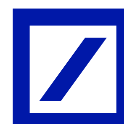
Deutsche Bank (Malaysia) Berhad

(Company No. 312552-W)
(Incorporated in Malaysia)

Basel II Pillar 3 Report
31 December 2016



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Introduction

Bank Negara Malaysia ("BNM") announced a two-phase approach for implementing the standards recommended by the Bank of International Settlement set out in "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" (Basel II) in Malaysia.

In the first phase, banking institutions are required to adopt the Standardised Approach for credit risk by the end of 2008. In the second phase, qualified banking institutions are allowed to migrate directly to the Internal Rating-Based approach (IRB Approach) in January 2010. Banks on the Standardised Approach are not mandated to migrate to the IRB Approach.

Deutsche Bank (Malaysia) Berhad ("the Bank") operates under the BNM's Risk Weighted Capital Adequacy Framework (Basel II – Risk Weighted Assets) "RWCAF" and Capital Adequacy Framework (Capital Components). The computation of the risk weighted assets is consistent with Pillar 1 requirements set out by the Basel Committee on Banking Supervision ("BCBS") and the Islamic Financial Services Board ("IFSB") in their respective documents – *"International Convergence of Capital Measurement and Capital Standards: A Revised Framework"* issued in June 2006 and the *"Capital Adequacy Standard"* issued in December 2005. BNM had proposed some customisations to the BCBS specification in an effort to avoid under estimation of risk within the industry as well as to ensure suitability of the framework in the local environment.

The capital adequacy ratios of the Bank are computed in accordance with Bank Negara Malaysia's Capital Adequacy Framework (Capital Components and Basel II – Risk-weighted Assets) reissued on 13 October 2015 and became effective from 1 January 2016. The Bank have adopted the Standardised Approach for Credit Risk and Market Risk, and the Basic Indicator Approach for Operational Risk. The minimum regulatory capital adequacy ratios before including capital conservation buffer and countercyclical capital buffer (CCyB) are 4.5% for CET1 Capital Ratio, 6.0% for Tier 1 Capital Ratio and 8.0% for Total Capital Ratio.

The capital conservation buffer required to be maintained in the form of CET1 Capital above the minimum regulatory capital adequacy ratios requirement will be phased-in as follows:

Calendar Year	Capital Conservation Buffer
2016	0.625%
2017	1.250%
2018	1.875%
2019 onwards	2.500%

The CCyB which is in a range of between 0% and 2.5% is not a requirement for exposure in Malaysia yet but may be applied by regulators in the future.

The information provided herein has been reviewed and verified by competent independent internal parties and certified by the Bank's Chief Executive Officer. The information is not audited as there is no requirement for external auditing of these disclosures under the BNM's RWCAF. The Pillar 3 Disclosure will be published in the Bank's website, www.db.com/malaysia.

1 Scope of Application

Deutsche Bank (Malaysia) Berhad and its subsidiaries ("DBMB Group") are incorporated and domiciled in Malaysia. DBMB Group is principally engaged in all aspect of banking and related financial services which includes Islamic Banking ("IBW") business.

The principles of consolidation used for regulatory capital purpose are not identical to those used for DBMB Group's financial statements, which are prepared in accordance with the Malaysian Financial Reporting Standards ("MFRS"), International Financial Reporting Standards and the Companies Act, 1965 in Malaysia. The subsidiary companies of the Bank, which are incorporated in Malaysia, are consolidated with the financial statements of the Bank. The accounting policy for consolidation is provided in Note 2(a) to the Financial Statements.

2 Capital Adequacy

2.1 Deutsche Bank (Malaysia) Berhad's Approach

The Bank manages risk and capital through a framework of principles, organisational structures, as well as measurement and monitoring processes that are closely aligned with the activities of the Bank's divisions.

The Deutsche Bank Group ("DB Group") Treasury function manages the Bank's capital at group level and locally in each region. The allocation of financial resources, in general, and capital, in particular, favors business portfolios with the highest positive impact on the Bank's profitability and shareholder value.

Regional capital plans covering the capital needs of DB Group's branches and subsidiaries are prepared on an annual basis and presented to the DB Group Investment Committee (GIC). At a country level, capital is maintained on the basis of the local regulator's requirements. It is overseen by the local Asset and Liability Committee ("ALCO"). Its mandate is to manage capital, funding, and liquidity risk.

2.2 Risk Weighted Assets and Capital Requirements

	2016		2015	
	Risk Weighted Assets	Min Capital Requirement at 8%	Risk Weighted Assets	Min Capital Requirement at 8%
Bank	**RM'000**	**RM'000**	**RM'000**	**RM'000**
Credit Risk	4,617,845	369,428	4,367,429	349,393
Market Risk	2,570,452	205,636	3,706,633	296,531
Operational Risk	613,663	49,093	559,457	44,757
Total	**7,801,960**	**624,157**	**8,633,519**	**690,681**
Islamic Banking Window				
Credit Risk	689	55	1,103	88
Market Risk	1,376	110	206	16
Operational Risk	1,866	149	3,033	243
Total	**3,931**	**314**	**4,342**	**347**

Table 1 - Risk Weighted Capital Ratio and Tier 1 capital

	2016		2015	
	Total Capital Ratio	CET1 / Tier 1 Capital Ratio	Total Capital Ratio	CET1 / Tier 1 Capital Ratio
Deutsche Bank (Malaysia) Berhad	22.187%	21.868%	19.567%	19.323%
Islamic Banking Window	791.910%	791.910%	707.543%	707.543%

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2 Capital Adequacy (continued)

2.2 Risk Weighted Assets and Capital Requirements (continued)

Table 2 – Risk weighted assets and capital requirements for credit risk (2016)

