

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

**PILLAR 3 DISCLOSURE**  
**31 DECEMBER 2017**

Domiciled in Malaysia  
Registered Office:  
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**Attestation by Chief Executive Officer pursuant to BASEL II – Pillar 3 Disclosures  
for the financial year ended 31 December 2017**

I hereby confirm that the Pillar 3 disclosures for the financial year ended 31 December 2017 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: 30 January 2018

## **1. INTRODUCTION**

### **Pillar 3 Disclosure**

United Overseas Bank (Malaysia) Bhd, in compliance 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), various additional quantitative and qualitative disclosures have been included in the annual report under the section 'Pillar 3 Disclosure'. This supplements the related information in the notes to the financial statements. The disclosures are to facilitate the understanding of the Bank's risk profile and assessment of the Bank's capital adequacy.

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 Group is generally subject to regulatory approval.

## **2. CAPITAL ADEQUACY**

Our approach to capital management is to ensure that the 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 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 Group's risk appetite. This is evaluated across all business segments and includes the 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 Group while the Risk and Capital Committee manages the Group's ICAAP, overall risk profile and capital requirements. The Group's capital position, capital management plan, contingency capital plan, as well as any capital management actions, are submitted to the senior management team 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 2017 was as follows:

Item	Exposure class 2017	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	<b>Credit risk</b>				
1.1	<b>Exempted exposures under the Standardised Approach (SA)</b>				
	<i>On-balance sheet exposures</i>				
	Sovereigns/central banks	15,112,480	15,112,480	-	-
	Insurance cos, securities firms and fund managers	22,226	-	-	-
	Corporates	836,392	834,169	833,901	66,712
	Other assets	692,707	692,707	570,294	45,624
	Defaulted exposures	10,742	10,742	16,112	1,289
	<b>Total on-balance sheet exposures</b>	<b>16,674,547</b>	<b>16,650,098</b>	<b>1,420,307</b>	<b>113,625</b>
	<i>Off-balance sheet exposures</i>				
	OTC derivatives	208,684	208,684	117,834	9,427
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	112,604	111,620	99,518	7,961
	<b>Total off-balance sheet exposures</b>	<b>321,288</b>	<b>320,304</b>	<b>217,352</b>	<b>17,388</b>
	<b>Total on and off-balance sheet exposures (SA)</b>	<b>16,995,835</b>	<b>16,970,402</b>	<b>1,637,659</b>	<b>131,013</b>
1.2	<b>Exposures under the Foundation IRB approach (FIRB)</b>				
	<i>On-balance sheet exposures</i>				
	Banks, DFIs and MDBs	7,440,557	6,625,751	938,570	75,086
	Corporates	27,527,264	23,441,427	24,408,403	1,952,672
	Equity (simple risk weight)	140,516	140,516	559,495	44,760
	Defaulted exposures	740,193	713,673	26	2
	<b>Total on-balance sheet exposures</b>	<b>35,848,530</b>	<b>30,921,367</b>	<b>25,906,494</b>	<b>2,072,520</b>
	<i>Off-balance sheet exposures</i>				
	OTC derivatives	1,482,456	1,478,991	716,117	57,289
	Off-Balance sheet exposures other than OTC derivatives or credit derivatives	9,464,533	8,482,571	8,127,308	650,185
	Defaulted exposures	21,649	20,948	-	-
	<b>Total off-balance sheet exposures</b>	<b>10,968,638</b>	<b>9,982,510</b>	<b>8,843,425</b>	<b>707,474</b>
	<b>Total on and off-balance sheet exposures (FIRB)</b>	<b>46,817,168</b>	<b>40,903,877</b>	<b>34,749,919</b>	<b>2,779,994</b>

2. CAPITAL ADEQUACY (Cont'd.)

Item	Exposure class 2017	Exposures pre CRM	Exposures post CRM	RWA	Min. capital requirement at 8%
		RM'000	RM'000	RM'000	RM'000
1.3	<b><u>Exposures under the Advance IRB approach (AIRB)</u></b>				
	<i>On-balance sheet exposures</i>				
	Corporates	50,211	50,211	23,292	1,863
	Residential mortgages	31,760,428	31,760,428	3,228,804	258,304
	Qualifying revolving retail	2,517,372	2,517,372	971,548	77,724
	Other retail	15,796,069	15,796,069	2,774,482	221,958
	Defaulted exposures	656,623	656,623	740,547	59,244
	<b>Total on-balance sheet exposures</b>	<b>50,780,703</b>	<b>50,780,703</b>	<b>7,738,673</b>	<b>619,093</b>
	<i>Off-balance sheet exposures</i>				
	OTC derivatives	3,867	3,867	3,799	304
	Off-Balance sheet exposures other than OTC derivatives or credit derivatives	9,930,000	9,930,000	1,281,633	102,531
	Defaulted exposures	512	512	754	60
	<b>Total off-balance sheet exposures</b>	<b>9,934,379</b>	<b>9,934,379</b>	<b>1,286,186</b>	<b>102,895</b>
	<b>Total on and off-balance sheet exposures (AIRB)</b>	<b>60,715,082</b>	<b>60,715,082</b>	<b>9,024,859</b>	<b>721,988</b>
	<b>Total exposures under IRB approach</b>	<b>107,532,250</b>	<b>101,618,959</b>	<b>43,774,778</b>	<b>3,501,982</b>
	<b>Total (exempted exposures and exposures under the IRB approach) after scaling factor</b>	-	-	<b>48,038,923</b>	<b>3,843,114</b>
2.0	<b><u>Large exposures risk requirement</u></b>	-	-	-	-
3.0	<b><u>Market risk</u></b>				
		Long position	Short position		
	Interest rate risk	66,144,843	64,315,064	659,157	52,733
	Foreign currency risk	256,715	442,915	213,591	17,087
	Commodity risk	173,597	173,600	66,250	5,300
	Options risk	-	-	47,264	3,781
4.0	<b><u>Operational risk (basic indicator approach)</u></b>			5,242,469	419,398
5.0	<b><u>Total RWA and capital requirements</u></b>			54,267,654	4,341,413

## 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 2016 was as follows:

Item	Exposure class 2016	Exposures pre CRM	Exposures post CRM	RWA	Min. capital requirement at 8%
		RM'000	RM'000	RM'000	RM'000
1.0	<b>Credit risk</b>				
1.1	<b><u>Exempted exposures under the Standardised Approach (SA)</u></b>				
	<i>On-balance sheet exposures</i>				
	Sovereigns/central banks	17,348,496	17,348,496	-	-
	Insurance cos, securities firms and fund managers	13,085	68	68	6
	Corporates	801,334	799,311	799,075	63,926
	Other assets	784,550	784,550	665,917	53,273
	Defaulted exposures	8,042	8,042	12,062	965
	<b>Total on-balance sheet exposures</b>	<b>18,955,507</b>	<b>18,940,467</b>	<b>1,477,122</b>	<b>118,170</b>
	<i>Off-balance sheet exposures</i>				
	OTC derivatives	344,054	344,054	195,090	15,607
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	145,996	144,980	137,466	10,997
	<b>Total off-balance sheet exposures</b>	<b>490,050</b>	<b>489,034</b>	<b>332,556</b>	<b>26,604</b>
	<b>Total on and off-balance sheet exposures (SA)</b>	<b>19,445,557</b>	<b>19,429,501</b>	<b>1,809,678</b>	<b>144,774</b>
1.2	<b><u>Exposures under the Foundation IRB approach (FIRB)</u></b>				
	<i>On-balance sheet exposures</i>				
	Banks, DFIs and MDBs	5,572,921	5,572,921	1,064,291	85,143
	Corporates	27,653,372	23,335,956	24,711,738	1,976,939
	Equity (simple risk weight)	126,021	126,021	501,191	40,096
	Defaulted exposures	674,373	649,925	-	-
	<b>Total on-balance sheet exposures</b>	<b>34,026,687</b>	<b>29,684,823</b>	<b>26,277,220</b>	<b>2,102,178</b>
	<i>Off-balance sheet exposures</i>				
	OTC derivatives	1,284,887	1,278,115	624,322	49,946
	Off-Balance sheet exposures other than OTC derivatives or credit derivatives	9,241,956	8,265,721	8,073,194	645,855
	Defaulted exposures	23,645	21,128	-	-
	<b>Total off-balance sheet exposures</b>	<b>10,550,488</b>	<b>9,564,964</b>	<b>8,697,516</b>	<b>695,801</b>
	<b>Total on and off-balance sheet exposures (FIRB)</b>	<b>44,577,175</b>	<b>39,249,787</b>	<b>34,974,736</b>	<b>2,797,979</b>

2. CAPITAL ADEQUACY (Cont'd.)

Item	Exposure class 2016	Exposures pre CRM	Exposures post CRM	RWA	Min. capital requirement at 8%
		RM'000	RM'000	RM'000	RM'000
1.3	<b><u>Exposures under the Advance IRB approach (AIRB)</u></b>				
	<i><u>On-balance sheet exposures</u></i>				
	Corporates	32,286	32,286	17,198	1,376
	Residential mortgages	29,939,234	29,939,234	3,045,946	243,676
	Qualifying revolving retail	2,377,189	2,377,189	920,884	73,671
	Other retail	15,531,334	15,531,334	2,686,449	214,916
	Defaulted exposures	602,594	602,594	689,966	55,197
	<b>Total on-balance sheet exposures</b>	<b>48,482,637</b>	<b>48,482,637</b>	<b>7,360,443</b>	<b>588,836</b>
	<i><u>Off-balance sheet exposures</u></i>				
	OTC derivatives	5,984	5,984	4,358	349
	Off-Balance sheet exposures other than OTC derivatives or credit derivatives	9,618,905	9,618,905	1,230,541	98,443
	Defaulted exposures	135	135	216	17
	<b>Total off-balance sheet exposures</b>	<b>9,625,024</b>	<b>9,625,024</b>	<b>1,235,115</b>	<b>98,809</b>
	<b>Total on and off-balance sheet exposures (AIRB)</b>	<b>58,107,661</b>	<b>58,107,661</b>	<b>8,595,558</b>	<b>687,645</b>
	<b>Total exposures under IRB approach</b>	<b>102,684,836</b>	<b>97,357,448</b>	<b>43,570,294</b>	<b>3,485,624</b>
	<b>Total (exempted exposures and exposures under the IRB approach) after scaling factor</b>	-	-	<b>47,994,189</b>	<b>3,839,535</b>
2.0	<b><u>Large exposures risk requirement</u></b>	-	-	-	-
3.0	<b><u>Market risk</u></b>				
		<b>Long position</b>	<b>Short position</b>		
	Interest rate risk	55,301,677	53,057,601	786,892	62,951
	Foreign currency risk	295,589	299,852	27,261	2,181
	Commodity risk	198,588	169,400	129,380	10,350
	Options risk	-	-	23,645	1,892
4.0	<b><u>Operational risk (basic indicator approach)</u></b>			4,980,184	398,415
5.0	<b><u>Total RWA and capital requirements</u></b>			53,941,551	4,315,324

