Standard Chartered Bank Malaysia Berhad and its subsidiaries

Pillar 3 Disclosures 31 December 2016



Incorporated in Malaysia with registered Company No. 115793P

Level 16, Menara Standard Chartered

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1. Overview

Basel II

The Basel Committee on Banking Supervision ("BCBS") published a framework for International Convergence of Capital Measurement and Capital Standards (commonly referred to as 'Basel II'), which replaced the original 1988 Basel I Accord. Basel II is structured around three 'pillars' which are outlined below:-

- Pillar 1 sets out minimum regulatory capital requirements the minimum amount of regulatory capital banks must hold against the risks they assume;
- Pillar 2 sets out the key principles for supervisory review of a bank's risk management framework and its capital adequacy. It sets out specific oversight responsibilities for the Board of Directors ("the Board") and senior management, thus reinforcing principles of internal control and other corporate governance practices; and
- Pillar 3, covered in the supplementary financial information (unaudited), aims to bolster market discipline through enhanced disclosure by banks.

Basel II provides three credit risk approaches of increasing sophistication, namely, The Standardised Approach ("TSA"), the Foundation Internal Ratings Based Approach ("FIRB") and the Advanced Internal Ratings Based Approach ("AIRB").

In Malaysia, the Capital Adequacy Framework (Basel II - Risk Weighted Assets) came into effect on 1 January 2013, last updated on 1 August 2016. The framework (previously known as Risk Weighted Capital Adequacy Framework (Basel II - Risk Weighted Assets Computation) sets out the requirements on the computation of the risk-weighted assets developed based on the Basel Committee on Banking Supervision (BCBS) and the Islamic Financial Services Board (IFSB) papers "International Convergence of Capital Measurement and Capital Standards: A Revised Framework issued in June 2006 and the "Capital Adequacy Standard (CAS)" issued in December 2005, respectively. The framework forms part of the overall Capital Adequacy Framework, hence should be read alongside the Capital Adequacy Framework (Capital Components).

Bank Negara Malaysia ("BNM") has formally approved Standard Chartered Bank Malaysia Berhad ("SCBMB") and Standard Chartered Saadiq Berhad ("SCSB") to use the AIRB approach for calculating and reporting credit risk regulatory capital in June 2010. As a result, since July 2010 regulatory capital submission, SCBMB and SCSB have been using AIRB approach for calculating and reporting the credit risk capital requirement. Formal approvals (SCBMB in Nov 2009 and SCSB in May 2013) were also obtained from BNM for the use of TSA approach for calculating and reporting operational risk. SCBMB and SCSB started using TSA approach for calculating and reporting the operational risk capital requirement effective July 2010 and September 2013, respectively.

1. Overview (continued)

Basel II (continued)

Scope of application

The Pillar 3 disclosures are prepared for the Standard Chartered Bank Malaysia Berhad ("the Bank") and its subsidiaries ("the Group"). The Group offers Islamic banking financial services via the Bank's wholly owned subsidiary company, Standard Chartered Saadiq Berhad. The accounting policy for consolidation is provided in note 2(a) of the Group's financial statements for the financial year ended 31 December 2016 ("the financial statements"). All subsidiaries are fully consolidated and the treatment is the same for both regulatory and accounting purposes.

The Group is not aware of any material, practical impediments to the prompt transfer of capital resources in excess of those required for regulatory purposes or repayment of intercompany loans and advances.

2. Capital management

The Group's capital management approach is driven by its desire to maintain a strong capital base in support of its business development, to meet regulatory capital requirements at all times.

Details of the Group's capital management approach are disclosed in Note 47(i) of the Group's financial statements, while details of regulatory capital structure and main features of capital instruments of the Group are disclosed in Note 48 and Note 21 of the financial statements. All ordinary shares in issue confer identical rights in respect of capital, dividends and voting.

3. Risk management

Risk management is the set of end-to-end activities through which we make risk-taking decisions and we control and optimize the risk-return profile of the Group. It is a Group-wide activity and starts right at the front-line. The management of risk lies at the heart of the Group's business. Effective risk management is a central part of the financial and operational management of the Group and fundamental to our ability to generate profits consistently and maximize the interests of shareholders and other stakeholders.

Our risk management framework, principles and governance are disclosed in Note 39 of the Group's financial statements.

4. Regulatory capital requirement

Disclosure on capital adequacy under the Standardised and IRB approach

Disclosure on capital adequacy under the Standardised and IRB	approach			
Group 31 December 2016 Exposure class	Gross exposures RM'000	Net exposures RM'000	Risk weighted assets RM'000	Minimum capital requirement at 8% RM'000
(a) Credit risk				
Exposures under the Standardised approach				
On-balance sheet exposures:-				
Corporates	290,491	274,244	272,415	21,793
Regulatory retail	287,034	234,158	220,034	17,603
Residential mortgages Higher risk assets	12,382	12,382	4,334	347
Other assets	609,830	604,388	453.504	36,280
Defaulted exposures	34,814	32,874	65,152	5,212
Total on-balance sheet exposures	1,234,551	1,158,046	1,015,439	81,235
Off-balance sheet exposures:-				
OTC derivatives	33	_	-	_
Off-balance sheet exposures other than OTC				
derivative transactions and credit derivatives	112,751	88,258	88,172	7,054
Defaulted exposures	236	236	354	28
Total off-balance sheet exposures	113,020	88,494	88,526	7,082
Total on and off-balance sheet exposures	1,347,571	1,246,540	1,103,965	88,317
Exposures under the IRB approach				
On-balance sheet exposures:-				
Sovereigns/Central banks	6,035,427	6,035,427	1,120,726	89,658
Banks, development financial institutions				
& multilateral development banks ("MDBs")	5,763,930	5,870,764	998,215	79,857
Insurance companies, securities firms & fund managers	312,754	348,601	90,497	7,240
Corporates	9,386,073	9,314,980	8,572,494	685,800
Residential mortgages	11,860,672	11,860,672	1,817,320	145,386
Qualifying revolving retail exposures	1,798,930	1,798,930	1,097,952	87,836
Other retail	4,027,875	3,956,287	1,786,882	142,951
Defaulted exposures Total on-balance sheet exposures	1,721,891 40,907,552	1,721,891 40,907,552	3,186,630 18,670,716	254,930 1,493,658
rotal off balance choot expectation	10,007,002	10,007,002	10,010,110	1,100,000
Off-balance sheet exposures:-				
OTC derivatives	8,050,480	8,050,480	2,177,204	174,177
Off-balance sheet exposures other than OTC derivative transactions and credit derivatives	10,805,363	10,805,363	4,726,439	378,115
Defaulted exposures	50,917	50,917	10,171	814
Total off-balance sheet exposures	18,906,760	18,906,760	6,913,814	553,106
Total on and off-balance sheet exposures	E0 014 212	E0 014 212	25,584,530	2.046.764
•	59,814,312	59,814,312	25,564,550	2,040,704
(b) Large exposures risk requirement			-	-
	Long	Short		
(c) Market risk (Standardised approach)	position	position	000 400	54.575
Interest rate risk Foreign currency risk	31,069,267 60,484,588	29,625,653 60,262,038	682,188 38,777	54,575 3,102
Options risk	4,447,836	4,445,300	177,186	14,175
(d) Operational risk (Standardised approach)			3,344,050	267,524
Total RWA and capital requirements		-	30,930,696	2,474,457
Total NWA and capital requirements		=	30,330,030	2,474,437
CET1, Tier 1 and Total Capital ratios				
			Before	After proposed
			proposed	dividend
			dividend	
CET 1 capital ratio			10 2650/	12 0020/
CET 1 capital ratio Tier 1 capital ratio			12.365% 13.594%	12.002% 13.230%
Total capital ratio			17.107%	16.744%

4. Regulatory capital requirement (continued)

Disclosure on capital adequacy under the Standardised and IRB approach (continued)

Group 31 December 2015	Gross exposures	Net exposures	Risk weighted assets	Minimum capital requirement at 8%
Exposure class	RM'000	RM'000	RM'000	RM'000
(a) Credit risk				
Exposures under the Standardised approach				
On-balance sheet exposures:- Corporates	131,290	121,633	115,643	9,251
Regulatory retail	113,441	51,850	40,231	3,218
Residential mortgages	13,031	13,031	4,561	365
Higher risk assets	<u>-</u>	-	<u>-</u>	<u>-</u>
Other assets	978,503	969,773	713,855	57,108 5,466
Defaulted exposures Total on-balance sheet exposures	39,686 1,275,951	33,597 1,189,884	68,319 942,609	5,466 75,408
Total of Salarios officer exposures	1,210,001	1,100,001	0.12,000	70,100
Off-balance sheet exposures:-				
OTC derivatives Off-balance sheet exposures other than OTC	1,269	797	796	64
derivative transactions and credit derivatives	152,846	126,680	126,397	10,112
Defaulted exposures	257	257	386	31
Total off-balance sheet exposures	154,372	127,734	127,579	10,207
Total on and off-balance sheet exposures	1,430,323	1,317,618	1,070,188	85,615
Exposures under the IRB approach				
On-balance sheet exposures:- Sovereigns/Central banks	6,703,001	6,703,001	504,576	40,366
Banks, development financial institutions & multilateral development banks ("MDBs") Insurance companies, securities firms &	5,631,133	5,598,317	670,284	53,623
fund managers	459,304	492,120	55,087	4,407
Corporates	8,562,157	8,636,807	8,002,615	640,209
Residential mortgages	12,566,457	12,566,457	2,328,786	186,303
Qualifying revolving retail exposures Other retail	1,865,523 4,463,011	1,865,523 4,388,361	1,171,441 1,903,852	93,715 152,308
Defaulted exposures	1,664,526	1,664,526	2,663,461	213,077
·	41,915,112	41,915,112	17,300,102	1,384,008
Off-balance sheet exposures:-				
OTC derivatives	8,026,757	8,026,757	1,744,533	139,563
Off-balance sheet exposures other than OTC				
derivative transactions and credit derivatives Defaulted exposures	12,686,285 195,082	12,686,285 195,082	4,619,682 36,334	369,575 2,907
Total off-balance sheet exposures	20,908,124	20,908,124	6,400,549	512,045
				·
Total on and off-balance sheet exposures	62,823,236	62,823,236	23,700,651	1,896,053
(b) Large exposures risk requirement			=	-
	Long	Short		
(c) Market risk (Standardised approach)	position	position		
Interest rate risk Foreign currency risk	30,893,032 54,033,728	32,870,971 54,055,673	1,000,290 188,463	80,023 15,077
Options risk	5,642,784	5,039,076	361,448	28,916
(d) Operational risk (Standardised approach)			3,473,947	277,916
Total RWA and capital requirements		-	29,794,987	2,383,600
		=	-, - ,	,,
CET 1, Tier 1 and Total Capital ratios				
			Before	After proposed
			proposed	dividend
CET 1 capital ratio			dividend 11.832%	11 0220/
CET 1 capital ratio Tier 1 capital ratio			13.108%	11.832% 13.108%
Total capital ratio			16.830%	16.830%
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4. Regulatory capital requirement (continued)

Disclosure on capital adequacy under the Standardised and IRB approach (continued)

Bank 31 December 2016 Exposure class	Gross exposures RM'000	Net exposures RM'000	Risk weighted assets RM'000	Minimum capital requirement at 8% RM'000
(a) Credit risk				
Exposures under the Standardised approach				
On-balance sheet exposures:-				
Corporates	258,170	241,923	240,094	19,208
Regulatory retail	99,044	46,168	35,067	2,805
Residential mortgages	12,031	12,031	4,211	337
Higher risk assets Other assets	- 535,785	530,343	- 382,847	30,628
Defaulted exposures	27,840	25,900	56,346	4,508
Total on-balance sheet exposures	932,870	856,365	718,565	57,486
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Off-balance sheet exposures:-	00			
OTC derivatives	33	-	-	-
Off-balance sheet exposures other than OTC derivative transactions and credit derivatives	74,460	51,517	51,434	4,115
Defaulted exposures	236	236	354	28
Total off-balance sheet exposures	74,729	51,753	51,788	4,143
Total an and off balance about an account	4 007 500	000 440	770.050	64.600
Total on and off-balance sheet exposures	1,007,599	908,118	770,353	61,629
Exposures under the IRB approach				
On-balance sheet exposures:- Sovereigns/Central banks	5,269,484	5,269,484	1,027,223	82,178
Banks, development financial institutions	5,209,404	5,209,464	1,021,223	02,170
& MDBs	8,682,769	8,789,603	1,634,865	130,789
Insurance companies, securities firms &	-, ,	-,,	,,	,
fund managers	184,059	219,906	41,955	3,356
Corporates	7,874,710	7,803,573	7,135,605	570,848
Residential mortgages	9,107,587	9,107,587	1,379,645	110,372
Qualifying revolving retail exposures Other retail	1,798,930 3,173,521	1,798,930 3,101,977	1,097,952 1,451,858	87,836 116,149
Defaulted exposures	1,612,884	1,612,884	2,904,099	232,328
Total on-balance sheet exposures	37,703,944	37,703,944	16,673,202	1,333,856
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Off-balance sheet exposures:-	0.000.454	0.000.454	0.000.007	400.000
OTC derivatives Off-balance sheet exposures other than OTC	8,338,151	8,338,151	2,288,367	183,069
derivative transactions and credit derivatives	10,214,841	10,214,841	4,487,710	359,017
Defaulted exposures	50,690	50,690	9,939	795
Total off-balance sheet exposures	18,603,682	18,603,682	6,786,016	542,881
Total on and off-balance sheet exposures	56,307,626	56,307,626	23,459,218	1,876,737
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(b) Large exposures risk requirement			-	-
	Long	Short		
(c) Market risk (Standardised approach)	position	position		
Interest rate risk	31,069,267	29,625,653	682,188	54,575
Foreign currency risk Options risk	60,484,588 4,447,836	60,262,038 4,445,300	38,777 177,186	3,102 14,175
·	4,447,030	4,443,300	177,100	14,175
(d) Operational risk (Standardised approach)		_	3,195,375	255,630
Total RWA and capital requirements		=	28,323,097	2,265,849
CET1, Tier 1 and Total Capital ratios				
MIN . SING . SING . MINOU			Before	After proposed
			proposed	dividend
			dividend	G.71G011G
CET 1 capital ratio			11.983%	11.586%
Tier 1 capital ratio			13.324%	12.927%
Total capital ratio			16.161%	15.764%

CET 1 capital ratio

Tier 1 capital ratio

Total capital ratio

Regulatory capital requirement (continued)

Disclosure on capital adequacy under the Standardised and IRB approach (continued)

Bank 31 December 2015 Exposure class	Gross exposures RM'000	Net exposures RM'000	Risk weighted assets RM'000	Minimum capital requirement at 8% RM'000
(a) Credit risk				
Exposures under the Standardised approach				
On-balance sheet exposures:-				
Corporates	112,984	103,327	97,337	7,787
Regulatory retail	112,010	50,419	39,117	3,129
Residential mortgages	13,031	13,031	4,561	365
Higher risk assets Other assets	655,414	646,684	399,472	31,958
Defaulted exposures	39,661	33,572	68,282	5,463
Total on-balance sheet exposures	933,100	847,033	608,769	48,702
Off-balance sheet exposures:-				
OTC derivatives	1,269	797	796	64
Off-balance sheet exposures other than OTC				
derivative transactions and credit derivatives	100,865	76,406	76,123	6,090
Defaulted exposures	257	257	386	31
Total off-balance sheet exposures	102,391	77,460	77,305	6,185
Total on and off-balance sheet exposures	1,035,491	924,493	686,074	54,887
Exposures under the IRB approach On-balance sheet exposures:- Sovereigns/Central banks Banks, development financial institutions & MDBs Insurance companies, securities firms & fund managers Corporates Residential mortgages Qualifying revolving retail exposures Other retail Defaulted exposures Total on-balance sheet exposures Off-balance sheet exposures:- OTC derivatives Off-balance sheet exposures other than OTC derivative transactions and credit derivatives Defaulted exposures Total off-balance sheet exposures Total off-balance sheet exposures	5,588,687 9,984,990 258,126 7,585,612 9,678,216 1,865,523 3,396,663 1,554,993 39,912,810 8,267,119 11,836,149 195,083 20,298,351 60,211,161	5,588,687 9,952,173 290,942 7,657,303 9,678,216 1,865,523 3,324,973 1,554,993 39,912,810 8,267,119 11,836,149 195,083 20,298,351 60,211,161	439,476 1,273,978 26,444 7,078,517 1,485,642 1,171,441 1,303,264 2,358,579 15,137,341 1,720,421 4,254,451 36,334 6,011,206 21,148,547	35,158 101,918 2,116 566,281 118,851 93,715 104,261 188,686 1,210,986 137,634 340,356 2,907 480,897 1,691,883
(b) Large exposures risk requirement			-	-
(c) Market risk (Standardised approach) Interest rate risk Foreign currency risk Options risk (d) Operational risk (Standardised approach) Total RWA and capital requirements	Long position 30,893,032 54,033,728 5,642,784	Short position 32,870,971 54,055,673 5,039,076	1,000,290 188,463 361,448 3,273,059 26,657,881	80,023 15,077 28,916 261,845 2,132,631
CET1, Tier 1 and Total Capital ratios:			Before	After proposed
			proposed	dividend

11.918%

13.343%

16.214%

dividend

Before proposed

dividend

11.918%

13.343%

16.214%

5. Credit risk

Credit risk is the potential for loss due to the failure of a counterparty to meet its obligations to pay the bank in accordance with agreed terms. Credit exposures may arise from both the banking and trading book. Credit risk is managed through a framework which sets out policies and procedures covering the measurement and management of credit risk. There is a clear segregation of duties between transaction originators in the businesses and the approvers in the Risk function. All credit exposure limits are approved within a defined credit approval authority framework.