				31-Dec-2016
RISK TYPE	**Gross Exposures**	**Net Exposures**	**Risk-Weighted Assets**	**Minimum Capital Requirement at 8% ***
Credit Risk	**RM'000**	**RM'000**	**RM'000**	**RM'000**
On-Balance Sheet Exposures				
Sovereigns/Central Banks #	4,170,750	3,562,109	-	-
Public Sector Entities	-	-	-	-
Banks, Development Financial Institutions and Multilateral Development Banks	2,878,723	2,878,723	1,161,921	92,954
Insurance Companies, Securities Firms and Fund Managers	-	-	-	-
Corporates	1,106,678	1,106,678	1,106,091	88,487
Regulatory Retail	-	-	-	-
Residential Mortgages	15,416	15,416	5,395	432
Higher Risk Assets	-	-	-	-
Other Assets	278,928	278,928	277,382	22,191
Equity Exposure	1,631	1,631	1,861	149
Defaulted Exposures	2,456	2,456	2,456	196
Total On-Balance Sheet Exposures	**8,454,582**	**7,845,941**	**2,555,106**	**204,409**
Off-Balance Sheet Exposures				
OTC Derivatives	3,072,123	2,058,611	1,104,648	88,371
Credit Derivatives	29,757	29,757	8,961	717
Direct Credit Substitutes	-	-	-	-
Transaction related contingent Items	362,234	361,060	335,371	26,830
Short Term Self Liquidating trade related contingencies	55,966	55,966	47,622	3,810
Other commitments, such as formal standby facilities and credit lines	577,497	577,497	566,137	45,291
Defaulted Exposures	-	-	-	-
Total for Off-Balance Sheet Exposures	**4,097,577**	**3,082,891**	**2,062,739**	**165,019**
Total On and Off- Balance Sheet Exposures	**12,552,159**	**10,928,832**	**4,617,845**	**369,428**

* The minimum regulatory capital requirement before including capital conservation buffer and countercyclical capital buffer.

Under Risk Weighted Capital Adequacy Framework (RWCAF), exposures to the Federal Government of Malaysia, Bank Negara Malaysia, overseas federal governments and central banks of their respective jurisdictions are accorded a preferential sovereign risk weight of 0%.

2 Capital Adequacy (continued)

2.2 Risk Weighted Assets and Capital Requirements (continued)

Table 2.1 - Risk weighted assets and capital requirements for credit risk (2015)

31-Dec-2015

RISK TYPE	Gross Exposures	Net Exposures	Risk-Weighted Assets	Minimum Capital Requirement at 8%
Credit Risk	**RM'000**	**RM'000**	**RM'000**	**RM'000**
On-Balance Sheet Exposures				
Sovereigns/Central Banks #	678,451	148,311	-	-
Public Sector Entities	-	-	-	-
Banks, Development Financial Institutions and Multilateral Development Banks	2,026,106	2,026,106	733,076	58,646
Insurance Companies, Securities Firms and Fund Managers	-	-	-	-
Corporates	1,104,133	1,104,133	1,103,181	88,254
Regulatory Retail	830	830	622	50
Residential Mortgages	18,037	18,037	6,434	515
Higher Risk Assets	-	-	-	-
Other Assets	105,883	105,883	103,992	8,319
Equity Exposure	1,631	1,631	1,861	149
Defaulted Exposures	2,667	2,667	2,667	213
Total On-Balance Sheet Exposures	**3,937,738**	**3,407,598**	**1,951,833**	**156,146**
Off-Balance Sheet Exposures				
OTC Derivatives	4,385,033	2,563,700	1,413,468	113,077
Credit Derivatives	46,251	46,251	21,206	1,696
Direct Credit Substitutes	-	-	-	-
Transaction related contingent Items	498,969	496,067	456,566	36,525
Short Term Self Liquidating trade related contingencies	94,240	94,240	81,346	6,508
Other commitments, such as formal standby facilities and credit lines	477,821	477,821	443,010	35,441
Defaulted Exposures	-	-	-	-
Total for Off-Balance Sheet Exposures	**5,502,314**	**3,678,079**	**2,415,596**	**193,247**
Total On and Off- Balance Sheet Exposures	**9,440,052**	**7,085,677**	**4,367,429**	**349,393**

Under RWCAF, exposures to the Federal Government of Malaysia, Bank Negara Malaysia, overseas federal governments and central banks of their respective jurisdictions are accorded a preferential sovereign risk weight of 0%.

Table 3 – Risk weighted assets and capital requirements for market risk (2016)

31-Dec-2016

RISK TYPE	Gross Exposures		Risk Weighted Assets	Minimum Capital Requirement at 8%*
	RM'000		RM'000	RM'000
Market Risk	**Long Position**	**Short Position**		
Interest Rate Risk	120,566,302	119,303,271	1,791,563	143,325
Foreign Currency Risk	504,576	103	504,576	40,366
Options	23,634	-	274,313	21,945
			2,570,452	205,636

* The minimum regulatory capital requirement before including capital conservation buffer and countercyclical capital buffer.

2 Capital Adequacy (continued)

2.2 Risk Weighted Assets and Capital Requirements (continued)

Table 3.1 - Risk weighted assets and capital requirements for market risk (2015)

31-Dec-2015

RISK TYPE	Gross Exposures		Risk Weighted Assets	Minimum Capital Requirement at 8%
	RM'000		RM'000	RM'000
Market Risk	**Long Position**	**Short Position**		
Interest Rate Risk	131,548,434	126,030,607	2,026,095	162,088
Foreign Currency Risk	1,413,543	116,911	1,413,538	113,083
Options	33,151	-	267,000	21,360
			3,706,633	296,531

For interest rate risk, the gross exposures represent the sum of notional and mark-to-market value.
For foreign currency risk, the gross exposures represent net open position.
For options, the gross exposures represent net market value of option portfolio.

Table 4 – Risk weighted assets and capital requirements for operational risk (2016)

31-Dec-2016

RISK TYPE	Risk Weighted Assets	Minimum Capital Requirement at 8%*
	RM'000	RM'000
Operational Risk	613,663	49,093

* The minimum regulatory capital requirement before including capital conservation buffer and countercyclical capital buffer.

Table 4.1 - Risk weighted assets and capital requirements for operational risk (2015)

31-Dec-2015

RISK TYPE	Risk Weighted Assets	Minimum Capital Requirement at 8%
	RM'000	RM'000
Operational Risk	559,457	44,757

Table 5 – Risk weighted assets and capital requirements arising from Large Exposure Risk

31-Dec-2016 & 31-Dec-2015

RISK TYPE	Gross Exposures	Net Exposures	Risk-Weighted Assets	Minimum Capital Requirement at 8%*
	RM'000	RM'000	RM'000	RM'000
Large Exposures Risk Requirements	-	-	-	-

* The minimum regulatory capital requirement before including capital conservation buffer and countercyclical capital buffer.

The Bank does not have any capital requirement for Large Exposure Risk as there is no amount in excess of the lowest threshold arising from equity holdings as specified in BNM's RWCAF.

2 Capital Adequacy (continued)

2.3 Capital Structure

2.3.1 Main Features of Capital Instruments

The Bank's total regulatory capital is made up of Tier 1 and Tier 2 capital and the sum of Tier 1 and Tier 2 capital is also referred to as Total Capital.

Tier 1 capital consists primarily of ordinary paid-up share capital, share premium, statutory reserve fund and retained profits less deferred tax assets.