## 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 2017 was as follows:

Item	Exposure class 2017	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	<b>Credit risk</b>						
1.1	<b>Exempted exposures under SA</b>						
	<i>On-balance sheet exposures</i>						
	Sovereigns/central banks	200,846	200,846	-	-	-	-
	Other assets	175	175	175	-	175	14
	<b>Total on-balance sheet exposures</b>	201,021	201,021	175	-	175	14
	<b>Total on and off-balance sheet</b>	201,021	201,021	175	-	175	14
1.2	<b>Exposures under the FIRB approach</b>						
	<i>On-balance sheet exposures</i>						
	Banks, DFIs and MDBs	13,757	13,757	1,275	-	1,275	102
	Corporates	214,485	213,470	221,430	-	221,430	17,714
	<b>Total on-balance sheet exposures</b>	228,242	227,227	222,705	-	222,705	17,816
	<i>Off-balance sheet exposures</i>						
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	72,132	71,553	116,232	-	116,232	9,299
	<b>Total off-balance sheet exposures</b>	72,132	71,553	116,232	-	116,232	9,299
	<b>Total on and off-balance sheet</b>	300,374	298,780	338,937	-	338,937	27,115



2. CAPITAL ADEQUACY (Cont'd.)

Item	Exposure class 2017	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	<b>Exposures under the AIRB approach</b>						
	<u>On-balance sheet exposures</u>						
	Residential mortgages	354,450	354,450	77,771	-	77,771	6,222
	Other retail	282,590	282,590	70,760	-	70,760	5,661
	Defaulted exposures	703	703	4	-	4	-
	<b>Total on-balance sheet exposures</b>	637,743	637,743	148,535	-	148,535	11,883
	<u>Off-balance sheet exposures</u>						
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	312,945	312,945	62,630	-	62,630	5,010
	<b>Total off-balance sheet exposures</b>	312,945	312,945	62,630	-	62,630	5,010
	<b>Total on and off-balance sheet</b>	950,688	950,688	211,165	-	211,165	16,893
<b>Total exposures under IRB approach</b>	1,251,062	1,249,468	550,102	-	550,102	44,008	
<b>Total (exempted exposures and exposures under the IRB approach) after scaling factor</b>	-	-	583,283	-	583,283	46,663	
2.0	<b>Large exposures risk requirement</b>	-	-	-	-	-	-
3.0	<b>Market risk</b>						
		<b>Long position</b>	<b>Short position</b>				
	Interest rate risk	-	-	-	-	-	-
	Foreign currency risk	-	-	-	-	-	-
	Commodity risk	-	-	-	-	-	-
Options risk	-	-	-	-	-	-	
4.0	<b>Operational risk (basic indicator approach)</b>			26,768	-	26,768	2,141
5.0	<b>Total RWA and capital requirements</b>			610,051	-	610,051	48,804

## 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 2016 was as follows:

Item	Exposure class 2016	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	<b>Credit risk</b>						
1.1	<b>Exempted exposures under SA</b>						
	<i>On-balance sheet exposures</i>						
	Sovereigns/central banks	792,096	792,096	-	-	-	-
	Other assets	88	88	88	-	88	7
	<b>Total on-balance sheet exposures</b>	792,184	792,184	88	-	88	7
	<b>Total on and off-balance sheet</b>	792,184	792,184	88	-	88	7
1.2	<b>Exposures under the FIRB approach</b>						
	<i>On-balance sheet exposures</i>						
	Banks, DFIs and MDBs	49	49	5	-	5	1
	Corporates	100,062	100,062	87,829	-	87,829	7,026
	<b>Total on-balance sheet exposures</b>	100,111	100,111	87,834	-	87,834	7,027
	<b>Total on and off-balance sheet</b>	100,111	100,111	87,834	-	87,834	7,027
1.3	<b>Exposures under the AIRB approach</b>						
	<i>On-balance sheet exposures</i>						
	Residential mortgages	330	330	78	-	78	6
	Other retail	4,323	4,323	2,278	-	2,278	182
	<b>Total on-balance sheet exposures</b>	4,653	4,653	2,356	-	2,356	188
	<i>Off-balance sheet exposures</i>						
	Off-balance sheet exposures other than OTC derivatives or credit derivatives	718	718	152	-	152	12
	<b>Total off-balance sheet exposures</b>	718	718	152	-	152	12
	<b>Total on and off-balance sheet</b>	5,371	5,371	2,508	-	2,508	200

2. CAPITAL ADEQUACY (Cont'd.)

Item	Exposure class 2016	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
	<b>Total exposures under IRB approach</b>	105,482	105,482	90,342	-	90,342	7,227
	<b>Total (exempted exposures and exposures under the IRB approach) after scaling factor</b>	-	-	95,851	-	95,851	7,668
2.0	<b><u>Large exposures risk requirement</u></b>	-	-	-	-	-	-
3.0	<b><u>Market risk</u></b>						
		<b>Long position</b>	<b>Short position</b>				
	Interest rate risk	-	-	-	-	-	-
	Foreign currency risk	-	-	-	-	-	-
	Commodity risk	-	-	-	-	-	-
	Options risk	-	-	-	-	-	-
4.0	<b><u>Operational risk (basic indicator approach)</u></b>			9,139	-	9,139	731
5.0	<b><u>Total RWA and capital requirements</u></b>			104,990	-	104,990	8,399

### 3. CAPITAL STRUCTURE

The Bank, on 30 August 2013 issued RM500 million subordinated bonds at 4.55%p.a., maturing on 29 August 2023. Subsequently the Bank, on 8 May 2015 issued RM1 billion subordinated bonds at 4.65% p.a. maturing on 8 May 2025. Both subordinated bonds are for working capital, general funding and corporate funding purposes.

For the main features of the subordinated bonds, please refer to Note 18 in the financial statements.

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

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

	<b>Group</b>		<b>Bank</b>	
	<b>31-Dec-17</b>	<b>31-Dec-16</b>	<b>31-Dec-17</b>	<b>31-Dec-16</b>
	<b>RM'000</b>	<b>RM'000</b>	<b>RM'000</b>	<b>RM'000</b>
<u>Common Equity Tier 1 ("CET1")/</u>				
<u>Tier 1 Capital</u>				
Paid-up share capital	792,555	470,000	792,555	470,000
Share premium	-	322,555	-	322,555
Retained profits	8,261,176	7,032,664	8,335,026	7,097,119
Statutory reserve	-	470,000	-	470,000
Other reserves	262,825	218,817	94,135	50,127
Regulatory adjustments applied in the calculation of CET1 Capital	(329,192)	(267,904)	(276,492)	(118,238)
<b>Total CET1/Tier 1 Capital</b>	<b>8,987,364</b>	<b>8,246,132</b>	<b>8,945,224</b>	<b>8,291,563</b>
<u>Tier 2 Capital</u>				
Tier 2 Capital instruments	1,500,000	1,500,000	1,500,000	1,500,000
Loan/financing loss provision				
- Surplus eligible provisions over expected losses	277,701	277,107	278,408	277,107
- Collective impairment provisions	29,883	26,357	20,470	22,621
Regulatory adjustments applied in the calculation of Tier 2 Capital	70,762	68,111	(26,712)	(5,425)
<b>Total Tier 2 Capital</b>	<b>1,878,346</b>	<b>1,871,575</b>	<b>1,772,166</b>	<b>1,794,303</b>
<b>Total Capital</b>	<b>10,865,710</b>	<b>10,117,707</b>	<b>10,717,390</b>	<b>10,085,866</b>

### 3. CAPITAL STRUCTURE (Cont'd.)

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

	<b>Group</b>		<b>Bank</b>	
	<b>31-Dec-17</b>	<b>31-Dec-16</b>	<b>31-Dec-17</b>	<b>31-Dec-16</b>
CET1/Tier 1 ratio	16.373%	15.205%	16.484%	15.371%
Total Capital	19.795%	18.656%	19.749%	18.698%
CET1/Tier 1 Capital (net of proposed dividends)	15.532%	14.494%	15.633%	14.656%
Total capital (net of proposed dividends)	18.954%	17.945%	18.899%	17.982%

The capital adequacy ratios of Islamic Banking Window are computed in accordance with the BNM's Capital Adequacy Framework for Islamic Banking (Capital Components) and Basel II - Risk-weighted Assets Framework for Islamic Banking.

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

	<b>31-Dec-17</b>	<b>31-Dec-16</b>
	<b>RM'000</b>	<b>RM'000</b>
<u>Common Equity Tier 1 ("CET1")/ Tier 1 Capital</u>		
Capital fund	450,000	450,000
Accumulated losses	(518)	(406)
Other reserves	(80)	(353)
Regulatory adjustments applied in the calculation of CET1 Capital	(145)	(175)
Total CET1/Tier 1 Capital	449,257	449,066
<u>Tier 2 Capital</u>		
Financing loss provision		
- Surplus eligible provisions over expected losses	1,523	-
- Collective impairment provisions	2	-
Total Tier 2 Capital	1,525	-
Total Capital	450,782	449,066

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

	<b>31-Dec-17</b>	<b>31-Dec-16</b>
CET1/Tier 1 ratio	73.643%	427.722%
Total Capital	73.892%	427.722%

#### **4. RISK MANAGEMENT**

##### **Risk Management Overview**

Effective risk management is integral to the Bank's business success. The Bank's approach to risk management is to ensure that risks are managed within the levels established by the Bank's various senior management committees and approved by the Board and/or its committees.

The Bank has established a comprehensive framework of policies and procedures to identify, measure, monitor and control risks. These are guided by the Group's Risk Management Principles which advocate:

- delivery of sustainable long-term growth using sound risk management principles and business practices;
- continual improvement of risk discovery capabilities and risk controls; and
- business development based on a prudent, consistent and efficient risk management framework.

##### **Risk Management Governance and Framework**

The Board oversees 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, the Board is supported by the Risk Management Committee ("RMC").

The Bank 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"), Technology & Corporate Infrastructure Committee ("TCIC"), Operational Risk Management Committee ("ORMC") and the 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 maintain 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.

#### **4. RISK MANAGEMENT (Cont'd.)**

##### **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 and reputation risk. Our risk-taking approach focuses 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 allows us to be a stable partner with our customers through changing economic conditions and cycles.

The Bank's risk appetite framework is updated and approved annually by the Board. Senior management monitors and reports the risk limits to the Board.

##### **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 risks, the Bank has adopted the Standardised Approach ("SA"). For operational risks, 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 testing is 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 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.

The Bank's portfolio is also 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 Credit Working Group ("CWG"), ICCC and EXCO are the key oversight committees for credit risk and support the CEO and RMC in managing the Bank's overall credit risk exposures. The committees 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 CWG, ICCC and EXCO also review and assess the Bank's credit portfolios and credit risk profiles.

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

### **Credit Risk Policies and Processes**

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

#### **i. 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, and credit approval is based on a risk-adjusted scale according to a borrower's credit rating. 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.

#### **ii. 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 obligors, portfolios, borrowers, 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.



## **5. CREDIT RISK (Cont'd.)**

### **iii. 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.

### **iv. 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.

### **v. 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. Any delinquent accounts, including a revolving credit facility (such as an overdraft) with limit excesses, is 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.

### **Classification and loan loss impairment**

The Bank classifies its credit portfolios according to the borrower's ability to repay the credit facility 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 is likely to jeopardise 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.