Our credit risk management policies, governance and reporting & measurement system are disclosed in Note 39 (b) of the Group's financial statements.

The Group uses the Internal Ratings Based ("IRB") approach to manage credit risk for its portfolios. The Standardised approach is applied to portfolios that are classified as permanently exempt from the IRB approach, and those portfolios that are currently under transition to the IRB approach or too small an exposure for IRB model built. The development, use and governance of models under the IRB approach is covered in more detail in Section 5(i).

(i) Internal Ratings Based models

The overall governance and development process for the Group's IRB models are consistent across all portfolios.

The table below provides the Group's and the Bank's portfolio under IRB models:

Portfolio	Exposure
Sovereign and Central Bank	Central Government, Central Government department, Central banks, Entities owned or guaranteed by Central Government
Bank, DFIs and MDBs	Bank, Finance & Leasing, Life insurance, Non-life insurance, Broker dealer, Funds managers
Corporates	Large Corporate, Mid Corporate, Middle Market*, Emerging Middle Market, Commodity Traders & Buyers, Medium Enterprise, Small Business
Residential Mortgages	Retails Clients Residential Mortgage
Qualifying revolving retail exposures	Retail Clients Credit card
Other retail exposures	Corporate SME (including Business & Commercial Clients) property lending, Corporate SME (including Business & Commercial Clients) lending, Personal financing, and residential properties under construction

^{*} The Middle Market model is replaced by the Mid Corporate model in Q4 2016. As there are remaining exposures under the Middle Market model, the model is retained in the table for reference. With regards to the pillar 3 reporting in 2017 onwards, the Middle Market model will be removed from the table.

Model governance

The IRB models used by the Group calculate Probability of Default ("PD"), Loss Given Default ("LGD") and Exposure at Default ("EAD").

5. Credit risk (continued)

(i) Internal Ratings Based models (continued)

Model governance (continued)

Models are developed by Standard Chartered PLC Group's analytics team within the Risk Measurement function. The model development process is conducted and documented in line with specific criteria setting out the minimum standards for model development. All IRB models are validated in detail by a model validation team, which is separate from the teams that develop and maintain the models. Model validation findings are presented to the Standard Chartered PLC Group Credit Model Assessment Committee ("MAC"). The Credit MAC supports the Standard Chartered PLC Group Credit Risk Committee in ensuring risk identification and measurement capabilities are objective and consistent, so that risk control and risk origination decisions are properly informed.

These decision making bodies are comprised of divisional senior management whose role is to challenge model assumptions and performance and agree on appropriate model use for business decision making and regulatory capital requirement calculations. The Standard Chartered PLC Group Risk Committee and Board Risk Committee periodically review overall model performance.

As part of local governance, IRB model development and validation findings are subjected to local Executive Risk Committee ("ERC") and local Board Risk Committee ("BRC") review, endorsement and recommendation to the Board for adoption or approval. These decision making bodies are comprised of senior management whose role is to review model assumptions, performance, local regulatory requirements, agree on appropriate model use for local business decision making and capital reporting.

Model validation

The model validation process involves a qualitative and quantitative assessment of the model, data, systems and governance. This would typically include an assessment of the:-

- · Model assumptions;
- Validity of the technical approach used;
- Statistical and empirical measures of performance;
- Appropriateness of intended model use;
- Model application and infrastructure;
- Data integrity and history;
- Model response to changes in internal and external environment the extent to which the model provides point in time or through the cycle measures of risk;
- · Model monitoring standards and triggers; and
- Levels of conservatism applied.

Statistical testing is used to determine a model's discriminatory power, predicted versus realised performance and stability over time with pre-defined thresholds for passing such tests.

PD model development

Standard Chartered PLC Group employs a variety of techniques to develop its PD models. In each case the appropriate approach is dictated by the availability and appropriateness of both internal and external data.

If there is a perceived weakness in the data, for example shorter histories or fewer instances of default, an appropriate amount of conservatism is applied to predicted default rates.

The general approaches fall into three categories:-

Default History Based ('Good-Bad') – where a sufficient number of defaults are available, Standard Chartered PLC Group deploys a variety of statistical methods to determine the likelihood that counterparties would default on existing exposures. These methods afford high discriminatory power by identifying counterparty characteristics that have a significant predictive ability. The majority of the Group's retail and corporate exposures are rated under such an approach.

5. Credit risk (continued)

(i) Internal Ratings Based models (continued)

PD model development (continued)

Shadow Rating Approach – if it is determined that Standard Chartered PLC Group's internal data does not provide a sufficient default history (for example, so called 'low default portfolios'), then Standard Chartered PLC Group develops models which are designed to be comparable to the ranking of issuer ratings assigned by established ECAIs, where those agencies have access to large databases of defaults over a long time period on a variety of credit obligations.

Constrained Expert Judgement – for certain types of exposure there is little or no internal or external default history, and no reliable external ratings. In such rare cases, Standard Chartered PLC Group has quantitative frameworks to incorporate expert opinions of Standard Chartered PLC Group's credit risk management personnel into the model development process.

LGD model development

Standard Chartered PLC Group develops LGD models by assessing recoveries and the forced sale value of collateral together with the economic costs in securing these recoveries, and the timing with which such cash flows occur. All such cash flows are then measured at net present value using a suitable discount rate to derive a recovery rate. LGD is therefore the EAD less these estimated recoveries.

Recoveries are estimated based upon empirical evidence which has shown that factors such as customer segment and product have predictive content.

All LGD models are conservatively calibrated to a 'downturn' – with lower collateral values and lower recoveries on exposures, compared to those estimated over the long run.

EAD model development

An EAD model is developed for uncertain exposures such as lines of credit, credit cards, overdrafts and other commitments. Based on Standard Chartered PLC Group's experience (and supplemented by external data), EAD models assess changes to limits and the likely draw-down of undrawn committed and uncommitted limits as an exposure approaches default. The factor generated by the model and applied to the undrawn limit is referred to as the Credit Conversion Factor (CCF).

Standard Chartered PLC Group has used conservative assumptions in assessing EAD, in keeping with the expected experience in an economic downturn.

Model use

In addition to supporting credit decisions, IRB models also support risk-based pricing methodologies and measures used to assess business performance.

The use of models is governed by a suite of policies:

- The credit grading policy and procedure which defines the applicability of each model, details the
 procedure for use and sets the conditions and approval authority required to override model output;
 and
- The Standard Chartered PLC Group's Model Risk Policy specifies that models are subject to regular monitoring and review with underlying Standard Chartered PLC Group's Model Standards for IRB Credit Risk Models specifying statistical thresholds and other triggers which determine when models need to be redeveloped.

Section 5.3 provides further analysis on the Group's and the Bank's credit risk exposures under the IRB approach.

5. Credit risk (continued)

Credit monitoring (continued)

(i) Internal Ratings Based models (continued)

Corporates, Institutional and Commercial model results

Internal Ratings Based models were developed from a dataset that spans at least a full business cycle. The data has been used to calibrate estimates of PD to the Group's long run experience. Actual ('point in time') default rates will typically differ from this 'through the cycle' experience as economies move above or below cyclical norms.

Estimates of PD are computed as of 1 January 2016 and are compared with default observations through 31 December 2016. The historical default experience for institutions, central governments or central banks is minimal, so the predicted PD reflects a particularly low number of defaults. For institutions and central governments or central banks, there were no defaults during 2016. The actual default rates for corporate exposures in 2016 remained below IRB model predictions as at the beginning of 2016, reflecting the impact of the Group's prudent and proactive credit management.

The calculation of realised versus predicted LGD is affected by the fact that it may take a number of years for the workout process to be completed. As such, an observed recovery value cannot be assigned to the majority of the 2016 defaults, making it meaningless to compare realised versus predicted outcomes in a manner similar to that for PD and EAD. To address this, for corporates and institutions we have adopted an approach based on a four-year rolling period of predicted and realised LGD, which for the current reporting year includes 2013 to 2016 defaults that have completed their workout process as at the end of 2016. This approach compares the four-year rolling predicted LGD, providing the predicted outcome of these resolved defaults one year prior to default, against the realised LGD for the same set of defaults. These two figures are fully comparable, providing thereby a meaningful assessment of LGD model performance. Under this approach, realised LGD value for corporates is lower than predicted. This is explained by the regulatory guidance to calibrate LGD models to downturn conditions. For central governments or central banks and institutions, no values are provided reflecting the fact that there were no defaults in the past four years with completed workout as of December 2016.

EAD takes into consideration the potential draw down of a commitment as an obligor defaults by estimating the Credit Conversion Factor (CCF) of undrawn commitments. For assets which defaulted in 2016, the comparison of realised versus predicted EAD is summarised in the ratio of EAD one year prior to default to the outstanding amount at time of default. The ratios for all models are larger than one, indicating that the predicted EAD is higher than the realised outstanding amount at default. This is explained by the regulatory guidance to assign conservatism to the CCF of certain exposure types and to calibrate the models to downturn conditions, as well as by the impact of management action leading to a reduction in actual exposure prior to default.

Corporate SME observed default is lower than the predicted PD. Predicted PD was computed as at 31 December 2015 and compared to the actual default observations over a one year period ended 31 December 2016. Portfolio size remained stable and default pool has been minimal, as such the observed default rate is lower than the predicted default rate. The observed LGD was calculated based on actual recoveries during the 2014 to 2016 period for existing non-defaults as of December 2012 where defaulted in 2013. Realised LGD was higher than the predicted LGD for Bank Level, primarily due one large account that defaulted in 2013. The ratios for EAD model is larger than one, indicating that the predicted EAD is higher than the realised outstanding amount at default.

5. Credit risk (continued)

Credit monitoring (continued)

(i) Internal Ratings Based models (continued)

Corporates, Institutional and Commercial model results (continued)

Group

·	Predicted PD %	Observed PD %	Predicted LGD %	Realised LGD %	Predicted EAD/ Realised EAD
IRB exposures					
Central governments or central banks	0.0%	N/A	N/A	N/A	N/A
Corporates	1.4%	1.0%	45.5%	7.7%	1.5
Institutions	0.1%	N/A	N/A	N/A	N/A
Corporate SME	2.4%	1.9%	20.9%	15.0%	1.1
Bank					
					Drodicted

					Predicted
	Predicted	Observed	Predicted	Realised	EAD/
	PD	PD	LGD	LGD	Realised
	%	%	%	%	EAD
IRB exposures					
Central governments or central banks	0.0%	N/A	N/A	N/A	N/A
Corporates	1.4%	1.2%	45.5%	7.7%	1.5
Institutions	0.1%	N/A	N/A	N/A	N/A
Corporate SME	2.3%	1.7%	18.4%	19.4%	1.1

Retail model results

Retail models have been developed for majority of its portfolios. Predicted PD was computed as at 31 December 2015 and compared to the actual default observation over a one year period ending 31 December 2016.

The observed default rate for all asset classes is lower than the predicted PD with the exception of Other Retail asset class. The higher observed default rate for the Other Retail asset class as compared to predicted PD was attributed primarily to personal loans exposures, for which a series of ongoing portfolio initiatives had been implemented to manage this exposure. Model recalibrations have been done (not reflected in the data-point used) to ensure predicted PD is reflective of the underlying portfolio performance.

The realized LGD is calculated based on 12 months default window, recoveries over a 24 months workout period and compared to the predicted LGD. Realised LGDs for the Group are lower than the predicted values for all asset classes, primarily due to the models using "downturn" parameter settings to predict LGD. LGD under predicts for Bank's Other Retail Exposures due to personal loan product, for which model is currently being re-developed.

No material difference between predicted EAD as compared to realised EAD.

5. Credit risk (continued)

Credit monitoring (continued)

(i) Internal Ratings Based models (continued)

Retail model results (continued)

Group

	Predicted PD %	Observed PD %	Predicted LGD %	Realised LGD %	Predicted EAD/ Realised EAD
IRB exposures					
Residential mortgages	3.1%	1.6%	13.7%	9.2%	1.0
Qualifying revolving retail exposures	3.0%	2.6%	64.8%	60.3%	1.1
Other retail exposures	9.1%	9.3%	78.5%	72.4%	1.1
Bank					

	Predicted PD %	Observed PD %	Predicted LGD %	Realised LGD %	Predicted EAD/ Realised EAD
IRB exposures					
Residential mortgages	3.1%	1.7%	13.7%	9.2%	1.0
Qualifying revolving retail exposures	3.0%	2.6%	64.8%	60.3%	1.1
Other retail exposures	7.1%	9.3%	69.2%	75.6%	1.1

5. Credit risk (continued)

Credit monitoring

(ii) Actual losses

The tables below show net individual impairment charges raised and write off during the financial year of 2016 versus 2015 for IRB exposure classes. The net individual impairment charge is a point in time actual charge raised in accordance with accounting standards that require the Bank to either provide for or write-off debts when certain conditions are met.

Group

	31 December 2016 Actual losses RM'000	31 December 2015 Actual losses RM'000
Corporates	139,276	373,263
Residential Mortgages	36,094	34,218
Qualifying Revolving Retail Exposures	91,602	98,709
Other Retail	208,278	198,411
	475,250	704,601
Bank	31 December 2016 Actual Iosses RM'000	31 December 2015 Actual losses RM'000
Corporates	139,276	371,864
Residential Mortgages	27,285	28,944
Qualifying Revolving Retail Exposures	91,602	98,709
Other Retail	142,882	139,038
	401,045	638,555

The lower actual loss as compared to the corresponding year was mainly due to lower corporate provisions made during the period.

5. Credit risk (continued)

Credit monitoring (continued)

(iii) Risk grade profile

Exposures by internal credit grading

For IRB portfolios, an alphanumeric credit risk-grading system is used in all client or product segment. The grading is based on Standard Chartered PLC Group's internal estimate of PD over a one-year horizon, with customers or portfolios assessed against a range of quantitative and qualitative factors. The numeric grades run from 1 to 14 and some of the grades are further sub-classified. Lower credit grades are indicative of a lower likelihood of default. Credit grades 1 to 12 are assigned to performing customers or accounts, while credit grades 13 and 14 are assigned to non-performing or defaulted customers.

The Group's credit grades are not intended to replicate external credit grades, and ratings assigned by external ratings agencies are not used in determining internal credit grades. Nonetheless, as the factors used to grade a borrower may be similar, a borrower rated poorly by an ECAI is typically expected to be assigned a weak internal credit grade.