Share capital is the issued and fully paid share capital and there is no obligation to pay dividend to the shareholders. However, as per DB Group internal policy, all distributable profits (according to local GAAP) of a subsidiaries, that have not been previously approved for retention under a capital request, must be remitted as a dividend to the parent company and up the legal entity chain to the ultimate parent to support DB Group's dividend capacity.

Tier 2 capital consists of collective assessment allowance and regulatory reserve.

Deferred tax assets are excluded from the computation of the Bank's capital base.

2.3.2 Components of Capital

Table 6 – Components of Tier 1 and Tier 2 capital:

	Group and Bank	
	31-Dec-16 RM'000	**31-Dec-15 RM'000**
Tier 1 capital		
Paid-up share capital	173,599	173,599
Share premium	357,763	357,763
Statutory reserve	174,722	174,722
Retained profits	1,035,787	988,748
Less: Deferred tax assets	(35,761)	(26,543)
Total Common Equity Tier 1 / Tier 1 Capital	1,706,110	1,668,289
Tier 2 Capital		
Collective assessment allowance	11,351	7,460
Regulatory Reserve	13,558	13,558
Total Capital	1,731,019	1,689,307
Common equity tier 1 / Tier 1 Capital Ratio	21.868%	19.323%
Total capital ratio	22.187%	19.567%

3 Risk Management

3.1 Risk and Capital Management

Risk Management Framework
The risk management at the Bank is integral to DB Group's risk management framework and processes.

The Bank's business model requires to identify, assess, measure, aggregate and manage risks, and to allocate capital among businesses. Risk and capital are managed via a framework of principles, organizational structures and measurement and monitoring processes that are closely aligned with the activities and organizational structure of the Bank:

- Core risk management responsibilities are embedded in the Bank's local Management Board and delegated to senior risk management committees responsible for execution and oversight. The local Management Board regularly monitors the risk and capital profile.
- The Bank operate a Three Lines of Defence ("3LoD") risk management model. The First Line of Defense ("1st LoD") are all the business divisions and service providing infrastructure areas (i.e., Group Technology Operations and Corporate Services) who are the "owners" of the risks. The Second Line of Defence ("2nd LoD") are all the independent risk and control infrastructure functions. The Third Line of Defence ("3rd LoD") is Group Audit, which assures the effectiveness of the controls. All 3LoD are independent of one another and accountable for maintaining structures that ensure adherence to the designed principles at all levels.
- Risk strategy is approved by the Bank's local Management Board on an annual basis and is defined based on the Risk Appetite and Strategic and Capital Plan in order to align risk, capital and performance targets.
- Cross-risk analysis reviews are conducted to validate that sound risk management practices and a holistic awareness of risk exist.
- All material risk types are centrally managed via risk management processes. Modeling and measurement approaches to assess risk in terms of capital demand. Reputational risk, model risk are implicitly covered in DB Group's economic capital framework, primarily within operational and strategic risk.
- Monitoring, stress testing tools and escalation processes are in place for key capital and liquidity thresholds and metrics.
- Systems, processes and policies are critical components of the risk management capability. The Bank has a sound & efficient risk infrastructure in place. The Board Risk Management Committee (BRMC) of the Bank regularly reviews reports from the respective divisions and is made aware of the risk exposure of the Bank and its ongoing management at each meeting.

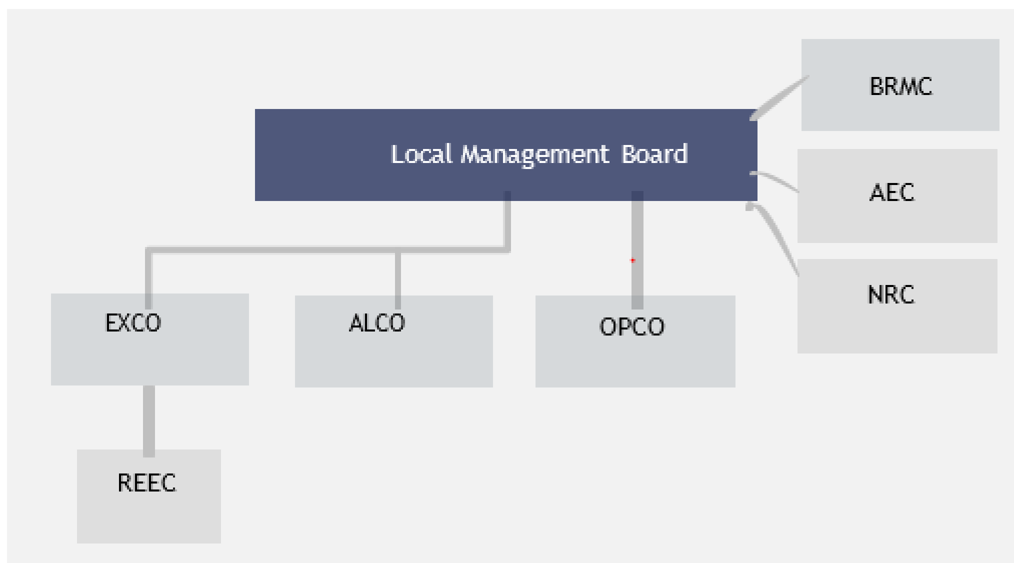
3 Risk Management (continued)

3.1 Risk and Capital Management (continued)

Risk Governance

- The Bank's operations are regulated and supervised by BNM. Such regulation focuses on licensing, capital adequacy, liquidity, risk concentration, conduct of business as well as organizational and reporting requirements. The European Central Bank in connection with the relevant authorities of EU members which joined the Single Supervisory Mechanism via the Joint Supervisory Team act in cooperation as DB Group primary supervisors to monitor the Group's compliance with the German Banking Act and other applicable laws and regulations as well as the CRR/CRD 4 framework and respective implementations into German law.
- Several layers of management provide cohesive risk governance.
- The local Management Board is aware and kept regularly informed on special developments in the risk situation, risk management and risk controlling, as well as on the Bank's reputation and material litigation cases.
- The local Management Board is responsible for managing the Bank in accordance with the law, the Articles of Association and its Terms of Reference with the objective of creating sustainable value in the interest of the company, thus taking into consideration the interests of the shareholders, employees and other stakeholders.
- The local Management Board is responsible for establishing a proper business organization, encompassing an appropriate and effective risk management.

The following functional committees are central to the management of risk at the Bank:



BRMC = Board Risk Management Committee
AEC = Audit and Executive Committee
NRC = Nominations and Remuneration Committee
EXCO = Executive Committee
REEC= Risk Exposure Executive Committee
ALCO = Asset and Liabilities Committee
OPCO = Operations Committee

The Bank's Head of Risk oversees the management of all credit, market, operational and liquidity risks as well as the comprehensive control of risk. He also chairs the Risk Exposure Executive Committee, which is the key local approval body.

