and other lending-related commitments to retail, corporate and institutional borrowers. Treasury and capital market operations, and investments also expose the Bank to counterparty and issuer credit risks.

Integral to the management of credit risk is a framework that clearly defines policies and processes relating to the measurement and management of credit risk. The framework helps to foster a robust culture of identification, measurement and management of credit risk within the Bank. The Bank adopts an holistic approach towards assessing credit risk and ensures that managing credit risk is part of an integrated approach to enterprise risk management.

The Bank's portfolio is also being reviewed and stress-tested regularly, and the Bank continuously monitors the operating environment to identify emerging risks and to formulate mitigating actions.

Credit Risk Governance and Organisation

The CMC supports the CEO and the RMC in managing the Bank's overall credit risk exposures. This committee serve as the executive forum for discussions on all credit-related issues including the credit risk management framework, policies, processes, infrastructure, methodologies and systems. The CMC also reviews and assesses the Bank's credit portfolios and credit risk profiles.

The Credit Risk Management under Risk Management develops bank-wide credit policies and guidelines, and focuses on facilitating business development within a prudent, consistent and efficient credit risk management framework. It is responsible for the reporting, analysis and management of all elements of credit risk to the CMC, RMC and Board.

Credit Risk Policies and Processes

The Bank has established credit policies and processes to manage credit risk in the following key areas:

Credit approval process

To maintain the independence and integrity of the credit approval process, the credit origination and approval functions are clearly segregated. Credit approval authority is delegated to officers based on their experience, seniority and track record. All credit approval officers are guided by credit policies and credit acceptance guidelines that are periodically reviewed to ensure their continued relevance to the Bank's business strategy and business environment.

5. CREDIT RISK (Cont'd.)

Credit concentration risk

Credit concentration risk may arise from a single large exposure or from multiple exposures that are closely correlated. This is managed by setting exposure limits on borrowers, obligor groups, portfolios, industries and countries, generally expressed as a percentage of the Bank's eligible capital base.

Credit risk exposures are managed through a robust credit underwriting, structuring and monitoring process. The Bank also manages its country risk exposures within an established framework that involves setting limits for each country. Such limits are based on the country's risk rating, economic potential measured by its gross domestic product and the Bank's business strategy. Regular assessments of emerging risks and in-depth reviews of industry trends are performed to provide a forward-looking view on developments that could impact the Bank's portfolio.

Credit stress test

Credit stress testing is a core component of the Bank's credit portfolio management process. Various regulatory and internal stress tests are conducted periodically. The main purpose of credit stress testing is to provide a forward-looking assessment of the Bank's credit portfolio under adverse economic scenarios. Under stress scenarios such as a severe recession, significant losses from the credit portfolio may occur. Stress tests are used to assess if the Bank's capital can withstand such losses and their impact on profitability and balance sheet quality. Stress tests also help us to identify the vulnerability of various business units and would enable us to formulate appropriate mitigating actions.

The Bank's stress test scenarios consider potential and plausible macroeconomic and geopolitical events in varying degrees of likelihood and severity. These are developed through consultation with relevant business units and approved by senior management.

Credit Monitoring and Remedial Management

The Bank regularly monitors credit exposures, portfolio performance and emerging risks that may impact its credit risk profile. The Board and senior management are updated on credit trends through internal risk reports, so that mitigating actions can be taken if necessary.

Delinquency monitoring

The Bank monitors closely the delinquency of borrowing accounts as it is a key indicator of credit quality. An account is considered as delinquent when payment is not received on due date. All delinquent accounts, including revolving credit facilities (such as an overdraft) with limit excesses, are closely monitored and managed through a disciplined process by officers from business units and risk management function. Where appropriate, such accounts are also subject to more frequent credit reviews.

5. CREDIT RISK (Cont'd.)

Classification and loan/ financing loss impairment

The Bank classifies its credit portfolios according to the borrower's ability to repay the credit facilities from their normal source of income.

All borrowing accounts are categorised into 'Pass', 'Special Mention' or 'Non-Performing' categories. Non-Performing accounts are further categorised as 'Substandard', 'Doubtful' or 'Loss' in accordance with the Bank's policy. Any account which is delinquent (or in excess for a revolving credit facility such as an overdraft) for more than 90 days will be categorised automatically as 'Non-Performing'. In addition, any account that exhibits weaknesses which are likely to adversely affect repayment on existing terms may be categorised as 'Non-Performing'.

Upgrading and declassification of a 'Non-Performing' account to 'Pass' or 'Special Mention' status must be supported by a credit assessment of the repayment capability, cash flows and financial position of the borrower. The Bank must also be satisfied that once the account is declassified, the account is unlikely to be classified again in the near future.

A rescheduled or restructured account shall be categorised as 'Non-Performing' when the account exhibits signs of increase in credit risk. The rescheduled or restructured account is to be placed on the appropriate classified grade based on the Bank's assessment of the financial condition of the borrower and the ability of the borrower to repay under the rescheduled or restructured terms. A rescheduled or restructured account must comply fully with the rescheduled or restructured terms before it can be declassified.

The Bank provides for impairment based on local regulatory requirements including Bank Negara Malaysia (BNM) guidelines and MFRS9 for local reporting purposes. Where necessary, additional impairment is provided to comply with the Bank's impairment policy.

Special Asset Management

Special Asset Management (SAM) independently manages the restructuring, workout and recovery of the Bank's Non-Performing portfolios. The primary objectives are (i) to nurse the Non-Performing accounts back to financial health whenever possible for transfer back to the respective business units for management and (ii) to maximise recovery of the Non-Performing accounts that the Bank intends to exit.

Write-Off Policy

A non-performing account is written off either when the prospect of a recovery is considered poor or when all feasible avenues of recovery have been exhausted.

5. CREDIT RISK (Cont'd.)

(i) The credit exposures by sector of the Bank for the financial year ended 31 December 2020 were as follows:

Bank	Sovereigns/ central banks RM'000	Public sector entities RM'000	Banks, DFIs and MDBs RM'000	Ins cos, securities firms and fund managers RM'000	Corporates (including specialised lending and SMEs) RM'000	Retail RM'000	Residential mortgages RM'000	Equity exposures RM'000	Other assets RM'000	Grand total RM'000
Agriculture, hunting, forestry and fishing	-	-	-	-	1,912,643	26,806	-	-	-	1,939,449
Mining and quarrying	-	-	939,264	-	196,953	10,209	-	-	-	1,146,426
Manufacturing	-	-	76,037	-	7,307,636	1,365,505	-	-	-	8,749,178
Electricity, gas and water	-	-	-	-	262,442	12,793	-	-	-	275,235
Construction	-	-	-	-	10,891,718	549,171	-	-	-	11,440,889
Wholesale, retail trade, restaurant and hotels	-	179,045	3,230	-	13,412,676	4,383,772	-	-	-	17,978,723
Transport, storage and communication	-	-	268	-	2,078,322	187,574	-	-	-	2,266,164
Finance, insurance and business services	14,104	52,467	9,415,524	1,238,898	3,019,857	975,109	-	-	-	14,715,959
Real estate	-	-	-	-	4,053,440	666,667	-	-	-	4,720,107
Community, social and personal services	-	-	-	-	40,629	126,365	-	-	-	166,994
Households	-	-	-	-	3,406	17,208,786	38,403,682	-	-	55,615,874
Others	23,045,806	-	-	-	171,290	-	-	158,385	1,376,278	24,751,759
	23,059,910	231,512	10,434,323	1,238,898	43,351,012	25,512,757	38,403,682	158,385	1,376,278	143,766,757

Note: The credit exposures in the tables (i) to (iv) are based on exposures as defined under BNM's Capital Adequacy Framework for Standardised Approach and IRB Approach respectively.

5. CREDIT RISK (Cont'd.)

The credit exposures by sector of the Bank for the financial year ended 31 December 2019 were as follows:

Bank	Sovereigns/ central banks RM'000	Public sector entities RM'000	Banks, DFIs and MDBs RM'000	Ins cos, securities firms and fund managers RM'000	Corporates (including specialised lending and SMEs) RM'000	Retail RM'000	Residential mortgages RM'000	Equity exposures RM'000	Other assets RM'000	Grand total RM'000
Agriculture, hunting, forestry and fishing	-	-	-	-	1,551,728	30,227	-	-	-	1,581,955
Mining and quarrying	-	-	1,187,979	-	89,406	9,834	-	-	-	1,287,219
Manufacturing	-	-	90,507	-	7,109,674	1,338,571	-	-	-	8,538,752
Electricity, gas and water	-	-	-	-	260,059	9,569	-	-	-	269,628
Construction	-	-	-	-	11,262,892	564,514	-	-	-	11,827,406
Wholesale, retail trade, restaurant and hotels	-	-	13,769	-	12,910,318	4,275,950	-	-	-	17,200,037
Transport, storage and communication	-	-	-	-	2,339,637	180,357	-	-	-	2,519,994
Finance, insurance and business services	9,027	34,508	12,547,175	194,655	3,518,235	879,544	-	-	-	17,183,144
Real estate	-	-	-	-	3,938,822	665,125	-	-	-	4,603,947
Community, social and personal services	-	-	-	-	72,432	127,320	-	-	-	199,752
Households	-	-	-	-	5,710	18,121,016	37,750,313	-	-	55,877,039
Others	13,078,564	25,709	-	-	25,391	-	-	133,884	961,857	14,225,405
	<u>13,087,591</u>	<u>60,217</u>	<u>13,839,430</u>	<u>194,655</u>	<u>43,084,304</u>	<u>26,202,027</u>	<u>37,750,313</u>	<u>133,884</u>	<u>961,857</u>	<u>135,314,278</u>

5. CREDIT RISK (Cont'd.)

(ii) The credit exposures by sector of the Islamic Banking Window for the financial year ended 31 December 2020 were as follows:

Islamic Banking Window	Sovereigns/ central banks RM'000	Public sector entities RM'000	Banks, DFIs and MDBs RM'000	Ins cos, securities firms and fund managers RM'000	Corporates (including specialised lending and SMEs) RM'000	Retail RM'000	Residential mortgages RM'000	Equity exposures RM'000	Other assets RM'000	Grand total RM'000
Agriculture, hunting, forestry & fishing	-	-	-	-	524,065	450	-	-	-	524,515
Mining and Quarrying	-	-	-	-	96,873	-	-	-	-	96,873
Manufacturing	-	-	-	-	319,301	160,764	-	-	-	480,065
Electricity, gas and water	-	-	-	-	56,921	-	-	-	-	56,921
Construction	-	-	-	-	416,643	66,793	-	-	-	483,436
Wholesale, retail trade, restaurant and hotels	-	-	-	-	479,525	389,479	-	-	-	869,004
Transport, storage and communication	-	-	-	-	96,846	34,482	-	-	-	131,328
Finance, insurance and business services	1,405	4,518	115,504	1,002,586	36,288	158,644	-	-	-	1,318,945
Real estate	-	-	-	-	214,033	109,194	-	-	-	323,227
Community, social and personal services	-	-	-	-	-	26,942	-	-	-	26,942
Households	-	-	-	-	-	291,032	2,907,752	-	-	3,198,784
Others	1,337,367	-	-	-	-	-	-	-	6,486	1,343,854
	<u>1,338,772</u>	<u>4,518</u>	<u>115,504</u>	<u>1,002,586</u>	<u>2,240,495</u>	<u>1,237,780</u>	<u>2,907,752</u>	<u>-</u>	<u>6,486</u>	<u>8,853,893</u>

5. CREDIT RISK (Cont'd.)

The credit exposures by sector of the Islamic Banking Window for the financial year ended 31 December 2019 were as follows:

Islamic Banking Window	Sovereigns/ central banks RM'000	Public sector entities RM'000	Banks, DFIs and MDBs RM'000	Ins cos, securities firms and fund managers RM'000	Corporates (including specialised lending and SMEs) RM'000	Retail RM'000	Residential mortgages RM'000	Equity exposures RM'000	Other assets RM'000	Grand total RM'000
Agriculture, hunting, forestry & fishing	-	-	-	-	373,371	456	-	-	-	373,827
Manufacturing	-	-	-	-	270,872	115,655	-	-	-	386,527
Electricity, gas and water	-	-	-	-	60,891	-	-	-	-	60,891
Construction	-	-	-	-	256,999	60,129	-	-	-	317,128
Wholesale, retail trade, restaurant and hotels	-	-	-	-	379,884	293,162	-	-	-	673,046
Transport, storage and communication	-	-	-	-	66,914	26,285	-	-	-	93,199
Finance, insurance and business services	1,752	1,535	50,529	742	36,075	110,549	-	-	-	201,182
Real estate	-	-	-	-	141,194	71,665	-	-	-	212,859
Community, social and personal services	-	-	-	-	-	22,595	-	-	-	22,595
Households	-	-	-	-	-	305,142	2,487,550	-	-	2,792,692
Others	1,753,622	-	-	-	-	-	-	-	6,491	1,760,113
	1,755,374	1,535	50,529	742	1,586,200	1,005,638	2,487,550	-	6,491	6,894,059