As a guide, the table below presents the Group's credit grades corresponding to that of Standard and Poor's credit ratings.

	Standard and Poor's Mapping			
Credit Grade	Corp/NBFIs *	Banks		
1A	AAA/AA+	AAA/AA+		
1B	AA	AA		
2A	AA/AA-	AA-		
2B	AA-	A+		
3A	A+	A		
3B	A	A-/BBB+		
4A	A-	BBB		
4B	BBB+	BBB/BBB-		
5A	BBB	BBB-		
5B	BBB-/BB+	BB+		
6A	BB+/BB	BB+/BB		
6B	BB	BB		
7A	BB/BB-	BB/BB-		
7B	BB-	BB-		
8A	BB-/B+	BB-/B+		
8B	B+	B+		
9A	B+	В		
9B	B+/B	B/B-		
10A	В	B-		
10B	B/B-	B-		
11A	B-	B-/CCC		
11B	B-	CCC/C		
11C	B-/CCC	CCC/C		
12A	CCC/C	CCC/C		
12B	CCC/C	CCC/C		
12C	CCC/C	CCC/C		

^{*} Represents corporates/non-bank financial institutions.

Credit grades for Retail Banking accounts covered by IRB models are based on a probability of default. These models are based on application and behavourial screcards which make use of credit bureau information as well as Groups' internal data.

IRB models cover a substantial majority of the Group's loans and are used extensively in assessing risks at customer and portfolio level, setting strategy and optimising the Group's risk-return decisions.

5. Credit risk (continued)

Credit monitoring (continued)

(iii) Risk grade profile (continued)

Exposures by internal credit grading (continued)

The Group makes use of internal risk estimates of PD, LGD, EL and EAD in the areas of:-

- Credit Approval and Decision The level of authority required for the sanctioning of credit requests and the decision made is based on PD, LGD, EL and EAD of the obligor with reference to the nominal exposure;
- Pricing In Corporates, Institutional and Commercial Banking, a pre-deal pricing calculator is used
 which takes into consideration PD, LGD and EAD in the calculation of expected loss and economic
 capital for the proposed transactions to ensure appropriate return. Retail Banking pricing considers
 obligor's risk profile (as it takes into account the loan size and customer segment), pricing regulations if
 any, and competition in the market place;
- Limit Setting In Corporates, Institutional and Commercial Banking concentration limits for some
 portfolios, as counterparty limits are determined by PD, LGD and EAD. The limits operate on a sliding
 scale to ensure that the Group does not have over concentration of low credit quality assets. The
 Group's concentration risk monitoring dashboard utilises IRB Model output such as credit grades, PD,
 LGD and EADs. In Retail Clients, portfolio limits are based on recession loss;
- Provisioning Collective Impairment Provision ("CIP") are raised at the portfolio level and are set with reference to expected loss which is based on PD, LGD and EAD amongst other qualitative and quantitative factors;
- Risk Appetite assessment Key inputs used in the assessment of business and market variables for setting Risk Appetite includes but not limited to consideration of risk based methodologies such as IRB parameters; and
- Economic Capital PD, LGD and EAD are key components of the model in credit risk economic capital calculation.

(iv) Counterparty credit risk in the trading book

Counterparty credit risk ("CCR") is the risk that the Group's counterparty in a foreign exchange, interest rate, commodity, equity or credit derivative contract defaults prior to maturity date of the contract and that the Group at the time has a claim on the counterparty. CCR arises predominantly in the trading book, but also arises in the non-trading book due to hedging of external funding.

The credit risk arising from all financial derivatives is managed as part of the overall lending limits to banks and customers.

The Group will seek to negotiate Credit Support Annexes ("CSA") with counterparties on a case by case basis, where collateral is deemed a necessary or desirable mitigant to the exposure. The credit terms of the CSA are specific to each legal document and determined by the credit risk approval unit responsible for the counterparty. The nature of the collateral will be specified in the legal document and will typically be cash or highly liquid securities.

A daily operational process takes place to calculate the MTM on all trades captured under the CSA. Additional collateral will be called from the counterparty if total uncollateralised MTM exposure exceeds the threshold and minimum transfer amount specified in the CSA to provide an extra buffer to the daily variation margin process.

5. Credit risk (continued)

Credit monitoring (continued)

(iv) Counterparty credit risk in the trading book

In line with market convention, the Group negotiates CSA terms for certain counterparties where the thresholds related to each party are dependent on their internal rating model. Such clauses are typically mutual in nature. It is therefore recognised that a downgrade in the Group's rating could result in counterparties seeking additional collateral calls to cover negative MTM portfolios where thresholds are lowered.

Credit reserves

Using risk factors such as PD and LGD, a Regulatory Expected Loss is calculated for each counterparty across the CCR portfolio, and based on this calculation, credit reserves are set aside for traded products. The reserve is a dynamic calculation based on the EAD risk profile for each counterparty, alongside PD and LGD factors.

Wrong way risk

Wrong way risk occurs when either the EAD or LGD increases as the credit quality of an obligor decreases. For example, as the MTM on a derivative contract increases in favour of the Group, this can correspond to a higher replacement cost (EAD), and the counterparty may increasingly be unable to meet its obligations. Furthermore the EAD may become larger as the counterparty finds it harder to meet its payment, margin call or collateral posting requirements. The Group employs various policies and procedures to ensure that deterioration in credit grading is alerted to management.

Exposure value calculation

Exposure values for regulatory capital purposes on over the counter traded products are calculated according to the CCR MTM method. This is calculated as a sum of the current replacement cost and the potential future credit exposure. The current replacement cost is the Ringgit equivalent amount owed by the counterparty to the Group for various financial derivative transactions. The potential future credit exposure is an add-on based on a percentage of the notional principal of each transaction. Such percentages vary according to the underlying asset class and tenor of each trade.

Section 5.6 provides further analysis on the Group's off-balance sheet and counterparty credit risk.

5. Credit risk

5.1 Exposure values

The following tables detail the Group's and the Bank's Exposure at Default ("EAD") before the effect of credit risk mitigation, broken down by the relevant exposure class against the relevant geography, industry and maturity. EAD is based on the current outstanding and accrued interest and fees, plus a proportion of the undrawn component of the facility. The amount of the undrawn facility included is dependant on the credit conversion factor of respective product type, and for IRB exposure classes, this amount is modeled internally.

Geographical analysis

The below tables provide the Group's and the Bank's EAD analysed by location of the exposures.

Group 31 December 2016	Malaysia RM'000	Others RM'000	Total RM'000
IRB exposures			
Sovereigns/Central banks	6,110,164	35	6,110,199
Banks, development financial institutions & MDBs	8,440,259	4,973,000	13,413,259
Insurance companies, securities firms & fund managers	595,485	197,403	792,888
Corporate exposures (excluding specialised lending			
and firm-size adjustment)	14,205,062	1,170,894	15,375,956
Corporate exposures (with firm-size adjustment)	2,304,490	1,189	2,305,679
Specialised lending	413,518	30,346	443,864
Retail exposures	21,372,467		21,372,467
Residential mortgages	12,732,495	-	12,732,495
Qualifying revolving retail exposures	3,904,489	-	3,904,489
Other retail exposures	4,735,483	-	4,735,483
Total IRB exposures	53,441,445	6,372,867	59,814,312
Standardised exposures			
Corporates	398,346	5,133	403,479
Regulatory retail	319,644	-	319,644
Residential mortgages	12,823	-	12,823
Higher risk assets	137	-	137
Other assets	601,553	9,935	611,488
Total Standardised exposures	1,332,503	15,068	1,347,571
Total credit risk exposures	54,773,948	6,387,935	61,161,883

5. Credit risk (continued)

5.1 Exposure values (continued)

Geographical analysis (continued)

Group 31 December 2015	Malaysia RM'000	Others RM'000	Total RM'000
IRB exposures			
Sovereigns/Central banks	6,703,001	_	6,703,001
	7,747,488	6,266,033	14,013,521
Banks, development financial institutions & MDBs Insurance companies, securities firms & fund managers	7,747,466	227,416	997,597
Corporate exposures (excluding specialised lending	770,101	227,410	991,591
and firm-size adjustment)	14,162,712	1,385,974	15,548,686
Corporate exposures (with firm-size adjustment)	2,366,009	1,363,974	2,367,470
Specialised lending	579,598	67,851	647,449
Retail exposures	22,545,512	-	22,545,512
Residential mortgages	13,460,217	_ 1	13,460,217
Qualifying revolving retail exposures	3,879,553	_	3,879,553
Other retail exposures	5,205,742	_	5,205,742
Other retail exposures	0,200,142		0,200,142
Total IRB exposures	54,874,501	7,948,735	62,823,236
Standardised exposures			
Corporates	275,886	13,519	289,405
Regulatory retail	146,439	, -	146,439
Residential mortgages	14,140	-	14,140
Higher risk assets	177	-	177
Other assets	966,408	13,754	980,162
Total Standardised exposures	1,403,050	27,273	1,430,323
·	·		·
Total credit risk exposures	56,277,551	7,976,008	64,253,559

5. Credit risk (continued)

5.1 Exposure values (continued)

Geographical analysis (continued)

Bank 31 December 2016	Malaysia RM'000	Others RM'000	Total RM'000
IRB exposures			
Sovereigns/Central banks	5,344,221	35	5,344,256
Banks, development financial institutions & MDBs	11,820,663	4,858,843	16,679,506
Insurance companies, securities firms & fund managers	457,513	149,352	606,865
Corporate exposures (excluding specialised lending			
and firm-size adjustment)	12,910,382	1,032,943	13,943,325
Corporate exposures (with firm-size adjustment)	1,813,977	1,189	1,815,166
Specialised lending	413,518	30,346	443,864
Retail exposures	17,474,644		17,474,644
Residential mortgages	9,845,174	-	9,845,174
Qualifying revolving retail exposures	3,904,489	-	3,904,489
Other retail exposures	3,724,981	-	3,724,981
Total IRB exposures	50,234,918	6,072,708	56,307,626
Standardised exposures			
Corporates	329,222	3,658	332,880
Regulatory retail	124,667	-	124,667
Residential mortgages	12,472	-	12,472
Higher risk assets	137	-	137
Other assets	537,438	5	537,443
Total Standardised exposures	1,003,936	3,663	1,007,599
Total credit risk exposures	51,238,854	6,076,371	57,315,225

5. Credit risk (continued)

5.1 Exposure values (continued)

Geographical analysis (continued)

Bank 31 December 2015	Malaysia RM'000	Others RM'000	Total RM'000
IRB exposures			
Sovereigns/Central banks	5,588,687	-	5,588,687
Banks, development financial institutions & MDBs	12,886,341	5,869,208	18,755,549
Insurance companies, securities firms & fund managers	533,410	187,726	721,136
Corporate exposures (excluding specialised lending			
and firm-size adjustment)	13,427,322	1,058,042	14,485,364
Corporate exposures (with firm-size adjustment)	1,805,664	1,461	1,807,125
Specialised lending	579,598	67,851	647,449
Retail exposures	18,205,851		18,205,851
Residential mortgages	10,379,941	-	10,379,941
Qualifying revolving retail exposures	3,879,553	-	3,879,553
Other retail exposures	3,946,357	-	3,946,357
Total IRB exposures	53,026,873	7,184,288	60,211,161
Standardised exposures			
Corporates	207,138	11,979	219,117
Regulatory retail	144,984	-	144,984
Residential mortgages	14,140	-	14,140
Higher risk assets	177	-	177
Other assets	657,071	2	657,073
Total Standardised exposures	1,023,510	11,981	1,035,491
Total credit risk exposures	54,050,383	7,196,269	61,246,652

5. Credit risk (continued)

5.1 Exposure values (continued)

Sector or economic purpose analysis

The below tables provide the Group's and the Bank's EAD analysed by sector or economic purpose of the exposure.

Group 31 December 2016	Agricultural, hunting, forestry and fishing RM'000	Mining and quarrying RM'000	Manufacturing RM'000	Electricity, gas and water RM'000	Construction RM'000	Wholesale & retail trade and restaurants & hotels RM'000	Transportation storage and communication RM'000	Finance, insurance and business services RM'000	Real estate RM'000	Household RM'000	Others RM'000	Total RM'000
IRB exposures												
Sovereigns/Central banks Banks, development financial	-	-	-	-	-	-	-	6,110,199	-	-	-	6,110,199
institutions & MDBs	-	-	_	-	-	_	_	13,413,259	_	-	-	13,413,259
Insurance companies, securities firms &												, ,
fund managers	-	-	-	-	-	-	-	792,888	-	-	-	792,888
Corporate exposures (excluding specialised lending and firm-size												
adjustment)	183,978	957,824	5,339,177	383,902	2,086,037	2,426,973	1,236,425	1,280,075	1,342,667	_	138,898	15,375,956
Corporate exposures (with firm-size	,	,	-,,	,	_,,,,,,,,	_,, .	,,,,	,,,	.,,		,	, ,
adjustment)	25,437	52,389	462,066	10,457	128,945	538,034	80,160	84,026	111,874	304,947	507,344	2,305,679
Specialised lending	-	30,346	374,797	23,701	-	600	-	-	14,420	-	-	443,864
Retail exposures	2,734	3,815	143,959	898	83,976	318,361	45,909	81,212	13,077	18,450,677	2,227,849	21,372,467
Residential mortgages	-	-	-	-	-	-	-	-	-	12,732,495	-	12,732,495
Qualifying revolving retail exposures	-	-	-	-	-	-	-	-	-	3,904,489	-	3,904,489
Other retail exposures	2,734	3,815	143,959	898	83,976	318,361	45,909	81,212	13,077	1,813,693	2,227,849	4,735,483
Total IRB exposures	212,149	1,044,374	6,319,999	418,958	2,298,958	3,283,968	1,362,494	21,761,659	1,482,038	18,755,624	2,874,091	59,814,312
Standardised exposures												
Corporates	-	-	44,211	-	168,620	7,673	-	19,503	-	135,919	27,553	403,479
Regulatory retail	-	-	-	-	915	· -	-	· -	-	318,729	· -	319,644
Residential mortgages	-	-	-	-	-	-	-	-	-	12,823	-	12,823
Higher risk assets	-	-	-	-	-	-	-	-	-	137	-	137
Other assets	-	-	-	-	-	1,735	-	5	-	-	609,748	611,488
Total Standardised exposures	-	-	44,211	-	169,535	9,408	-	19,508	-	467,608	637,301	1,347,571
Total credit risk exposures	212,149	1,044,374	6,364,210	418,958	2,468,493	3,293,376	1,362,494	21,781,167	1,482,038	19,223,232	3,511,392	61,161,883

5. Credit risk (continued)

5.1 Exposure values (continued)

Sector or economic purpose analysis (continued)

Group 31 December 2015	Agricultural, hunting, forestry and fishing RM'000	Mining and quarrying RM'000	Manufacturing RM'000	Electricity, gas and water RM'000	Construction RM'000	Wholesale & retail trade and restaurants & hotels RM'000	Transportation storage and communication RM'000	Finance, insurance and business services RM'000	Real estate RM'000	Household RM'000	Others RM'000	Total RM'000
IRB exposures												
Sovereigns/Central banks	-	-	-	-	-	-	-	6,703,001	-	-	-	6,703,001
Banks, development financial												
institutions & MDBs	-	-	-	-	-	-	-	14,013,521	-	-	-	14,013,521
Insurance companies, securities firms & fund managers								997,597				997,597
Corporate exposures (excluding	_	_	_	_	_	_	_	991,091	_		_	331,331
specialised lending and firm-size												
adjustment)	154,351	972,536	5,671,144	166,388	2,057,402	2,808,545	1,990,934	541,493	1,013,832	-	172,061	15,548,686
Corporate exposures (with firm-size												
adjustment)	19,025	111,445	502,437	5,686	139,186	451,137	88,725	90,237	150,118	-	809,474	2,367,470
Specialised lending	-	73,468	444,703	26,124	-	600	-	-	102,554	-	-	647,449
Retail exposures	7,899	2,724	114,921	1,210	66,126	266,213	35,919	65,954	13,141	18,806,887	3,164,518	22,545,512
Residential mortgages	-	-	-	-	-	-	-	-	-	13,460,217	-	13,460,217
Qualifying revolving retail exposures	7.000		-	-	-	-	-	-	-	3,879,553	-	3,879,553
Other retail exposures	7,899	2,724	114,921	1,210	66,126	266,213	35,919	65,954	13,141	1,467,117	3,164,518	5,205,742
Total IRB exposures	181,275	1,160,173	6,733,205	199,408	2,262,714	3,526,495	2,115,578	22,411,803	1,279,645	18,806,887	4,146,053	62,823,236
Standardised exposures												
Corporates	44	-	32,312	-	184,657	12,185	-	33,193	-	5,011	22,003	289,405
Regulatory retail	-	-	-	-	1,804	4	-	-	-	144,140	491	146,439
Residential mortgages	-	-	-	-	-	-	-	-	-	14,140	-	14,140
Higher risk assets	-	-	-	-	-	-	-	-	-	177	-	177
Other assets	-	-	72	-	-	15,116	-	2	-	-	964,972	980,162
Total Standardised exposures	44	-	32,384	-	186,461	27,305	-	33,195	-	163,468	987,466	1,430,323
Total credit risk exposures	181,319	1,160,173	6,765,589	199,408	2,449,175	3,553,800	2,115,578	22,444,998	1,279,645	18,970,355	5,133,519	64,253,559