## **5. CREDIT RISK (Cont'd.)**

### **Classification and loan loss impairment (cont'd.)**

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 BNM guidelines and MFRS 139 for local reporting purposes. Where necessary, additional impairment is provided for to comply with the Bank's impairment policy.

### **Bank Special Asset Management**

Special Asset Management Division ("SAMD") manages the Non-Performing portfolios of the Bank. SAMD proactively manages a portfolio of Non-Performing Loan ("NPL") accounts, with the primary intention of nursing these accounts back to health and transferring them back to the respective business units. SAMD manages accounts that the Bank intends to exit in order to maximise debt recovery.

### **Write-Off Policy**

A classified account that is not secured by any realisable collateral will be 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 2017 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	-	-	-	-	1,251,124	44,859	-	-	-	1,295,983
Mining and quarrying	-	-	1,030,615	-	235,940	6,724	-	-	-	1,273,279
Manufacturing	-	-	66,200	-	6,184,011	1,324,791	-	-	-	7,575,002
Electricity, gas and water	-	-	-	-	215,335	9,000	-	-	-	224,335
Construction	-	-	-	-	12,774,324	457,015	-	-	-	13,231,339
Wholesale, retail trade, restaurant and hotels	-	-	7,548	-	8,191,329	3,965,350	-	-	-	12,164,227
Transport, storage and communication	-	-	-	-	1,464,826	180,796	-	-	-	1,645,622
Finance, insurance and business services	502	-	3,915,558	118,315	2,716,549	746,097	-	-	-	7,497,021
Real estate	-	-	-	-	4,007,600	740,936	-	-	-	4,748,536
Community, social and personal services	-	-	-	-	57,335	131,535	-	-	-	188,870
Households	-	-	-	-	-	18,002,833	35,026,181	-	-	53,029,014
Others	15,157,299	43,065	3,874,156	-	1,734,399	53	-	140,516	705,369	21,654,857
	<b>15,157,801</b>	<b>43,065</b>	<b>8,894,077</b>	<b>118,315</b>	<b>38,832,772</b>	<b>25,609,989</b>	<b>35,026,181</b>	<b>140,516</b>	<b>705,369</b>	<b>124,528,085</b>

## 5. CREDIT RISK (Cont'd.)

(i) The credit exposures by sector of the Bank for the financial year ended 31 December 2016 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	-	-	4,686	-	1,246,812	52,815	-	-	-	1,304,313
Mining and quarrying	-	-	1,828,668	-	258,699	7,694	-	-	-	2,095,061
Manufacturing	-	-	47,169	-	5,525,329	1,324,568	-	-	-	6,897,066
Electricity, gas and water	-	-	-	-	115,479	9,447	-	-	-	124,926
Construction	-	-	-	-	13,055,569	418,562	-	-	-	13,474,131
Wholesale, retail trade, restaurant and hotels	-	-	11,758	-	8,800,472	4,050,939	-	-	-	12,863,169
Transport, storage and communication	-	-	-	-	1,566,614	163,027	-	-	-	1,729,641
Finance, insurance and business services	55,957	-	5,101,296	169,810	2,941,879	703,574	-	-	-	8,972,516
Real estate	-	-	-	-	4,877,091	799,707	-	-	-	5,676,798
Community, social and personal services	-	-	-	-	45,393	133,882	-	-	-	179,275
Households	-	-	-	-	6	17,198,782	33,183,335	-	-	50,382,123
Others	17,292,539	165,119	-	-	27,256	59	-	126,021	820,380	18,431,374
	<b>17,348,496</b>	<b>165,119</b>	<b>6,993,577</b>	<b>169,810</b>	<b>38,460,599</b>	<b>24,863,056</b>	<b>33,183,335</b>	<b>126,021</b>	<b>820,380</b>	<b>122,130,393</b>

5. CREDIT RISK (Cont'd.)

(i) The credit exposures by sector of the Islamic Banking Window for the financial year ended 31 December 2017 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
Manufacturing	-	-	-	-	35,651	32,411	-	-	-	68,062
Electricity, gas and water	-	-	-	-	54,631	-	-	-	-	54,631
Construction	-	-	-	-	39,682	13,890	-	-	-	53,572
Wholesale, retail trade, restaurant and hotels	-	-	-	-	61,824	91,914	-	-	-	153,738
Transport, storage and communication	-	-	-	-	10,023	15,861	-	-	-	25,884
Finance, insurance and business services	503	-	13,757	-	38,530	27,421	-	-	-	80,211
Real estate	-	-	-	-	46,276	18,172	-	-	-	64,448
Community, social and personal services	-	-	-	-	-	3,664	-	-	-	3,664
Households	-	-	-	-	-	254,170	493,184	-	-	747,354
Others	200,343	-	-	-	-	-	-	-	175	200,518
	<u>200,846</u>	<u>-</u>	<u>13,757</u>	<u>-</u>	<u>286,617</u>	<u>457,503</u>	<u>493,184</u>	<u>-</u>	<u>175</u>	<u>1,452,082</u>

5. CREDIT RISK (Cont'd.)

(i) The credit exposures by sector of the Islamic Banking Window for the financial year ended 31 December 2016 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
Construction	-	-	-	-	100,062	4,270	-	-	-	104,332
Finance, insurance and business services	2,427	-	49	-	-	-	-	-	-	2,476
Households	-	-	-	-	-	361	740	-	-	1,101
Others	789,669	-	-	-	-	-	-	-	88	789,757
	<u>792,096</u>	<u>-</u>	<u>49</u>	<u>-</u>	<u>100,062</u>	<u>4,631</u>	<u>740</u>	<u>-</u>	<u>88</u>	<u>897,666</u>

## 5. CREDIT RISK (Cont'd.)

(ii) The credit exposures by remaining contractual maturities of the Bank for the financial year ended 31 December 2017 were as follows:

Bank	Sovereigns/ central banks	Public sector entities	Banks, DFIs and MDBs	Ins cos, securities firms and fund managers	Corporates (including specialised lending and SMEs)	Retail	Residential mortgages	Equity exposures	Other assets	Grand total
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
< 3 months	7,914,599	12,931	6,717,045	57,535	10,111,185	764,419	17,199	-	29,949	25,624,862
3 - 6 months	3,044	4,566	62,399	9,597	2,369,214	170,483	3,657	-	-	2,622,960
6 - 12 months	141,831	25,568	235,353	17,375	3,131,426	7,290,201	1,572,148	-	882	12,414,784
1 - 3 years	4,400,891	-	1,502,388	28,214	10,311,276	2,507,064	102,075	140,516	674,538	19,666,962
3 - 5 years	2,139,792	-	351,733	5,485	7,422,383	438,258	269,360	-	-	10,627,011
> 5 years	557,644	-	25,159	109	5,487,288	14,439,564	33,061,742	-	-	53,571,506
	15,157,801	43,065	8,894,077	118,315	38,832,772	25,609,989	35,026,181	140,516	705,369	124,528,085

(ii) The credit exposures by remaining contractual maturities of the Bank for the financial year ended 31 December 2016 were as follows:

Bank	Sovereigns/ central banks	Public sector entities	Banks, DFIs and MDBs	Ins cos, securities firms and fund managers	Corporates (including specialised lending and SMEs)	Retail	Residential mortgages	Equity exposures	Other assets	Grand total
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
< 3 months	11,408,041	32,136	4,427,097	17,609	9,234,237	652,478	18,444	-	-	25,790,042
3 - 6 months	-	31,421	184,360	7,478	1,939,233	158,819	3,440	-	-	2,324,751
6 - 12 months	10,004	101,562	202,350	3,382	3,052,168	6,482,548	1,551,886	-	-	11,403,900
1 - 3 years	3,551,186	-	1,861,255	137,839	10,631,740	2,590,113	100,218	126,021	820,380	19,818,752
3 - 5 years	1,584,399	-	263,750	3,474	7,280,702	381,319	273,198	-	-	9,786,842
> 5 years	794,866	-	54,765	28	6,322,519	14,597,779	31,236,149	-	-	53,006,106
	17,348,496	165,119	6,993,577	169,810	38,460,599	24,863,056	33,183,335	126,021	820,380	122,130,393

## 5. CREDIT RISK (Cont'd.)

(ii) The credit exposures by remaining contractual maturities of the Islamic Banking Window for the financial year ended 31 December 2017 were as follows:

Islamic Banking Window	Sovereigns/ central banks	Public sector entities	Banks, DFIs and MDBs	Ins cos, securities firms and fund managers	Corporates (including specialised lending and SMEs)	Retail	Residential mortgages	Equity exposures	Other assets	Grand total
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
< 3 months	162,115	-	-	-	76,251	-	-	-	-	238,366
3 - 6 months	-	-	-	-	5,330	-	-	-	-	5,330
6 - 12 months	-	-	-	-	6,799	-	-	-	-	6,799
1 - 3 years	38,731	-	13,757	-	20,036	52	-	-	175	72,751
3 - 5 years	-	-	-	-	108,185	88	-	-	-	108,273
> 5 years	-	-	-	-	70,016	457,363	493,184	-	-	1,020,563
	200,846	-	13,757	-	286,617	457,503	493,184	-	175	1,452,082

(ii) The credit exposures by remaining contractual maturities of the Islamic Banking Window for the financial year ended 31 December 2016 were as follows:

Islamic Banking Window	Sovereigns/ central banks	Public sector entities	Banks, DFIs and MDBs	Ins cos, securities firms and fund managers	Corporates (including specialised lending and SMEs)	Retail	Residential mortgages	Equity exposures	Other assets	Grand total
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
< 3 months	-	-	-	-	-	-	-	-	-	-
3 - 6 months	-	-	-	-	-	-	-	-	-	-
6 - 12 months	-	-	-	-	-	-	-	-	-	-
1 - 3 years	792,096	-	49	-	100,062	-	-	-	88	892,295
3 - 5 years	-	-	-	-	-	-	-	-	-	-
> 5 years	-	-	-	-	-	4,631	740	-	-	5,371
	792,096	-	49	-	100,062	4,631	740	-	88	897,666



5. CREDIT RISK (Cont'd.)

(iii) Past due and impaired loans analysed by industry:

The Bank	2017		2016	
	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	1,784	11,161	4,305	14,255
Mining and quarrying	2,013	-	2,579	-
Manufacturing	341,447	140,079	214,907	134,662
Electricity, gas and water	1,983	-	18,481	-
Construction	484,167	138,526	813,722	162,417
Wholesale, retail trade, restaurant and hotels	469,093	133,802	274,376	126,630
Transport, storage and communication	7,866	142,836	7,802	99,836
Finance, insurance and business services	35,406	127,092	33,479	138,881
Real estate	226,457	121,485	250,293	47,759
Community, social and personal services	2,721	737	2,990	953
Households:				
- purchase of residential properties	1,084,720	381,318	1,100,148	359,551
- purchase of non residential properties	376,784	60,201	256,317	46,064
- others	179,922	93,182	177,369	95,339
	<b>3,214,363</b>	<b>1,350,419</b>	<b>3,156,768</b>	<b>1,226,347</b>

Islamic Banking Window	2017		2016	
	Past due but not impaired RM'000	Impaired loans RM'000	Past due but not impaired RM'000	Impaired loans RM'000
Households:				
- purchase of residential properties	7,345	703	-	-
- others	43	-	-	-
	<b>7,388</b>	<b>703</b>	<b>-</b>	<b>-</b>