5. CREDIT RISK (Cont'd.)

(iii) The credit exposures by remaining contractual maturities of the Bank for the financial year ended 31 December 2020 were as follows:

Bank	Sovereigns/ central banks RM'000	Public sector entities RM'000	Banks, DFIs and MDBs RM'000	Ins cos, securities firms and fund managers RM'000	Corporates (including specialised lending and SMEs) RM'000	Retail RM'000	Residential mortgages RM'000	Equity exposures RM'000	Other assets RM'000	Grand total RM'000
< 3 months	7,418,993	29,575	6,287,134	166,738	11,963,366	824,667	11,376	-	-	26,701,849
3 - 6 months	399,945	22,892	1,766,966	15,203	3,183,683	236,593	7,176	-	-	5,632,458
6 - 12 months	925,705	-	234,336	16,167	4,404,287	7,229,928	1,562,091	-	505,038	14,877,552
1 - 3 years	7,961,590	152,118	1,523,194	19,566	11,465,997	2,648,115	100,174	158,385	871,240	24,900,379
3 - 5 years	3,640,054	26,927	526,916	1,021,224	6,578,760	847,866	264,882	-	-	12,906,629
> 5 years	2,713,623	-	95,777	-	5,754,919	13,725,588	36,457,983	-	-	58,747,890
	23,059,910	231,512	10,434,323	1,238,898	43,351,012	25,512,757	38,403,682	158,385	1,376,278	143,766,757

The credit exposures by remaining contractual maturities of the Bank for the financial year ended 31 December 2019 were as follows:

Bank	Sovereigns/ central banks RM'000	Public sector entities RM'000	Banks, DFIs and MDBs RM'000	Ins cos, securities firms and fund managers RM'000	Corporates (including specialised lending and SMEs) RM'000	Retail RM'000	Residential mortgages RM'000	Equity exposures RM'000	Other assets RM'000	Grand total RM'000
< 3 months	444,636	16,390	11,188,743	105,431	12,261,862	936,274	15,059	-	-	24,968,395
3 - 6 months	1,771,241	18,118	1,202,201	19,339	2,779,879	231,348	10,057	-	-	6,032,183
6 - 12 months	3,171,114	-	787,040	22,731	5,450,399	9,954,189	1,606,690	133,884	961,857	22,087,904
1 - 3 years	4,450,934	15,434	295,304	25,260	9,460,794	528,509	111,549	-	-	14,887,784
3 - 5 years	3,051,613	10,275	328,584	21,894	7,637,930	761,891	282,353	-	-	12,094,540
> 5 years	198,053	-	37,558	-	5,493,440	13,789,816	35,724,605	-	-	55,243,472
	13,087,591	60,217	13,839,430	194,655	43,084,304	26,202,027	37,750,313	133,884	961,857	135,314,278

5. CREDIT RISK (Cont'd.)

(iv) The credit exposures by remaining contractual maturities of the Islamic Banking Window for the financial year ended 31 December 2020 were as follows:

Islamic Bankin Window	Sovereigns/ central banks RM'000	Public sector entities RM'000	Banks, DFIs and MDBs RM'000	Ins cos, securities firms and fund managers RM'000	Corporates (including specialised lending and SMEs) RM'000	Retail RM'000	Residential mortgages RM'000	Equity exposures RM'000	Other assets RM'000	Grand total RM'000
< 3 months	1,216,661	2,410	100,896	1,109	653,095	2,825	-	-	-	1,976,996
3 - 6 months	120,706	2,108	-	-	32,686	427	-	-	-	155,927
6 - 12 months	-	-	-	-	101,832	195	-	-	-	102,027
1 - 3 years	1,405	-	14,608	-	101,393	7,591	-	-	6,486	131,483
3 - 5 years	-	-	-	1,001,477	261,337	3,908	1,253	-	-	1,267,975
> 5 years	-	-	-	-	1,090,152	1,222,834	2,906,499	-	-	5,219,485
	1,338,772	4,518	115,504	1,002,586	2,240,495	1,237,780	2,907,752	-	6,486	8,853,893

The credit exposures by remaining contractual maturities of the Islamic Banking Window for the financial year ended 31 December 2019 were as follows:

Islamic Bankin Window	Sovereigns/ central banks RM'000	Public sector entities RM'000	Banks, DFIs and MDBs RM'000	Ins cos, securities firms and fund managers RM'000	Corporates (including specialised lending and SMEs) RM'000	Retail RM'000	Residential mortgages RM'000	Equity exposures RM'000	Other assets RM'000	Grand total RM'000
< 3 months	298,485	1,535	32,751	619	357,222	1,062	-	-	-	691,674
3 - 6 months	886,482	-	-	123	32,571	686	-	-	-	919,862
6 - 12 months	529,604	-	17,778	-	63,645	2,135	-	-	6,491	619,653
1 - 3 years	40,803	-	-	-	125,954	83	-	-	-	166,840
3 - 5 years	-	-	-	-	80,923	3,999	1,133	-	-	86,055
> 5 years	-	-	-	-	925,885	997,673	2,486,417	-	-	4,409,975
	1,755,374	1,535	50,529	742	1,586,200	1,005,638	2,487,550	-	6,491	6,894,059

5. CREDIT RISK (Cont'd.)

(v) Past due and credit-impaired loans, advances and financing analysed by economic sectors:

The Bank	2020		2019	
	Past due but not impaired RM'000	Impaired loans RM'000	Past due but not impaired RM'000	Impaired loans RM'000
Agriculture, hunting, forestry and fishing	50,632	559	3,751	1,109
Mining and quarrying	10,412	776	10,886	978
Manufacturing	169,827	213,580	175,063	177,841
Electricity, gas and water	3,855		1,740	
Construction	598,013	314,203	195,085	201,291
Wholesale, retail trade, restaurant and hotels	292,238	212,724	311,676	176,440
Transport, storage and communication	68,637	92,750	16,654	101,214
Finance, insurance and business services	74,141	23,895	33,765	19,803
Real estate	120,049	181,370	162,141	203,346
Community, social and personal services	6,047	-	6,367	213
Households:				
- purchase of residential properties	743,747	466,125	1,284,066	497,044
- purchase of non residential properties	280,502	96,145	365,325	82,771
- others	127,975	76,244	203,231	98,760
	2,546,075	1,678,371	2,769,750	1,560,810

5. CREDIT RISK (Cont'd.)

Past due and credit-impaired financing, advances and others analysed by economic sectors for Islamic Banking Window:

Islamic Banking Window	2020		2019	
	Past due but not impaired RM'000	Credit-impaired financing, advances and others RM'000	Past due but not impaired RM'000	Credit-impaired financing, advances and others RM'000
Agriculture, hunting, forestry and fishing	-	-	-	-
Mining and quarrying	-	-	-	-
Manufacturing	20,629	15,485	2,089	642
Construction	2,582	4,386	7,177	654
Wholesale, retail trade, restaurant and hotels	8,310	10,006	29,829	5,028
Transport, storage and communication	3,406	-	3,381	-
Finance, insurance and business services	3,717	-	-	-
Real estate	4,290	-	-	-
Community, social and personal services	2,653	-	-	-
Households:				
- purchase of residential properties	55,130	45,488	95,914	31,563
- purchase of non residential properties	5,605	538	6,299	499
- others	615	-	935	100
	106,937	75,903	145,624	38,486

5. CREDIT RISK (Cont'd.)

(vi) Allowances for Expected Credit Loss (ECL) 1,2 and 3 analysed by economic sector:

The Bank	2020		2019	
	ECL 3 RM'000	ECL 1 and ECL 2 RM'000	ECL 3 RM'000	ECL 1 and ECL 2 RM'000
Agriculture, hunting, forestry and fishing	-	22,448	-	67,013
Mining and quarrying	-	13,282	-	12,509
Manufacturing	98,382	153,946	75,948	117,584
Electricity, gas and water	-	3,408	-	3,644
Construction	43,409	158,293	29,130	110,688
Wholesale, retail trade, restaurant and hotels	94,088	264,875	33,347	197,484
Transport, storage and communication	42,621	41,094	47,121	32,644
Finance, insurance and business services	10,612	89,846	5,884	80,239
Real estate	33,044	85,737	3,223	62,550
Community, social and personal services	-	3,108	-	3,101
Households:				
- purchase of residential properties	98,378	444,863	63,799	382,205
- purchase of non residential properties	17,261	107,136	8,424	101,492
- others	17,781	110,220	19,256	66,800
	455,576	1,498,256	286,132	1,237,953

5. CREDIT RISK (Cont'd.)

Allowances for Expected Credit Loss (ECL) 1,2 and 3 analysed by economic sector for Islamic Banking Window:

Islamic Banking Window	2020		2019	
	ECL 3 RM'000	ECL 1 and ECL 2 RM'000	ECL 3 RM'000	ECL 1 and ECL 2 RM'000
Agriculture, hunting, forestry and fishing	-	1,642	-	20,138
Mining and quarrying	-	566	-	-
Manufacturing	4,068	8,023	643	5,386
Electricity, gas and water	-	184	-	30
Construction	1,203	6,544	-	2,329
Wholesale, retail trade, restaurant and hotels	4,490	11,625	1,058	4,006
Transport, storage and communication	-	2,436	-	600
Finance, insurance and business services	-	5,332	-	829
Real estate	-	3,969	-	1,341
Community, social and personal services	-	617	-	123
Households:				
- purchase of residential properties	10,776	13,911	5,414	3,021
- purchase of non residential properties	147	570	-	187
- others	-	288	-	103
	20,684	55,707	7,115	38,093

5. CREDIT RISK (Cont'd.)

(vii) Allowances for Expected Credit Loss 3 (ECL 3) analysed by economic sector:

	2020		2019	
	Allowances for ECL 3 made during the year RM'000	Write-offs during the year RM'000	Allowances for ECL 3 made during the year RM'000	Write-offs during the year RM'000
The Bank				
Agriculture, hunting, forestry and fishing	1,604	-	-	-
Mining and quarrying			-	-
Manufacturing	45,757	10,145	54,651	9,149
Electricity, gas and water			-	-
Construction	38,491	19,054	7,710	1,837
Wholesale, retail trade, restaurant and hotels	78,549	9,189	32,927	17,519
Transport, storage and communication	5,540	654	13,113	587
Finance, insurance and business services	6,643	3,669	8,235	2,832
Real estate	34,298	830	3,079	-
Community, social and personal services	42	42	280	280
Households:				
- purchase of residential properties	111,801	36,500	135,905	51,139
- purchase of non residential properties	21,642	4,343	11,841	2,189
- others	61,767	49,572	78,549	59,797
	406,133	133,998	346,290	145,329

5. CREDIT RISK (Cont'd.)

Allowances for ECL 3 analysed by economic sector for Islamic Banking Window:

	2020		2019	
	Allowances for ECL 3 made during the year RM'000	Write-offs during the year RM'000	Allowances for ECL 3 made during the year RM'000	Write-offs during the year RM'000
Islamic Banking Window				
Agriculture, hunting, forestry and fishing	-	-	-	-
Mining and quarrying	-	-	-	-
Manufacturing	4,086	-	-	-
Electricity, gas and water	-	-	-	-
Construction	1,554	-	-	-
Wholesale, retail trade, restaurant and hotels	4,041	791	1,973	-
Transport, storage and communication	-	-	-	-
Finance, insurance and business services	-	-	-	-
Real estate	-	-	-	-
Community, social and personal services	-	-	-	-
Households:				
- purchase of residential properties	9,681	1,165	7,878	-
- purchase of non residential properties	207	-	-	-
- others	31	-	16	-
	19,600	1,956	9,867	-

Impaired loans and impairment provision by geographical area

Past due loans, impaired loans and impairment provision were from customers residing in Malaysia.