5. Credit risk (continued)

5.1 Exposure values (continued)

Sector or economic purpose analysis (continued)

Bank 31 December 2016	Agricultural, hunting, forestry and fishing RM'000	Mining and quarrying RM'000	Manufacturing RM'000	Electricity, gas and water RM'000	Construction RM'000	restaurants	Transportation storage and communication RM'000	Finance, insurance and business services RM'000	Real estate RM'000	Household RM'000	Others RM'000	Total RM'000
IRB exposures												
Sovereigns/Central banks	-	-	-	-	-	-	-	5,344,256	-	-	-	5,344,256
Banks, development financial												
institutions & MDBs	-	-	-	-	-	-	-	16,679,506	-	-	-	16,679,506
Insurance companies, securities firms &								222.225				000 005
fund managers	-	-	-	-	-	-	-	606,865	-	-	-	606,865
Corporate exposures (excluding												
specialised lending and firm-size adjustment)	46,601	929,162	4,915,925	383,902	2,058,882	2,130,024	1,142,995	1,090,886	1,147,921	_	97,027	13,943,325
Corporate exposures (with firm-size	40,001	929,102	4,913,923	303,902	2,030,002	2,130,024	1,142,995	1,090,000	1,147,321	-	97,027	13,343,323
adjustment)	25,437	52,389	444,565	10,457	94,334	508,971	39,503	42,494	108,536	_	488,480	1,815,166
Specialised lending	-	30,346	374.797	23.701	-	600	-	-	14,420	_	-	443.864
Retail exposures	1.362	2,430	105,564	28	41,339	236,419	17,274	45,359	13,053	14,795,800	2,216,016	17,474,644
Residential mortgages	-	-	-	-	-	-	-	-	-	9,845,174	-	9,845,174
Qualifying revolving retail exposures	-	-	-	-	-	-	-	-	-	3,904,489	-	3,904,489
Other retail exposures	1,362	2,430	105,564	28	41,339	236,419	17,274	45,359	13,053	1,046,137	2,216,016	3,724,981
Total IRB exposures	73,400	1,014,327	5,840,851	418,088	2,194,555	2,876,014	1,199,772	23,809,366	1,283,930	14,795,800	2,801,523	56,307,626
Ctondordicad avecauses												
Standardised exposures Corporates			44,211		99.496	7,673		19,503	_	134,444	27,553	332,880
Regulatory retail	-	-	44,211	-	99,490	7,073	-	19,505	-	123,752	21,555	124,667
Residential mortgages	_	-	_	_	915	-	-	-	-	12,472	_	12,472
Higher risk assets	_	_	_	_	_	_	_	_	_	137	_	137
Other assets	_	-	_	_	_	1.735	_	5	-	-	535.703	537,443
Total Standardised exposures	-	-	44,211	-	100,411	9,408	-	19,508	-	270,805	563,256	1,007,599
			, —			5,155				3,000	,	, ,
Total credit risk exposures	73,400	1,014,327	5,885,062	418,088	2,294,966	2,885,422	1,199,772	23,828,874	1,283,930	15,066,605	3,364,779	57,315,225

5. Credit risk (continued)

5.1 Exposure values (continued)

Sector or economic purpose analysis (continued)

Bank 31 December 2015	Agricultural, hunting, forestry and fishing RM'000	Mining and quarrying RM'000	Manufacturing RM'000	Electricity, gas and water RM'000	Construction RM'000	Wholesale & retail trade and restaurants & hotels RM'000	Transportation storage and communication RM'000	Finance, insurance and business services RM'000	Real estate RM'000	Household RM'000	Others RM'000	Total RM'000
IRB exposures												
Sovereigns/Central banks	-	-	-	-	-	-	-	5,588,687	-	-	-	5,588,687
Banks, development financial institutions & MDBs							_	18,755,549			_	18,755,549
Insurance companies, securities firms &	-	-	-	-	-	-	-	10,733,349	-	-	-	10,733,349
fund managers	-	-	-	-	-	-	-	721,136	-	-	-	721,136
Corporate exposures (excluding												
specialised lending and firm-size	154 251	952,696	5,264,804	166,388	2,053,387	2,625,439	1,890,986	429,878	827,845		119,590	14,485,364
adjustment) Corporate exposures (with firm-size	154,351	952,696	5,264,604	100,300	2,055,367	2,025,439	1,090,900	429,070	027,045	-	119,590	14,400,304
adjustment)	19,025	97,148	474,986	5,686	42,604	433,206	44,068	77,401	142,417	-	470,584	1,807,125
Specialised lending	-	73,468	444,703	26,124	-	600	-	-	102,554	-	-	647,449
Retail exposures	6,004	489	62,016	95	17,614	166,811	6,891	20,549	12,985	15,476,097	2,436,300	18,205,851
Residential mortgages	-	-	-	-	-	-	-	-	-	10,379,941	-	10,379,941
Qualifying revolving retail exposures	-	-	-	-	-	-	-	-	-	3,879,553	-	3,879,553
Other retail exposures	6,004	489	62,016	95	17,614	166,811	6,891	20,549	12,985	1,216,603	2,436,300	3,946,357
T	170.000	4 400 004	0.040.500	400.000	0.440.005	0.000.050	1 0 1 1 0 1 5	05 500 000	4 005 004	45 470 007	0.000.474	00 011 101
Total IRB exposures	179,380	1,123,801	6,246,509	198,293	2,113,605	3,226,056	1,941,945	25,593,200	1,085,801	15,476,097	3,026,474	60,211,161
Standardised exposures												
Corporates	44	-	32,312	-	115,909	12,185	-	33,193	-	5,011	20,463	219,117
Regulatory retail	-	-	-	-	840	4	-	-	-	144,140	-	144,984
Residential mortgages	-	-	-	-	-	-	-	-	-	14,140	-	14,140
Higher risk assets	-	-	-	-	-	-	-	-	-	177	-	177
Other assets	-	-	72	-	-	15,116	-	2	-	-	641,883	657,073
Total Standardised exposures	44	-	32,384	-	116,749	27,305	-	33,195	-	163,468	662,346	1,035,491
Total credit risk exposures	179,424	1,123,801	6,278,893	198,293	2,230,354	3,253,361	1,941,945	25,626,395	1,085,801	15,639,565	3,688,820	61,246,652

5. Credit risk (continued)

5.1 Exposure values (continued)

Residual contractual maturity analysis

The following tables show the Group's and the Bank's residual maturity of EAD by each principal category of exposure class.

Group 31 December 2016	Up to 1 year RM'000	> 1 - 5 years RM'000	Over 5 years RM'000	Total RM'000
IRB exposures				
Sovereigns/Central banks	3,887,051	2,222,905	243	6,110,199
Banks, development financial institutions & MDBs	10,021,194	2,817,160	574,905	13,413,259
Insurance companies, securities firms & fund managers	622,912	154,180	15,796	792,888
Corporate exposures (excluding specialised	0,0	,	.0,.00	. 02,000
lending and firm-size adjustment)	10,911,948	3,204,810	1,259,198	15,375,956
Corporate exposures (with firm-size adjustment)	1,155,740	322,976	826,963	2,305,679
Specialised lending	126,742	263,075	54,047	443,864
Retail exposures	1,294,303	3,574,529	16,503,635	21,372,467
Residential mortgages	517,887	365,897	11,848,711	12,732,495
Qualifying revolving retail exposures	186,660	2,071,126	1,646,703	3,904,489
Other retail exposures	589,756	1,137,506	3,008,221	4,735,483
	 .			
Total IRB exposures	28,019,890	12,559,635	19,234,787	59,814,312
Standardised exposures				
Corporates	272,945	101,009	29,525	403,479
Regulatory retail	91,965	191,278	36,401	319,644
Residential mortgages	2	728	12,093	12,823
Higher risk assets	10	14	113	137
Other assets	561,566	<u>-</u> _	49,922	611,488
Total Standardised exposures	926,488	293,029	128,054	1,347,571
Total credit risk exposures	28,946,378	12,852,664	19,362,841	61,161,883

Note: The above table shows that exposures with residual contractual maturity more than 5 years, of which 63% are collateralized.

5. Credit risk (continued)

5.1 Exposure values (continued)

Residual contractual maturity analysis (continued)

Group 31 December 2015	Up to 1 year RM'000	> 1 - 5 years RM'000	Over 5 years RM'000	Total RM'000
IRB exposures				
Sovereigns/Central banks	5,232,807	1,439,667	30,527	6,703,001
Banks, development financial institutions & MDBs	7,625,370	5,166,382	1,221,769	14,013,521
Insurance companies, securities firms & fund				
managers	583,025	404,198	10,374	997,597
Corporate exposures (excluding specialised				
lending and firm-size adjustment)	11,048,188	3,443,483	1,057,015	15,548,686
Corporate exposures (with firm-size adjustment)	1,255,445	262,985	849,040	2,367,470
Specialised lending	19,258	508,582	119,609	647,449
Retail exposures	1,169,725	5,466,274	15,909,513	22,545,512
Residential mortgages	312,090	384,559	12,763,568	13,460,217
Qualifying revolving retail exposures	305,666	3,464,530	109,357	3,879,553
Other retail exposures	551,969	1,617,185	3,036,588	5,205,742
Total IRB exposures	26,933,818	16,691,571	19,197,847	62,823,236
Standardised exposures				
Corporates	155,381	109,523	24,501	289,405
Regulatory retail	54,383	8,504	83,552	146,439
Residential mortgages	459	695	12,986	14,140
Higher risk assets	10	14	153	177
Other assets	868,911	23,200	88,051	980,162
Total Standardised exposures	1,079,144	141,936	209,243	1,430,323
Total credit risk exposures	28,012,962	16,833,507	19,407,090	64,253,559

Note: The above table shows that exposures with residual contractual maturity more than 5 years, of which 66% are collateralized.

5. Credit risk (continued)

5.1 Exposure values (continued)

Residual contractual maturity analysis (continued)

Bank 31 December 2016	Up to 1 year RM'000	> 1 - 5 years RM'000	Over 5 years RM'000	Total RM'000
IRB exposures				
Sovereigns/Central banks	3,121,108	2,222,905	243	5,344,256
Banks, development financial institutions & MDBs	12,202,610	3,159,526	1,317,370	16,679,506
Insurance companies, securities firms & fund				
managers	488,540	102,529	15,796	606,865
Corporate exposures (excluding specialised				
lending and firm-size adjustment)	9,987,790	2,757,401	1,198,134	13,943,325
Corporate exposures (with firm-size adjustment)	1,058,238	224,350	532,578	1,815,166
Specialised lending	126,742	263,075	54,047	443,864
Retail exposures	1,078,081	3,353,400	13,043,163	17,474,644
Residential mortgages	427,036	353,585	9,064,553	9,845,174
Qualifying revolving retail exposures	186,660	2,071,126	1,646,703	3,904,489
Other retail exposures	464,385	928,689	2,331,907	3,724,981
Total IRB exposures	28,063,109	12,083,186	16,161,331	56,307,626
Standardised exposures				
Corporates	263,082	41,687	28,111	332,880
Regulatory retail	89,972	2,456	32,239	124,667
Residential mortgages	2	728	11,742	12,472
Higher risk assets	10	14	113	137
Other assets	487,521	-	49,922	537,443
Total Standardised exposures	840,587	44,885	122,127	1,007,599
Total credit risk exposures	28,903,696	12,128,071	16,283,458	57,315,225
•	:			

Note: The above table shows that exposures with residual contractual maturity more than 5 years, of which 57% are collateralized.

5. Credit risk (continued)

5.1 Exposure values (continued)

Residual contractual maturity analysis (continued)

Bank 31 December 2015	Up to 1 year RM'000	> 1 - 5 years RM'000	Over 5 years RM'000	Total RM'000
IRB exposures				
Sovereigns/Central banks	4,118,493	1,439,667	30,527	5,588,687
Banks, development financial institutions & MDBs	11,986,425	5,446,106	1,323,018	18,755,549
Insurance companies, securities firms & fund				
managers	547,561	163,201	10,374	721,136
Corporate exposures (excluding specialised				
lending and firm-size adjustment)	10,255,473	3,271,782	958,109	14,485,364
Corporate exposures (with firm-size adjustment)	1,155,838	111,652	539,635	1,807,125
Specialised lending	19,258	508,582	119,609	647,449
Retail exposures	1,030,926	5,097,291	12,077,634	18,205,851
Residential mortgages	310,915	376,195	9,692,831	10,379,941
Qualifying revolving retail exposures	305,666	3,464,530	109,357	3,879,553
Other retail exposures	414,345	1,256,566	2,275,446	3,946,357
Total IRB exposures	29,113,974	16,038,281	15,058,906	60,211,161
Standardised exposures				
Corporates	147,737	48,340	23,040	219,117
Regulatory retail	54,361	7,130	83,493	144,984
Residential mortgages	459	695	12,986	14,140
Higher risk assets	10	14	153	177
Other assets	545,822	23,200	88,051	657,073
Total Standardised exposures	748,389	79,379	207,723	1,035,491
Total credit risk exposures	29,862,363	16,117,660	15,266,629	61,246,652

Note: The above table shows that exposures with residual contractual maturity more than 5 years, of which 64% are collateralized.

5. Credit risk (continued)

5.2 Credit risk mitigation

The following tables disclose the total exposure before the effect of Credit Risk Mitigation ("CRM") and the exposures covered by guarantees/credit derivatives, eligible financial collateral and other eligible collateral shown by exposure class.