3 Risk Management (continued)

3.1 Risk and Capital Management (continued)

Risk Culture
The risk culture at the Bank is fully integrated in DB Group's risk culture framework and processes. This is underpinned in the below principles and practices.

DB Group seeks to promote a strong risk culture throughout the organization. It aims to help reinforce the Bank's resilience by encouraging a holistic approach to the management of risk and return throughout the organization as well as the effective management of DB Group's risk, capital and reputational profile. DB Group actively takes risks in connection with its business and as such the following principles define the risk culture within DB Group:

- Risk is taken within a defined risk appetite;
- Every risk taken needs to be approved within the risk management framework;
- Risk taken needs to be adequately compensated; and
- Risk should be continuously monitored and managed.

Employees at all levels are responsible for the management and escalation of risks. All employees are expected to exhibit behaviors that support a strong risk culture. To promote this DB Group policies require that behavior assessment is incorporated into the performance assessment and compensation processes. DB Group communicated the following risk culture behaviors through various communication vehicles:

- Being fully responsible for our risks;
- Being rigorous, forward looking and comprehensive in the assessment of risk;
- Inviting, providing and respecting challenges;
- Trouble shooting collectively; and
- Placing Deutsche Bank and its reputation at the heart of all decisions.

These behaviours are reinforced through a comprehensive risk culture training programme, as well as targeted communications and awareness campaigns.

Risk and Capital Management Organisation
The DB Group's Chief Risk Officer (CRO), who is a member of the DB Group Management Board, is responsible for the identification, assessment, management and reporting of risks arising within operations across all businesses and risk types. The below functional committees are central to the Risk function:

- The DB Group's Risk Committee identifies, controls and manages all risks including risk concentrations at the DB Group. To fulfil this mandate, the DB Group's Risk Committee is supported by sub-committees that are responsible for dedicated areas of risk management, including the Non-Financial Risk Committee, the Enterprise Risk Committee, and the Group Reputational Risk Committee.
- The Non-Financial Risk Committee ensures oversight and decision-making on Non-Financial Risks.
- The Group Reputational Risk Committee ensures oversight, governance and decision-making on Reputational Risks. It also provides for an appropriate look-back and lessons learnt process.
- The Enterprise Risk Committee ensures oversight and decision-making on Financial Risks and cross-risks. It is responsible for aggregating and analysing enterprise-wide risk information and recommending risk and return allocation across risks. Enterprise Risk Management will manage enterprise risk appetite and allocation across businesses and legal entities, integrate and aggregate risks to provide greater enterprise risk transparency to support decision making, govern and improve the effectiveness of risk management framework , and commission forward looking stress tests, and manage group recovery and resolution plans.

3 Risk Management (continued)

3.1 Risk and Capital Management (continued)

Risk and Capital Management Organisation (continued)

Dedicated Risk units are established with the mandate to:
- Ensure that the business conducted within each division is consistent with the DB Group's risk appetite;
- Formulate and implement risk and capital management policies, procedures and methodologies that are appropriate to the businesses within each division;
- Approve credit, market and liquidity risk limits;
- Conduct periodic portfolio reviews to ensure that the portfolio of risks is within acceptable parameters; and
- Develop and implement risk and capital management infrastructures and systems that are appropriate for each division.

The heads of the DB Group's Risk units, who are the members of DB's Group Risk Committee, are responsible for the performance of the units and report directly to DB Group's Chief Risk Officer.

DB Group's Finance and Group Audit departments support the Risk function where they operate independently of both the group divisions and of the Risk function.

3.2 Risk Appetite Framework

Risk appetite expresses the level of risk that the Bank is willing to assume within risk capacity in order to achieve business objectives. Risk appetite is expressed in both qualitative statements and quantitative metrics. Risk capacity is defined as the maximum level of risk the Bank can assume before breaching regulatory capital requirements and liquidity needs and our obligations to stakeholders.

Risk appetite is an integral element in the business planning processes via Business and Risk Strategy, to promote the appropriate alignment of risk, capital and performance targets, while at the same time considering risk capacity and appetite constraints from both financial and non-financial risks. The Bank leverage the stress testing process to test the compliance of the plan also under stressed market conditions. Top-down risk appetite serves as the limit for risk-taking for the bottom-up planning from the business functions.

The Risk Appetite Statement (RAS) at the Bank ensures that risk taking activities at the Bank is consistent with DB Group's strategy, business and risk overviews, as well as the local regulatory environment. Key objectives of the RAS are to:

- Articulate the Bank's risk appetite clearly via both quantitative metrics and qualitative statements;
- Detail an overall approach in communicating risk appetite across and within the Bank;
- Set ultimate boundaries for the Bank's risk/reward target setting;
- Ensure that the Bank has sufficient financial resources to support daily business at any given point in time and to absorb stressed market events;
- Be able to anticipate emerging risks and be adaptive towards changing economic and regulatory developments;
- Provide the basis for ongoing monitoring of the risk profile through the Bank's 'Risk and Capital Profile' report; and
- Define thresholds for each metrics at which escalation will be triggered.

3 Risk Management (continued)

3.2 Risk Appetite Framework (continued)

In facilitating a consistent understanding of the nomenclatures around risk appetite, all key definitions established at DB Group level are adapted to the Bank as below:

Risk Appetite Framework: The overall approach, including policies, processes, controls, and systems through which risk appetite is established, communicated, and monitored;

Risk Capacity: The maximum level of risk that the Bank can assume before breaching regulatory capital and liquidity needs and its obligations to stakeholders;

Risk Appetite: The aggregate level of risk that the Bank is willing to assume within its risk capacity to achieve its business objectives;

Limit: Quantitative restriction on the size or amount of risk exposure based on forward looking assumptions;

Risk Profile: Point in time assessment of the Bank's gross and net risk exposures aggregated within, and across, each relevant risk type, business unit and legal entity based on current or forward-looking assumptions.

The Bank's Risk Appetite articulates the overall tone from the top in pursuing risk across the Bank and supports DB Group's risk culture, in reinforcing the bank's holistic risk management practices. In conjunction to the qualitative statements, the Bank desires to:

- Risk is taken within a defined risk appetite, which is actively managed and monitored in a timely manner, in order to maintain a robust risk profile and capital adequacy.
- Maintain stable funding and strategic liquidity to ensure that business is conducted within the liquidity risk appetite.
- Avoid any undue concentrations within the portfolios considering multiple dimensions, e.g. counterparty, region/ country, industries, products/ asset classes and business lines.
- Promote balanced risk adjusted performance and be fully responsible for accepting well compensated risks within risk appetite.
- Ensure that any business activity is supported by appropriate processes and controls to minimize operational risk.
- Minimize negative reputational, environmental and social impacts of our business activities.