5. CREDIT RISK (Cont'd.)

(viii) Credit exposure analysed by geography:

Bank As at 31 December 2020	In Malaysia RM'000	Outside Malaysia RM'000	Total RM'000
Cash and short-term funds	4,780,793	1,288,715	6,069,508
Deposits and placements with financial institutions	1,149,710	-	1,149,710
Securities purchased under resale agreements	1,170,004	-	1,170,004
Financial assets at fair value through profit or loss (FVTPL)	4,346,399	-	4,346,399
Debt instruments at fair value through other comprehensive income (FVOCI)	25,638,935	-	25,638,935
Debt instruments at amortised cost	519,844	-	519,844
Other assets	451,255	47,149	498,404
Loans, advances and financing	78,859,080	6,749,192	85,608,272
Derivative financial assets	765,829	48,289	814,118
Statutory deposits with BNM	196,451	-	196,451
Financial assets not subject to credit risk	1,642,702	75,197	1,717,899
	<u>119,521,002</u>	<u>8,208,542</u>	<u>127,729,544</u>
Commitments and contingencies	<u>109,191,048</u>	<u>12,037,649</u>	<u>121,228,697</u>
As at 31 December 2019	In Malaysia RM'000	Outside Malaysia RM'000	Total RM'000
Cash and short-term funds	290,857	1,039,408	1,330,265
Deposits and placements with financial institutions	499,864	-	499,864
Securities purchased under resale agreements	3,568,380	-	3,568,380
Financial assets at fair value through profit or loss (FVTPL)	4,206,956	-	4,206,956
Debt instruments at fair value through other comprehensive income (FVOCI)	20,026,345	-	20,026,345
Debt instruments at amortised cost	803,460	-	803,460
Other assets	307,797	20,141	327,938
Loans, advances and financing	77,822,834	7,007,909	84,830,743
Derivative financial assets	331,685	103,341	435,026
Statutory deposits with BNM	1,722,676	-	1,722,676
Financial assets not subject to credit risk	1,084,896	60,833	1,145,729
	<u>110,665,750</u>	<u>8,231,632</u>	<u>118,897,382</u>
Commitments and contingencies	<u>92,380,617</u>	<u>10,453,514</u>	<u>102,834,131</u>

Note: The credit exposures in the above tables are based on current outstanding for on balance sheet disclosures which can be found on pg 111 of the Financial Statement. Likewise, Commitments & Contingencies can be found on pg 178 & pg 179 of the Financial Statement.

5. CREDIT RISK (Cont'd.)

Credit Exposures under Basel II

Under Basel II, credit risk for the various asset classes may be computed using a combination of:

- i. Standardised Approach (SA);
- ii. Foundation Internal Ratings-Based (FIRB) Approach; and
- iii. Advanced Internal Ratings-Based (AIRB) Approach.

The table below summarises the approaches adopted by the Bank for credit risk computation.

The Bank has adopted the FIRB Approach for its non-retail exposures and the AIRB Approach for its retail exposures.

	Standardised* <u>RM'million</u>	FIRB <u>RM'million</u>	AIRB <u>RM'million</u>
Total Credit Exposures	25,011	48,725	63,906

*Amount under Standardised Approach refers to credit exposures where IRB Approach is not applicable.

The Bank had on 7 January 2010 received approval from BNM to migrate directly to the Internal Ratings Based Approach for credit risk beginning January 2010 as per the Risk Weighted Capital Adequacy Framework.

For exposures subject to the SA, approved External Credit Assessment Institutions (ECAI) ratings and prescribed risk weights based on asset class are used in the computation of regulatory capital.

The ECAI used by the Bank are Rating Agency Malaysia, Fitch Ratings, Moody's Investors Service, Malaysian Rating Corporation Berhad and Standard & Poor's. ECAI ratings are mapped to a common credit quality grade prescribed by BNM.

5. CREDIT RISK (Cont'd.)

The aggregate breakdown of credit risk standardised exposures by risk weights of the Bank for the financial year ended 31 December 2020 were as follows:

Risk weights	Bank									Total RWA
	Sovereigns/ central banks	Public sector entities	Banks, DFIs and MDBs	Ins cos, securities firms and fund managers	Corporates	Regulatory Retail	Other assets	Equity	Total exposures after netting and CRM	
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	
0%	21,710,244	179,046	-	-	2,021	-	619,629	-	22,510,940	-
10%	-	-	-	-	-	-	-	-	-	-
20%	1,149,309	52,467	-	-	202	-	0	-	1,201,977	240,395
35%	-	-	-	-	-	-	-	-	-	-
50%	-	-	-	-	2	-	-	-	2	1
75%	-	-	-	-	-	-	-	-	-	-
90%	-	-	-	-	-	-	-	-	-	-
100%	-	-	-	43,041	328,099	9,965	756,649	155,929	1,293,683	1,293,683
110%	-	-	-	-	-	-	-	-	-	-
125%	-	-	-	-	-	-	-	-	-	-
135%	-	-	-	-	-	-	-	-	-	-
150%	-	-	-	-	3,947	-	-	-	3,947	5,921
270%	-	-	-	-	-	-	-	-	-	-
350%	-	-	-	-	-	-	-	-	-	-
400%	-	-	-	-	-	-	-	-	-	-
625%	-	-	-	-	-	-	-	-	-	-
937.5%	-	-	-	-	-	-	-	-	-	-
1250.0%	-	-	-	-	-	-	-	-	-	-
Total	22,859,553	231,512	-	43,041	334,270	9,965	1,376,278	155,929	25,010,549	1,540,000

5. CREDIT RISK (Cont'd.)

The aggregate breakdown of credit risk standardised exposures by risk weights of the Bank for the financial year ended 31 December 2019 were as follows:

Risk weights	Bank									Total RWA
	Sovereigns/ central banks	Public sector entities	Banks, DFIs and MDBs	Ins cos, securities firms and fund managers	Corporates	Regulatory Retail	Other assets	Equity	Total exposures after netting and CRM	
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	
0%	13,081,450	25,709	-	-	2,062	-	278,378	-	13,387,599	-
10%	-	-	-	-	-	-	-	-	-	-
20%	6,141	34,508	-	-	110	-	-	-	40,759	8,152
35%	-	-	-	-	-	-	-	-	-	-
50%	-	-	-	-	39	-	-	-	39	19
75%	-	-	-	-	-	-	-	-	-	-
90%	-	-	-	-	-	-	-	-	-	-
100%	-	-	-	41,515	371,875	-	683,479	131,809	1,228,678	1,228,678
110%	-	-	-	-	-	-	-	-	-	-
125%	-	-	-	-	-	-	-	-	-	-
135%	-	-	-	-	-	-	-	-	-	-
150%	-	-	-	-	643	-	-	-	643	965
270%	-	-	-	-	-	-	-	-	-	-
350%	-	-	-	-	-	-	-	-	-	-
400%	-	-	-	-	-	-	-	-	-	-
625%	-	-	-	-	-	-	-	-	-	-
937.5%	-	-	-	-	-	-	-	-	-	-
1250.0%	-	-	-	-	-	-	-	-	-	-
Total	13,087,591	60,217	-	41,515	374,729	-	961,857	131,809	14,657,717	1,237,814

5. CREDIT RISK (Cont'd.)

Credit Exposures under Basel II (cont'd.)

The table below summarises the approaches adopted by the Bank for credit risk computation.

The Bank has adopted the FIRB Approach for its non-retail exposures and the AIRB Approach for its retail exposures under its Islamic Banking Window:

	Standardised* <u>RM'million</u>	FIRB <u>RM'million</u>	AIRB <u>RM'million</u>
Total Credit Exposures	1,351	3,224	4,146

*Amount under Standardized Approach refers to credit exposures where IRB Approach is not applicable.

5. CREDIT RISK (Cont'd.)

The aggregate breakdown of credit risk standardised exposures by risk weights of the Islamic Banking Window for the financial year ended 31 December 2020 were as follows:

Risk weights	Islamic Banking Window							Total exposures after netting and CRM	Total RWA
	Sovereigns/ central banks	Public sector entities	Banks, DFIs and MDBs	Ins cos, securities firms and fund managers	Corporates	Other assets			
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	
0%	1,338,772	-	-	-	-	-	1,338,772	-	
10%	-	-	-	-	-	-	-	-	
20%	-	4,518	-	-	-	-	4,518	904	
35%	-	-	-	-	-	-	-	-	
50%	-	-	-	-	-	-	-	-	
75%	-	-	-	-	-	-	-	-	
90%	-	-	-	-	-	-	-	-	
100%	-	-	-	1,109	95	6,486	7,690	7,690	
110%	-	-	-	-	-	-	-	-	
125%	-	-	-	-	-	-	-	-	
135%	-	-	-	-	-	-	-	-	
150%	-	-	-	-	-	-	-	-	
270%	-	-	-	-	-	-	-	-	
350%	-	-	-	-	-	-	-	-	
400%	-	-	-	-	-	-	-	-	
625%	-	-	-	-	-	-	-	-	
937.5%	-	-	-	-	-	-	-	-	
1250.0%	-	-	-	-	-	-	-	-	
Total	1,338,772	4,518	-	1,109	95	6,486	1,350,981	8,594	

5. CREDIT RISK (Cont'd.)

The aggregate breakdown of credit risk standardised exposures by risk weights of the Islamic Banking Window for the financial year ended 31 December 2019 were as follows:

Risk weights	Islamic Banking Window							Total RWA
	Sovereigns/ central banks	Public sector entities	Banks, DFIs and MDBs	Ins cos, securities firms and fund managers	Corporates	Other assets	Total exposures after netting and CRM	
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
0%	1,755,374	-	-	-	-	-	1,755,374	-
10%	-	-	-	-	-	-	-	-
20%	-	1,535	-	-	-	-	1,535	307
35%	-	-	-	-	-	-	-	-
50%	-	-	-	-	-	-	-	-
75%	-	-	-	-	-	-	-	-
90%	-	-	-	-	-	-	-	-
100%	-	-	-	742	-	6,491	7,233	7,233
110%	-	-	-	-	-	-	-	-
125%	-	-	-	-	-	-	-	-
135%	-	-	-	-	-	-	-	-
150%	-	-	-	-	-	-	-	-
270%	-	-	-	-	-	-	-	-
350%	-	-	-	-	-	-	-	-
400%	-	-	-	-	-	-	-	-
625%	-	-	-	-	-	-	-	-
937.5%	-	-	-	-	-	-	-	-
1250.0%	-	-	-	-	-	-	-	-
Total	1,755,374	1,535	-	742	-	6,491	1,764,142	7,540

5. CREDIT RISK (Cont'd.)

Rated Exposures according to ratings by ECAIs of the Bank as at 31 December 2020 were as follows:

RM'000						
Exposure class	Ratings of Corporates by Approved ECAIs					
	Moody's	Aaa to Aa3	A1 to A3	Baa1 to Ba3	B1 to C	Unrated
	S&P	AAA to AA-	A+ to A-	BBB+ to BB-	B+ to D	Unrated
	Fitch	AAA to AA-	A+ to A-	BBB+ to BB-	B+ to D	Unrated
	RAM	AAA to AA3	A to A3	BBB1 to BB3	B to D	Unrated
	MARC	AAA to AA-	A+ to A-	BBB+ to BB-	B+ to D	Unrated
<u>On and off-balance sheet exposures</u>						
Credit exposures (using corporate risk weights)						
Public sector entities (applicable for entities risk weighted based on their external ratings as corporates)		-	-	-	-	231,512
Insurance cos, securities firms and fund managers		-	-	-	-	43,041
Corporates		-	-	-	-	334,270
Total		-	-	-	-	608,823

RM'000							
Exposure class	Ratings of Banking Institutions by Approved ECAIs						
	Moody's	Aaa to Aa3	A1 to A3	Baa1 to Baa3	Ba1 to B3	Caa1 to C	Unrated
	S&P	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Unrated
	Fitch	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Unrated
	RAM	AAA to AA3	A1 to A3	BBB1 to BBB3	BB1 to B3	C1 to D	Unrated
	MARC	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	C+ to D	Unrated
<u>On and off-balance sheet exposures</u>							
Banks, DFIs and MDBs		-	-	-	-	-	-
Total		-	-	-	-	-	-

5. CREDIT RISK (Cont'd.)

RM'000

Exposure class	Ratings of Sovereigns and Central Banks by Approved ECAIs						
	Moody's	Aaa to Aa3	A1 to A3	Baa1 to Baa3	Ba1 to B3	Caa1 to C	Unrated
	S&P	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Unrated
	Fitch	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Unrated
	RAM	AAA to AA3	A1 to A3	BBB1 to BBB3	BB1 to B3	C1 to D	Unrated
	MARC	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	C+ to D	Unrated
On and off-balance sheet exposures							
Sovereigns/central banks		-	21,761,800	-	-	-	1,097,753
Total		-	21,761,800	-	-	-	1,097,753

Rated Exposures according to ratings by ECAIs of the Bank for the financial year ended 31 December 2019 were as follows:

RM'000

Exposure class	Ratings of Corporates by Approved ECAIs					
	Moody's	Aaa to Aa3	A1 to A3	Baa1 to Ba3	B1 to C	Unrated
	S&P	AAA to AA-	A+ to A-	BBB+ to BB-	B+ to D	Unrated
	Fitch	AAA to AA-	A+ to A-	BBB+ to BB-	B+ to D	Unrated
	RAM	AAA to AA3	A to A3	BBB1 to BB3	B to D	Unrated
	MARC	AAA to AA-	A+ to A-	BBB+ to BB-	B+ to D	Unrated
On and off-balance sheet exposures						
Credit exposures (using corporate risk weights)						
Public sector entities (applicable for entities risk weighted based on their external ratings as corporates)		-	-	-	-	60,217
Insurance cos, securities firms and fund managers		-	-	-	-	41,515
Corporates		-	-	-	-	374,729
Total		-	-	-	-	476,461