		Exposures covered by quarantees	Exposures covered by eligible	Exposures covered by Other
Group 31 December 2016	Exposures before CRM RM'000	or credit derivatives RM'000	financial collateral RM'000	eligible collateral RM'000
On-balance sheet exposures				
Sovereigns/Central banks	6,035,427	-	-	-
Banks, development financial institutions & MDBs	5,763,930	28,996	-	-
Insurance companies, securities firms & fund				
managers	312,754	111,559	2,741	-
Corporates	9,652,863	162,436	715,193	1,076,355
Regulatory retail	6,113,839	6,176	121,592	89,316
Residential mortgages	11,873,054	-	-	11,629,727
Higher risk assets	-	-	-	-
Other assets	609,830	-	5,442	-
Specialised financing/investment	23,701	-	-	-
Defaulted exposures	1,756,705	-	38,911	390,205
Total on-balance sheet exposures	42,142,103	309,167	883,879	13,185,603
Off-balance sheet exposures				
OTC derivatives	8,050,513	111,676	33	-
Off-balance sheet exposures other than OTC				
derivatives or credit derivatives	10,918,114	32,824	191,514	576,133
Defaulted exposures	51,153	-	4,785	1,765
Total off-balance sheet exposures	19,019,780	144,500	196,332	577,898
Total on and off-balance sheet exposures	61,161,883	453,667	1,080,211	13,763,501

5. Credit risk (continued)

5.2 Credit risk mitigation (continued)

		Exposures covered by guarantees	Exposures covered by eligible	Exposures covered by Other
Group	Exposures	or credit	financial	eligible
31 December 2015	before CRM RM'000	derivatives RM'000	collateral RM'000	collateral RM'000
On-balance sheet exposures				
Sovereigns/Central banks	6,703,001	-	-	-
Banks, development financial institutions & MDBs	5,631,133	32,816	-	-
Insurance companies, securities firms & fund				
managers	459,304	183,985	2,592	-
Corporates	8,580,321	25,125	323,542	863,694
Regulatory retail	6,441,975	10,643	111,083	70,022
Residential mortgages	12,579,488	-	-	12,385,479
Higher risk assets	-	-	-	-
Other assets	978,503	-	8,731	-
Specialised financing/investment	113,126	-	-	-
Defaulted exposures	1,704,212	-	66,457	319,212
Total on-balance sheet exposures	43,191,063	252,569	512,405	13,638,407
Off-balance sheet exposures				
OTC derivatives	8,028,026	34	472	-
Off-balance sheet exposures other than OTC				
derivatives or credit derivatives	12,839,131	44,445	1,203,206	394,868
Defaulted exposures	195,339	-	1,754	491
Total off-balance sheet exposures	21,062,496	44,479	1,205,432	395,359
Total on and off-balance sheet exposures	64,253,559	297,048	1,717,837	14,033,766

5. Credit risk (continued)

5.2 Credit risk mitigation (continued)

		Exposures covered by guarantees	Exposures covered by eligible	Exposures covered by other
Bank	Exposures	or credit	financial	eligible
31 December 2016	before CRM RM'000	derivatives RM'000	collateral RM'000	collateral RM'000
On-balance sheet exposures				
Sovereigns/Central banks	5,269,484	-	-	-
Banks, development financial institutions & MDBs	8,682,769	28,996	-	-
Insurance companies, securities firms & fund				
managers	184,059	111,559	-	-
Corporates	8,109,179	161,876	646,552	833,572
Regulatory retail	5,071,495	6,132	120,266	82,408
Residential mortgages	9,119,618	-	-	8,916,447
Higher risk assets	-	-	-	-
Other assets	535,785	-	5,442	-
Specialised financing/investment	23,701	-	-	-
Defaulted exposures	1,640,724	-	38,911	369,137
Total on-balance sheet exposures	38,636,814	308,563	811,171	10,201,564
Off-balance sheet exposures				
OTC derivatives	8,338,184	111,676	33	-
Off-balance sheet exposures other than OTC				
derivatives or credit derivatives	10,289,301	28,659	166,620	485,974
Defaulted exposures	50,926	-	4,785	1,538
Total off-balance sheet exposures	18,678,411	140,335	171,438	487,512
·				
Total on and off-balance sheet exposures	57,315,225	448,898	982,609	10,689,076

5. Credit risk (continued)

5.2 Credit risk mitigation (continued)

		Exposures covered by guarantees	Exposures covered by eligible	Exposures covered by other
Bank	Exposures	or credit	financial	eligible
31 December 2015	before CRM RM'000	derivatives RM'000	collateral RM'000	collateral RM'000
On-balance sheet exposures				
Sovereigns/Central banks	5,588,687	-	-	-
Banks, development financial institutions & MDBs	9,984,990	32,816	-	-
Insurance companies, securities firms & fund				
managers	258,126	183,985	-	-
Corporates	7,585,470	23,346	281,785	795,156
Regulatory retail	5,374,196	9,000	109,999	64,648
Residential mortgages	9,691,247	-	-	9,540,579
Higher risk assets	-	-	-	-
Other assets	655,414	-	8,731	-
Specialised financing/investment	113,126	-	-	-
Defaulted exposures	1,594,654	-	66,457	317,575
Total on-balance sheet exposures	40,845,910	249,147	466,972	10,717,958
Off-balance sheet exposures				
OTC derivatives	8,268,388	34	472	-
Off-balance sheet exposures other than OTC				
derivatives or credit derivatives	11,937,014	41,055	1,188,692	236,247
Defaulted exposures	195,340	-	1,754	491
Total off-balance sheet exposures	20,400,742	41,089	1,190,918	236,738
·				
Total on and off-balance sheet exposures	61,246,652	290,236	1,657,890	10,954,696

5. Credit risk (continued)

5.3 Exposures under IRB approach

Exposures under the IRB approach by risk grade or PD band for non-retail exposures

The below tables analyse the Group's and the Bank's PD range or internal risk grading of non-retail exposures.

Group 31 December 2016	0-0.04% RM'000	0.04-0.17% RM'000	0.17-0.59% RM'000	0.59-3.05% RM'000	3.05-12.00% RM'000	12.00-100% RM'000	Default or 100% RM'000
Non-retail exposures (EAD) On balance sheet exposures							
Sovereign	_	6,035,427	-	_	_	_	-
Bank	189,153	5,089,292	277,128	192,229	16,119	9	-
Corporate	123,155	1,644,377	2,682,233	3,921,244	1,044,170	283,648	1,057,338
Total on-balance sheet exposures	312,308	12,769,096	2,959,361	4,113,473	1,060,289	283,657	1,057,338
<u>Undrawn commitments</u>							
Sovereign	-	-	-	-	-	-	-
Bank	11,886	178,035	1,330	530	-	-	-
Corporate	29,056	309,778	565,644	636,905	88,995	16,099	8,780
Total undrawn commitments	40,942	487,813	566,974	637,435	88,995	16,099	8,780
<u>Derivatives</u>							
Sovereign	35	74,737	-	-	-	-	-
Bank	3,744	5,709,475	445,543	315,752	-	-	-
Corporate	117,031	628,526	250,729	475,410	13,708	15,790	
Total derivatives	120,810	6,412,738	696,272	791,162	13,708	15,790	<u> </u>
Contingent							
Sovereign	-	=	-	-	-	=	=
Bank	38,391	853,790	6,836	77,803	3,190	3,024	=
Corporate	10,303	1,162,693	1,866,999	1,117,812	575,970	235,814	36,180
Total contingent	48,694	2,016,483	1,873,835	1,195,615	579,160	238,838	36,180
Exposure weighted average LGD (%)							
Sovereign	45.00%	46.39%	-	_	-	_	=
Bank	26.20%	32.81%	35.96%	41.20%	41.20%	37.29%	=
Corporate	44.47%	42.27%	44.27%	39.72%	43.55%	36.80%	41.34%
Exposure weighted average risk weight (%)							
Sovereign	0.00%	18.49%	-	-	_	-	-
Bank	4.51%	12.81%	33.47%	76.89%	122.35%	173.26%	-
Corporate	11.16%	31.79%	63.43%	84.16%	146.41%	194.92%	137.95%

5. Credit risk (continued)

5.3 Exposures under IRB approach (continued)

Exposures under the IRB approach by risk grade or PD band for non-retail exposures (continued)

Group 31 December 2015	0-0.04% RM'000	0.04-0.17% RM'000	0.17-0.59% RM'000	0.59-3.05% RM'000	3.05-12.00% RM'000	12.00-100% RM'000	Default or 100% RM'000
Non-retail exposures (EAD) On balance sheet exposures							
Sovereign	-	6,703,001	-	-	-	-	-
Bank	1,244,650	3,885,549	282,983	199,656	18,295	-	
Corporate	50,888	1,138,167	2,379,082	4,536,284	880,611	36,429	976,384
Total on-balance sheet exposures	1,295,538	11,726,717	2,662,065	4,735,940	898,906	36,429	976,384
Undrawn commitments							
Sovereign Bank	516,309	66,770	1,208	-	-	-	-
Corporate	44,526	373,919	664,912	603,275	140,701	7,424	22,980
Total undrawn commitments	560,835	440,689	666,120	603,275	140,701	7,424	22,980
Total undrawn communicities	300,000	440,000	000,120	000,210	140,701	7,727	22,300
<u>Derivatives</u>							
Sovereign	-	-	-	-	-	-	-
Bank	2,443,907	3,548,970	428,476	293,310	-	-	-
Corporate	2,890	599,692	396,041	305,730	871	6,870	152,506
Total derivatives	2,446,797	4,148,662	824,517	599,040	871	6,870	152,506
Contingent							
Sovereign Bank	544,862	433,018	53,892	34,910	14,610	2,146	-
Corporate	6,845	1,354,432	1,866,824	2,537,965	143,009	319,260	12,685
Total contingent	551,707	1,787,450	1,920,716	2,572,875	157,619	321,406	12,685
rotal contingent	331,707	1,767,450	1,920,710	2,372,073	137,019	321,400	12,000
Exposure weighted average LGD (%)							
Sovereign	45.00%	26.20%	-	-	-	-	-
Bank	26.20%	25.36%	26.96%	41.14%	41.20%	41.20%	-
Corporate	49.18%	40.33%	39.78%	38.58%	50.39%	50.54%	43.03%
Exposure weighted average risk weight (%)							
Sovereign	-	7.53%	-	-	-	-	-
Bank	8.06%	11.25%	33.49%	87.25%	127.03%	193.21%	-
Corporate	9.13%	18.91%	46.61%	79.14%	166.45%	234.62%	85.56%

5. Credit risk (continued)

5.3 Exposures under IRB approach (continued)

Exposures under the IRB approach by risk grade or PD band for non-retail exposures (continued)

Bank 31 December 2016	0-0.04% RM'000	0.04-0.17% RM'000	0.17-0.59% RM'000	0.59-3.05% RM'000	3.05-12.00% RM'000	12.00-100% RM'000	Default or 100% RM'000
Non-retail exposures (EAD) On balance sheet exposures							
Sovereign	-	5,269,484	-	-	-	-	-
Bank	189,153	8,008,131	277,128	192,229	16,119	9	-
Corporate	123,155	1,502,707	2,224,637	3,127,077	806,760	274,433	1,056,920
Total on-balance sheet exposures	312,308	14,780,322	2,501,765	3,319,306	822,879	274,442	1,056,920
Undrawn commitments							
Sovereign Bank	11 000	179.070	4 220	- 530	-	-	-
Corporate	11,886 29,056	263,753	1,330 466,888	589,107	59,504	16,020	8,780
Total undrawn commitments	40,942	442,823	468,218	589,637	59,504	16,020	8,780
Total undrawn commitments	40,342	442,023	400,210	309,037	39,304	10,020	0,700
<u>Derivatives</u>							
Sovereign	35	74,737	-	-	-	-	-
Bank	3,744	6,170,043	381,122	266,016	-	-	-
Corporate	117,031	575,531	250,729	469,674	13,702	15,787	
Total derivatives	120,810	6,820,311	631,851	735,690	13,702	15,787	<u>-</u>
Contingent							
Sovereign	_	_	_	_	_	_	_
Bank	38,391	853,752	6,836	77,803	3,190	3,024	_
Corporate	10,303	1,073,851	1,865,563	1,033,405	563,065	235,602	36,180
Total contingent	48,694	1,927,603	1,872,399	1,111,208	566,255	238,626	36,180
<u> </u>	.0,00	.,02.,000	.,0.2,000	.,,200	000,200		
Exposure weighted average LGD (%)							
Sovereign	45.00%	46.42%	0.00%	0.00%	0.00%	0.00%	
Bank	26.20%	35.09%	35.53%	41.20%	41.20%	37.29%	
Corporate	44.47%	43.95%	43.79%	39.05%	44.38%	36.22%	41.32%
Exposure weighted average risk weight (%)							
Sovereign	0.00%	19.39%	0.00%	0.00%	0.00%	0.00%	0.00%
Bank	4.51%	15.27%	35.37%	75.96%	122.35%	173.26%	
Corporate	11.16%	33.43%	64.79%	81.16%	148.35%	192.68%	
· p - · - · - ·	3 70	33070	J 0 /0	3370	5.5676	.02.0070	. 3 33 70

5. Credit risk (continued)

5.3 Exposures under IRB approach (continued)

Exposures under the IRB approach by risk grade or PD band for non-retail exposures (continued)

Bank 31 December 2015	0-0.04% RM'000	0.04-0.17% RM'000	0.17-0.59% RM'000	0.59-3.05% RM'000	3.05-12.00% RM'000	12.00-100% RM'000	Default or 100% RM'000
Non-retail exposures (EAD) On balance sheet exposures Sovereign		5,588,687					
Bank	1,244,650	8,239,406	282,983	199,656	18,295	_	-
Corporate	50,888	862,968	2,170,590	3,954,730	771,328	33,234	975,475
Total on-balance sheet exposures	1,295,538	14,691,061	2,453,573	4,154,386	789,623	33,234	975,475
<u>Undrawn commitments</u>							
Sovereign	-	-	-	-	-	-	-
Bank	516,309	135,805	1,208	-	-	-	-
Corporate	44,526	300,676	560,664	443,702	120,352	7,424	22,980
Total undrawn commitments	560,835	436,481	561,872	443,702	120,352	7,424	22,980
<u>Derivatives</u>							
Sovereign	-	-	-	-	-	-	-
Bank	2,419,057	4,032,470	380,213	202,097	-	-	-
Corporate	2,890	527,594	396,041	299,021	871	6,865	152,507
Total derivatives	2,421,947	4,560,064	776,254	501,118	871	6,865	152,507
Contingent							
Sovereign	-	-	-	-	-	-	-
Bank	544,862	432,980	53,892	34,910	14,610	2,146	-
Corporate	6,845	1,274,136	1,864,801	2,344,629	133,425	319,227	12,685
Total contingent	551,707	1,707,116	1,918,693	2,379,539	148,035	321,373	12,685
Exposure weighted average LGD (%)							
Sovereign	45.00%	26.20%	-	=	-	-	-
Bank	26.20%	25.76%	26.00%	41.13%	41.20%	41.20%	
Corporate	49.18%	40.25%	39.67%	38.28%	53.49%	50.64%	43.00%
Exposure weighted average risk weight (%)							
Sovereign	_	7.86%	_	-	_	_	-
Bank	8.06%	12.72%	29.61%	85.18%	127.03%	193.21%	
Corporate	9.13%	18.84%	44.21%	77.56%	176.40%	239.27%	85.07%

5. Credit risk (continued)

5.3 Exposures under IRB approach (continued)

Exposures under the IRB approach by risk grade or PD band for retail exposures

The below tables analyse the Group's and the Bank's PD range of retail exposures.