**5. CREDIT RISK (Cont'd.)**

(iv) Individual and collective impairment provisions analysed by industry:

<b>The Bank</b>	<b>2017</b>		<b>2016</b>	
	<b>Individual impairment RM'000</b>	<b>Collective impairment RM'000</b>	<b>Individual impairment RM'000</b>	<b>Collective impairment RM'000</b>
Agriculture, hunting, forestry and fishing	-	35,474	448	15,406
Mining and quarrying	-	2,814	-	3,815
Manufacturing	58,480	179,166	58,437	198,300
Electricity, gas and water	-	5,354	-	3,582
Construction	29,415	191,160	44,670	133,803
Wholesale, retail trade, restaurant and hotels	26,529	232,089	30,356	192,325
Transport, storage and communication	37,439	32,408	558	44,586
Finance, insurance and business services	106,999	77,893	50,066	112,731
Real estate	1,984	134,010	1,859	144,638
Community, social and personal services	13	2,989	65	2,407
Households:				
- purchase of residential properties	27,549	169,557	25,124	123,570
- purchase of non residential properties	4,643	45,554	4,537	47,601
- others	17,092	120,389	17,550	102,284
	<b>310,143</b>	<b>1,228,857</b>	<b>233,670</b>	<b>1,125,048</b>

**5. CREDIT RISK (Cont'd.)**

(iv) Individual and collective impairment provisions analysed by industry (cont'd.):

Islamic Banking Window	2017		2016	
	Individual impairment RM'000	Collective impairment RM'000	Individual impairment RM'000	Collective impairment RM'000
Manufacturing	-	1,088	-	-
Construction	-	1,999	-	80
Wholesale, retail trade, restaurant and hotels	-	2,881	-	-
Transport, storage and communication	-	263	-	-
Finance, insurance and business services	-	360	-	-
Real estate	-	956	-	-
Community, social and personal services	-	47	-	-
Households:				
- purchase of residential properties	201	1,064	-	-
- purchase of non residential properties	-	84	-	-
- others	-	105	-	-
Others	-	8	-	-
	<b>201</b>	<b>8,855</b>	<b>-</b>	<b>80</b>

**5. CREDIT RISK (Cont'd.)**

(v) Charges and write-offs for individual impairment provisions analysed by industry:

<b>The Bank</b>	<b>2017</b>		<b>2016</b>	
	<b>Individual impairment made during the year</b>	<b>Write-offs during the year</b>	<b>Individual impairment made during the year</b>	<b>Write-offs during the year</b>
	<b>RM'000</b>	<b>RM'000</b>	<b>RM'000</b>	<b>RM'000</b>
Agriculture, hunting, forestry and fishing	-	-	448	-
Mining and quarrying	-	-	-	-
Manufacturing	27,658	6,681	48,563	23,666
Electricity, gas and water	-	-	-	-
Construction	16,062	18,982	16,990	-
Wholesale, retail trade, restaurant and hotels	27,605	16,641	32,241	9,185
Transport, storage and communication	44,875	359	1,093	690
Finance, insurance and business services	70,801	4,815	47,978	460
Real estate	4,687	2,183	1,383	219
Community, social and personal services	18	10	3,083	23
Households:				
- purchase of residential properties	53,861	14,772	31,771	6,909
- purchase of non residential properties	5,512	1,644	5,805	722
- others	81,577	62,178	86,466	84,736
	<b>332,656</b>	<b>128,265</b>	<b>275,821</b>	<b>126,610</b>

**5. CREDIT RISK (Cont'd.)**

(v) Charges and write-offs for individual impairment provisions analysed by industry (cont'd.):

	2017		2016	
	Individual impairment made during the year RM'000	Write-offs during the year RM'000	Individual impairment made during the year RM'000	Write-offs during the year RM'000
Islamic Banking Window				
Households:				
- purchase of residential properties	204	-	-	-
	<u>204</u>	<u>-</u>	<u>-</u>	<u>-</u>

**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.)**

(vi) Movements in allowance for losses on loans, advances and financing were as follows:

<b>The Bank</b>	<b>2017</b>	<b>2016</b>
	<b>RM'000</b>	<b>RM'000</b>
<u>Collective impairment</u>		
Balance as at 1 January	1,125,048	1,019,498
Allowance made during the year	103,809	105,550
Balance as at 31 December	<u>1,228,857</u>	<u>1,125,048</u>
<u>Individual impairment</u>		
Balance as at 1 January	233,670	183,854
Allowance made during the year	332,656	275,821
Amount written back in respect of recoveries	(119,569)	(91,718)
Amount written-off	(128,265)	(126,610)
Interest recognition on impaired loans	(7,016)	(6,885)
Other adjustment	(1,333)	(792)
Balance as at 31 December	<u>310,143</u>	<u>233,670</u>
	<b>2017</b>	<b>2016</b>
	<b>RM'000</b>	<b>RM'000</b>
<u>Islamic Banking Window</u>		
<u>Collective impairment</u>		
Balance as at 1 January/14 July	80	-
Impairment loss made during the period	8,775	80
Balance as at 31 December	<u>8,855</u>	<u>80</u>
<u>Individual impairment</u>		
Balance as at 1 January	-	-
Allowance made during the year	204	-
Interest recognition on impaired loans	(3)	-
Balance as at 31 December	<u>201</u>	<u>-</u>

**5. CREDIT RISK (Cont'd.)**

(vii) Geographical Analysis for the Bank:

<b>As at 31 December 2017</b>	<b>In Malaysia RM'000</b>	<b>Outside Malaysia RM'000</b>	<b>Total RM'000</b>
Cash and short-term funds	8,378,117	60,798	8,438,915
Securities purchased under resale agreements	1,079,420	-	1,079,420
Deposits and placements with financial institutions	150,000	-	150,000
Financial assets at fair value through profit or loss ("FVTPL")	229,455	-	229,455
Available-for-sale securities ("AFS")	11,009,527	-	11,009,527
Loans, advances and financing	70,394,265	7,280,765	77,675,030
Derivative financial assets	511,835	80,325	592,160
Other assets	176,819	10,538	187,357
Statutory deposits with BNM	1,802,205	-	1,802,205
	<u>93,731,643</u>	<u>7,432,426</u>	<u>101,164,069</u>
Commitments and contingencies	<u>86,590,471</u>	<u>10,519,679</u>	<u>97,110,150</u>

<b>As at 31 December 2016</b>	<b>In Malaysia RM'000</b>	<b>Outside Malaysia RM'000</b>	<b>Total RM'000</b>
Cash and short-term funds	10,992,791	812,949	11,805,740
Securities purchased under resale agreements	644,041	-	644,041
Deposits and placements with financial institutions	589,100	-	589,100
Financial assets at fair value through profit or loss ("FVTPL")	228,055	-	228,055
Available-for-sale securities ("AFS")	6,871,580	-	6,871,580
Loans, advances and financing	68,590,208	8,039,919	76,630,127
Derivative financial assets	720,445	48,536	768,981
Other assets	108,629	10,246	118,875
Statutory deposits with BNM	2,098,668	-	2,098,668
	<u>90,843,517</u>	<u>8,911,650</u>	<u>99,755,167</u>
Commitments and contingencies	<u>80,953,652</u>	<u>7,456,157</u>	<u>88,409,809</u>

## **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	16,970	40,904	60,715

\*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 2017 were as follows:

Risk weights	Bank						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%	15,136,493	-	-	-	1,170	122,413	15,260,076	-
10%	-	-	-	-	-	-	-	-
20%	21,308	43,065	15,431	-	-	-	79,804	15,960
35%	-	-	-	-	-	-	-	-
50%	-	-	28,387	-	1	-	28,388	14,194
75%	-	-	-	-	-	-	-	-
90%	-	-	-	-	-	-	-	-
100%	-	-	-	95,857	912,579	582,956	1,591,392	1,591,393
110%	-	-	-	-	-	-	-	-
125%	-	-	-	-	-	-	-	-
135%	-	-	-	-	-	-	-	-
150%	-	-	-	-	10,742	-	10,742	16,112
270%	-	-	-	-	-	-	-	-
350%	-	-	-	-	-	-	-	-
400%	-	-	-	-	-	-	-	-
625%	-	-	-	-	-	-	-	-
937.5%	-	-	-	-	-	-	-	-
1250.0%	-	-	-	-	-	-	-	-
<b>Total</b>	<b>15,157,801</b>	<b>43,065</b>	<b>43,818</b>	<b>95,857</b>	<b>924,492</b>	<b>705,369</b>	<b>16,970,402</b>	<b>1,637,659</b>

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 2016 were as follows:

Risk weights	Bank						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%	17,348,496	-	-	-	748	118,633	17,467,877	-
10%	-	-	-	-	-	-	-	-
20%	-	165,117	141	-	-	-	165,258	33,052
35%	-	-	-	-	-	-	-	-
50%	-	2	47,516	-	1	-	47,519	23,759
75%	-	-	-	-	-	-	-	-
90%	-	-	-	-	-	-	-	-
100%	-	-	-	156,711	882,347	701,747	1,740,805	1,740,805
110%	-	-	-	-	-	-	-	-
125%	-	-	-	-	-	-	-	-
135%	-	-	-	-	-	-	-	-
150%	-	-	-	-	8,042	-	8,042	12,062
270%	-	-	-	-	-	-	-	-
350%	-	-	-	-	-	-	-	-
400%	-	-	-	-	-	-	-	-
625%	-	-	-	-	-	-	-	-
937.5%	-	-	-	-	-	-	-	-
1250.0%	-	-	-	-	-	-	-	-
<b>Total</b>	<b>17,348,496</b>	<b>165,119</b>	<b>47,657</b>	<b>156,711</b>	<b>891,138</b>	<b>820,380</b>	<b>19,429,501</b>	<b>1,809,678</b>

**5. CREDIT RISK (Cont'd.)**

**Credit Exposures under Basel II (cont'd.)**

The table below summarises the approaches adopted by the Islamic Banking Window 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	201	299	951

\*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 2017 were as follows:

Risk weights	Islamic Banking Window							
	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	Total RWA
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
0%	200,846	-	-	-	-	-	200,846	-
10%	-	-	-	-	-	-	-	-
20%	-	-	-	-	-	-	-	-
35%	-	-	-	-	-	-	-	-
50%	-	-	-	-	-	-	-	-
75%	-	-	-	-	-	-	-	-
90%	-	-	-	-	-	-	-	-
100%	-	-	-	-	-	175	175	175
110%	-	-	-	-	-	-	-	-
125%	-	-	-	-	-	-	-	-
135%	-	-	-	-	-	-	-	-
150%	-	-	-	-	-	-	-	-
270%	-	-	-	-	-	-	-	-
350%	-	-	-	-	-	-	-	-
400%	-	-	-	-	-	-	-	-
625%	-	-	-	-	-	-	-	-
937.5%	-	-	-	-	-	-	-	-
1250.0%	-	-	-	-	-	-	-	-
<b>Total</b>	<b>200,846</b>	-	-	-	-	<b>175</b>	<b>201,021</b>	<b>175</b>