5. CREDIT RISK (Cont'd.)

RM'000

Exposure class	Ratings of Banking Institutions by Approved ECAIs						
	Moody's	Aaa to Aa3	A1 to A3	Baa1 to Baa3	Ba1 to B3	Caa1 to C	Unrated
	S&P	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Unrated
	Fitch	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Unrated
	RAM	AAA to AA3	A1 to A3	BBB1 to BBB3	BB1 to B3	C1 to D	Unrated
	MARC	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	C+ to D	Unrated
<u>On and off-balance sheet exposures</u>							
Banks, DFIs and MDBs		-	-	-	-	-	-
Total		-	-	-	-	-	-

RM'000

Exposure class	Ratings of Sovereigns and Central Banks by Approved ECAIs						
	Moody's	Aaa to Aa3	A1 to A3	Baa1 to Baa3	Ba1 to B3	Caa1 to C	Unrated
	S&P	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Unrated
	Fitch	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Unrated
	RAM	AAA to AA3	A1 to A3	BBB1 to BBB3	BB1 to B3	C1 to D	Unrated
	MARC	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	C+ to D	Unrated
<u>On and off-balance sheet exposures</u>							
Sovereigns/central banks		-	12,900,833	-	-	-	186,758
Total		-	12,900,833	-	-	-	186,758

5. CREDIT RISK (Cont'd.)

Rated Exposures according to ratings by ECAIs of the Islamic Banking Window as at 31 December 2020 were as follows:

RM'000						
Exposure class	Ratings of Corporates by Approved ECAIs					
	Moody's	Aaa to Aa3	A1 to A3	Baa1 to Ba3	B1 to C	Unrated
	S&P	AAA to AA-	A+ to A-	BBB+ to BB-	B+ to D	Unrated
	Fitch	AAA to AA-	A+ to A-	BBB+ to BB-	B+ to D	Unrated
	RAM	AAA to AA3	A to A3	BBB1 to BB3	B to D	Unrated
	MARC	AAA to AA-	A+ to A-	BBB+ to BB-	B+ to D	Unrated
On and off-balance sheet exposures						
Credit exposures (using corporate risk weights)						
Public sector entities (applicable for entities risk weighted based on their external ratings as corporates)		-	-	-	-	4,518
Insurance cos, securities firms and fund managers		-	-	-	-	1,109
Corporates		-	-	-	-	95
Total		-	-	-	-	5,722

RM'000							
Exposure class	Ratings of Banking Institutions by Approved ECAIs						
	Moody's	Aaa to Aa3	A1 to A3	Baa1 to Baa3	Ba1 to B3	Caa1 to C	Unrated
	S&P	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Unrated
	Fitch	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Unrated
	RAM	AAA to AA3	A1 to A3	BBB1 to BBB3	BB1 to B3	C1 to D	Unrated
	MARC	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	C+ to D	Unrated
On and off-balance sheet exposures							
Banks, DFIs and MDBs		-	-	-	-	-	-
Total		-	-	-	-	-	-

5. CREDIT RISK (Cont'd.)

RM'000

Exposure class	Ratings of Sovereigns and Central Banks by Approved ECAIs						
	Moody's	Aaa to Aa3	A1 to A3	Baa1 to Baa3	Ba1 to B3	Caa1 to C	Unrated
	S&P	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Unrated
	Fitch	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Unrated
	RAM	AAA to AA3	A1 to A3	BBB1 to BBB3	BB1 to B3	C1 to D	Unrated
	MARC	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	C+ to D	Unrated
On and off-balance sheet exposures							
Sovereigns/ central banks		-	829,859	-	-	-	508,913
Total		-	829,859	-	-	-	508,913

Rated Exposures according to ratings by ECAIs of the Islamic Banking Window for the financial year ended 31 December 2019 were as follows:

RM'000

Exposure class	Ratings of Corporates by Approved ECAIs					
	Moody's	Aaa to Aa3	A1 to A3	Baa1 to Ba3	B1 to C	Unrated
	S&P	AAA to AA-	A+ to A-	BBB+ to BB-	B+ to D	Unrated
	Fitch	AAA to AA-	A+ to A-	BBB+ to BB-	B+ to D	Unrated
	RAM	AAA to AA3	A to A3	BBB1 to BB3	B to D	Unrated
	MARC	AAA to AA-	A+ to A-	BBB+ to BB-	B+ to D	Unrated
On and off-balance sheet exposures						
Credit exposures (using corporate risk weights)						
Public sector entities (applicable for entities risk weighted based on their external ratings as corporates)		-	-	-	-	1,535
Insurance cos, securities firms and fund managers		-	-	-	-	742
Corporates						-
Total		-	-	-	-	2,277

5. CREDIT RISK (Cont'd.)

RM'000

Exposure class	Aaa to Aa3	A1 to A3	Baa1 to Baa3	Ba1 to B3	Caa1 to C	Unrated
	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Unrated
	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Unrated
	AAA to AA3	A1 to A3	BBB1 to BBB3	BB1 to B3	C1 to D	Unrated
	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	C+ to D	Unrated
<u>On and off-balance sheet exposures</u>						
Banks, DFIs and MDBs	-	-	-	-	-	-
Total	-	-	-	-	-	-

RM'000

Exposure class	Ratings of Sovereigns and Central Banks by Approved ECAs						
	Moody's	Aaa to Aa3	A1 to A3	Baa1 to Baa3	Ba1 to B3	Caa1 to C	Unrated
	S&P	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Unrated
	Fitch	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Unrated
	RAM	AAA to AA3	A1 to A3	BBB1 to BBB3	BB1 to B3	C1 to D	Unrated
	MARC	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	C+ to D	Unrated
<u>On and off-balance sheet exposures</u>							
Sovereigns/ central banks	-	1,755,374	-	-	-	-	
Total	-	1,755,374	-	-	-	-	

5. CREDIT RISK (Cont'd.)

Internal Credit Rating System

The Bank employs internal rating models to support the assessment of credit risk and assignment of exposures to rating grades or pools. Internal ratings are used pervasively by the Bank in the areas of credit approval, credit review and monitoring, credit stress testing, limits setting, pricing and collections.

The Bank has established a credit rating governance framework to ensure the reliable and consistent performance of the Bank's rating systems. The framework defines the roles and responsibilities of the various parties in the credit rating process, including independent model performance monitoring, annual model validation and independent reviews by Internal Audit.

Credit risk models are independently validated before they are implemented to ensure they are fit for purpose. The robustness of these rating models is monitored on an ongoing basis, and all models are subject to annual reviews conducted by model owners to ascertain that the chosen risk factors and assumptions continue to remain relevant for the respective portfolios. All new models, model changes and annual reviews are approved by the EXCO or Board, depending on the materiality of the portfolio.

Non-Retail Exposures

The Bank has adopted the FIRB Approach for its non-retail exposures. Under this approach, the internal models estimate a probability of default (PD) or supervisory slot for each borrower. These models employ qualitative and quantitative factors to provide an assessment of the borrower's ability to meet their financial obligations, and are calibrated to provide an estimate of the likelihood of default over one-year time horizon. A default is considered to have occurred if:

- the obligor is unlikely to pay its credit obligations in full to the Bank, without recourse by the Bank to actions such as realising the security; or
- the obligor is past due for more than 90 days on any credit obligation to the Bank.

Supervisory loss given default (LGD) and exposure at default (EAD) parameters prescribed by the BNM are used together with the internal credit ratings to calculate risk weights and regulatory capital requirements.

While the Bank's internal risk rating grades may show some correlation with the rating grades of external credit assessment institutions (ECAIs), they are not directly comparable or equivalent to the ECAIs ratings.

5. CREDIT RISK (Cont'd.)

Corporate Portfolio

The Bank has developed models to rate exposures in the Non-bank Financial Institution (NBFI), Large Corporate and SME portfolios. Credit risk factors used to derive a borrower's risk rating include its financial strength, quality of management, business risks, and the industry in which it operates. The borrower risk rating process is augmented by facility risk ratings, which take into account the type and structure of the facility, availability and type of collateral, and seniority of the exposure.

The Bank's internal rating grade structure for the NBFI, Large Corporate and SME models consists of 16 pass grades. The models are mapped to the rating scale by calibration that takes into account the Bank's long-term average portfolio default rate.

Specialised Lending Portfolio

The Bank has developed models for four Specialised Lending portfolios, namely: Income Producing Real Estate (IPRE), Commodities Finance (CF), Project Finance (PF) and Ship Finance (SF). Internal risk grades are derived based on a comprehensive assessment of financial and non-financial risk factors using internal scorecards.

The risk grade structure for IPRE portfolios, like our Corporate models, has 16 pass grades. Risk grades derived for CF, PF and SF portfolios are mapped to four supervisory slotting categories, which determines the risk weights to be applied to such exposures.

Bank Portfolio

The Bank's internal model takes into account asset quality, capital adequacy, liquidity, management, regulatory environment and robustness of the overall banking system. The model has an internal rating grade structure consisting of 15 pass grades.

Equity Portfolio

The Bank adopts the following approaches for its equity investments:

- i. Simple Risk Weight (SRW) method for its equity investment portfolio; and
- ii. PD/LGD method for its investments in Tier-1 and Tier-2 perpetual securities issued by banks.

Investment exposures adopting the SRW method are subject to the supervisory risk weights, while investment exposures adopting the PD/LGD method are rated using the Bank's internal model.

5. CREDIT RISK (Cont'd.)

Retail Exposures

The Bank has adopted the AIRB Approach for its retail exposures, which comprises residential mortgages, qualifying revolving retail exposures and other retail exposures.

Exposures within each of these asset classes are not managed individually, but as part of a pool of similar exposures based on borrower and transaction characteristics. Internal risk segmentation models are used to estimate PD, LGD and EAD parameters for each of these exposure pools based on historical internal loss data. Where internal loss data are insufficient to provide robust risk estimates, the segmentation models may incorporate internal and/or external proxies and, where necessary, may be augmented with appropriate margins of conservatism.

Retail Probability of Default Models

Retail PD models are based on pools of homogeneous exposures segmented by a combination of application scores, behavioral scores and other risk drivers reflecting borrower, facility and delinquency characteristics. PD pools are calibrated through-the-cycle using at least five years of historical data that cover a full economic cycle. For low default portfolios, internal and/or external proxies that are highly correlated with internal defaults are used to estimate the long-run average PD. A regulatory floor of 0.03 per cent is applied to all PD pools.

In general, the long-run observed default rates are largely lower than the PD estimates due to the model's calibration philosophy and the application of conservative overlays to account for model risk.

Retail Loss Given Default Models

Retail LGDs are estimated using historical default data and the recovery experience from such defaulted cases. LGD models are segmented using material pre-default risk drivers such as facility and collateral characteristics.

LGD models are calibrated to reflect a portfolio's economic downturn experience. In addition, for residential mortgages, an LGD floor of 10 per cent is applied at the segment level.

Retail Exposure at Default Models

For revolving products, EAD is computed based on the current outstanding balance and the estimated potential drawdown of undrawn commitments, which is statistically determined based on historical data. For closed-end products, the EAD is the current outstanding balance. EAD models are generally segmented by material pre-default risk drivers such as facility type, limit and utilisation. EAD models are calibrated to reflect the portfolio long-run averages, except for portfolios that exhibit positive correlation between LGD and PD values, in which case, these portfolios' EAD models are calibrated to reflect their economic downturn conditions. EADs must be at least equal to the current outstanding balances.

5. CREDIT RISK (Cont'd.)

Credit risk profile

The following tables presented the breakdown of exposures by RWA and EAD for the Bank using the respective internal rating scale for the model applicable to the asset classes for the financial year ended 31 December 2020:

Exposures under the IRB Approach by Risk Grade

CRR band	1-9	10-16	17-20 (Default)
	RM'000	RM'000	RM'000
<u>Non-retail exposures (EAD)</u>			
Large corporate, SMEs and specialised lending (IPRE)	22,064,468	19,858,378	998,245
Bank	10,343,279	91,044	-
Total non-retail exposures	32,407,748	19,949,422	998,245
<u>Undrawn commitments</u>			
Large corporate, SMEs and specialised lending (IPRE)	1,682,598	605,667	1,877
Bank	-	-	-
Total undrawn commitments	1,682,598	605,667	1,877
<u>Exposure weighted average LGD (%)</u>			
Large corporate, SMEs and specialised lending (IPRE)	42%	40%	45%
Bank	41%	45%	-
<u>Exposure weighted average risk weight (%)</u>			
Large corporate, SMEs and specialised lending (IPRE)	66%	114%	0%
Bank	11%	62%	-

Specialised Lending exposures under the Supervisory Slotting Criteria

Supervisory Categories	Strong/ RM'000	Good/ RM'000	Satisfactory/ RM'000	Weak/ RM'000	Default/ RM'000
<u>Specialised Lending exposures (EAD)</u>					
Project Finance	91,962	-	-	-	-
Object Finance	-	-	-	-	-
Risk Weighted Assets	64,373	-	-	-	-

5. CREDIT RISK (Cont'd.)

Exposures under the IRB Approach by Risk Grade (cont'd.)