Group 31 December 2016	0-0.11% RM'000	0.11-0.30% RM'000	0.30-0.43% RM'000	0.43-3.05% RM'000	3.05-9.20% RM'000	9.20-100% RM'000	Default or 100% RM'000
Retail exposures (EAD)							
On balance sheet exposures							
Residential mortgage	324,902	2,640,418	1,290,031	6,516,675	719,720	368,926	203,798
Qualifying revolving retail	32,658	198,924	87,210	732,428	525,141	222,569	180,392
Other retail	602,200	600,063	329,041	1,573,653	421,154	501,764	280,363
Total on-balance sheet exposures	959,760	3,439,405	1,706,282	8,822,756	1,666,015	1,093,259	664,553
Undrawn commitments							
Residential mortgage	4,926	34,722	24,731	593,028	3,557	4,999	2,062
Qualifying revolving retail	374,469	483,045	115,382	666,300	227,481	58,490	· -
Other retail	1,815	26,882	1,364	309,115	27,001	57,173	3,895
Total undrawn commitments	381,210	544,649	141,477	1,568,443	258,039	120,662	5,957
Exposure weighted average LGD (%)							
Residential mortgage	12.41%	12.51%	12.46%	12.58%	12.48%	12.92%	14.88%
Qualifying revolving retail	67.07%	67.07%	67.07%	67.07%	67.07%	67.07%	60.13%
Other retail	15.04%	18.10%	18.57%	32.62%	54.93%	62.86%	64.87%
Exposure weighted average risk weight (%)							
Residential mortgage	3.04%	5.43%	8.18%	15.88%	43.51%	66.28%	95.40%
Qualifying revolving retail	3.64%	7.43%	12.81%	31.94%	83.59%	168.60%	344.51%
Other retail	3.00%	9.50%	11.21%	38.82%	86.45%	139.37%	301.95%

5. Credit risk (continued)

5.3 Exposures under IRB approach (continued)

Exposures under the IRB approach by risk grade or PD band for retail exposures (continued)

Group 31 December 2015	0-0.11% RM'000	0.11-0.30% RM'000	0.30-0.43% RM'000	0.43-3.05% RM'000	3.05-9.20% RM'000	9.20-100% RM'000	Default or 100% RM'000
Retail exposures (EAD)							
On balance sheet exposures							
Residential mortgage	246,303	2,290,484	1,317,992	7,266,642	969,584	475,452	200,056
Qualifying revolving retail	33,144	202,730	81,251	738,400	570,074	239,924	174,909
Other retail	675,250	572,007	438,990	1,818,905	649,401	308,458	313,177
Total on-balance sheet exposures	954,697	3,065,221	1,838,233	9,823,947	2,189,059	1,023,834	688,142
Undrawn commitments							
Residential mortgage	3,519	29,507	29,759	611,849	9,888	6,551	2,631
Qualifying revolving retail	358,700	476,074	103,625	637,805	205,744	57,173	, -
Other retail	2,054	26,784	7,976	320,390	49,407	18,663	4,280
Total undrawn commitments	364,273	532,365	141,360	1,570,044	265,039	82,387	6,911
Exposure weighted average LGD (%)							
Residential mortgage	12.40%	12.16%	12.18%	12.26%	12.28%	12.71%	14.66%
Qualifying revolving retail	67.07%	67.07%	67.07%	67.07%	67.07%	67.07%	60.17%
Other retail	15.00%	22.88%	24.80%	34.98%	62.41%	61.60%	68.01%
Exposure weighted average risk weight (%)							
Residential mortgage	3.20%	6.07%	9.51%	17.98%	45.81%	70.02%	92.17%
Qualifying revolving retail	3.66%	7.40%	12.83%	32.27%	83.62%	169.79%	337.44%
Other retail	2.91%	11.53%	15.52%	39.58%	97.69%	131.58%	291.81%

5. Credit risk (continued)

5.3 Exposures under IRB approach (continued)

Exposures under the IRB approach by risk grade or PD band for retail exposures (continued)

Bank 31 December 2016	0-0.11% RM'000	0.11-0.30% RM'000	0.30-0.43% RM'000	0.43-3.05% RM'000	3.05-9.20% RM'000	9.20-100% RM'000	Default or 100% RM'000
Retail exposures (EAD)							
On balance sheet exposures							
Residential mortgage	322,292	2,001,958	996,569	4,939,523	559,249	287,996	181,726
Qualifying revolving retail	32,658	198,924	87,210	732,428	525,141	222,569	180,392
Other retail	502,050	475,101	213,800	1,218,350	326,398	437,822	193,846
Total on-balance sheet exposures	857,000	2,675,983	1,297,579	6,890,301	1,410,788	948,387	555,964
Undrawn commitments							
Residential mortgage	3,977	27,451	21,895	493,104	2,909	4,690	1,835
Qualifying revolving retail	374,469	483,045	115,382	666,300	227,481	58,490	-
Other retail	1,411	26,882	982	240,800	26,471	57,173	3,895
Total undrawn commitments	379,857	537,378	138,259	1,400,204	256,861	120,353	5,730
Exposure weighted average LGD (%)							
Residential mortgage	12.36%	12.52%	12.47%	12.61%	12.47%	12.91%	14.69%
Qualifying revolving retail	67.07%	67.07%	67.07%	67.07%	67.07%	67.07%	60.13%
Other retail	15.04%	18.64%	18.60%	31.39%	57.66%	63.70%	60.66%
Exposure weighted average risk weight (%)							
Residential mortgage	3.03%	5.46%	8.19%	15.71%	43.22%	65.65%	94.41%
Qualifying revolving retail	3.64%	7.43%	12.81%	31.94%	83.59%	168.60%	344.51%
Other retail	3.00%	9.74%	11.23%	37.43%	91.00%	142.25%	304.96%

5. Credit risk (continued)

5.3 Exposures under IRB approach (continued)

Exposures under the IRB approach by risk grade or PD band for retail exposures (continued)

Bank 31 December 2015	0-0.11% RM'000	0.11-0.30% RM'000	0.30-0.43% RM'000	0.43-3.05% RM'000	3.05-9.20% RM'000	9.20-100% RM'000	Default or 100% RM'000
Retail exposures (EAD)							
On balance sheet exposures							
Residential mortgage	240,159	2,100,925	1,078,384	5,298,229	607,399	353,120	198,473
Qualifying revolving retail	33,144	202,730	81,251	738,400	570,074	239,924	174,909
Other retail	590,411	495,770	302,229	1,334,998	473,328	199,927	206,136
Total on-balance sheet exposures	863,714	2,799,425	1,461,864	7,371,627	1,650,801	792,971	579,518
Undrawn commitments							
Residential mortgage	3,519	29,507	29,642	425,669	6,124	6,160	2,631
Qualifying revolving retail	358,700	476,074	103,625	637,805	205,744	57,173	-
Other retail	1,523	26,641	7,898	235,601	48,953	18,662	4,280
Total undrawn commitments	363,742	532,222	141,165	1,299,075	260,821	81,995	6,911
Exposure weighted average LGD (%)							
Residential mortgage	12.40%	12.17%	12.21%	12.33%	12.31%	12.76%	14.66%
Qualifying revolving retail	67.07%	67.07%	67.07%	67.07%	67.07%	67.07%	60.17%
Other retail	14.99%	23.61%	26.79%	34.17%	59.54%	60.03%	60.79%
Exposure weighted average risk weight (%)							
Residential mortgage	3.04%	5.31%	8.04%	15.14%	42.80%	67.06%	92.16%
Qualifying revolving retail	3.66%	7.40%	12.83%	32.27%	83.62%	169.79%	337.44%
Other retail	2.91%	11.80%	16.85%	37.78%	93.50%	127.87%	299.15%

5. Credit risk (continued)

5.3 Exposures under IRB approach (continued)

Exposures under the IRB approach by expected loss range for retail exposures

The below tables analyse the Group's and the Bank's expected loss range for retail exposures.

Group 31 December 2016	Up to 0.10% RM'000	>0.10 to 0.20% RM'000	>0.20 to 0.50% RM'000	>0.50 to 1.00% RM'000	>1.00 to 30.00% RM'000	>30 to <100% RM'000	100% RM'000
Retail exposures (EAD)							
On balance sheet exposures	7 000 470	0.000.055	4 077 400	200 707	202 702		
Residential mortgage	7,832,476	2,082,355	1,077,136	388,767	683,736	-	=
Qualifying revolving retail	71,617	159,965	288,260	216,930	1,023,357	219,193	-
Other retail	1,998,557	477,827	108,813	323,482	1,085,368	314,165	26
Total on-balance sheet exposures	9,902,650	2,720,147	1,474,209	929,179	2,792,461	533,358	26
Undrawn commitments							
Residential mortgage	157,785	123,653	376,222	2,074	8,291	=	=
Qualifying revolving retail	492,495	365,019	328,466	250,263	482,469	6,455	=
Other retail	44,511	2,934	265,100	6,969	97,241	10,186	304
Total undrawn commitments	694,791	491,606	969,788	259,306	588,001	16,641	304
Functions weighted everyone viels weight (0/)							
Exposure weighted average risk weight (%)	0.440/	47.450/	00.040/	44.400/	70.450/		
Residential mortgage	8.44%		28.31%	44.43%	73.15%	-	=
Qualifying revolving retail	4.09%	8.08%	16.59%	26.46%	83.58%	315.77%	- 0.000/
Other retail	10.84%	15.04%	28.50%	52.30%	122.07%	263.15%	0.00%
31 December 2015							
Retail exposures (EAD)							
On balance sheet exposures							
Residential mortgage	6,423,632	1,884,471	2,170,483	1,400,084	887,843	_	_
Qualifying revolving retail	72,754	163,120	278,268	215,725	1,113,967	196,598	_
Other retail	1,707,983	963,267	275,944	345,005	1,155,945	327,750	294
Total on-balance sheet exposures	8,204,369	3,010,858	2,724,695	1,960,814	3,157,755	524,348	294
<u>Undrawn commitments</u>	404.047	445 700	000 774	470 744	40.000		
Residential mortgage	121,847	115,739	262,771	179,711	13,636	-	-
Qualifying revolving retail	486,056	348,717	303,159	239,771	458,434	2,984	-
Other retail	24,958	15,185	280,979	15,304	88,190	4,918	20
Total undrawn commitments	632,861	479,641	846,909	434,786	560,260	7,902	20
Exposure weighted average risk weight (%)							
Residential mortgage	8.31%	17.20%	23.36%	35.65%	71.83%	-	-
Qualifying revolving retail	4.14%	8.10%	16.62%	26.44%	86.53%	317.43%	_
Other retail	8.05%	15.85%	35.44%	57.56%	113.97%	278.53%	135.90%
	3.0070	10.5070	33.1470	01.0070	1 10.07 70	2.0.0070	100.0070

5. Credit risk (continued)

5.3 Exposures under IRB approach (continued)

Exposures under the IRB approach by expected loss range for retail exposures (continued)

Bank 31 December 2016	Up to 0.10% RM'000	>0.10 to 0.20% RM'000	>0.20 to 0.50% RM'000	>0.50 to 1.00% : RM'000	>1.00 to 30.00% RM'000	>30 to <100% RM'000	100% RM'000
Retail exposures (EAD)							
On balance sheet exposures							
Residential mortgage	6,110,498	1,553,122	778,884	296,767	550,042	-	-
Qualifying revolving retail	71,617	159,965	288,260	216,930	1,023,357	219,193	-
Other retail	1,576,416	384,510	87,842	187,763	903,198	227,612	26
Total on-balance sheet exposures	7,758,531	2,097,597	1,154,986	701,460	2,476,597	446,805	26
Undrawn commitments							
Residential mortgage	136,101	106,798	303,781	1,799	7,382	-	-
Qualifying revolving retail	492,495	365,019	328,466	250,263	482,469	6,455	-
Other retail	43,122	2,934	197,495	6,611	96,962	10,186	304
Total undrawn commitments	671,718	474,751	829,742	258,673	586,813	16,641	304
Exposure weighted average risk weight (%)							
Residential mortgage	8.44%	17.34%	28.43%	44.45%	73.58%	0.00%	0.00%
Qualifying revolving retail	4.09%	8.08%	16.59%	26.46%	83.58%	315.77%	0.00%
Other retail	10.08%	15.17%	28.99%	53.26%	123.51%	260.14%	0.00%
31 December 2015							
Retail exposures (EAD)							
On balance sheet exposures							
Residential mortgage	6,322,528	1,814,695	778,228	308,381	652,857	=	-
Qualifying revolving retail	72,754	163,120	278,268	215,725	1,113,967	196,598	-
Other retail	1,406,601	743,973	219,432	229,402	797,227	205,871	294
Total on-balance sheet exposures	7,801,883	2,721,788	1,275,928	753,508	2,564,051	402,469	294
Undrawn commitments							
Residential mortgage	121,678	115,739	250,920	3,324	11,591	-	-
Qualifying revolving retail	486,056	348,717	303,159	239,771	458,434	2,984	-
Other retail	24,080	14,445	196,913	15,304	87,878	4,918	20
Total undrawn commitments	631,814	478,901	750,992	258,399	557,903	7,902	20
Exposure weighted average risk weight (%)							
Residential mortgage	8.29%	17.17%	27.33%	43.86%	72.47%	-	-
Qualifying revolving retail	4.14%	8.10%	16.62%	26.44%	86.53%	317.43%	-
Other retail	7.95%	15.96%	37.97%	56.95%	111.81%	284.22%	-

5. Credit risk (continued)

5.3 Exposures under IRB approach (continued)

The following tables set out exposures subject to the supervisory risk weights under the IRB approach for the Group and the Bank.

Group	Strong or 70%	Good or 90%	Satisfactory or 115%	Weak or 250%	Default or 0%
31 December 2016	RM'000	RM'000	RM'000	RM'000	RM'000
Income producing real estate					
- Total Exposures		15,020	<u> </u>	-	
- Risk Weighted Assets		13,518		-	-
31 December 2015					
Income producing real estate					
- Total Exposures		16,152	87,002	-	-
- Risk Weighted Assets		14,537	100,052	-	-
Bank	Strong or 70%	Good or 90%	Satisfactory or 115%	Weak or 250%	Default or 0%
Bank 31 December 2016	_		,		
	70%	90%	115%	250%	0%
31 December 2016	70%	90%	115%	250%	0%
31 December 2016 Income producing real estate	70%	90% RM'000	115%	250%	0%
31 December 2016 Income producing real estate - Total Exposures	70%	90% RM'000	115%	250%	0%
31 December 2016 Income producing real estate - Total Exposures - Risk Weighted Assets	70%	90% RM'000	115%	250%	0%
31 December 2016 Income producing real estate - Total Exposures - Risk Weighted Assets 31 December 2015	70%	90% RM'000	115%	250%	0%

5. Credit risk (continued)

5.4 Exposures under the Standardised approach

Risk weights under the Standardised approach

The following tables set out analysis of risk weights under the Standardised approach for the Group and the Bank.