The Bank assigns key risk appetite metrics that are sensitive to the material risks to which the bank is exposed to and which are able to function as key indicators of the bank's financial health in terms of liquidity and capital requirements. These key metrics are Common Equity Tier 1 (CET1) ratio, Economic Capital Adequacy (ECA) ratio, Liquidity Coverage Ratio (LCR), Stressed Net Liquidity Position (SNLP).

3 Risk Management (continued)

3.2 Risk Appetite Framework (continued)

In order to determine risk appetite and capacity, thresholds are set and the escalation mechanism are defined for further action. The levels chosen reflect the Bank's strategic focus and business plan as well as additional internal and external stakeholders. Monitoring of risk profile using key risk appetite metrics is implemented using framework as described below:

Green status (within risk appetite): Performances are in line with the Bank's preparedness to accept risk to achieve its business objectives and risk management is considered to be operating in a normal environment. As part of normal risk management, measures are actively taken to ensure that the risk profile remains within the risk appetite, and move towards the externally disclosed strategic target as in the Risk and Capital Demand plan.

Amber status (within risk capacity): Issues that may position threats to the Bank's business model, deviate from the desired risk appetite and undermine the stakeholder expectations. Heightened risk management or mitigating actions may be applied in reference to the escalation matrix, in ensuring timely intervention.

Red status: Once the risk capacity is crossed, mitigating actions are invoked if not already triggered in the amber range.

In the event that the desired risk appetite is breached under either normal or stress scenarios, an escalation is made to the EXCO which has to review and decide if further escalations to the Group and/or mitigating actions are required to bring risk profile back to the desired risk appetite range

The risk appetite framework is approved by the local Management Board. Amendments to the risk appetite framework at the Bank must be approved by the local Management Board.

3.3 Risk Management Tools

The DB Group uses a comprehensive range of quantitative methodologies for assessing and managing risks. As a matter of policy, the DB Group continually assesses the appropriateness and the reliability of its quantitative tools and metrics in light of the DB Group's changing risk environment. Some of these tools are common to a number of risk categories, while others are tailored to the particular features of specific risk categories. The advanced internal tools and metrics the DB Group currently uses to measure, manage and report its risk are:

3.3.1 Economic Capital

Economic capital measures the amount of capital DB Group needs to absorb from very severe unexpected losses arising from the DB Group's exposures. "Very severe" in this context means that economic capital is set at a level to cover with a probability of 99.98% the aggregated unexpected losses within one year. DB Group calculates economic capital for the default risk, transfer risk and settlement risk elements of credit risk, for market risk, for operational risk and for general business risk. DB Group continuously reviews and enhances its economic capital model as appropriate. It uses economic capital to show an aggregated view of its risk position from individual business lines up to its consolidated Group level. In addition, the Group considers economic capital, in particular for credit risk, when the Group measures the risk-adjusted profitability of its client relationships.

3 Risk Management (continued)

3.3 Risk Management Tools (continued)

3.3.2 Expected Loss

The DB Group uses expected loss as a measure of the credit and operational risk. Expected loss is a measurement of the loss the DB Group can expect within a one-year period from these risks as of the respective reporting date, based on historical loss experience. When calculating expected loss for credit risk, DB Group takes into account credit risk ratings, collateral, maturities and statistical averaging procedures to reflect the risk characteristics of different types of exposures and facilities. All parameter assumptions are based on statistical averages of up to seven years based on DB Group's internal default and loss history as well as external benchmarks. DB Group uses expected loss as a tool of the risk management process and as part of DB Group's management reporting systems. DB Group also considers the applicable results of the expected loss calculations as a component of its collectively assessed allowance for credit losses included in its financial statements. For operational risk DB Group determines the expected loss from statistical averages of internal loss history, recent risk trends as well as forward looking expert estimates.

3.3.3 Value at Risk

The DB Group uses the value-at-risk approach to derive quantitative measures for trading book market risks under normal market conditions. The Group's value-at-risk figures play a role in both internal and external (regulatory) reporting. For a given portfolio, value-at-risk measures the potential future loss (in terms of market value) that, under normal market conditions, will not be exceeded with a defined confidence level in a defined period. The value-at-risk for a total portfolio represents a measure of diversified market risk (aggregated using pre-determined correlations) in that portfolio.

3.3.4 Stress Testing

The Bank perform the stress test on pillar 1 capital as required and specified by BNM.

The Bank's Stress Tests are reported in the Risk and Capital Profile (RCP) report and regularly discussed by the EXCO and ALCO. The EXCO ensures that stress testing framework and scenarios used reflect all relevant material risks as well as local regulatory requirements. The local Management Board approves such stress testing framework, and is informed about the stress testing results regularly. It also assesses the viability of the Bank's capital planning based on the stress test results.

The EXCO is responsible to initiate and properly document remedial measures and mitigating actions (including explanations that justify the credibility and feasibility of those actions) based on the stress test results under consideration of the risk appetite, if deemed appropriate or necessary.

The Bank subjects all risk types covered under its Economic Capital (EC) concept (Pillar 2 risks), as well as liquidity risk, to regular stress tests. At Group level, the Stress Testing Committee is responsible for aligning scenario definitions between DB Group and legal entities according to the Global Stress Testing Policy.

3 Risk Management (continued)

3.3 Risk Management Tools (continued)

3.3.4 Stress Testing (continued)

Credit risk stress testing

Credit risk stress tests of economic capital and also local regulatory demand are based on Group Credit Risk Stress Test (GCST) methodology (Global Downturn or another macroeconomic stress scenario). The results are provided on a quarterly basis.

The Bank applies the migration matrix (global downturn scenario and macroeconomic stress scenario) as provided by DB Group to stress test its Credit Risk Weighted Asset (RWA). The migration matrix is an output from the GCST which is the macroeconomic downturn applied on the Bank's credit portfolio using the internal EC model to calculate rating downgrade impact. By applying regulatory risk weights to the exposure of the derived portfolio, stressed RWA are calculated.

Liquidity risk stress testing

The Bank is fully integrated into the Group's liquidity risk management framework, and as such performs local liquidity stress tests on a regular basis. The local stress test framework is derived from DB's global stress testing framework. Local stress test results are computed based on the standards described in the Group Liquidity Stress Testing Methodology. Stress parameters are adjusted to cover local market and product specifications and are discussed at the local ALCO. The parameters are locally verified and documented by the business areas. Stress tests are discussed regularly in the local ALCO, and brought to the attention of the EXCO and the local Management Board.