PD range of retail exposures	0.00% to 1.00%	1.01% to 2.00%	2.01% to 99.99%	SD to default
	RM'000	RM'000	RM'000	RM'000
<u>Retail exposures (EAD)</u>				
Residential mortgages	34,025,110	598,344	3,270,180	510,048
Qualifying revolving retail	4,105,639	856,893	1,746,060	23,764
Other retail	14,223,677	2,074,020	2,261,152	211,587
Total retail exposures	52,354,426	3,529,257	7,277,392	745,399
<u>Undrawn commitments</u>				
Residential mortgages	2,045,170	168,974	145,325	-
Qualifying revolving retail	3,003,987	391,010	765,085	-
Other retail	2,171,693	418,075	238,102	129
Total undrawn commitments	7,220,849	978,059	1,148,512	129
<u>Exposure weighted average LGD (%)</u>				
Residential mortgages	12.74%	13.87%	13.49%	14.06%
Qualifying revolving retail	32.91%	45.65%	44.32%	59.03%
Other retail	16.34%	26.77%	25.61%	25.34%
<u>Exposure weighted average risk weight (%)</u>				
Residential mortgages	7.33%	21.89%	43.63%	27.51%
Qualifying revolving retail	6.26%	19.84%	62.75%	287.35%
Other retail	12.19%	29.91%	40.37%	70.75%

The following tables presented the breakdown of exposures by RWA and EAD for the Bank using the respective internal rating scale for the model applicable to the asset classes for the financial year ended 31 December 2019:

Exposures under the IRB Approach by Risk Grade

CRR band	1-9	10-16	17-20 (Default)
	RM'000	RM'000	RM'000
<u>Non-retail exposures (EAD)</u>			
Large corporate, SMEs and specialised lending (IPRE)	24,441,803	17,347,264	833,429
Bank	13,817,071	22,360	-
Total non-retail exposures	38,258,874	17,369,624	833,429
<u>Undrawn commitments</u>			
Large corporate, SMEs and specialised lending (IPRE)	1,573,867	1,044,987	966
Bank	-	-	-
Total undrawn commitments	1,573,867	1,044,987	966
<u>Exposure weighted average LGD (%)</u>			
Large corporate, SMEs and specialised lending (IPRE)	42%	40%	45%
Bank	33%	45%	0%
<u>Exposure weighted average risk weight (%)</u>			
Large corporate, SMEs and specialised lending (IPRE)	72%	116%	0%
Bank	10%	48%	0%

5. CREDIT RISK (Cont'd.)

Specialised Lending exposures under the Supervisory Slotting Criteria

Supervisory Categories	Strong/ RM'000	Good/ RM'000	Satisfactory/ RM'000	Weak/ RM'000	Default/ RM'000
<u>Specialised Lending exposures (EAD)</u>					
Project Finance	79,780	-	-	-	-
Object Finance	4,048	-	-	-	-
Risk Weighted Assets	58,680	-	-	-	-

PD range of retail exposures	0.00% to 1.00%	1.01% to 2.00%	2.01% to 99.99%	SD to default
	RM'000	RM'000	RM'000	RM'000
<u>Retail exposures (EAD)</u>				
Residential mortgages	32,939,273	902,689	3,364,930	543,421
Qualifying revolving retail	4,206,863	950,767	2,072,330	45,620
Other retail	14,332,666	2,137,030	2,251,487	205,264
Total retail exposures	51,478,802	3,990,486	7,688,747	794,305
<u>Undrawn commitments</u>				
Residential mortgages	2,157,061	220,580	152,533	-
Qualifying revolving retail	3,067,736	490,014	830,962	-
Other retail	2,076,321	497,896	303,527	145
Total undrawn commitments	7,301,118	1,208,490	1,287,022	145
<u>Exposure weighted average LGD (%)</u>				
Residential mortgages	12.52%	14.38%	13.08%	13.46%
Qualifying revolving retail	33.03%	43.95%	45.48%	59.04%
Other retail	16.16%	26.59%	28.09%	25.17%
<u>Exposure weighted average risk</u>				
Residential mortgages	7.15%	22.43%	43.89%	50.61%
Qualifying revolving retail	6.35%	19.01%	67.52%	386.90%
Other retail	12.13%	29.97%	45.06%	127.46%

5. CREDIT RISK (Cont'd.)

The following tables presented the breakdown of exposures by RWA and EAD for the Islamic Banking Window using the respective internal rating scale for the model application to the asset classes for the financial year ended 31 December 2020:

Exposures under the IRB Approach by Risk Grade

CRR band	1-9	10-16	17-20 (Default)
	RM'000	RM'000	RM'000
<u>Non-retail exposures (EAD)</u>			
Large corporate, SMEs and specialised lending (IPRE)	1,354,068	869,279	16,612
Bank	115,504	-	-
Total non-retail exposures	1,469,572	869,279	16,612
<u>Undrawn commitments</u>			
Large corporate, SMEs and specialised lending (IPRE)	50,107	15,936	1,126
Bank	-	-	-
Total undrawn commitments	50,107	15,936	1,126
<u>Exposure weighted average LGD (%)</u>			
Large corporate, SMEs and specialised lending (IPRE)	44%	41%	45%
Bank	45%	-	-
<u>Exposure weighted average risk weight (%)</u>			
Large corporate, SMEs and specialised lending (IPRE)	105%	138%	0%
Bank	10%	-	-

As at 31 December 2020, there were no Specialised Lending exposures under the Supervisory Slotting Criteria for Islamic Banking Window.

PD range of retail exposures	0.00% to 1.00%	1.01% to 2.00%	2.01% to 99.99%	SD to default
	RM'000	RM'000	RM'000	RM'000
<u>Retail exposures (EAD)</u>				
Residential mortgages	2,477,900	73,348	311,319	45,185
Other retail	649,306	435,782	137,926	14,766
Total retail exposures	3,127,206	509,130	449,245	59,951
<u>Undrawn commitments</u>				
Residential mortgages	285,376	25,760	11,501	-
Other retail	61,503	67,711	6,097	-
Total undrawn commitments	346,879	93,471	17,598	-
<u>Exposure weighted average LGD (%)</u>				
Residential mortgages	15.55%	15.46%	16.52%	15.71%
Other retail	23.84%	27.31%	27.64%	41.90%
<u>Exposure weighted average risk</u>				
Residential mortgages	11.04%	23.69%	52.17%	2.04%
Other retail	20.00%	30.39%	43.93%	116.61%

5. CREDIT RISK (Cont'd.)

Exposures under the IRB Approach by Risk Grade (cont'd.)

The following tables presented the breakdown of exposures by RWA and EAD for the Islamic Banking Window using the respective internal rating scale for the model application to the asset classes for the financial year ended 31 December 2019:

CRR band	1-9	10-16	17-20 (Default)
	RM'000	RM'000	RM'000
<u>Non-retail exposures (EAD)</u>			
Large corporate, SMEs and specialised lending (IPRE)	1,049,020	537,180	-
Bank	50,529	-	-
Total non-retail exposures	1,099,548	537,180	-
<u>Undrawn commitments</u>			
Large corporate, SMEs and specialised lending (IPRE)	72,240	28,172	-
Bank	-	-	-
Total undrawn commitments	72,240	28,172	-
<u>Exposure weighted average LGD (%)</u>			
Large corporate, SMEs and specialised lending (IPRE)	45%	43%	0%
Bank	45%	0%	0%
<u>Exposure weighted average risk weight (%)</u>			
Large corporate, SMEs and specialised lending (IPRE)	109%	130%	0%
Bank	11%	0%	0%

As at 31 December 2019, there were no Specialised Lending exposures under the Supervisory Slotting Criteria for Islamic Banking Window.

PD range of retail exposures	0.00% to 1.00%	1.01% to 2.00%	2.01% to 99.99%	SD to default
	RM'000	RM'000	RM'000	RM'000
<u>Retail exposures (EAD)</u>				
Residential mortgages	2,044,189	147,685	264,078	31,599
Other retail	532,453	327,262	139,157	6,767
Total retail exposures	2,576,642	474,947	403,235	38,366
<u>Undrawn commitments</u>				
Residential mortgages	322,448	42,512	11,101	-
Other retail	82,568	68,038	12,796	-
Total undrawn commitments	405,015	110,550	23,897	-
<u>Exposure weighted average LGD (%)</u>				
Residential mortgages	15.53%	15.51%	16.56%	15.71%
Other retail	21.57%	26.03%	31.41%	35.66%
<u>Exposure weighted average risk</u>				
Residential mortgages	10.63%	23.81%	53.38%	1.92%
Other retail	17.48%	29.20%	46.17%	133.72%

5. CREDIT RISK (Cont'd.)

Retail exposures under the IRB Approach by expected loss range of the Bank for the financial year ended 31 December 2020 were as follows:

EL% range of retail exposures	0.0% to 1.0%	1.0% to 5.0%	5.0% to 10.0%	10.0% to 30.0%	30.0% to 100.0%
	RM'000	RM'000	RM'000	RM'000	RM'000
<u>Retail exposures (EAD)</u>					
Residential mortgages	37,117,141	830,021	86,040	370,480	-
Qualifying revolving retail	5,017,892	1,229,668	239,944	197,628	47,224
Other retail	17,544,085	856,165	175,754	127,952	66,480
Total retail exposures	59,679,118	2,915,854	501,738	696,060	113,704
<u>Undrawn commitments</u>					
Residential mortgages	2,341,425	17,062	982	-	-
Qualifying revolving retail	3,450,546	542,915	86,516	78,368	1,737
Other retail	2,775,908	48,743	3,215	133	-
Total undrawn commitments	8,567,879	608,720	90,713	78,501	1,737
<u>weight (%)</u>					
Residential mortgages	9.50%	71.45%	83.07%	0.64%	0.00%
Qualifying revolving retail	8.30%	47.81%	106.02%	129.28%	162.14%
Other retail	15.13%	57.52%	105.09%	47.38%	36.32%

Retail exposures under the IRB Approach by expected loss range of the Bank for the financial year ended 31 December 2019 were as follows:

EL% range of retail exposures	0.0% to 1.0%	1.0% to 5.0%	5.0% to 10.0%	10.0% to 30.0%	30.0% to 100.0%
	RM'000	RM'000	RM'000	RM'000	RM'000
<u>Retail exposures (EAD)</u>					
Residential mortgages	36,402,155	947,392	97,276	303,490	-
Qualifying revolving retail	5,226,242	1,440,787	262,409	258,037	88,105
Other retail	17,678,728	872,494	232,159	99,587	43,479
Total retail exposures	59,307,125	3,260,672	591,844	661,114	131,585
<u>Undrawn commitments</u>					
Residential mortgages	2,516,661	11,683	1,830	-	-
Qualifying revolving retail	3,624,311	660,237	56,352	45,335	2,477
Other retail	2,790,222	34,937	2,985	49,745	-
Total undrawn commitments	8,931,193	706,858	61,167	95,080	2,477
<u>weight (%)</u>					
Residential mortgages	9.89%	66.72%	75.83%	0.53%	0.00%
Qualifying revolving retail	8.24%	48.47%	114.87%	169.27%	177.78%
Other retail	15.36%	62.98%	100.05%	141.86%	39.89%

5. CREDIT RISK (Cont'd.)

Retail exposures under the IRB Approach by expected loss range of the Islamic Banking Window for the financial year ended 31 December 2020 were as follows:

EL% range of retail exposures	0.0% to 1.0%	1.0% to 5.0%	5.0% to 10.0%	10.0% to 30.0%	30.0% to 100.0%
	RM'000	RM'000	RM'000	RM'000	RM'000
<u>Retail exposures (EAD)</u>					
Residential mortgages	2,818,294	35,866	8,407	45,185	-
Other retail	1,159,614	48,323	10,938	9,655	9,250
Total retail exposures	3,977,908	84,189	19,345	54,840	9,250
<u>Undrawn commitments</u>					
Residential mortgages	321,948	689	-	-	-
Other retail	133,460	1,851	-	-	-
Total undrawn commitments	455,408	2,540	-	-	-
<u>weight (%)</u>					
Residential mortgages	14.79%	80.38%	89.95%	2.04%	0.00%
Other retail	25.09%	50.00%	68.29%	140.91%	42.54%

Retail exposures under the IRB Approach by expected loss range of the Islamic Banking Window for the financial year ended 31 December 2019 were as follows:

EL% range of retail exposures	0.0% to 1.0%	1.0% to 5.0%	5.0% to 10.0%	10.0% to 30.0%	30.0% to 100.0%
	RM'000	RM'000	RM'000	RM'000	RM'000
<u>Retail exposures (EAD)</u>					
Residential mortgages	2,413,614	33,512	8,926	31,499	-
Other retail	935,987	55,613	10,230	1,064	2,745
Total retail exposures	3,349,601	89,125	19,156	32,563	2,745
<u>Undrawn commitments</u>					
Residential mortgages	375,898	163	-	-	-
Other retail	157,827	5,560	15	-	-
Total undrawn commitments	533,725	5,722	15	-	-
<u>weight (%)</u>					
Residential mortgages	14.87%	79.69%	89.53%	1.76%	0.00%
Other retail	22.54%	60.87%	154.23%	124.68%	0.00%

5. CREDIT RISK (Cont'd.)

Actual loss by asset class

Actual loss consists of impairment loss allowance and write-off to the Bank's income statement for the financial year ended 31 December 2020.