Group	← Exp	osures after n	etting and cred	it risk mitigation Higher	n	Total exposures after netting	Total risk
31 December 2016	Corporates*	Regulatory retail	Residential mortgages	risk assets	Other assets	and credit risk	weighted assets
31 December 2010	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
Risk weights							
0%	382	-	-	-	150,884	151,266	-
20%	-	-	-	-	-	-	-
35%	-	-	12,388	-	-	12,388	4,342
50%	3,658	407	2	=	-	4,067	2,034
75%	-	56,820	50	-	-	56,870	42,653
100%	358,447	180,160	340	-	453,504	992,451	992,451
150%	218	27,441	44	137	- 4 050	27,840	41,760
1250%	362,705	264 929	12,824	137	1,658	1,658	20,725
Total exposures	302,703	264,828	12,024	131	606,046	1,246,540	1,103,965
Risk-weighted assets by							
exposures	360,603	264,140	4,780	206	474,236	1,103,965	
Average risk							
weight	99.4%	99.7%	37.3%	150.0%	78.3%	88.6%	
		0070	0070		. 0.070	33.373	
Deduction from capital base	<u> </u>	-	-	-	-		
	← Exp	osures after n	etting and cred	it risk mitigation Higher	n	Total exposures after netting	Total risk
	← Exp	osures after n	etting and cred	Ū	Other	•	Total risk weighted
31 December 2015	Corporates*	Regulatory retail	Residential mortgages	Higher risk assets	Other assets	after netting and credit risk mitigation	weighted assets
	·	Regulatory	Residential	Higher risk	Other	after netting and credit risk	weighted
31 December 2015 Risk weights 0%	Corporates*	Regulatory retail	Residential mortgages	Higher risk assets	Other assets	after netting and credit risk mitigation	weighted assets
Risk weights	Corporates*	Regulatory retail	Residential mortgages	Higher risk assets	Other assets RM'000	after netting and credit risk mitigation RM'000	weighted assets
Risk weights 0%	Corporates*	Regulatory retail	Residential mortgages	Higher risk assets	Other assets RM'000	after netting and credit risk mitigation RM'000	weighted assets
Risk weights 0% 20%	Corporates*	Regulatory retail	Residential mortgages RM'000	Higher risk assets	Other assets RM'000	after netting and credit risk mitigation RM'000	weighted assets RM'000
Risk weights 0% 20% 35% 50% 75%	Corporates* RM'000 - - -	Regulatory retail RM'000	Residential mortgages RM'000	Higher risk assets	Other assets RM'000 255,918 - - - -	after netting and credit risk mitigation RM'000 255,918 - 13,138 12,141 47,134	weighted assets RM'000
Risk weights 0% 20% 35% 50% 75% 100%	Corporates* RM'000	Regulatory retail RM'000 - - - 1 46,963 5,375	Residential mortgages RM'000	Higher risk assets RM'000	Other assets RM'000	after netting and credit risk mitigation RM'000 255,918 - 13,138 12,141 47,134 956,007	weighted assets RM'000 - - 4,598 6,071 35,351 955,910
Risk weights 0% 20% 35% 50% 75% 100% 150%	Corporates* RM'000 - - - 11,979	Regulatory retail RM'000	Residential mortgages RM'000	Higher risk assets RM'000	Other assets RM'000 255,918 - - - - 713,855	after netting and credit risk mitigation RM'000 255,918 - 13,138 12,141 47,134 956,007 31,622	weighted assets RM'000 - - 4,598 6,071 35,351 955,910 47,533
Risk weights 0% 20% 35% 50% 75% 100% 150%	Corporates* RM'000	Regulatory retail RM'000 - - - 1 46,963 5,375 29,974	Residential mortgages RM'000 - - - 13,138 161 171 626 45	Higher risk assets RM'000	Other assets RM'000 255,918 - - - - 713,855 - 1,658	after netting and credit risk mitigation RM'000 255,918 - 13,138 12,141 47,134 956,007 31,622 1,658	weighted assets RM'000 - - 4,598 6,071 35,351 955,910 47,533 20,725
Risk weights 0% 20% 35% 50% 75% 100% 150%	Corporates* RM'000	Regulatory retail RM'000 - - - 1 46,963 5,375	Residential mortgages RM'000	Higher risk assets RM'000	Other assets RM'000 255,918 - - - - 713,855	after netting and credit risk mitigation RM'000 255,918 - 13,138 12,141 47,134 956,007 31,622	weighted assets RM'000 - - 4,598 6,071 35,351 955,910 47,533
Risk weights 0% 20% 35% 50% 75% 100% 150% Total exposures Risk-weighted	Corporates* RM'000	Regulatory retail RM'000 - - - 1 46,963 5,375 29,974	Residential mortgages RM'000 - - - 13,138 161 171 626 45	Higher risk assets RM'000	Other assets RM'000 255,918 - - - - 713,855 - 1,658	after netting and credit risk mitigation RM'000 255,918 - 13,138 12,141 47,134 956,007 31,622 1,658	weighted assets RM'000 - - 4,598 6,071 35,351 955,910 47,533 20,725
Risk weights 0% 20% 35% 50% 75% 100% 150% 1com and a company and a compa	Corporates* RM'000	Regulatory retail RM'000 - - - 1 46,963 5,375 29,974	Residential mortgages RM'000 - - - 13,138 161 171 626 45	Higher risk assets RM'000	Other assets RM'000 255,918 - - - - 713,855 - 1,658	after netting and credit risk mitigation RM'000 255,918 - 13,138 12,141 47,134 956,007 31,622 1,658	weighted assets RM'000 - - 4,598 6,071 35,351 955,910 47,533 20,725
Risk weights 0% 20% 35% 50% 75% 100% 150% Total exposures Risk-weighted assets by	Corporates* RM'000 11,979 - 236,151 1,426 - 249,556	Regulatory retail RM'000 1 46,963 5,375 29,974 - 82,313	Residential mortgages RM'000 - - - 13,138 161 171 626 45 - 14,141	Higher risk assets RM'000	Other assets RM'000 255,918 - - - - 713,855 - 1,658 971,431	after netting and credit risk mitigation RM'000 255,918 - 13,138 12,141 47,134 956,007 31,622 1,658 1,317,618	weighted assets RM'000 - - 4,598 6,071 35,351 955,910 47,533 20,725
Risk weights 0% 20% 35% 50% 75% 100% 150% Total exposures Risk-weighted assets by	Corporates* RM'000 11,979 - 236,151 1,426 - 249,556	Regulatory retail RM'000 1 46,963 5,375 29,974 - 82,313	Residential mortgages RM'000 - - - 13,138 161 171 626 45 - 14,141	Higher risk assets RM'000	Other assets RM'000 255,918 - - - - 713,855 - 1,658 971,431	after netting and credit risk mitigation RM'000 255,918 - 13,138 12,141 47,134 956,007 31,622 1,658 1,317,618	weighted assets RM'000 - - 4,598 6,071 35,351 955,910 47,533 20,725
Risk weights 0% 20% 35% 50% 75% 100% 150% Total exposures Risk-weighted assets by exposures	Corporates* RM'000 11,979 - 236,151 1,426 - 249,556	Regulatory retail RM'000 1 46,963 5,375 29,974 - 82,313	Residential mortgages RM'000 - - - 13,138 161 171 626 45 - 14,141	Higher risk assets RM'000	Other assets RM'000 255,918 - - - - 713,855 - 1,658 971,431	after netting and credit risk mitigation RM'000 255,918 - 13,138 12,141 47,134 956,007 31,622 1,658 1,317,618	weighted assets RM'000 - - 4,598 6,071 35,351 955,910 47,533 20,725
Risk weights 0% 20% 35% 50% 75% 100% 150% Total exposures Risk-weighted assets by exposures Average risk	Corporates* RM'000 11,979 - 236,151 1,426 - 249,556	Regulatory retail RM'000 - - - 1 46,963 5,375 29,974 - 82,313	Residential mortgages RM'000 	Higher risk assets RM'000	Other assets RM'000 255,918 713,855 - 1,658 971,431	after netting and credit risk mitigation RM'000 255,918 - 13,138 12,141 47,134 956,007 31,622 1,658 1,317,618	weighted assets RM'000 - - 4,598 6,071 35,351 955,910 47,533 20,725

5. Credit risk (continued)

5.4 Exposures under the Standardised approach (continued)

Risk weights under the Standardised approach (continued)

			etting and cred	Higher		Total exposures after netting	Total risk
31 December 2016	Corporates* RM'000	Regulatory retail RM'000	Residential mortgages RM'000	risk assets RM'000	Other assets RM'000	and credit risk mitigation RM'000	weighted assets RM'000
Risk weights							
0%	382	-	-	-	147,498	147,880	-
20%	-	-	-	-	-	-	-
35%	-	-	12,037	-	-	12,037	4,221
50%	3,658	=	2	=	-	3,660	1,830
75%	=	44,715	50	=	-	44,765	33,574
100%	289,398	1,765	340	-	382,845	674,348	674,348
150%	218	23,371	44	137	-	23,770	35,655
1250%		-	-	-	1,658	1,658	20,725
Total exposures	293,656	69,851	12,473	137	532,001	908,118	770,353
Risk-weighted assets by exposures	291,554	70,358	4,657	206	403,578	770,353	
Average risk							
weight	99.3%	100.7%	37.3%	150.0%	75.9%	84.8%	
Deduction from capital base		<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	
	← Exp						
24 December 2045		Regulatory	Residential	Higher risk	Other	Total exposures after netting and credit risk	Total risk weighted
31 December 2015	Corporates*	Regulatory retail	Residential mortgages	Higher risk assets	Other assets	after netting and credit risk mitigation	weighted assets
		Regulatory	Residential	Higher risk	Other	after netting and credit risk	weighted
Risk weights	Corporates*	Regulatory retail	Residential mortgages	Higher risk assets	Other assets RM'000	after netting and credit risk mitigation RM'000	weighted assets RM'000
Risk weights 0%	Corporates*	Regulatory retail	Residential mortgages	Higher risk assets RM'000	Other assets	after netting and credit risk mitigation	weighted assets
Risk weights 0% 20%	Corporates*	Regulatory retail	Residential mortgages RM'000	Higher risk assets RM'000	Other assets RM'000	after netting and credit risk mitigation RM'000	weighted assets RM'000 - -
Risk weights 0% 20% 35%	Corporates* RM'000 - - -	Regulatory retail RM'000 - - -	Residential mortgages RM'000	Higher risk assets RM'000	Other assets RM'000	after netting and credit risk mitigation RM'000 247,212 - 13,138	weighted assets RM'000
Risk weights 0% 20% 35% 50%	Corporates*	Regulatory retail RM'000	Residential mortgages RM'000	Higher risk assets RM'000	Other assets RM'000	after netting and credit risk mitigation RM'000 247,212 - 13,138 12,141	weighted assets RM'000
Risk weights 0% 20% 35% 50% 75%	Corporates* RM'000 - - - - 11,979	Regulatory retail RM'000	Residential mortgages RM'000	Higher risk assets RM'000	Other assets RM'000	after netting and credit risk mitigation RM'000 247,212 - 13,138 12,141 45,865	weighted assets RM'000 - - 4,598 6,071 34,399
Risk weights 0% 20% 35% 50% 75% 100%	Corporates* RM'000 - - - 11,979 - 167,570	Regulatory retail RM'000 - - - 1 45,694 5,214	Residential mortgages RM'000	Higher risk assets RM'000	Other assets RM'000 247,212 - - - - 399,472	after netting and credit risk mitigation RM'000 247,212 - 13,138 12,141 45,865 572,882	weighted assets RM'000 - - 4,598 6,071 34,399 572,885
Risk weights 0% 20% 35% 50% 75% 100% 150%	Corporates* RM'000 - - - - 11,979	Regulatory retail RM'000 - - - - 1 45,694 5,214 29,949	Residential mortgages RM'000 - - 13,138 161 171 626 45	Higher risk assets RM'000	Other assets RM'000 247,212 399,472	after netting and credit risk mitigation RM'000 247,212 - 13,138 12,141 45,865 572,882 31,597	weighted assets RM'000 - - 4,598 6,071 34,399 572,885 47,396
Risk weights 0% 20% 35% 50% 75% 100% 150%	Corporates* RM'000 - - - 11,979 - 167,570 1,426	Regulatory retail RM'000 - - - 1 45,694 5,214 29,949 -	Residential mortgages RM'000 - - - 13,138 161 171 626 45	Higher risk assets RM'000	Other assets RM'000 247,212 - - - - 399,472 - 1,658	after netting and credit risk mitigation RM'000 247,212 - 13,138 12,141 45,865 572,882 31,597 1,658	weighted assets RM'000 - - 4,598 6,071 34,399 572,885 47,396 20,725
Risk weights 0% 20% 35% 50% 75% 100% 150%	Corporates* RM'000 - - - 11,979 - 167,570 1,426	Regulatory retail RM'000 - - - - 1 45,694 5,214 29,949	Residential mortgages RM'000 - - 13,138 161 171 626 45	Higher risk assets RM'000	Other assets RM'000 247,212 399,472	after netting and credit risk mitigation RM'000 247,212 - 13,138 12,141 45,865 572,882 31,597	weighted assets RM'000 - - 4,598 6,071 34,399 572,885 47,396
Risk weights 0% 20% 35% 50% 75% 100% 150% Total exposures Risk-weighted assets by	Corporates* RM'000 11,979 - 167,570 1,426 - 180,975	Regulatory retail RM'000 - - - 1 45,694 5,214 29,949 - 80,858	Residential mortgages RM'000 - - - 13,138 161 171 626 45 - 14,141	Higher risk assets RM'000	Other assets RM'000 247,212 399,472 - 1,658 648,342	after netting and credit risk mitigation RM'000 247,212 - 13,138 12,141 45,865 572,882 31,597 1,658 924,493	weighted assets RM'000 - - 4,598 6,071 34,399 572,885 47,396 20,725
Risk weights 0% 20% 35% 50% 75% 100% 150% 1ctal exposures Risk-weighted	Corporates* RM'000 - - - 11,979 - 167,570 1,426	Regulatory retail RM'000 - - - 1 45,694 5,214 29,949 -	Residential mortgages RM'000 - - - 13,138 161 171 626 45	Higher risk assets RM'000	Other assets RM'000 247,212 - - - - 399,472 - 1,658	after netting and credit risk mitigation RM'000 247,212 - 13,138 12,141 45,865 572,882 31,597 1,658	weighted assets RM'000 - - 4,598 6,071 34,399 572,885 47,396 20,725
Risk weights 0% 20% 35% 50% 75% 100% 150% Total exposures Risk-weighted assets by	Corporates* RM'000 11,979 - 167,570 1,426 - 180,975	Regulatory retail RM'000 - - - 1 45,694 5,214 29,949 - 80,858	Residential mortgages RM'000 - - - 13,138 161 171 626 45 - 14,141	Higher risk assets RM'000	Other assets RM'000 247,212 399,472 - 1,658 648,342	after netting and credit risk mitigation RM'000 247,212 - 13,138 12,141 45,865 572,882 31,597 1,658 924,493	weighted assets RM'000 - - 4,598 6,071 34,399 572,885 47,396 20,725
Risk weights	Corporates*	Regulatory retail	Residential mortgages	Higher risk assets	Other assets RM'000	after netting and credit risk mitigation RM'000	weigh asse

^{*} All corporate standardised exposures are unrated.

5. Credit risk (continued)

5.5 Problem credit management and provisioning

Impairment provisions analysed by borrowers' business or industry

The following tables show the Group's and the Bank's collective impairment provisions and movement in individual impairment provisions by each principal category of borrowers' business or industry.

Group 31 December 2016	Collective impairment provisions as at 31 December 2016 RM'000	Individual impairment provisions held as at 1 January 2016 RM'000	Transfer from provision for commitments and contingencies RM'000	Net individual impairment charge during the financial year RM'000	Amounts written off or other movements during the financial year RM'000	Individual impairment provisions held as at 31 December 2016 RM'000
Mortgages	40,033	47,694	-	36,094	(36,676)	47,112
Others	194,889	104,236	-	177,775	(181,136)	100,875
Retail Clients	234,922	151,930	-	213,869	(217,812)	147,987
Agriculture Mining and quarrying	3,945 5,621	20,623	- -	860 -	(685)	20,798
Manufacturing	60,054	445,661	102,388	98,164	(109,909)	536,304
Electricity, gas and water	1,108	· -	-	, -	-	-
Construction	14,167	1,496	-	620	(1,427)	689
Real estate	7,802	-	-	-	-	-
Wholesale & retail trade and restaurants & hotels	25,725	81,121	-	30,998	(53,219)	58,900
Transportation, storage and communication	9,622	1,928	-	3,186	(1,671)	3,443
Finance, insurance and business services	36,177	-	-	=	-	-
Household	18	-	-	-	-	-
Others	2,470	-	-	-	-	-
Corporates, Institutional and Commercial Clients	166,709	550,829	102,388	133,828	(166,911)	620,134
Total Impairment Provisions	401,631	702,759	102,388	347,697	(384,723)	768,121

5. Credit risk (continued)

5.5 Problem credit management and provisioning (continued)

Impairment provisions analysed by borrowers' business or industry (continued)

Group 31 December 2015	Collective impairment provisions as at 31 December 2015 RM'000	Individual impairment provisions held as at 1 January 2015 RM'000	Transfer from provision for commitments and contingencies RM'000	Net individual impairment charge during the financial year RM'000	Amounts written off or other movements during the financial year RM'000	Individual impairment provisions held as at 31 December 2015 RM'000
Mortgages	50,872	47,700	-	34,218	(34,224)	47,694
Others	229,472	100,885	=	167,352	(164,001)	104,236
Retail Clients	280,344	148,585	-	201,570	(198,225)	151,930
Agriculture Mining and quarrying	- 766	17,235	-	-	3,388	20,623
Manufacturing	39,398	128,026	_	321,711	(4,076)	445,661
Electricity, gas and water	605	120,020	-	521,711	(4,070)	-
Construction	11,772	59,554	_	1,427	(59,485)	1,496
Real estate	7,317	-	-	-, ·	-	-
Wholesale & retail trade and restaurants & hotels	9,791	53,231	-	45,951	(18,061)	81,121
Transportation, storage and communication	708	· -	-	1,928	-	1,928
Finance, insurance and business services	30,025	-	-	=	-	-
Household	-	-		=	-	-
Others	888	-	-	-	-	
Corporates, Institutional and Commercial Clients	101,270	258,046	-	371,017	(78,234)	550,829
Total Impairment Provisions	381,614	406,631	-	572,587	(276,459)	702,759

5. Credit risk (continued)

5.5 Problem credit management and provisioning (continued)

Impairment provisions analysed by borrowers' business or industry (continued)