Market risk stress testing

Stress testing is a key risk management technique, which evaluates the potential effects of extreme market events and extreme movements in individual risk factors. It is one of the core quantitative tools used to assess the market risk of the Bank's positions. The scenario-based approach in stress testing is complementary to statistical model approaches as for Value at Risk (VaR). Market Risk Management (MRM) performs several types of stress testing to capture the variety of risks: individual business-level stress tests, MRM portfolio stress testing (e.g. Portfolio Stress Testing (PST), Event Risk Scenarios (ERS)), and Group-wide stress testing.

Operational risk stress testing

The Bank is fully integrated into the Group's operational risk management framework, and as such performs operational risk stress tests on a regular basis. The operational risk stress test framework is derived from DB's global stress testing framework, but adjusted to cover local market peculiarities.

Group Operational Risk translates the Group operational risk stress impact into DB operational risk factors for EC and Regulatory Capital (RC) respectively. The stressed operational risk factors for EC and RC are calculated on a quarterly basis by translating the macro economic assumptions of the Global Downturn scenario into expert based 'workable' operational risk assumptions and applied on a legal entity level.

3 Risk Management (continued)

3.4 Risk Reporting and Measurement Systems

The DB Group has centralised risk data warehouses and systems supporting regulatory reporting and external disclosures, as well as internal management reporting for credit, market, operational and liquidity risk. The DB Group's risk infrastructure incorporates the relevant legal entities and business divisions and provides the basis for tailor-made reporting on risk positions, capital adequacy and limit utilisation to the relevant functions on a regular and ad-hoc basis. Established units within DB Group Finance and Risk assume responsibility for measurement, analysis and reporting of risk while ensuring sufficient quality and integrity of risk related data.

The main reports on risk and capital management that are used to provide the central governance bodies with information relating to DB Group risk exposures are the following:
— DB Group's Risk & Capital Profile which is presented quarterly to the DB Group Management Board. It comprises an overview of the current risk, capital and liquidity situation of the DB Group incorporating information on regulatory capital and economic capital adequacy.
— Stress tests are performed quarterly and reported to the DB Group Management Board. These are supplemented, as required, by ad-hoc stress tests.

3.5 Capital Management

The DB Group's Treasury function manages the DB Group's capital at group level and locally in each region. Treasury implements the DB Group's capital strategy, which itself is developed by the DB Group Capital and Risk Committee and approved by the DB Group Management Board. The Group is committed to maintain its sound capitalisation. Overall capital demand and supply are constantly monitored and adjusted, if necessary, to meet the need for capital from various perspectives. The Bank's strategic plan, announced on 29 October 2015, includes key financial targets and their glide path until 2020.

The allocation of capital, determination of the DB Group's funding plan and other resource issues are presented to and approved by the DB Group Capital and Risk Committee.

The DB Group conducts an annual planning process to determine the DB Group's future strategic direction, decide on key initiatives and allocate resources to the businesses. The DB Group's plan comprises profit and loss, capital supply and capital demand, other resources, such as headcount, and business-specific key performance indicators. Based upon a range of economic scenarios, the business areas discuss their strategic development with the required risk management functions in order to align their revenue potential with the Group's risk appetite/resources. The approved planned risk-weighted assets and capital deduction items form the basis for quarterly capital demand limits by business area. The risk and performance plans feed into DB Group's Treasury capital and liquidity planning. Depending on the development of risk-weighted assets and capital deduction items, DB Group's Treasury regularly updates contingency measures in light of the Group's Tier 1 capital ratio target.

3 Risk Management (continued)

3.5 Capital Management (continued)

Regional capital plans covering the capital needs of the DB Group's branches and subsidiaries are prepared on an annual basis and presented to the DB Group Investment Committee. Local ALCO attend to the needs of legal and regulatory capital requirements under the stewardship of regional Treasury teams. Furthermore, ALCO safeguard compliance with requirements such as restrictions on dividends allocable for remittance to Deutsche Bank AG or on the ability of the Group's subsidiaries to make loans or advances to the parent bank. In developing, implementing and testing the DB Group's capital and liquidity, the DB Group takes such legal and regulatory requirements into account.

4 Credit Risk

Credit risk arises from all transactions where actual, contingent or potential claims against any counterparty, borrower or obligor (which refer to collectively as "counterparties") exist, including those claims that the Bank plans to distribute.

The Bank understands the below dimensions as key drivers for credit risk:

— "Counterparty Risk", the most significant element of credit risk, is the risk that counterparties fail to meet contractual obligations in relation to the claims described above;
— "Country Risk" arising from a country's propensity to economic and political disruption. It therefore relates to the likelihood that changes in the business environment will occur that reduce the viability of doing business in the country or region. Country Risk shall mean the risk that the Bank may suffer a loss due to possible deterioration of economic conditions; political and social upheaval; nationalisation and expropriation of assets; government repudiation of external indebtedness; exchange controls or currency depreciation or devaluation in any given country;
— "Industry Risk" being the risk of adverse developments in the operating environment for a specific industry segment leading to a deterioration in the financial profile of counterparties operating in that segment and resulting in increased credit risk across this portfolio of counterparties.
— "Product Risk" being the risk driven by the underlying structure and economic dependencies of the product in question and can include factors such as tenor, recovery expectations and likelihood of having an exposure at the time of a default. This category also includes 'Settlement risk' arising from the non-simultaneous transfer of cash or securities due to the settlement or clearance of trades.

The Bank manages credit risk on the basis of policies and guidelines set by Group Credit Risk Management (CRM), an independent risk management function organised in alignment with the divisions of the Bank.

The Bank's CRM is based on the following principles:

- Accept credit risk only with creditworthy clients based on proper client due diligence
- Manage concentration risk at counterparty, product, country and industry level. Actively mitigate concentration risk through collateralization, hedging and/or distribution
- Allocate credit risk appetite by considering sustainable risk/return

CRM is organised globally and carries out risk identification, assessment, management, monitoring and reporting of credit risks. The CRM department is independent from business. Accordingly, the Bank adopts the credit policies of DB Group and the Head of Risk is responsible for ensuring that local procedures are compliant with DB Group principles.

4 Credit Risk (continued)

4.1 Credit Risk Measurement

To determine the risk weighted assets for regulatory capital requirement purposes, the Bank measures credit risk using the standardized approach in line with BNM regulations. The standardized approach measures credit risk either pursuant to fixed risk weights, which are predefined by the regulator, or through the application of external ratings. In order to calculate the regulatory capital requirements under the standardized approach, the Bank use eligible external ratings from Standard & Poor's, Moody's, Fitch Ratings.