Comparison of actual loss and expected loss by asset class

Bank

Asset class	Actual loss (as at 31 December 2020)	Expected loss (as at 31 December 2019)	Actual loss (as at 31 December 2019)	Expected loss (as at 31 December 2018)
	RM'000	RM'000	RM'000	RM'000
Corporate	162,496	887,882	19,355	867,297
Bank	-	3,784	-	5,022
Retail	117,955	368,221	155,368	287,377
Total	280,451	1,259,887	174,723	1,159,696

The actual loss in 2020 is lower than the expected loss computed as at 31 December 2019. The Bank continues to be proactive in its risk management approach to ensure that actual losses remained within the Bank's expectations.

EL is the estimated credit loss from defaults over a one-year horizon. EL is the product of PD, LGD and EAD. A comparison of actual loss and expected loss provides an indication of the predictive power of the IRB models used by the Bank.

However, they are not directly comparable due to the following reasons:

- i. EL as at 31 December 2019 is a measure of expected credit loss based on the credit exposure as at that date. On the other hand, impairment loss allowance and write-offs are accounting entries relating to a fluctuating portfolio over the course of the financial year. Moreover, write-offs may relate to defaults from prior years.
- ii. EL is estimated based on non-default exposures only, while impairment loss allowance is an accounting estimate of likely loss from defaulted exposures. Write-offs are recorded on defaulted exposures when no further recovery is possible.

Islamic Banking Window

Asset class	Actual loss (as at 31 December 2020)	Expected loss (as at 31 December 2019)	Actual loss (as at 31 December 2019)	Expected loss (as at 31 December 2018)
	RM'000	RM'000	RM'000	RM'000
Corporate	4,086	18,557	-	8,416
Bank	-	17	-	21
Retail	12,478	16,567	6,235	6,881
Total	16,564	35,141	6,235	15,318

5. CREDIT RISK (Cont'd.)

Actual loss consists of allowances for ECL and write-off to the Bank's income statement for the financial year ended 31 December 2020.

Bank 2020	Stage 1	Stage 2	Stage 3	Total ECL RM'000
	12 Months ECL RM'000	Lifetime ECL non credit- impaired RM'000	Lifetime ECL credit- impaired RM'000	
At 1 January	870,677	367,276	286,132	1,524,085
Transferred to Stage 1	66,937	(167,488)	(4,439)	(104,990)
Transferred to Stage 2	(75,955)	281,661	(11,214)	194,492
Transferred to Stage 3	(566)	(48,500)	169,358	120,292
Allowances made for the financial year	371,575	478,059	236,775	1,086,409
Maturity/settlement/repayment	(521,555)	(124,189)	(74,951)	(720,695)
Exchange differences	1,187	(863)	-	324
Net total	(158,377)	418,680	315,529	575,832
Amounts written off	-	-	(133,998)	(133,998)
Other movements	-	-	(12,087)	(12,087)
At 31 December	712,300	785,956	455,576	1,953,832

Bank 2019	Stage 1	Stage 2	Stage 3	Total ECL RM'000
	12 Months ECL RM'000	Lifetime ECL non credit- impaired RM'000	Lifetime ECL credit- impaired RM'000	
At 1 January	798,668	362,169	212,674	1,373,511
Transferred to Stage 1	43,278	(136,731)	(7,005)	(100,458)
Transferred to Stage 2	(62,901)	235,776	(14,701)	158,174
Transferred to Stage 3	(583)	(53,267)	177,925	124,075
Allowances made for the financial year	370,086	62,989	168,365	601,440
Maturity/settlement/repayment	(277,433)	(103,645)	(100,221)	(481,299)
Exchange differences	(438)	(15)	-	(453)
Net total	72,009	5,107	224,363	301,479
Amounts written off	-	-	(145,329)	(145,329)
Other movements	-	-	(5,576)	(5,576)
At 31 December	870,677	367,276	286,132	1,524,085

5. CREDIT RISK (Cont'd.)

Movements in the allowances for ECL and write-off on financing, advances and others for Islamic Banking Window are as follows:

	Stage 1	Stage 2	Stage 3	Total ECL RM'000
	12 Months ECL RM'000	Lifetime ECL not credit impaired RM'000	Lifetime ECL credit impaired RM'000	
2020				
At 1 January	10,763	27,330	7,115	45,208
Transferred to Stage 1	1,217	(7,722)	-	(6,505)
Transferred to Stage 2	(2,884)	17,670	(105)	14,681
Transferred to Stage 3	(282)	(1,605)	3,263	1,376
Allowances made for the financial year	75,965	7,591	16,337	99,893
Maturity/settlement/ repayment	(63,804)	(8,532)	(2,917)	(75,253)
Exchange differences	-	-	-	-
Net total	10,212	7,402	16,578	34,192
Amounts written off	-	-	(1,956)	(1,956)
Other movements	-	-	(1,053)	(1,053)
At 31 December	20,975	34,732	20,684	76,391

	Stage 1	Stage 2	Stage 3	Total ECL RM'000
	12 Months ECL RM'000	Lifetime ECL not credit impaired RM'000	Lifetime ECL credit impaired RM'000	
2019				
At 1 January	13,706	15,449	1,633	30,788
Transferred to Stage 1	499	(6,297)	-	(5,798)
Transferred to Stage 2	(952)	29,735	(1,134)	27,649
Transferred to Stage 3	(23)	(1,649)	6,405	4,733
Allowances made for the financial year	45,739	489	3,462	49,690
Maturity/settlement/ repayment	(48,206)	(10,397)	(2,496)	(61,099)
Exchange differences	-	-	-	-
Net total	(2,943)	11,881	6,237	15,175
Other movements	-	-	(755)	(755)
At 31 December	10,763	27,330	7,115	45,208

5. CREDIT RISK (Cont'd.)

Credit Risk Mitigation

Potential credit losses are mitigated using a variety of instruments such as collateral, derivatives and guarantee. As a fundamental credit principle, the Bank generally does not grant credit facilities solely on the basis of the collateral provided. All credit facilities are granted based on the credit standing of the borrower, source of repayment and debt servicing ability.

Collateral is taken whenever possible to mitigate the credit risk assumed and the value of the collateral is monitored periodically.

The frequency of valuation depends on the type, liquidity and volatility of the collateral value. The main types of collateral taken by the Bank are mainly properties, cash and marketable securities. Policies and processes are in place to monitor collateral concentration.

Appropriate haircuts are applied to the market value of collateral, reflecting the underlying nature of the collateral, quality, volatility and liquidity. In addition, collateral taken by the Bank has to fulfill certain eligibility criteria (such as legal certainty across relevant jurisdictions) in order to be eligible for Internal Ratings-Based (IRB) purposes.

In extending credit facilities to SMEs, personal guarantees are also often taken as a form of moral support to ensure commitment from the principal shareholders and directors.

For IRB purposes, the Bank does not recognise personal guarantees as an eligible credit risk protection. Corporate guarantees are often obtained when the borrower's credit worthiness is not sufficient to justify an extension of credit. To recognise the effects of guarantees under the FIRB Approach, the Bank adopts the PD substitution approach whereby the PD of an eligible guarantor of an exposure will be used for calculating the capital requirement.

Exposures arising from FX and derivatives are typically mitigated through agreements such as the International Swaps and Derivatives Association (ISDA) Master Agreements, the Credit Support Annex (CSA) and the Global Master Repurchase Agreements (GMRA). Such agreements help to minimise credit exposure by allowing the Bank to offset what it owes to a counterparty against what is due from that counterparty in the event of a default.

For IRB purpose, the Bank does not recognise ISDA netting. The Current Exposure Method is used to estimate its FX and derivative exposures on a gross basis.

5. CREDIT RISK (Cont'd.)

Credit Risk Mitigation (cont'd.)

The following table presents the total exposures which are covered by eligible credit risk mitigants of the Bank for the financial year ended 31 December 2020:

Exposure class	Exposures before CRM	Exposures covered by guarantees/ credit derivatives	Exposures covered by eligible financial collateral	Exposures covered by other eligible collateral
	RM'000	RM'000	RM'000	RM'000
<u>Credit risk</u>				
<i><u>On-balance sheet exposures</u></i>				
Sovereign/central banks	23,059,910	-	200,357	-
Public Sector Entities	179,046	179,046	-	-
Banks, DFIs and MDBs	8,545,328	-	848,650	-
Insurances cos, securities firms and fund managers	1,130,358	-	10,016	-
Corporates	34,524,654	2,803,114	2,339,840	1,711,575
Regulatory retail	18,279,487	-	-	-
Residential mortgages	35,534,166	-	-	-
Other assets	1,321,778	-	-	-
Equity exposures	158,385	-	-	-
Defaulted exposures	1,283,719	4,407	566	14,599
Total on-balance sheet exposures	124,016,831	2,986,567	3,399,428	1,726,174
<i><u>Off-balance sheet exposures</u></i>				
OTC derivatives	1,679,485	2,314	1,797	0
Off-balance sheet exposures other than OTC derivatives or credit derivatives	17,604,520	145,264	821,528	182,240
Defaulted exposures	7,665	-	878	-
Total off-balance sheet exposures	19,291,670	147,578	824,204	182,240
Total on and off-balance sheet exposures	143,308,501	3,134,145	4,223,632	1,908,414

5. CREDIT RISK (Cont'd.)

Credit Risk Mitigation (cont'd.)

The following table presents the total exposures which are covered by eligible credit risk mitigants of the Bank for the financial year ended 31 December 2019:

Exposure class	Exposures before CRM	Exposures covered by guarantees/ credit derivatives	Exposures covered by eligible financial collateral	Exposures covered by other eligible collateral
	RM'000	RM'000	RM'000	RM'000
<u>Credit risk</u>				
<i><u>On-balance sheet exposures</u></i>				
Sovereign/central banks	13,070,835	-	-	-
Public Sector Entities	25,709	25,709	-	-
Banks, DFIs and MDBs	12,548,171	-	3,579,945	-
Insurances cos, securities firms and fund managers	31,794	-	31,515	-
Corporates	33,902,173	1,755,377	2,217,977	1,553,425
Regulatory retail	18,684,686	937	132	-
Residential mortgages	34,676,718	-	-	-
Other assets	910,065	-	-	-
Equity exposures	133,884	-	-	-
Defaulted exposures	1,308,745	3,479	46	30,481
Total on-balance sheet exposures	115,292,780	1,785,502	5,829,615	1,583,906
<i><u>Off-balance sheet exposures</u></i>				
OTC derivatives	1,096,550	203	930	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	18,607,450	224,531	825,768	223,417
Defaulted exposures	5,056	-	186	-
Total off-balance sheet exposures	19,709,056	224,734	826,884	223,417
Total on and off-balance sheet exposures	135,001,836	2,010,236	6,656,499	1,807,322

5. CREDIT RISK (Cont'd.)

Credit risk mitigation (cont'd.)