**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 2016 were as follows:

Risk weights	Islamic Banking Window							
	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	Total RWA
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
0%	792,096	-	-	-	-	-	792,096	-
10%	-	-	-	-	-	-	-	-
20%	-	-	-	-	-	-	-	-
35%	-	-	-	-	-	-	-	-
50%	-	-	-	-	-	-	-	-
75%	-	-	-	-	-	-	-	-
90%	-	-	-	-	-	-	-	-
100%	-	-	-	-	-	88	88	88
110%	-	-	-	-	-	-	-	-
125%	-	-	-	-	-	-	-	-
135%	-	-	-	-	-	-	-	-
150%	-	-	-	-	-	-	-	-
270%	-	-	-	-	-	-	-	-
350%	-	-	-	-	-	-	-	-
400%	-	-	-	-	-	-	-	-
625%	-	-	-	-	-	-	-	-
937.5%	-	-	-	-	-	-	-	-
1250.0%	-	-	-	-	-	-	-	-
<b>Total</b>	<b>792,096</b>	-	-	-	-	<b>88</b>	<b>792,184</b>	<b>88</b>

5. CREDIT RISK (Cont'd.)

Rated Exposures according to ratings by ECAIs of the Bank for the financial year ended 31 December 2017 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	
<b>On and off-balance sheet exposures</b>							
<b>Credit exposures (using corporate risk weights)</b>							
Public sector entities (applicable for entities risk weighted based on their external ratings as corporates)		-	-	-	-	43,065	
Insurance cos, securities firms and fund managers		-	-	-	-	95,857	
Corporates		-	-	-	-	924,492	
<b>Total</b>		-	-	-	-	<b>1,063,414</b>	

							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
<b>On and off-balance sheet exposures</b>							
Banks, DFIs and MDBs	14,000	24,262	37	-	-	5,519	
<b>Total</b>	<b>14,000</b>	<b>24,262</b>	<b>37</b>	-	-	<b>5,519</b>	

							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
<b>On and off-balance sheet exposures</b>							
Sovereigns/central banks	-	15,157,801	-	-	-	-	
<b>Total</b>	-	<b>15,157,801</b>	-	-	-	-	

5. CREDIT RISK (Cont'd.)

Rated Exposures according to ratings by ECAIs of the Bank for the financial year ended 31 December 2016 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	
<b>On and off-balance sheet exposures</b>							
<b>Credit exposures (using corporate risk weights)</b>							
Public sector entities (applicable for entities risk weighted based on their external ratings as corporates)		-	-	-	-	165,119	
Insurance cos, securities firms and fund managers		-	-	-	-	156,711	
Corporates		-	-	-	-	891,138	
<b>Total</b>		-	-	-	-	<b>1,212,968</b>	

							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
<b>On and off-balance sheet exposures</b>							
Banks, DFIs and MDBs		-	-	-	-	47,657	
<b>Total</b>		-	-	-	-	<b>47,657</b>	

							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
<b>On and off-balance sheet exposures</b>							
Sovereigns/central banks		-	17,348,496	-	-	-	
<b>Total</b>		-	<b>17,348,496</b>	-	-	-	

5. CREDIT RISK (Cont'd.)

Rated Exposures according to ratings by ECAIs of the Islamic Banking Window for the financial year ended 31 December 2017 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
<b>On and off-balance sheet exposures</b>						
<b>Credit exposures (using corporate risk weights)</b>						
Public sector entities (applicable for entities risk weighted based on their external ratings as corporates)		-	-	-	-	-
Insurance cos, securities firms and fund managers		-	-	-	-	-
Corporates		-	-	-	-	-
<b>Total</b>		-	-	-	-	-

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
<b>On and off-balance sheet exposures</b>							
Banks, DFIs and MDBs		-	-	-	-	-	-
<b>Total</b>		-	-	-	-	-	-

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
<b>On and off-balance sheet exposures</b>							
Sovereigns/central banks		-	200,846	-	-	-	-
<b>Total</b>		-	<b>200,846</b>	-	-	-	-



5. CREDIT RISK (Cont'd.)

Rated Exposures according to ratings by ECAIs of the Islamic Banking Window for the financial year ended 31 December 2016 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
<b>On and off-balance sheet exposures</b>						
<b>Credit exposures (using corporate risk weights)</b>						
Public sector entities (applicable for entities risk weighted based on their external ratings as corporates)		-	-	-	-	-
Insurance cos, securities firms and fund managers		-	-	-	-	-
Corporates		-	-	-	-	-
<b>Total</b>		-	-	-	-	-

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
<b>On and off-balance sheet exposures</b>							
Banks, DFIs and MDBs		-	-	-	-	-	
<b>Total</b>		-	-	-	-	-	

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
<b>On and off-balance sheet exposures</b>							
Sovereigns/central banks		-	792,096	-	-	-	
<b>Total</b>		-	<b>792,096</b>	-	-	-	

## **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 probability of default ("PD") for each borrower is estimated using internal models. These PD 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 auction 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 ECAI, they are not directly comparable or equivalent to the ECAI ratings.

## **5. CREDIT RISK (Cont'd.)**

### **Corporate asset class**

The Bank has developed models to rate exposures in the Large Corporate and SME asset class. 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 Corporate asset class consists of 16 pass grades. The Large Corporate and SME models are mapped to the rating scale by calibration that takes into account the Bank's long-term average portfolio default rate.

### **Specialised Lending asset sub-class**

Within the corporate asset class, the Bank has four sub-classes for Specialised Lending: (i) Income Producing Real Estate ("IPRE"), (ii) Commodities Finance ("CF"), (iii) Project Finance ("PF") and (iv) Ship Finance ("SF"). Internal risk grades are derived based on a comprehensive assessment of financial and non-financial risk factors using internal scorecards.

The rating grade structure for IPRE exposures follows that of the corporate asset class, with 16 pass grades. Risk grades derived for CF, PF and SF exposures are mapped to four supervisory slotting categories, which determines the risk weights to be applied to such exposures.

### **Bank asset class**

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

### **Equity asset class**

The Bank adopts the following approaches for its equity investments:

- i. Simple Risk Weight ("SRW") method for its equity investment portfolio; and
- ii. Probability of Default/Loss Given Default ("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 scorecard.

## **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 is 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.

### **Residential Mortgage Asset Class**

This includes any credit facility (such as housing loan, term loan, overdraft) secured against a mortgage of a residential property or properties which meet criteria stipulated by BNM. Residential mortgage exposures are assessed and managed using the Bank's framework of credit policies, procedures and the risk segmentation models.

### **Qualifying Revolving Retail Exposures ("QRRE") Asset Class**

This includes credit card exposures and unsecured credit lines which meet the criteria stipulated by BNM. QRRE are assessed and managed using a combination of application and behavioral scorecards, risk segmentation models, as well as internal credit policies and procedures.

### **Other Retail Asset Class**

This includes commercial properties, share financing and any other retail exposures not classified as residential mortgage or QRRE. These exposures are assessed and managed using the Bank's framework of credit policies, procedures and risk segmentation models.

**5. CREDIT RISK (Cont'd.)**

**Credit risk profile**

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

**Exposures under the IRB approach by Risk Grade**

**31-Dec-17**

**Bank**

<b>CRR band</b>	<b>1-9</b>	<b>10-16</b>	<b>17-20 (Default)</b>
	<b>RM'000</b>	<b>RM'000</b>	<b>RM'000</b>
<u>Non-retail exposures (EAD)</u>			
Large corporate, SMEs and specialised lending (IPRE)	22,669,812	14,461,704	761,842
Bank	8,668,711	181,546	-
<b>Total non-retail exposures</b>	<b>31,338,523</b>	<b>14,643,250</b>	<b>761,842</b>
<u>Undrawn commitments</u>			
Large corporate, SMEs and specialised lending (IPRE)	3,025,565	537,391	12,210
Bank	-	-	-
<b>Total undrawn commitments</b>	<b>3,025,565</b>	<b>537,391</b>	<b>12,210</b>
<u>Exposure weighted average LGD (%)</u>			
Large corporate, SMEs and specialised lending (IPRE)	42%	38%	44%
Bank	41%	45%	-
<u>Exposure weighted average risk weight</u>			
Large corporate, SMEs and specialised lending (IPRE)	73%	114%	-
Bank	13%	42%	-

**Specialised Lending Exposure under the Supervisory Slotting Criteria**

<b>Supervisory Categories / Risk Weights</b>	<b>Strong/ 70%</b>	<b>Good/ 90%</b>	<b>Satisfactory/ 115%</b>	<b>Weak/ 250%</b>	<b>Default/ 0%</b>
	<b>RM'000</b>	<b>RM'000</b>	<b>RM'000</b>	<b>RM'000</b>	<b>RM'000</b>
<u>Specialised Lending Exposure (EAD)</u>					
Object Finance	814	6,212	-	4,923	-
Risk Weighted Assets	570	5,590	-	12,306	-

5. CREDIT RISK (Cont'd.)

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

31-Dec-17

Bank

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	30,497,208	1,151,241	2,946,605	431,127
Qualifying revolving retail	4,351,731	672,789	1,741,084	44,997
Other retail	14,431,770	2,121,589	2,064,468	181,561
<b>Total retail exposures</b>	<b>49,280,709</b>	<b>3,945,619</b>	<b>6,752,157</b>	<b>657,685</b>
<u>Undrawn commitments</u>				
Residential mortgages	2,294,613	360,681	179,333	-
Qualifying revolving retail	3,247,451	299,049	701,731	-
Other retail	2,003,834	569,823	248,100	1,062
<b>Total undrawn commitments</b>	<b>7,545,898</b>	<b>1,229,553</b>	<b>1,129,164</b>	<b>1,062</b>
<u>Exposure weighted average LGD (%)</u>				
Residential mortgages	11.87%	13.97%	12.41%	12.31%
Qualifying revolving retail	31.81%	45.21%	42.77%	55.80%
Other retail	15.98%	25.95%	26.75%	25.29%
<u>Exposure weighted average risk weight</u>				
Residential mortgages	6.75%	21.66%	41.91%	74.56%
Qualifying revolving retail	5.99%	19.91%	62.03%	316.12%
Other retail	11.97%	29.33%	42.54%	152.89%

5. CREDIT RISK (Cont'd.)

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

31-Dec-16

Bank

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)	21,569,455	15,299,002	698,046
Bank	6,795,202	150,718	-
<b>Total non-retail exposures</b>	<b>28,364,657</b>	<b>15,449,720</b>	<b>698,046</b>
<u>Undrawn commitments</u>			
Large corporate, SMEs and specialised lending (IPRE)	3,075,710	553,332	12,000
Bank	-	-	-
<b>Total undrawn commitments</b>	<b>3,075,710</b>	<b>553,332</b>	<b>12,000</b>
<u>Exposure weighted average LGD (%)</u>			
Large corporate, SMEs and specialised lending (IPRE)	42%	38%	44%
Bank	45%	45%	-
<u>Exposure weighted average risk weight</u>			
Large corporate, SMEs and specialised lending (IPRE)	75%	110%	-
Bank	20%	66%	-