For Pillar 2 capital, the Bank adopts the credit risk economic capital concept from DB Group which measures the amount of capital needed to absorb very severe, unexpected losses arising from exposures over the period of one year. Further information on the Group credit risk EC quantification can be found in the Group's annual pillar 3 report under section "Credit Risk Economic Capital Model"

4.2 Past Due Loans

The Bank considers loans to be past due once contractually agreed payments on principal and/or interest remain unpaid by the borrower. Generally the Bank distinguishes between loans that are less than three (3) months past due and loans being past due for three (3) months or more.

4.3 Impairment of Loan and Allowance for Loan Losses

Loans, advances and financing of the Bank are classified as impaired when they fulfill either of the following criteria:

- principal or interest or both are past due for three (3) months or more;
- the loan exhibits indications of significant credit weaknesses; or
- where an impaired loan has been rescheduled or restructured, the loan will continue to be classified as impaired until repayments based on the revised and/or restructured terms have been observed continuously for a period of six (6) months.

At each statement of financial position date, the Bank assesses whether there is objective evidence that a loan is impaired. A loan is impaired and impairment losses are incurred if:

- there is objective evidence of impairment as a result of a loss event that occurred after the initial recognition of the loan and up to the reporting date,
- the loss event had an impact on the estimated future cash flows of the loan, and
- a reliable estimate of the loss amount can be made

Credit Risk Management's loss assessments are subject to regular review in collaboration with Group Finance. The results of this review are reported to and approved by an oversight committee comprised of Group Finance and Risk senior management.

To allow management to determine whether a loss event has occurred on an individual basis, all significant counterparty relationships are reviewed periodically. This evaluation considers current information and events related to the counterparty, such as the counterparty experiencing significant financial difficulty or a breach of contract, for example, default or delinquency in interest or principal payments.

4 Credit Risk (continued)

4.3 Impairment of Loan and Allowance for Loan Losses (continued)

If there is evidence of impairment leading to an impairment loss for an individual counterparty relationship, then the amount of the loss is determined as the difference between the carrying amount of the loan, including accrued interest, and the present value of expected future cash flows discounted at the loan's original effective interest rate, including cash flows that may result from foreclosure less costs for obtaining and selling the collateral. The carrying amount of the loans is reduced by the use of an allowance account and the amount of the loss is recognized in the profit or loss as a component of the provision for credit losses.

The collective assessment of impairment is principally to establish an allowance amount relating to loans that are either individually significant but for which there is no objective evidence of impairment, or are not individually significant but for which there is, on a portfolio basis, a loss amount that is probable of having occurred and is reasonably estimable.

4 Credit Risk (continued)

4.4 Geographic distribution of credit exposures, broken down in significant areas by major types of gross credit exposures

Table 7

Credit Exposure	Geography						31-Dec-16
Category	America RM'000	Europe RM'000	India RM'000	Malaysia RM'000	Singapore RM'000	Others RM'000	Total RM'000
Sovereigns/Central Banks	-	-	-	4,170,749	-	-	4,170,749
Banks, DFIs & MDBs	65,464	180,056	306,746	3,926,842	787,082	186,851	5,453,041
Public Sector Entities	-	-	-	-	-	-	-
Insurance Companies, Securities Firms and Fund Managers	-	-	-	12,550	-	-	12,550
Corporates	-	40,413	-	2,568,759	8,215	-	2,617,387
Regulatory Retails	-	-	-	-	-	-	-
Residential Mortgages	-	-	-	15,417	-	-	15,417
Other Asset	-	-	-	278,928	-	-	278,928
Equity Exposure	-	-	-	1,631	-	-	1,631
Defaulted Exposures	-	-	-	2,456	-	-	2,456
Grand Total	65,464	220,469	306,746	10,977,332	795,297	186,851	12,552,159

Table 7.1

Credit Exposure	Geography						31-Dec-15
Category	America RM'000	Europe RM'000	India RM'000	Malaysia RM'000	Singapore RM'000	Others RM'000	Total RM'000
Sovereigns/Central Banks	-	-	-	684,953	-	-	684,953
Banks, DFIs & MDBs	182,375	307,557	60,733	3,891,910	278,159	429,681	5,150,415
Public Sector Entities	-	-	-	-	-	-	-
Insurance Companies, Securities Firms and Fund Managers	-	-	-	13,635	-	-	13,635
Corporates	-	167,189	-	3,204,411	90,386	-	3,461,986
Regulatory Retails	-	-	-	830	-	-	830
Residential Mortgages	-	-	-	18,052	-	-	18,052
Other Asset	-	-	-	105,883	-	-	105,883
Equity Exposure	-	-	-	1,631	-	-	1,631
Defaulted Exposures	-	-	-	2,667	-	-	2,667
Grand Total	182,375	474,746	60,733	7,923,972	368,545	429,681	9,440,052

4 Credit Risk (continued)

4.5 Distribution of exposures by sector, broken down by major types of gross credit exposures

Table 8

Credit Exposure	Sector											31-Dec-16
Category	Construction	Education, Health & Others	Electricity, Gas & Water Supply	Finance, Insurance, Real Estate & Business Activities	Household	Manufacturing	Mining & Quarrying	Others	Primary Agriculture	Transport, Storage & Communication	Wholesale & Retail Trade & Restaurants & Hotels	Total RM'000
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	
Sovereigns/Central Banks	-	-	-	4,170,749	-	-	-	-	-	-	-	4,170,749
Public Sector Entities	-	-	-	-	-	-	-	-	-	-	-	-
Banks, DFIs & MDBs	-	-	-	5,453,041	-	-	-	-	-	-	-	5,453,041
Insurance Companies, Securities Firms and Fund Managers	-	3,366	-	9,184	-	-	-	-	-	-	-	12,550
Corporates	108,495	500	91,484	668,151	15	1,032,250	22,860	157,270	7,974	320,938	207,450	2,617,387
Regulatory Retail	-	-	-	-	-	-	-	-	-	-	-	-
Residential Mortgages	-	-	-	-	15,417	-	-	-	-	-	-	15,417
Other Assets	-	-	-	278,928	-	-	-	-	-	-	-	278,928
Equity Exposure	-	-	-	1,631	-	-	-	-	-	-	-	1,631
Defaulted Exposures	-	-	-	-	2,456	-	-	-	-	-	-	2,456
Grand Total	108,495	3,866	91,484	10,581,684	17,888	1,032,250	22,860	157,270	7,974	320,938	207,450	12,552,159