The following table presents the total exposures which are covered by eligible credit risk mitigants of Islamic Banking Window for the financial year ended 31 December 2020:

Exposure class	Exposures before CRM	Exposures covered by guarantees/ credit derivatives	Exposures covered by eligible financial collateral	Exposures covered by other eligible collateral
	RM'000	RM'000	RM'000	RM'000
<u>Credit risk</u>				
<i><u>On-balance sheet exposures</u></i>				
Sovereign/central banks	1,338,772	-	-	-
Banks, DFIs and MDBs	115,504	-	-	-
Insurances cos, securities firms and fund managers	1,001,476	-	-	-
Corporates	2,093,116	94,904	80,354	45,864
Regulatory retail	1,087,704	-	-	-
Residential mortgages	2,539,930	-	-	-
Other assets	6,486	-	-	-
Defaulted exposures	55,183	-	-	-
Total on-balance sheet exposures	8,238,171	94,904	80,354	45,864
<i><u>Off-balance sheet exposures</u></i>				
OTC derivatives	6,265	-	25	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	588,077	3,127	6,681	41
Defaulted Exposures	1,126	-	-	-
Total off-balance sheet exposures	595,468	3,127	6,707	41
Total on and off-balance sheet exposures	8,833,639	98,031	87,061	45,905

5. CREDIT RISK (Cont'd.)

Credit risk mitigation (cont'd.)

The following table presents the total exposures which are covered by eligible credit risk mitigants of Islamic Banking Window for the financial year ended 31 December 2019:

Exposure class	Exposures before CRM	Exposures covered by guarantees/ credit derivatives	Exposures covered by eligible financial collateral	Exposures covered by other eligible collateral
	RM'000	RM'000	RM'000	RM'000
<u>Credit risk</u>				
<i><u>On-balance sheet exposures</u></i>				
Sovereign/central banks	1,755,374	-	-	-
Banks, DFIs and MDBs	50,529	-	-	-
Corporates	1,446,443	93,571	24,092	27,872
Regulatory retail	835,470	-	-	-
Residential mortgages	2,079,891	-	-	-
Other assets	6,491	-	-	-
Defaulted exposures	31,336	-	-	-
Total on-balance sheet exposures	6,205,534	93,571	24,092	27,872
<i><u>Off-balance sheet exposures</u></i>				
OTC derivatives	2,277	-	-	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	679,218	6,951	4,553	-
	0	-	-	-
Total off-balance sheet exposures	681,495	6,951	4,553	-
Total on and off-balance sheet exposures	6,887,029	100,522	28,645	27,872

5. CREDIT RISK (Cont'd.)

OFF-BALANCE SHEET EXPOSURES AND COUNTERPARTY CREDIT RISK

Counterparty Credit Risk

Unlike normal lending risk where the notional at risk can be determined with a high degree of certainty during the contractual period, counterparty credit risk exposure fluctuates with market variables. Counterparty credit risk is measured as the sum of current mark-to-market plus appropriate add-on factor for potential future exposure (PFE). The PFE factor is an estimate of the maximum credit exposure over the remaining life of the foreign exchange (FX)/ derivative transactions and is used for limit setting and internal risk management.

The Bank also has established policies and procedures to manage wrong-way risk, i.e. where the counterparty credit exposure is correlated positively with its default risk. Transactions that exhibit such characteristics are identified and reported to Senior Management on a regular basis. In addition, transactions with specific wrong-way risk are generally rejected at the underwriting stage.

Credit Exposures from Foreign Exchange and Derivatives

Pre-settlement limits for FX and derivative transactions are established using the PFE approach. This approach takes into consideration the transaction currency and tenor to address the credit risk exposures arising from adverse market movements.

5. CREDIT RISK (Cont'd.)

OFF-BALANCE SHEET EXPOSURES AND COUNTERPARTY CREDIT RISK (Cont'd.)

Credit Exposures from Foreign Exchange and Derivatives (cont'd.)

The Off-Balance Sheet Exposures and their related counterparty credit risk of the Bank for the financial year ended 31 December 2020 were as follows:

Description	Principal Amount	Positive Fair Value of Derivative Contracts	Credit Equivalent Amount	RWA
	RM'000	RM'000	RM'000	RM'000
Direct credit substitutes	2,627,192		2,549,849	1,727,545
Transaction related contingent items	5,866,993		2,910,012	1,801,497
Short Term Self Liquidating trade related contingencies	436,465		99,150	61,223
Foreign exchange related contracts				
One year or less	35,267,102	257,337	670,627	182,943
Over one year to five years	196,407	1,300	17,149	11,954
Over five years	-	-	-	-
Interest/Profit rate related contracts				
One year or less	6,219,513	44,782	94,004	44,549
Over one year to five years	25,759,642	385,087	1,196,853	516,581
Over five years	1,807,224	69,181	242,603	126,779
Equity related contracts				
One year or less	118,736	4,263	-	-
Over one year to five years	-	-	-	-
Over five years	-	-	-	-
Commodity contracts				
One year or less	518,729	51,824	78,012	56,693
Over one year to five years	19,308	343	653	65
Over five years	-	-	-	-
Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year	6,483,994		4,456,619	2,852,274
Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year	20,177,400		1,040,924	233,966
Any commitments that are unconditionally cancelled at any time by the bank without prior notice or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness	15,634,135		5,925,122	751,331
Unutilised credit card lines	95,857		19,171	17,579
Off-balance sheet for securitisation	-		-	-
Total	121,228,697	814,118	19,300,748	8,384,979

5. CREDIT RISK (Cont'd.)

OFF-BALANCE SHEET EXPOSURES AND COUNTERPARTY CREDIT RISK (Cont'd.)

Credit Exposures from Foreign Exchange and Derivatives (cont'd.)

The Off-Balance Sheet Exposures and their related counterparty credit risk of the Bank for the financial year ended 31 December 2019 were as follows:

Description	Principal Amount	Positive Fair Value of Derivative Contracts	Credit Equivalent Amount	RWA
	RM'000	RM'000	RM'000	RM'000
Direct credit substitutes	2,705,659		2,620,287	1,696,912
Transaction related contingent items	6,107,043		3,042,267	2,036,302
Short Term Self Liquidating trade related contingencies	389,829		89,824	52,267
Foreign exchange related contracts				
One year or less	25,342,582	148,769	475,949	139,178
Over one year to five years	550,954	5,215	39,829	24,345
Over five years	-	-	-	-
Interest/Profit rate related contracts				
One year or less	10,034,013	36,573	133,368	60,810
Over one year to five years	15,392,386	157,015	713,544	405,647
Over five years	1,275,978	32,441	165,528	112,757
Equity related contracts				
One year or less	369,983	9,164	516	82
Over one year to five years	82,587	1,549	-	-
Over five years	-	-	-	-
Commodity contracts				
One year or less	486,130	43,026	74,099	44,693
Over one year to five years	76,363	1,274	9,471	1,217
Over five years	-	-	-	-
Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year	7,483,692		5,148,254	3,548,768
Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year	17,396,566		942,075	227,467
Any commitments that are unconditionally cancelled at any time by the bank without prior notice or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness	15,055,672		6,071,844	767,628
Unutilised credit card lines	84,694		16,939	15,264
Off-balance sheet for securitisation	-		-	-
Total	102,834,131	435,026	19,543,794	9,133,335

5. CREDIT RISK (Cont'd.)

OFF-BALANCE SHEET EXPOSURES AND COUNTERPARTY CREDIT RISK (Cont'd.)

Credit Exposures from Foreign Exchange and Derivatives (cont'd.)

The off-balance sheet exposures and their related counterparty credit risk of the Islamic Banking Window for the financial year ended 31 December 2020 were as follows:

Description	Principal amount	Positive fair value of derivative contracts	Credit equivalent amount	RWA
	RM'000	RM'000	RM'000	RM'000
Direct credit substitutes	35,164		35,164	36,981
Transaction related contingent items	56,499		28,449	32,415
Short-term self-liquidating trade-related contingencies	4,362		872	1,436
Foreign exchange related contracts with an original maturity up to one year	435,412	8,729	6,265	2,817
Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year	720,560		518,124	160,519
Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year	260,048		6,594	2,651
Any commitments that are unconditionally cancelled at any time by the bank without prior notice or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness	227,495		-	-
Total	1,739,540	8,729	595,468	236,819

5. CREDIT RISK (Cont'd.)

OFF-BALANCE SHEET EXPOSURES AND COUNTERPARTY CREDIT RISK (Cont'd.)

Credit Exposures from Foreign Exchange and Derivatives (cont'd.)

The off-balance sheet exposures and their related counterparty credit risk of the Islamic Banking Window for the financial year ended 31 December 2019 were as follows:

Description	Principal amount	Positive fair value of derivative contracts	Credit equivalent amount	RWA
	RM'000	RM'000	RM'000	RM'000
Direct credit substitutes	11,874		11,874	6,968
Transaction related contingent items	54,306		27,278	31,581
Short-term self-liquidating trade-related contingencies	3,259		652	359
Foreign exchange related contracts with an original maturity up to one year	153,257	2,637	2,277	1,049
Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year	950,177		637,296	210,473
Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year	212,341		2,119	789
Any commitments that are unconditionally cancelled at any time by the bank without prior notice or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness	212,239		-	-
Total	1,597,452	2,637	681,496	251,219

6. MARKET RISK

Market risk refers to the risk of losses to the Bank from movements in the market rates or prices (such as changes in interest rates, foreign exchange rates, equity prices, commodity prices, credit spreads) of the underlying asset.

Market risk is governed by the Bank's ALCO, which meets monthly to review and provide directions on market risk matters. The Market Risk Management (MRM) and Balance Sheet Risk Management (BSRM) under Risk Management supports the RMC, RCC and ALCO with independent assessment of the market risk profile of the Bank.

The Bank's market risk framework comprises market risk policies, practices and the control structure with appropriate delegation of authority and market risk limits. The Bank employs valuation methodologies that are in line with sound market practices. Valuation and risk models are independently validated. In addition, a Product/Service Programme process ensures that market risk issues identified are adequately addressed prior to the launch of products and services.

One of the Bank's main objectives in undertaking trading activities is to provide customer-centric products and services to support client franchise business and to cater for clients' hedging needs. We review and enhance our management of derivatives risks continually to ensure that the complexities of the business are controlled appropriately.

Overall market risk appetite is balanced at the Bank and business unit levels with the targeted revenue, and takes into account the capital position of the Bank. Market Risk appetite is established for all trading exposures and non-trading FX exposures within the Bank. This ensures that the Bank remains well-capitalised even under stress conditions. The risk appetite is translated into risk limits that are delegated to business units. These risk limits have proportional returns that are commensurate with the risks taken.

The Bank currently adopts the Standardised Approach for the calculation of regulatory market risk capital but uses internal models to measure and control trading market risks. The financial products which are warehoused, measured and controlled using internal models include FX and FX option, plain vanilla interest rate contract, interest rate option, cross currency swap, government bond, quasi government bond, corporate bond, commodity contract and commodity option.

The Bank adopts a daily Expected Shortfall (ES) within a 97.5 percent confidence interval over a one-day holding period, using the historical Value-at-Risk (VaR) simulation method, as a control of market risk. This entails the estimation of tail loss based on the most recent historical data. ES is the average portfolio loss, assuming that the loss is greater than the specified percentile of the loss distribution. This methodology does not make assumptions on the distribution of returns and the correlations between risk classes. It assumes that possible future changes in market rates may be implied by observed historical market movements.

For backtesting purpose, the Bank uses daily VaR within a 99 percent confidence interval over a one-day holding period, based on historical simulation method. As VaR is the statistical measure for potential losses, the VaR measures are backtested against profit and loss of the trading book to validate the robustness of the methodology. The backtesting process analyses whether the exceptions are due to model deficiencies or market volatility. All backtesting exceptions are tabled to the ALCO with recommended actions and resolutions.

6. MARKET RISK (Cont'd.)

To complement the ES measure, stress and scenario tests are performed to identify the Bank's vulnerability to event risk. These tests serve to provide early warnings of plausible extreme losses to facilitate proactive management of market risks.

The Bank's daily ES as at 31 December 2020 was RM7.843 million.

	Year End RM'000	High RM'000	Low RM'000	Average RM'000
2020				
Interest rate	3,375	10,615	883	4,466
Foreign exchange	1,737	3,191	75	868
Commodities	145	560	5	155
Option Volatility	135	426	3	113
Total diversified ES	<u>7,843</u>	<u>15,455</u>	<u>2,555</u>	<u>7,794</u>
2019				
Interest rate	2,094	8,890	612	2,263
Foreign exchange	506	6,338	235	1,684
Commodities	20	964	20	239
Option Volatility	114	185	84	132
Total diversified ES	<u>4,159</u>	<u>11,009</u>	<u>1,933</u>	<u>3,963</u>

7. INTEREST RATE RISK/RATE OF RETURN RISK IN THE BANKING BOOK (IRRBB/RORRBB)

Interest rate risk/ rate of return risk in the banking book (IRRBB/RORRBB) is defined as the risk of potential loss of capital or reduction in earnings due to changes in interest/profit rate environment.

Mismatches in pricing and other characteristics of assets and liabilities of the Bank would give rise to sensitivity to interest/profit rate movements. As interest/profit rates and yield curves change over time, these mismatches may result in change in the Bank's earnings and economic net worth. The primary objective of managing IRRBB/RORRBB is to protect and enhance capital or economic net worth through adequate, stable and reliable growth in net interest/profit earnings under a broad range of possible economic conditions.