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	28,774,484	1,202,215	2,804,336	402,300
Qualifying revolving retail	3,724,219	637,753	1,616,202	44,933
Other retail	14,437,691	2,375,789	1,870,916	155,553
<b>Total retail exposures</b>	<b>46,936,394</b>	<b>4,215,757</b>	<b>6,291,454</b>	<b>602,786</b>
<u>Undrawn commitments</u>				
Residential mortgages	2,279,498	398,670	139,374	-
Qualifying revolving retail	2,708,902	273,172	618,912	-
Other retail	2,152,034	620,254	165,545	-
<b>Total undrawn commitments</b>	<b>7,140,434</b>	<b>1,292,096</b>	<b>923,831</b>	<b>-</b>
<u>Exposure weighted average LGD (%)</u>				
Residential mortgages	11.67%	13.33%	12.03%	12.03%
Qualifying revolving retail	32.16%	45.80%	43.29%	56.32%
Other retail	16.17%	25.22%	26.10%	26.09%
<u>Exposure weighted average risk weight</u>				
Residential mortgages	6.67%	20.75%	41.00%	74.69%
Qualifying revolving retail	6.09%	20.24%	62.43%	339.77%
Other retail	12.07%	28.51%	41.46%	152.37%

5. CREDIT RISK (Cont'd.)

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

31-Dec-17

Islamic Banking Window

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)	91,680	194,938	-
Bank	13,757	-	-
<b>Total non-retail exposures</b>	105,437	194,938	-
<u>Undrawn commitments</u>			
Large corporate, SMEs and specialised lending (IPRE)	7,500	51,950	-
Bank	-	-	-
<b>Total undrawn commitments</b>	7,500	51,950	-
<u>Exposure weighted average LGD (%)</u>			
Large corporate, SMEs and specialised lending (IPRE)	45%	45%	-
Bank	45%	-	-
<u>Exposure weighted average risk weight</u>			
Large corporate, SMEs and specialised lending (IPRE)	62%	144%	-
Bank	9%	-	-

As at 31 December 2017, there were no Specialised Lending Exposure 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	129,319	323,896	39,266	703
Other retail	125,531	271,943	60,029	-
<b>Total retail exposures</b>	254,850	595,839	99,295	703
<u>Undrawn commitments</u>				
Residential mortgages	34,544	94,142	9,345	-
Other retail	13,840	145,380	15,693	-
<b>Total undrawn commitments</b>	48,384	239,522	25,038	-
<u>Exposure weighted average LGD (%)</u>				
Residential mortgages	15.31%	15.36%	16.99%	15.58%
Other retail	27.82%	17.21%	25.24%	-
<u>Exposure weighted average risk weight</u>				
Residential mortgages	10.10%	23.65%	46.59%	0.63%
Other retail	22.45%	19.87%	34.98%	-



5. CREDIT RISK (Cont'd.)

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

31-Dec-16

Islamic Banking Window

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)	100,062	-	-
Bank	49	-	-
<b>Total non-retail exposures</b>	100,111	-	-
<u>Undrawn commitments</u>			
Large corporate, SMEs and specialised lending (IPRE)	-	-	-
Bank	-	-	-
<b>Total undrawn commitments</b>	-	-	-
<u>Exposure weighted average LGD (%)</u>			
Large corporate, SMEs and specialised lending (IPRE)	45%	-	-
Bank	45%	-	-
<u>Exposure weighted average risk weight (%)</u>			
Large corporate, SMEs and specialised lending (IPRE)	88%	-	-
Bank	9%	-	-

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	-	740	-	-
Other retail	-	2,321	2,310	-
<b>Total retail exposures</b>	-	3,061	2,310	-
<u>Undrawn commitments</u>				
Residential mortgages	-	411	-	-
Other retail	-	307	-	-
<b>Total undrawn commitments</b>	-	718	-	-
<u>Exposure weighted average LGD (%)</u>				
Residential mortgages	-	15.58%	-	-
Other retail	-	59.22%	25.83%	-
<u>Exposure weighted average risk weight</u>				
Residential mortgages	-	23.77%	-	-
Other retail	-	64.18%	36.50%	-

5. CREDIT RISK (Cont'd.)

Retail exposures under the IRB approach by expected loss range

31-Dec-17

Bank

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	33,935,786	898,003	38,230	154,085	77
Qualifying revolving retail	5,076,868	1,287,548	166,060	208,483	71,642
Other retail	17,529,204	969,888	230,091	42,649	27,556
<b>Total retail exposures</b>	<b>56,541,858</b>	<b>3,155,439</b>	<b>434,381</b>	<b>405,217</b>	<b>99,275</b>
<u>Undrawn commitments</u>					
Residential mortgages	2,786,752	46,303	1,572	-	-
Qualifying revolving retail	3,596,071	607,149	14,626	28,452	1,933
Other retail	2,699,466	113,788	5,303	4,188	74
<b>Total undrawn commitments</b>	<b>9,082,289</b>	<b>767,240</b>	<b>21,501</b>	<b>32,640</b>	<b>2,007</b>
<u>Exposure weighted average risk weight (%)</u>					
Residential mortgages	9.53%	66.31%	89.55%	0.80%	-
Qualifying revolving retail	7.43%	46.12%	111.96%	161.79%	171.07%
Other retail	15.01%	51.28%	127.91%	190.36%	9.96%

31-Dec-16

Bank

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	31,940,198	1,052,941	66,687	123,509	-
Qualifying revolving retail	4,391,880	1,202,221	161,776	197,539	69,691
Other retail	17,778,008	762,666	228,392	45,682	25,201
<b>Total retail exposures</b>	<b>54,110,086</b>	<b>3,017,828</b>	<b>456,855</b>	<b>366,730</b>	<b>94,892</b>
<u>Undrawn commitments</u>					
Residential mortgages	2,807,192	10,012	338	-	-
Qualifying revolving retail	3,012,599	546,537	14,497	25,688	1,665
Other retail	2,899,466	31,616	4,546	2,205	-
<b>Total undrawn commitments</b>	<b>8,719,257</b>	<b>588,165</b>	<b>19,381</b>	<b>27,893</b>	<b>1,665</b>
<u>Exposure weighted average risk weight (%)</u>					
Residential mortgages	8.72%	74.34%	76.94%	0.08%	-
Qualifying revolving retail	7.64%	45.83%	110.99%	164.15%	182.38%
Other retail	15.24%	52.31%	107.81%	159.07%	25.96%

5. CREDIT RISK (Cont'd.)

Retail exposures under the IRB approach by expected loss range (cont'd.)

31-Dec-17

Islamic Banking Window

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	492,481	-	-	703	-
Other retail	446,310	11,193	-	-	-
<b>Total retail exposures</b>	<b>938,791</b>	<b>11,193</b>	<b>-</b>	<b>703</b>	<b>-</b>
<u>Undrawn commitments</u>					
Residential mortgages	138,031	-	-	-	-
Other retail	174,913	-	-	-	-
<b>Total undrawn commitments</b>	<b>312,944</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<u>Exposure weighted average risk weight (%)</u>					
Residential mortgages	21.92%	-	-	0.63%	-
Other retail	21.72%	56.15%	-	-	-

31-Dec-16

Islamic Banking Window

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	740	-	-	-	-
Other retail	4,631	-	-	-	-
<b>Total retail exposures</b>	<b>5,371</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<u>Undrawn commitments</u>					
Residential mortgages	411	-	-	-	-
Other retail	307	-	-	-	-
<b>Total undrawn commitments</b>	<b>718</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<u>Exposure weighted average risk weight (%)</u>					
Residential mortgages	23.77%	-	-	-	-
Other retail	50.38%	-	-	-	-

## 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 2017.

### Comparison of actual loss and expected loss by asset class

#### Bank

Asset class	Actual loss (as at 31 December 2017)	Expected loss (as at 31 December 2016)	Actual loss (as at 31 December 2016)	Expected loss (as at 31 December 2015)
	RM'000	RM'000	RM'000	RM'000
Corporate	115,974	436,092	75,540	440,350
Bank	-	4,946	-	4,606
Retail	68,266	194,271	66,000	189,546
<b>Total</b>	<b>184,240</b>	<b>635,309</b>	<b>141,540</b>	<b>634,502</b>

The actual loss in 2017 is lower than the expected loss computed as at 31 December 2016. The Bank continues to be proactive in its risk management approach to ensure that actual losses remained within 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 2016 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 2017)	Expected loss (as at 31 December 2016)	Actual loss (as at 31 December 2016)	Expected loss (as at 31 December 2015)
	RM'000	RM'000	RM'000	RM'000
Corporate	-	522	-	-
Bank	-	-	-	-
Retail	204	37	-	-
<b>Total</b>	<b>204</b>	<b>559</b>	<b>-</b>	<b>-</b>

**5. CREDIT RISK (Cont'd.)**

Actual loss consists of impairment loss allowance and write-off to the Bank's income statement for the financial year ended 31 December 2017.

**Loans, Advances and Financing**

<b>Movements in allowance for losses on loans, advances and financing were as follows:</b>	<b>2017 RM'000</b>	<b>2016 RM'000</b>
<u>Collective impairment</u>		
Balance as at 1 January	1,125,048	1,019,498
Allowance made during the year	103,809	105,550
Balance as at 31 December	<u>1,228,857</u>	<u>1,125,048</u>
<u>Individual impairment</u>		
Balance as at 1 January	233,670	183,854
Allowance made during the year	332,656	275,821
Amount written back in respect of recoveries	(119,569)	(91,718)
Amount written-off	(128,265)	(126,610)
Interest recognition on impaired loans	(7,016)	(6,885)
Other adjustment	(1,333)	(792)
Balance as at 31 December	<u>310,143</u>	<u>233,670</u>
<b>Allowance for impairment on loans, advances and financing</b>		
(a) Individual impairment		
- made in the financial year	332,656	275,821
- written back in the financial year	(119,569)	(91,718)
(b) Collective impairment		
- made in the financial year	103,809	105,550
Impaired loans, advances and financing:		
- written-off	26,264	2,692
- recovered	(51,768)	(41,031)
	<u>291,392</u>	<u>251,314</u>

**5. CREDIT RISK (Cont'd.)**

**Financing, advances and others**

**Movements in allowance for losses on financing,  
 advances and others for Islamic Banking  
 Window were as follows:**

	<b>2017</b>	<b>2016</b>
	<b>RM'000</b>	<b>RM'000</b>
<u>Collective impairment</u>		
Balance as at 1 January/14 July	80	-
Impairment loss made during the period	8,775	80
Balance as at 31 December	<u>8,855</u>	<u>80</u>
 <b>Allowance for impairment on loans, advances and financing</b>		
(a) Individual impairment		
- made in the financial year	204	-
(b) Collective impairment		
- made in the financial year	8,775	80
	<u>8,979</u>	<u>80</u>

## **5. CREDIT RISK (Cont'd.)**

### **Credit Risk Mitigation**

Potential credit losses are mitigated using a variety of instruments such as collateral, derivatives and guarantees. 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 cash, marketable securities, real estate, equipment, inventory and receivables. 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 moral 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 foreign exchange ("FX") and derivatives are typically mitigated through agreements such as the International Swaps and Derivatives Association ("ISDA") Master Agreements and the Credit Support Annex ("CSA"). Such agreements help to minimize 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 tables presented the total exposures which are covered by eligible credit risk mitigants of the Bank for the financial year ended 31 December 2017:

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
<b><u>Credit risk</u></b>				
<i><u>On-balance sheet exposures</u></i>				
Sovereign/central banks	15,112,480	-	-	-
Banks, DFIs and MDBs	7,440,557	-	814,805	-
Insurances cos, securities firms and fund managers	22,226	-	22,026	-
Corporates	28,413,866	609,372	2,387,649	1,700,611
Regulatory retail	18,313,441	-	-	-
Residential mortgages	31,760,428	-	-	-
Other assets	692,707	-	-	-
Equity exposures	140,516	-	-	-
Defaulted exposures	1,101,582	341	1,022	14,416
<b>Total on-balance sheet exposures</b>	<b>102,997,803</b>	<b>609,713</b>	<b>3,225,502</b>	<b>1,715,027</b>
<i><u>Off-balance sheet exposures</u></i>				
OTC derivatives	1,170,997	869	3,422	42
Off-balance sheet exposures other than OTC derivatives or credit derivatives	20,031,147	105,562	777,543	205,403
Defaulted exposures	13,583	-	266	361
<b>Total off-balance sheet exposures</b>	<b>21,215,727</b>	<b>106,431</b>	<b>781,231</b>	<b>205,806</b>
<b>Total on and off-balance sheet exposures</b>	<b>124,213,530</b>	<b>716,144</b>	<b>4,006,733</b>	<b>1,920,833</b>



5. CREDIT RISK (Cont'd.)

**Credit Risk Mitigation (cont'd.)**

The following tables presented the total exposures which are covered by eligible credit risk mitigants of the Bank for the financial year ended 31 December 2016:

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
<b><u>Credit risk</u></b>				
<i><u>On-balance sheet exposures</u></i>				
Sovereign/central banks	17,348,496	-	-	-
Banks, DFIs and MDBs	5,572,920	-	-	-
Insurances cos, securities firms and fund managers	13,085	-	13,017	-
Corporates	28,486,992	547,400	2,543,609	1,775,830
Regulatory retail	17,926,245	-	-	-
Residential mortgages	29,963,494	-	-	-
Other assets	784,550	-	-	-
Equity exposures	126,021	-	-	-
Defaulted exposures	1,058,856	-	9,899	6,623
<b>Total on-balance sheet exposures</b>	<b>101,280,659</b>	<b>547,400</b>	<b>2,566,525</b>	<b>1,782,453</b>
<i><u>Off-balance sheet exposures</u></i>				
OTC derivatives	1,171,707	4,334	6,772	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	19,428,093	90,931	813,521	163,731
Defaulted exposures	13,152	-	109	2,121
<b>Total off-balance sheet exposures</b>	<b>20,612,952</b>	<b>95,265</b>	<b>820,402</b>	<b>165,852</b>
<b>Total on and off-balance sheet exposures</b>	<b>121,893,611</b>	<b>642,665</b>	<b>3,386,927</b>	<b>1,948,305</b>

**5. CREDIT RISK (Cont'd.)**

**Credit risk mitigation (cont'd.)**

The following tables presented the total exposures which are covered by eligible credit risk mitigants of Islamic Banking Window for the financial year ended 31 December 2017:

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
<b><u>Credit risk</u></b>				
<i><u>On-balance sheet exposures</u></i>				
Sovereign/central banks	200,846	-	-	-
Banks, DFIs and MDBs	13,757	-	-	-
Corporates	214,485	87,750	1,015	-
Regulatory retail	282,590	-	-	-
Residential mortgages	354,450	-	-	-
Other assets	175	-	-	-
Defaulted exposures	503	-	-	-
<b>Total on-balance sheet exposures</b>	<b>1,066,806</b>	<b>87,750</b>	<b>1,015</b>	<b>-</b>
<i><u>Off-balance sheet exposures</u></i>				
Off-balance sheet exposures other than OTC derivatives or credit derivatives	385,076	8,842	579	-
<b>Total off-balance sheet exposures</b>	<b>385,076</b>	<b>8,842</b>	<b>579</b>	<b>-</b>
<b>Total on and off-balance sheet exposures</b>	<b>1,451,882</b>	<b>96,592</b>	<b>1,594</b>	<b>-</b>

**5. CREDIT RISK (Cont'd.)**

**Credit risk mitigation (cont'd.)**

The following tables presented the total exposures which are covered by eligible credit risk mitigants of Islamic Banking Window for the financial year ended 31 December 2016:

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
<b><u>Credit risk</u></b>				
<i><u>On-balance sheet exposures</u></i>				
Sovereign/central banks	792,096	-	-	-
Banks, DFIs and MDBs	49	-	-	-
Corporates	100,062	-	-	-
Regulatory retail	4,323	-	-	-
Residential mortgages	330	-	-	-
Other assets	88	-	-	-
<b>Total on-balance sheet exposures</b>	<b>896,948</b>	<b>-</b>	<b>-</b>	<b>-</b>
<i><u>Off-balance sheet exposures</u></i>				
Off-balance sheet exposures other than OTC derivatives or credit derivatives	718	-	-	-
<b>Total off-balance sheet exposures</b>	<b>718</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total on and off-balance sheet exposures</b>	<b>897,666</b>	<b>-</b>	<b>-</b>	<b>-</b>

## **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.)

The off-balance sheet exposures and their related counterparty credit risk of the Bank for the financial year ended 31 December 2017 were as follows:

Description	Principal amount	Positive fair value of derivative contracts	Credit equivalent amount	RWA
	RM'000	RM'000	RM'000	RM'000
<b>Direct credit substitutes</b>	3,202,391		3,155,460	2,260,927
<b>Transaction related contingent items</b>	6,037,933		3,034,380	2,139,796
<b>Short-term self liquidating trade related contingencies</b>	524,618		115,387	93,389
<b>Foreign exchange related contracts</b>				
One year or less	24,198,577	296,421	635,018	159,262
Over one year to five years	204,645	99	11,512	11,065
<b>Interest/profit rate related contracts</b>				
One year or less	7,689,651	95,793	152,398	63,654
Over one year to five years	15,526,922	133,699	746,707	542,178
Over five years	58,084	234	4,447	2,815
<b>Equity related contracts</b>				
One year or less	464,921	3,425	22,890	18,337
Over one year to five years	1,093,643	-	43,746	7,730
<b>Commodity contracts</b>				
One year or less	215,980	7,965	23,231	9,396
Over one year to five years	537,233	2,752	55,063	23,314
<b>Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year</b>	11,697,356		6,597,870	4,202,984
<b>Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year</b>	14,085,535		681,934	141,414
<b>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</b>	11,493,526		5,928,435	655,787
<b>Unutilised credit card lines</b>	79,135		15,827	14,915
<b>Total</b>	<b>97,110,150</b>	<b>540,388</b>	<b>21,224,305</b>	<b>10,346,963</b>

## 5. CREDIT RISK (Cont'd.)

The off-balance sheet exposures and their related counterparty credit risk of the Bank for the financial year ended 31 December 2016 were as follows:

Description	Principal amount	Positive fair value of derivative contracts	Credit equivalent amount	RWA
	RM'000	RM'000	RM'000	RM'000
<b>Direct credit substitutes</b>	2,963,581		2,963,581	2,350,193
<b>Transaction related contingent items</b>	5,751,113		2,907,914	2,029,319
<b>Short-term self liquidating trade related contingencies</b>	476,394		107,718	69,745
<b>Foreign exchange related contracts</b>				
One year or less	16,559,657	413,612	627,679	262,095
Over one year to five years	319,406	13,361	31,832	30,636
<b>Interest/profit rate related contracts</b>				
One year or less	8,070,548	56,088	136,859	55,150
Over one year to five years	14,451,820	203,220	649,760	368,703
Over five years	1,475,311	3,601	78,508	55,388
<b>Equity related contracts</b>				
One year or less	383,707	1,629	16,572	9,803
Over one year to five years	483,193	12	19,514	4,517
<b>Commodity contracts</b>				
One year or less	376,522	18,699	50,456	25,529
Over one year to five years	200,000	-	24,000	12,000
<b>Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year</b>	12,384,483		6,857,557	4,195,239
<b>Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year</b>	13,374,793		809,243	210,181
<b>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</b>	11,075,418		5,371,596	619,757
<b>Unutilised credit card lines</b>	63,863		12,773	12,250
<b>Total</b>	<b>88,409,809</b>	<b>710,222</b>	<b>20,665,562</b>	<b>10,310,505</b>

**5. CREDIT RISK (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 2017 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	7,134		7,134	4,522
Transaction related contingent items	11,096		5,548	6,343
Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year	590,785		371,644	167,159
Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year	84,534		750	838
<b>Total</b>	<b>693,549</b>	<b>-</b>	<b>385,076</b>	<b>178,862</b>

The off-balance sheet exposures and their related counterparty credit risk of the Islamic Banking Window for the financial year ended 31 December 2016 were as follows:

Description	Principal amount	Positive fair value of derivative contracts	Credit equivalent amount	RWA
	RM'000	RM'000	RM'000	RM'000
Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year	1,071		718	152
<b>Total</b>	<b>1,071</b>	<b>-</b>	<b>718</b>	<b>152</b>

## **6. MARKET RISK**

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") of the Risk Management Division ("RMD") supports the RMC, RCC, EXCO and ALCO with independent assessment of the market risk profile of the Bank.

The Bank's market risk framework comprises market risk policies and practices, the validation of valuation and risk models, which is performed by Head Office in Singapore, 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 New Product/Service Programme process ensures that market risk issues identified are adequately addressed prior to the launch of products and services. Management of derivatives risks is continuously reviewed and enhanced to ensure that the complexities of the business are appropriately controlled.

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. This ensures that the Bank remain 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.

Market Risk appetite is provided for the trading exposure within the Bank.

### **Standardised Approach**

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 warehoused, measured and controlled with internal models include vanilla FX and FX options, plain vanilla interest rate, overnight index swap, cross currency basis swap spread, government bonds, quasi government bonds, corporate bonds, commodity contracts and commodity options.

### **Internal Model Approach**

The Bank estimates a daily Value-at-Risk ("VaR") within a 99 per cent confidence interval using the historical simulation method, as a control for market risk. The method assumes that possible future changes in market rates may be implied by observed historical market movements.

As VaR is the statistical measure for potential losses, the VaR measures are backtested against profit or 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 backtest exceptions are tabled at ALCO with recommended actions and resolutions.



**6. MARKET RISK (Cont'd.)**

To complement the VaR 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 daily VaR on 31 December 2017 was RM4.2 million.

	<b>Year End RM'000</b>	<b>High RM'000</b>	<b>Low RM'000</b>	<b>Average RM'000</b>
<b>2017</b>				
Interest rate	2,447	16,774	1,430	6,197
Foreign exchange	4,052	9,935	151	4,797
Commodities	410	1,971	25	573
Total diversified VaR	4,198	16,848	1,254	7,745
<b>2016</b>				
Interest rate	1,441	5,578	1,036	2,894
Foreign exchange	1,255	11,483	121	2,225
Commodities	379	563	11	224
Total diversified VaR	2,034	13,186	980	3,388

## **7. OPERATIONAL RISK**

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. Potential loss may be in the form of financial loss or other damages, for example, loss of reputation and public confidence that will impact the Bank's credibility and ability to transact, maintain liquidity and obtain new business. Operational risk includes fraud risk, legal risk, compliance risk (including Shariah non-compliance risk), reputational risk, outsourcing risk and technology risk. However, strategic risk and reputational risk are excluded from the operational risk capital computation.