Bank 31 December 2016	Collective impairment provisions as at 31 December 2016 RM'000	Individual impairment provisions held as at 1 January 2016 RM'000	Transfer from provision for commitments and contingencies RM'000	Net individual impairment charge during the financial year RM'000	Amounts written off or other movements during the financial year RM'000	Individual impairment provisions held as at 31 December 2016 RM'000
Mortgages	33,018	44,284	-	27,285	(29,105)	42,464
Others	144,580	80,208	-	112,379	(112,042)	80,545
Retail Clients	177,598	124,492	-	139,664	(141,147)	123,009
Agriculture	148	20,623	-	860	(685)	20,798
Mining and quarrying	4,977	-	-	=	-	-
Manufacturing	52,170	444,477	102,388	98,164	(109,909)	535,120
Electricity, gas and water	1,108	-	=	-	-	-
Construction	12,801	1,496	=	620	(1,427)	689
Real estate	7,145	-	=	-	-	-
Wholesale & retail trade and restaurants & hotels	20,522	81,121	=	30,998	(53,219)	58,900
Transportation, storage and communication	8,933	1,928	=	3,186	(1,671)	3,443
Finance, insurance and business services	33,354	-	-	-	-	-
Household	18	-		-	-	-
Others	2,191	-	=	-	-	-
Corporates, Institutional and Commercial Clients	143,367	549,645	102,388	133,828	(166,911)	618,950
Total Impairment Provisions	320,965	674,137	102,388	273,492	(308,058)	741,959

5. Credit risk (continued)

5.5 Problem credit management and provisioning (continued)

Impairment provisions analysed by borrowers' business or industry (continued)

Bank 31 December 2015	Collective impairment provisions as at 31 December 2015 RM'000	Individual impairment provisions held as at 1 January 2015 RM'000	Transfer from provision for commitments and contingencies RM'000	Net individual impairment charge during the financial year RM'000	Amounts written off or other movements during the financial year RM'000	Individual impairment provisions held as at 31 December 2015 RM'000
Mortgages	41,403	47,179	-	28,944	(31,839)	44,284
Others	153,198	78,336	-	107,979	(106,107)	80,208
Retail Clients	194,601	125,515	-	136,923	(137,946)	124,492
Agriculture	-	17,235	-	-	3,388	20,623
Mining and quarrying	688	· -	-	-	· -	, <u>-</u>
Manufacturing	35,396	127,306	-	321,238	(4,067)	444,477
Electricity, gas and water	605	-	-	-	-	-
Construction	11,617	59,554	-	1,427	(59,485)	1,496
Real estate	6,708	-	-	-	=	-
Wholesale & retail trade and restaurants & hotels	7,850	53,231	-	45,951	(18,061)	81,121
Transportation, storage and communication	681	-	-	1,928	-	1,928
Finance, insurance and business services	29,244	-	-	-	-	-
Others	875	-	-	-	-	<u> </u>
Corporates, Institutional and Commercial Clients	93,664	257,326	-	370,544	(78,225)	549,645
Total Impairment Provisions	288,265	382,841	-	507,467	(216,171)	674,137

5. Credit risk (continued)

5.5 Problem credit management and provisioning (continued)

The following table analyses the Group's and the Bank's loans, advances and financing past due but not impaired, analysed by borrowers' business or industry.

	Group		Bank	
	31 December 2016 RM'000	31 December 2015 RM'000	31 December 2016 RM'000	31 December 2015 RM'000
Mortgages	1,192,222	1,320,580	877,358	1,010,702
Others	391,774	402,527	284,941	278,230
Retail Clients	1,583,996	1,723,107	1,162,299	1,288,932
Agriculture	-	-	-	-
Mining and quarrying	=	30,347	=	30,347
Manufacturing	82,737	22,714	82,737	22,714
Electricity, gas and water	=	-	=	-
Construction	2,000	122	2,000	122
Real estate	=	=	=	-
Wholesale & retail trade and restaurants & hotels	42,338	12,139	42,338	12,139
Transportation, storage and communication	-	216	-	216
Finance, insurance and business services	27,314	288	27,314	288
Education, Health & Others	4,921	=	4,921	-
Household	=	=	=	-
Others	<u> </u>		-	-
Corporates, Institutional and Commercial Clients	159,310	65,826	159,310	65,826

The following table analyses the Group's and the Bank's loans, advances and financing past due but not impaired, analysed by significant geographical areas.

	Group)	Bank	
	2016 RM'000	2015 RM'000	2016 RM'000	2015 RM'000
Malaysia Others	1,743,306	1,788,933	1,321,609	1,354,758
	1,743,306	1,788,933	1,321,609	- 1,354,758

5. Credit risk (continued)

5.6 Off-balance sheet and counterparty credit risk

The following tables analyse the Group's and the Bank's off-balance sheet and counterparty credit risk.

Group 31 December 2016	Principal amount RM'000	Positive fair value of contracts RM'000	Negative fair value of contracts RM'000	Credit equivalent amount RM'000	Risk weighted assets RM'000
Direct credit substitutes Transaction related contingent items Short term self liquidating trade	2,141,367 3,776,779	-	- -	2,141,367 3,776,779	1,284,151 1,175,690
related contingencies Sell and buy back agreements Foreign exchange related contracts	184,446	-	-	183,862	37,893
One year or less	49,581,064	2,159,245	1,692,979	3,009,224	689,570
Over one year to five years	12,551,181	1,097,546	1,438,512	1,961,981	772,759
Over five years	2,641,904	589,142	349,215	870,460	136,908
Interest/profit rate related contracts		•		•	
One year or less	21,155,218	19,138	24,695	53,426	7,569
Over one year to five years	32,199,345	246,884	232,280	890,570	188,180
Over five years	7,761,427	89,327	86,809	618,786	120,372
Equity related contracts					
One year or less	45,410	678	-	2,420	141
Over one year to five years	88,053	3,024	252	9,316	959
Over five years	-	-	-	-	-
Commodity contracts					
One year or less	5,080,399	194,651	194,651	464,394	157,652
Over one year to five years	2,087,097	36,971	36,971	168,380	102,698
Over five years	-	-	-	-	-
Credit derivative contracts *					
One year or less	-	-	-	-	-
Over one year to five years	20,475	532	-	1,556	396
Over five years	-	-	-	· -	-
Other commitments, such as formal standby					
facilities and credit lines, with an original	0.400.050			004004	507.007
maturity of over one year	2,429,059	-	-	694,304	587,007
Other commitments, such as formal standby facilities and credit lines, with an original					
maturity of up to one year	891,397	-	-	853,576	206,096
Any commitments that are unconditionally cancellable at any time by the bank without prior notice or that effectively provide for automatic cancellation due to deterioration					
in a borrower's creditworthiness	35,366,484	-	-	3,319,379	1,534,299
	178,001,105	4,437,138	4,056,364	19,019,780	7,002,340

The table below shows the credit derivative contracts for client intermediation activities:

* Credit derivative contracts	Principal	equivalent	weighted
	amount	amount	assets
	RM'000	RM'000	RM'000
Total return swap - protection sold	20,475	1,556	396

5. Credit risk (continued)

5.6 Off-balance sheet and counterparty credit risk (continued)

Direct credit substitutes 3,057,485 Transaction related contingent items 4,143,266 Short term self liquidating trade related contingencies 257,117	3,057,485 4,143,266 256,653	1,177,455 1,052,663
Short term self liquidating trade related contingencies 257,117		
related contingencies 257,117	256,653	
· · · · · · · · · · · · · · · · · · ·	256,653	
		69,028
Sell and buy back agreements		
Foreign exchange related contracts		
One year or less 37,895,111 1,362,821 1,514,96	, ,	480,918
Over one year to five years 17,890,717 2,178,748 1,969,97		761,596
Over five years 2,775,301 544,263 349,49	7 849,789	187,708
Interest/profit rate related contracts		
One year or less 14,047,615 11,364 24,82	,	7,203
Over one year to five years 44,620,631 279,435 271,81	7 1,241,425	198,539
Over five years 7,017,272 103,110 109,79	4 566,229	87,435
Equity related contracts		
One year or less 172,399 9,150 9,14	5 16,030	1,671
Over one year to five years 206,513 8,196 5,05	19,204	2,114
Over five years	-	-
Commodity contracts		
One year or less 1,759,487 151,351 175,55	93,897	22,099
Over one year to five years 51,457 34,531 10,42	38,703	2,444
Over five years	-	-
Credit derivative contracts *		
One year or less 128,755 3,619 -	3,619	169
Over one year to five years 20,475 292 -	2,340	484
Over five years	-	-
Other commitments, such as formal standby		
facilities and credit lines, with an original		
maturity of over one year 3,307,784	1,139,661	846,055
Other commitments, such as formal standby		
facilities and credit lines, with an original		
maturity of up to one year 789,534	756,919	191,073
Any commitments that are unconditionally		
cancellable at any time by the bank without		
prior notice or that effectively provide for		
automatic cancellation due to deterioration		
in a borrower's creditworthiness 35,861,295	3,527,979	1,439,474
<u>174,002,214</u>	9 21,062,496	6,528,128

The table below shows the credit derivative contracts for client intermediation activities:

* Credit derivative contracts	Principal amount RM'000	Credit equivalent amount RM'000	Risk weighted assets RM'000
Total return swaps			
- protection sold	20,475	2,340	484
Credit default swap			
- protection sold	128,755	3,619	169

5. Credit risk (continued)

5.6 Off-balance sheet and counterparty credit risk (continued)

Bank 31 December 2016	Principal amount RM'000	Positive fair value of contracts RM'000	Negative fair value of contracts RM'000	Credit equivalent amount RM'000	Risk weighted assets RM'000
Direct credit substitutes	2,138,550	-	-	2,139,904	1,283,614
Transaction related contingent items Short term self liquidating trade	3,564,104	-	-	3,619,175	1,153,576
related contingencies	143,256	-	-	146,281	28,906
Sell and buy back agreements Foreign exchange related contracts					
One year or less	49,536,213	2,159,117	1,691,254	3,007,750	686,077
Over one year to five years	12,551,180	1,145,132	1,474,682	2,249,466	868,321
Over five years Over five years	2,641,904	589,142	349,215	870,460	136,908
Interest rate related contracts	2,041,904	309,142	349,213	670,400	130,900
One year or less	21,155,218	19,138	24,695	53,426	7,569
Over one year to five years	32,174,557	246,884	232,280	889,910	206,389
Over five years	7,761,427	89,327	86,809	618,786	120,372
Equity related contracts	7,701,427	00,021	00,000	010,700	120,012
One year or less	45,410	678	_	2,420	141
Over one year to five years	107,664	3,775	583	11,636	1,844
Over five years	-	-	-	-	,
Commodity contracts					
One year or less	5,080,399	194,651	194,651	464,394	157,652
Over one year to five years	2,087,097	36,971	36,971	168,380	102,698
Over five years	-	-	-	-	-
Credit derivative contracts *					
One year or less	-	-	-	-	-
Over one year to five years	20,475	532	-	1,556	396
Over five years	-	-	-	-	-
Other commitments, such as formal standby facilities and credit lines, with an original					
maturity of over one year	2,024,073	-	-	601,746	509,514
Other commitments, such as formal standby facilities and credit lines, with an original					
maturity of up to one year	707,356	-	-	670,739	159,368
Any commitments that are unconditionally cancellable at any time by the bank without					
prior notice or that effectively provide for					
automatic cancellation due to deterioration					
in a borrower's creditworthiness	37,985,421	_	_	3,162,382	1,414,459
	179,724,304	4,485,347	4,091,140	18,678,411	6,837,804
The table below shows the credit derivative contra	acts for client intern	nediation activities	S: Principal	Credit equivalent	Risk weighted
			amount	amount	assets

* Credit derivative contracts	Principal amount RM'000	Credit equivalent amount RM'000	Risk weighted assets RM'000
Total return swap - protection sold	20,475	1,556	396
- protection sold	20,475	1,556	

5. Credit risk (continued)

5.6 Off-balance sheet and counterparty credit risk (continued)

Bank 31 December 2015	Principal amount RM'000	Positive fair value of contracts RM'000	Negative fair value of contracts RM'000	Credit equivalent amount RM'000	Risk weighted assets RM'000
Direct credit substitutes	3,056,141	-	-	3,056,141	1,177,153
Transaction related contingent items	3,972,160	-	-	3,972,160	1,010,282
Short term self liquidating trade					
related contingencies	132,058	-	-	131,594	30,604
Sell and buy back agreements					
Foreign exchange related contracts	07.050.000	4 000 000	4 545 500	4 004 740	470 707
One year or less	37,956,009	1,362,393 2,178,747	1,515,590 1,969,649	1,981,713	479,727 527,251
Over one year to five years Over five years	17,890,717 2,775,301	2,178,747 544,263	349,497	3,331,736 849,789	527,351 187,708
Interest rate related contracts	2,775,301	544,263	349,497	849,789	187,708
One year or less	14,360,918	11,364	39,127	36,978	7,203
Over one year to five years	43,768,589	279,436	252,075	1,215,706	196,205
Over five years	7,017,272	103,110	109,794	566,229	87,435
Equity related contracts	7,017,272	100,110	103,734	300,223	07,400
One year or less	172,399	9,150	9,145	16,030	1,671
Over one year to five years	226,124	9,690	5,054	22,267	3,013
Over five years		-	-	,	-
Commodity contracts					
One year or less	1,776,184	151,351	179,576	93,897	22,099
Over one year to five years	34,759	34,532	9,863	38,703	2,444
Over five years	-	-	-	-	-
Credit derivative contracts **					
One year or less	128,755	3,619	-	3,619	169
Over one year to five years	20,475	292	-	2,340	484
Over five years	-	-	-	-	-
Other commitments, such as formal standby					
facilities and credit lines, with an original					
maturity of over one year	2,598,880	-	-	880,538	647,950
Other commitments, such as formal standby					
facilities and credit lines, with an original					
maturity of up to one year	526,132	-	-	509,738	118,117
Any commitments that are unconditionally					
cancellable at any time by the bank without					
prior notice or that effectively provide for					
automatic cancellation due to deterioration	0= 101 0= :			0.400.075	4.070.465
in a borrower's creditworthiness	35,484,394			3,429,676	1,376,136
	171,897,267	4,687,947	4,439,370	20,138,854	5,875,751

The table below shows the credit derivative contracts for client intermediation activities:

* Credit derivative contracts	Principal amount RM'000	equivalent amount RM'000	RISK weighted assets RM'000
Total return swaps			
- protection sold	20,475	2,340	484
Credit default swap			
- protection sold	128,755	3,619	169

6. Market risk

The Group recognises market risk as the potential for loss of earnings or economic value due to adverse changes in financial market rates or prices. The Bank's exposure to market risk arises predominantly from providing clients access to financial markets, facilitation of which entails the Bank's taking moderate market risk position. All trading teams support client activity; there are no proprietary trading teams. Hence, income earned from market risk related activities is broadly stable. Market risk also arises in the non-trading book from the requirement to hold a large liquid assets buffer of high quality liquid debt securities.

Our market risk management governance, measurment, valuation framework and exposures are disclosed in Note 39(c) and 43 of the Group's financial statements.

7. Equity exposures in banking book

Table below details the equity exposures in banking book of the Group.

	31-Dec-16		31-Dec-15	
	Gross	Risk	Gross	Risk
Group and Bank	exposures RM'000	assets RM'000	exposures RM'000	assets RM'000
Privately Held				
For socio-economic purposes	9,098	9,098	9,098	9,098
For non socio-economic purposes		<u>-</u>		-
	9,098	9,098	9,098	9,098

8. Operational risk

Operational risk is the potential for loss from inadequate or failed internal processes, people, and systems or from the impact of external events, including legal risks.

Our operational role governance, approach and measurement methodology are disclosed in Note 39(a) of the Group's financial statements.

Chief Executive Officer Attestation

In accordance with Bank Negara Malaysia's Risk Weighted Capital Adequacy Framework (Basel II) – Disclosure Requirements (Pillar 3), I hereby attest that to the best of my knowledge, the disclosures contained in Standard Chartered Bank Malaysia Berhad's Pillar 3 Disclosures report for the financial year ended 31 December 2016 are consistent with the manner in which the Group and the Bank assesses and manages its risk, and are not misleading in any particular way.

Mahendra Gursahani
Chief Executive Officer

Date: 13 April 2017