The ALCO maintains oversight of the effectiveness of the interest/profit rate risk management structure including policies, limits and controls. Balance Sheet Risk Management under Risk Management supports the ALCO in monitoring the interest/profit rate risk profile of the banking book.

IRRBB/RORRBB is quantified on a monthly basis using a combination of static analysis tools and dynamic simulation techniques. Static analysis tools include repricing gap approach and sensitivity approach (PV01). Mismatches in the longer tenor from repricing gap will experience greater change in dollar value of interest/profit rate positions for 1 basis point increase in prevailing interest/profit rate than similar position in the shorter tenor.

Net Interest Income (NII)/ Net Profit Income (NPI) sensitivity simulation is performed to quantify a forward looking impact on NII/NPI for the next 12 months under various interest/profit rate scenarios to assess the impact of interest/profit rate movements on income. Economic Value of Equity (EVE) sensitivity simulation provides a measure of the potential economic value impact of interest/profit rate changes across the full maturity profile of the balance sheet, including off-balance sheet items. It measures the net effect of the present value of repricing cash flows of the banking book under different interest/profit rate scenarios.

Stress tests are also performed regularly to determine the adequacy of capital in meeting the impact of extreme interest/profit rate movements on the balance sheet. Such tests are also performed to provide early warnings of potential extreme losses, facilitating the proactive management of interest/profit rate risks in an environment of rapid financial market changes.

The risks arising from the trading book, such as movements in interest/profit rates, foreign exchange rates and equity prices are managed and controlled under the market risk framework that is discussed under the Market Risk section.

**7. INTEREST RATE RISK/RATE OF RETURN RISK IN THE BANKING BOOK (IRRBB/RORRBB)
(Cont'd.)**

Interest/Profit Rate Sensitivity Analysis - Banking Book

The table below shows the results at 100 and 200 basis points parallel interest/profit rate shocks to EVE and NII/NPI. The repricing profile of loans is generally based on the earliest possible repricing dates. Interest/profit rate flooring effects are taken into consideration. Loan prepayment and time deposit early withdraw rates are estimated based on past statistics and trends where possible and material. The average repricing maturity of core non-maturity deposits is determined through empirical models.

Economic Value of Equity (EVE)

31-Dec-20	Increase/ (Decrease) in basis points	Sensitivity of EVE	Increase/ (Decrease) in basis points	Sensitivity of EVE
Currency		RM'000		RM'000
Total	+200/(200)	(544,784)/ 533,352	+100/(100)	(281,127)/ 304,669
MYR	+200/(200)	(554,087)/ 532,553	+100/(100)	(285,816)/ 304,481
USD	+200/(200)	9,303/ 799	+100/(100)	4,689/ 188

31-Dec-19	Increase/ (Decrease) in basis points	Sensitivity of EVE	Increase/ (Decrease) in basis points	Sensitivity of EVE
Currency		RM'000		RM'000
Total	+200/(200)	(297,123)/ 358,234	+100/(100)	(156,417)/ 173,538
MYR	+200/(200)	(314,436)/ 372,279	+100/(100)	(165,110)/ 182,306
USD	+200/(200)	17,313/ (14,045)	+100/(100)	8,693/ (8,768)

Net Interest/Profit Income (NII/NPI)

31-Dec-20	Increase/ (Decrease) in basis points	Sensitivity of NII/NPI	Increase/ (Decrease) in basis points	Sensitivity of NII/NPI
Currency		RM'000		RM'000
Total	+200/(200)	389,685/ (570,677)	+100/(100)	194,843/ (264,821)
MYR	+200/(200)	422,720/ (549,896)	+100/(100)	211,360/ (255,267)
USD	+200/(200)	(33,035)/ (20,781)	+100/(100)	(16,517)/ (9,554)

31-Dec-19	Increase/ (Decrease) in basis points	Sensitivity of NII	Increase/ (Decrease) in basis points	Sensitivity of NII
Currency		RM'000		RM'000
Total	+200/(200)	552,409/ (644,135)	+100/(100)	277,912/ (309,474)
MYR	+200/(200)	593,908/ (661,983)	+100/(100)	298,661/ (320,990)
USD	+200/(200)	(41,499)/ 17,848	+100/(100)	(20,749)/ 11,516

8. LIQUIDITY RISK

Liquidity risk is the risk that arises from the Bank's inability to meet its obligations or fund increases in assets as they fall due. The Bank maintains sufficient liquidity to fund its day-to-day operations, to meet deposit withdrawals and loan/financing disbursements, to participate in new investments, and to repay borrowings. Hence, liquidity is managed in a manner to address known as well as unanticipated cash funding needs.

Liquidity risk is managed in accordance with a framework of policies, controls and limits. These policies, controls and limits enable the Bank to monitor and manage liquidity risk to ensure that sufficient sources of funds are available over a range of market conditions. These include minimising excessive funding concentrations by diversifying the sources and terms of funding as well as maintaining a portfolio of high quality and marketable liquid assets.

The Bank takes a conservative stance on its liquidity management by continuing to gather core deposits, ensuring that liquidity limits are strictly adhered to and that there are adequate liquid assets to meet potential cash shortfall.

The distribution of deposits is actively managed to ensure a balance between cost effectiveness, continued accessibility to funds, and diversification of funding sources. Important factors in ensuring liquidity are competitive pricing, proactive management of the Bank's core deposits and the maintenance of customer confidence.

Aligned with the regulatory liquidity risk management framework, the Bank's liquidity risk is measured and managed on a projected cash flow basis. The Bank's liquidity is monitored under business-as-usual and stress scenarios. Cash flow mismatch limits are established to limit the Bank's liquidity exposure. The Bank also employs liquidity early warning indicators and trigger points to signal possible contingency situations.

The Bank's liquidity ratios, Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR), are above the regulatory requirement.

Contingency funding plans are in place to identify potential liquidity crisis using a series of warning indicators. Crisis management processes and various strategies including funding and communication plans have been developed to minimise the impact of any liquidity crunch.

The policy of the Bank is to be self-sufficient in its funding capabilities, notwithstanding that it has the support of parent bank in Singapore.

The table in Note 41 to the financial statements on pages 201 to 204 provides the maturity mismatch analysis of the Bank's near and long-term time bands relating to the cash inflows and outflows based on contractual maturity arising from the Bank's activities.

9. OPERATIONAL RISK

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. Operational risk includes banking operations risk, fraud risk, legal risk, regulatory compliance risk (including Shariah non-compliance risk), reputational risk, outsourcing risk and technology risk.

The Bank's primary objective is to foster a sound reputation and operating environment.

Operational Risk Governance, Framework and Programmes

Operational risk is managed through a framework of policies and procedures by which business and support units properly identify, assess, monitor, mitigate and report their risks. The ORMC meets monthly to provide oversight of operational risk matters across the Bank.

The Operational Risk Governance structure adopts the Three Lines of Defence Model. The business and support units, as the First Line of Defence, are responsible for establishing a robust control environment as part of their day-to-day operations. Each business and support unit is responsible for implementing the operational risk framework and policies, embedding appropriate internal controls into processes and maintaining business resilience for key activities.

The Operational Risk Management (ORM) under Risk Management, as the Second Line of Defence, provides an overarching governance over operational risk through relevant frameworks, policies, programmes and systems. It also monitors and reports key risk self-assessment results, outsourcing matters, operational risk indicator breaches, self-identified operational risks and operational risk incidents to the ORMC and the Board.

Internal Audit, as the Third Line of Defence, provides an independent and objective assessment on the overall effectiveness of the risk governance framework and internal controls through periodic audit reviews.

The Bank has an established business continuity and crisis management programme which ensures prompt recovery of critical business and support units should there be unforeseen events. An annual attestation is provided to the Board on the state of business continuity readiness of the Bank.

Our Insurance programme covers civil and crime liability, cyber liability, property damage, terrorism, public liability, as well as directors' and officers' liability. The programme reduces operational losses through adequate insurance coverage.

The Bank adopts the Basic Indicator Approach for the calculation of operational risk capital.

9. OPERATIONAL RISK (Cont'd.)

The subject-specific key risks that we focus on include but not limited to :

Technology Risk

Technology risk is defined as any potential adverse outcome, damage, loss, violation, failure or disruption arising from the use of or reliance on information and communication technologies. The governance of technology risk rests with the ORMC, who facilitates a holistic oversight of operational risk matters across the Bank. The Bank has an established technology risk management framework which ensures technology and cyber risks are managed in a systematic and consistent manner. A dedicated Technology Risk Management (TRM) function within ORM, as the Second Line of Defence, drives the governance and oversight for technology risk management across the Bank. TRM works closely with business and support units, including the technology and information security teams, to oversee, review and strengthen their practices in technology risk management.

Regulatory Compliance Risk

Regulatory compliance risk refers to the risk of non-compliance with laws, regulations, rules, standards and codes of conduct. This risk is identified, monitored and managed through a structured governance framework of compliance policies, procedures and guidelines. The framework also manages the risk of regulatory breaches relating to sanctions, anti-money laundering and countering the financing of terrorism.

Legal Risk

Legal risk arises from unenforceable, unfavourable, defective or unintended contracts, lawsuits or claims, developments in laws and regulations, or non-compliance with applicable laws and regulations. Business and support units work with both internal and external legal counsels to ensure that legal risks are effectively managed.

Reputational Risk

Reputational risk is the risk of adverse impact on earnings, liquidity or capital arising from negative stakeholder perception or opinion of the Bank's business practices, activities and financial condition. The Bank recognises the impact of reputational risk and has developed a policy to identify and manage the risk across the Bank.

Outsourcing Risk

Outsourcing risk is the risk of adverse financial, operational, reputational, legal and compliance impact arising from the failure of a service provider to provide the outsourced service, or to comply with legal and regulatory requirements or breaches of security by a service provider. The Bank manages this risk through an outsourcing framework, policy, procedures and guidelines.

9. OPERATIONAL RISK (Cont'd.)

Fraud Risk

Fraud is defined as an act with an element to deceive or to conceal facts, and is not restricted to the gain of monetary or material benefits.

The Bank manages fraud risks actively. The corporate governance oversight of fraud risk is provided by the Audit Committee (AC) at the Board level and primarily by the ORMC at the management level. The Integrated Fraud Management (IFM) under Risk Management, as the Second Line of Defence, drives strategy and governance and oversees the framework and policy of fraud risk management across the Bank.

The Bank's fraud hotline managed by IFM provides a safe channel to report suspected frauds. IFM conducts independent fraud investigations and works closely with business and support units to strengthen its practices across the five pillars of prevention, detection, response, remediation and reporting.

Anti-bribery and Corruption

The Bank adopts a zero tolerance policy against any form of bribery and corruption, and all other illegal or unethical behaviour. All employees are required to comply fully with laws and regulations governing bribery and corruption which include the Malaysian Anti-Corruption Commission Act 2009 (MACC Act) and the UK Bribery Act 2010 amongst others. The Bank's contracts with customers, service providers, agents and business associates contain provisions prohibiting bribery and corruption practices. Procedures and controls are put in place to identify and manage the risks of bribery and corruption across our business. All employees are also educated via the Code of Conduct and mandatory online training on what would constitute corrupt practices as well as related legal and regulatory requirements on bribery and corruption.

10. EQUITIES (Disclosures for Banking Book position)

The following table presented the equity exposures in the banking book.

These exposures were classified under available-for-sale (AFS) securities which were being measured at fair value.

Type of Equities	Bank			
	31-Dec-20		31-Dec-19	
	Exposures	RWA	Exposures	RWA
	RM'000	RM'000	RM'000	RM'000
Publicly traded equity exposures * mainly acquired via loan restructuring activities	2,456	7,369	2,076	6,226
All other equity exposures	155,929	155,929	131,809	131,809
Total	158,385	163,298	133,885	138,035

	Bank	
	31-Dec-20	31-Dec-19
	RM'000	RM'000
Realised (loss)/gains arising from sales and liquidation	-	-
Unrealised gains included in fair value reserve	145,850	121,346

As at 31 December 2019, there were no equity exposures under Islamic Banking Window.

11. PROFIT SHARING INVESTMENT ACCOUNTS AND SHARIAH GOVERNANCE

Profit Sharing Investment Accounts (PSIA)

This disclosure is not applicable as United Overseas Bank (Malaysia) Bhd's Islamic Banking Window does not have any PSIA arrangement with third party.

Shariah Governance

This is disclosed in United Overseas Bank (Malaysia) Bhd's Annual Report, under the section "Corporate Governance".

No actual Shariah non-compliance event has been detected for the financial year ended 31 December 2020. As such, no Shariah non-compliant income has been recorded for the year.