The Bank's objective is to manage operational risk at appropriate levels relative to the markets in which the businesses operate.

Operational risk is managed through a framework of policies and procedures by which Business/Support Units properly identify, assess, monitor, mitigate and report their risks. The ORMC attended by senior management meets monthly to provide oversight of operational risk and compliance related matters across the Bank.

The strategy for managing operational risk in the Bank is anchored on the three lines of defence concept which are as follows:

- The first line of defence is accountable for implementing the operational risk framework and policies, embedding appropriate internal controls into processes and maintaining business resilience for key activities. The responsibility for managing day-to-day operational risk rests with each Business/Support Units.
- In the second line, Operational Risk Management is responsible for exercising governance over operational risk through the management of the operational risk framework, policy development, quality assurance of internal controls, operational risk measurement and reporting of operational risk issues to senior management, relevant management committees and Board of Directors.
- Internal audit and external audit act as the third line of defence by providing independent review and assessment on the effectiveness of the First and Second Lines of Defence.

## **7. OPERATIONAL RISK (Cont'd.)**

A key component of the operational risk management framework is risk identification and control self-assessments. This is achieved through the bank-wide implementation of a set of operational risk tools:

- a) Key Risk and Control Self-Assessment ("KRCSA") - KRCSA is a tool for Business/Support Units to manage their unit's operational risk profile which involves identifying and assessing the inherent risks of key processes, as well as evaluating the effectiveness of controls to mitigate the identified risks. Action plans to address operational risk issues are documented and monitored via Operational Risk Action Plans.
- b) Key Operational Risk Indicators ("KORIs") are statistical data collected and monitored by Business/Support Units on an ongoing basis to enable early detection of potential operational risks and control weaknesses.
- c) A database of operational risk incidents and losses has been established to facilitate the analysis of loss trends and root causes.
- d) Management Risk Awareness ("MRA") is a tool for Business/Support Units to self-declare existing material operational risks or newly identified material operational risks arising from new products/processes or change in business environment that are encountered in the day-to-day business activities, but have not yet resulted in an operational incident so that timely and appropriate risk mitigating actions can be implemented.

Several risk mitigation policies and programmes are in place to maintain a sound operating environment.

An outsourcing policy ensures that all significant risks arising from outsourcing arrangements are identified and effectively managed on a continuous basis.

A Product/Service Programme ensures that risks associated with new/variation products and services are identified, analysed and addressed prior to product launch and is subject to periodic reviews.

A business continuity and crisis management programme have been developed and tested to ensure prompt recovery of critical business functions following unforeseen events. Senior management provides an annual attestation to the Board of Directors on the state of business continuity readiness of the Bank.

A technology risk management framework has been established, enabling the Bank to manage technology risks in a systematic and consistent manner.

## **7. OPERATIONAL RISK (Cont'd.)**

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 framework of policies, procedures and guidelines maintained by the Bank. The framework also manages the risk of breaches and sanctions relating to Anti-Money Laundering and Countering the Financing of Terrorism.

The Bank actively manages fraud and bribery risks. Tools and policies, including a whistle-blowing programme, a material risk notification protocol and a fraud risk awareness training programme have been developed to manage such risks. All employees are guided by a Code of Conduct, which includes anti-bribery and corruption provisions.

Legal risks are risks arising out of unenforceable / unfavourable / defective / unintended contracts, lawsuits or claims involving the Bank, developments in laws and regulations or non-compliance with applicable laws, rules and professional standards. Policy on management of legal risks has been established to manage contractual risk, litigation risk, legislative risk, intellectual property risk and external lawyers.

Reputational risk is the risk arising from negative perception on the part of customers, counterparties, shareholders, investors, debt-holders, market analysts, other relevant parties or regulators that can adversely affect a bank's ability to maintain existing, or establish new, business relationship and continued access to sources of funding (e.g. through the interbank or securitisation markets). The Bank recognises the impact of reputational risk and a framework has been developed to identify and manage the risk across the Bank.

To mitigate operational losses resulting from significant risk events, a bank insurance programme covering crime, fraud, civil liability, property damage, public liability, as well as directors' and officers' liability has been put in place.

**8. 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-17		31-Dec-16	
	Exposures	RWA	Exposures	RWA
	RM'000	RM'000	RM'000	RM'000
Publicly traded equity exposures * mainly acquired via loan restructuring activities	2,569	7,707	2,893	8,679
All other equity exposures	137,947	551,788	123,128	492,512
<b>Total</b>	<b>140,516</b>	<b>559,495</b>	<b>126,021</b>	<b>501,191</b>

	Bank	
	31-Dec-17	31-Dec-16
	RM'000	RM'000
Realised (loss)/gains arising from sales and liquidation	(11)	144
Unrealised gains included in fair value reserve	127,978	113,483

As at 31 December 2017, there were no equity exposures under Islamic Banking Window.

## **9. INTEREST RATE RISK/RATE OF RETURN RISK IN THE BANKING BOOK ("IRR/RORBB")**

The ALCO maintains oversight of the effectiveness of the interest/profit rate risk management structure. The BSRM supports the ALCO in monitoring the interest/profit rate risk profile of the banking book.

The primary objective of interest/profit rate risk management 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.

Banking book interest/profit rate risk exposure is quantified on a monthly basis using a combination of static analysis tools and dynamic simulation techniques. Static analysis tools include repricing schedules and sensitivity analysis. They provide indications of the potential impact of interest/profit rate changes on interest/profit income and price value through the analysis of the sensitivity of assets and liabilities to changes in interest/profit rates. Interest/profit rate sensitivity varies with different repricing periods, currencies and embedded optionality, where applicable. Mismatches in the longer tenor will experience greater change in the price-value of interest/profit rate positions than similar positions in the shorter tenor.

In the dynamic simulation process, both the Net Interest/Profit Income ("NII/NPI") and Economic Value of Equity ("EVE") approaches are applied to assess interest/profit rate risk. The potential effects of interest/profit rate change on NII/NPI are estimated by simulating the possible future course of interest/profit rates, expected changes in business activities over time. Changes in interest/profit rates are simulated using different interest/profit rate scenarios such as changes in the shape of the yield curve, including high and low rates, as well as positive and negative tilt scenarios. NII/NPI 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.

In EVE sensitivity simulations, the present values for repricing cash flows are computed, with the focus on changes in EVE under different interest/profit rate scenarios. This economic perspective measures interest/profit rate risks across the full maturity profile of the balance sheet, including off-balance sheet items.

Stress testing is 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 reported figures are based on the upward and downward parallel movement of the yield curve. The repricing profile of loans/financing is generally based on the earliest possible repricing dates, taking into account the notice period to be served to the customers.

The risks arising from the trading book, such as 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.

**9. INTEREST RATE RISK/RATE OF RETURN RISK IN THE BANKING BOOK ("IRR/RORBB")**  
(Cont'd.)

**Interest/Profit Rate Sensitivity Analysis - Banking Book**

The table below showed the results at 100 and 200 basis points parallel interest/profit rate shocks to Economic Value of Equity ("EVE") and Net Interest/Profit Income ("NII/NPI"). The reported figures were based on the upward and downward parallel movement of the yield curve. The repricing profile of loans/financings and deposits that do not have maturity dates are generally based on the earliest possible repricing dates taking into account the notice period to be served to customers.

Economic Value of Equity ("EVE")

<b>31-Dec-17</b>	Increase/ (Decrease) in basis points	Sensitivity of EVE	Increase/ (Decrease) in basis points	Sensitivity of EVE
Currency		RM'million		RM'million
<b>Total</b>	<b>+200/(200)</b>	<b>59.1/(32.1)</b>	<b>+100/(100)</b>	<b>26.5/(19.8)</b>
MYR	+200/(200)	60.2/(33.1)	+100/(100)	27.0/(20.3)
USD	+200/(200)	(1.1)/1.0	+100/(100)	(0.5)/0.5
<b>31-Dec-16</b>	Increase/ (Decrease) in basis points	Sensitivity of EVE	Increase/ (Decrease) in basis points	Sensitivity of EVE
Currency		RM'million		RM'million
<b>Total</b>	<b>+200/(200)</b>	<b>96.4/(72.7)</b>	<b>+100/(100)</b>	<b>45.6/(39.6)</b>
MYR	+200/(200)	97.3/(73.2)	+100/(100)	46.0/(40.0)
USD	+200/(200)	(0.9)/0.5	+100/(100)	(0.4)/0.4

Net Interest/Profit Income ("NII/NPI")

<b>31-Dec-17</b>	Increase/ (Decrease) in basis points	Sensitivity of NII/NPI	Increase/ (Decrease) in basis points	Sensitivity of NII/NPI
Currency		RM'million		RM'million
<b>Total</b>	<b>+200/(200)</b>	<b>462.3/(463.7)</b>	<b>+100/(100)</b>	<b>204.2/(204.2)</b>
MYR	+200/(200)	464.3/(460.4)	+100/(100)	205.2/(205.2)
USD	+200/(200)	(2.0)/(3.3)	+100/(100)	(1.0)/1.0
<b>31-Dec-16</b>	Increase/ (Decrease) in basis points	Sensitivity of NII	Increase/ (Decrease) in basis points	Sensitivity of NII
Currency		RM'million		RM'million
<b>Total</b>	<b>+200/(200)</b>	<b>401.3/(420.3)</b>	<b>+100/(100)</b>	<b>167.7/(172.6)</b>
MYR	+200/(200)	413.4/(413.4)	+100/(100)	173.7/(173.7)
USD	+200/(200)	(12.1)/(6.9)	+100/(100)	(6.0)/1.1

## **10. LIQUIDITY RISK**

The Bank maintains sufficient liquidity to fund its day-to-day operations, meet deposit withdrawals and loan/financing disbursements, participate in new investments, and 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. In addition to these controls and policies, the Bank also actively manages and monitors daily BNM's and the Group's Basel III Liquidity Coverage Ratio ("LCR"). 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 in 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 cash shortfalls.

The distribution of deposits is managed actively 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.

Liquidity risk is aligned with the regulatory liquidity risk management framework, and 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.

With regard to the regulatory requirements on LCR which are effective from 1 June 2015, the Bank's ratios were above 100 per cent for both the All Currency LCR and the Ringgit Malaysia LCR as at 31 December 2017.

Contingency funding plans are in place to identify liquidity crisis using a series of warning indicators. Crisis escalation processes and various strategies including funding and communication 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 UOBL Group in Singapore.

The table in Note 38 to the financial statements on [page o/s](#) - Bank presents 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. Behavioral adjustments were made on significant balance sheet items that had actual maturity dates that differed substantially from the Bank's contractual profile.



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**(Company No. 271809 K)**  
**(Incorporated in Malaysia)**

## **11. PROFIT SHARING INVESTMENT ACCOUNTS AND SHARIAH GOVERNANCE**

### **Profit Sharing Investment Accounts**

This disclosure is not applicable as United Overseas Bank (Malaysia) Bhd's Islamic Banking Window does not have any Profit Sharing Investment Accounts.

### **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 2017. As such, no Shariah non-compliant income has been recorded for the year.