Table 8.1

Credit Exposure	Sector											31-Dec-15
Category	Construction	Education, Health & Others	Electricity, Gas & Water Supply	Finance, Insurance, Real Estate & Business Activities	Household	Manufacturing	Mining & Quarrying	Others	Primary Agriculture	Transport, Storage & Communication	Wholesale & Retail Trade & Restaurants & Hotels	Total RM'000
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	
Sovereigns/Central Banks	-	-	-	684,953	-	-	-	-	-	-	-	684,953
Public Sector Entities	-	-	-	-	-	-	-	-	-	-	-	-
Banks, DFIs & MDBs	-	-	-	5,150,415	-	-	-	-	-	-	-	5,150,415
Insurance Companies, Securities Firms and Fund Managers	-	3,703	-	9,932	-	-	-	-	-	-	-	13,635
Corporates	64,832	500	250,386	856,126	-	1,707,221	73,145	147,056	9,314	77,031	276,375	3,461,986
Regulatory Retail	-	-	-	-	830	-	-	-	-	-	-	830
Residential Mortgages	-	-	-	-	18,052	-	-	-	-	-	-	18,052
Other Assets	-	-	-	105,883	-	-	-	-	-	-	-	105,883
Equity Exposure	-	-	-	1,631	-	-	-	-	-	-	-	1,631
Defaulted Exposures	-	-	-	-	2,667	-	-	-	-	-	-	2,667
Grand Total	64,832	4,203	250,386	6,808,940	21,549	1,707,221	73,145	147,056	9,314	77,031	276,375	9,440,052

4 Credit Risk (continued)

4.6 Residual contractual maturity breakdown by major types of gross credit exposures

Table 9

Credit Exposure	Maturity			31-Dec-16
	Up to 1year	1-5 year	> 5 years	Total RM'000
Sovereigns/Central Banks	4,170,749	-	-	4,170,749
Public Sector Entities	-	-	-	-
Banks, DFIs & MDBs	3,958,758	1,076,707	417,577	5,453,042
Insurance Cos, Securities Firms & Fund Managers	9,184	-	3,366	12,550
Corporates	2,217,691	342,554	57,141	2,617,386
Regulatory Retail	-	-	-	-
Residential Mortgages	-	-	15,417	15,417
Other Assets	278,928	-	-	278,928
Equity Exposure	1,631	-	-	1,631
Defaulted Exposures	-	-	2,456	2,456
Grand Total	10,636,941	1,419,261	495,957	12,552,159

Table 9.1

Credit Exposure	Maturity			31-Dec-15
	Up to 1year	1-5 year	> 5 years	Total RM'000
Sovereigns/Central Banks	684,953	-	-	684,953
Public Sector Entities	-	-	-	-
Banks, DFIs & MDBs	2,801,182	1,874,446	474,787	5,150,415
Insurance Cos, Securities Firms & Fund Managers	9,900	32	3,703	13,635
Corporates	1,956,844	1,433,338	71,803	3,461,985
Regulatory Retail	830	-	-	830
Residential Mortgages	2,914	15	15,124	18,053
Other Assets	105,883	-	-	105,883
Equity Exposure	1,631	-	-	1,631
Defaulted Exposures	-	-	2,667	2,667
Grand Total	5,564,137	3,307,831	568,084	9,440,052

4 Credit Risk (continued)

4.7 Impaired loans and impairment provisions by sector

Table 10: Impaired loans, advances and financing analysed by economic purpose which are wholly incurred in Malaysia are as follows:

	Group and Bank	
	2016	**2015**
	RM'000	**RM'000**
Purchase of landed properties - residential	2,634	2,982
	2,634	2,982

4.8 Reconciliation of loan impairment provisions

Table 11: Movements in gross impaired loans, advances and financing which are all wholly incurred in Malaysia:

	Group and Bank	
	2016	**2015**
	RM'000	**RM'000**
Balance at 1 January	2,982	3,537
Classified as impaired during the year	638	517
Reclassified as non-impaired during the year	(540)	(864)
Amount recovered	(446)	(208)
Amount written off	-	-
At 31 December	2,634	2,982
Gross impaired loans as a percentage of gross loans, advances and financing	0.14%	0.22%

4 Credit Risk (continued)

4.8 Reconciliation of loan impairment provisions (continued)

Table 11.1: Movements in collective assessment allowance for impaired loans, advances and financing which are all wholly incurred in Malaysia:

	Group and Bank	
	2016	**2015**
	RM'000	**RM'000**
Collective Assessment Allowance		
At 1 January	9,268	8,807
Allowance made during the year	7,554	461
At 31 December	16,822	9,268

Table 11.2: Movements in individual assessment allowance for impaired loans, advances and financing which are all wholly incurred in Malaysia:

	Group and Bank	
	2016	**2015**
	RM'000	**RM'000**
Individual Assessment Allowance	Household	Household
At 1 January	315	304
Allowance made during the year	126	42
Amount recovered	(263)	(31)
At 31 December	178	315
Direct impact to Income Statement:		
Impairment writen off	-	-
Impairment recovered	(263)	(31)
	(263)	(31)

4 Credit Risk (continued)

4.9 Standardised Approach to Credit Risk

Under the standardised approach for credit risk, the determination of capital requirements is based on an approach that links predefined risk weights by BNM to predefined asset class to which the credit exposure is assigned across sovereigns, central banks, public sector entities, banks, corporates, residential mortgages, regulatory retail portfolios, non-performing loans, high risk exposures and other assets. These credit exposures are risk-weighted based on recognised external credit ratings.

For Sovereigns, Corporates and Banking Institutions, external ratings are used to assign risk weights. These external ratings must come from BNM approved rating agencies, known as External Credit Assessment Institutions ("ECAI"); namely
(a) Standard & Poor's ("S&P")
(b) Moody's Investors Services ("Moody's")
(c) Rating Agency Malaysia Berhad ("RAM")
(d) Malaysian Rating Corporation Berhad ("MARC")

The Bank uses ratings from these agencies as part of its day to day business. External ratings for the counterparty are determined as soon as a relationship is established and these ratings are tracked and kept updated. Assessments provided by approved ECAI are mapped to credit quality steps as prescribed by BNM. Where a counterparty or exposure is rated by more than one ECAI, the second highest rating is used to determine the risk weight.

The following is a summary of the rules governing the assignment of risk weights under the Standardised Approach. Each exposure must be assigned to one of the five credit quality rating categories defined in the table below. For counterparty exposure class of Banking Institutions, those with original maturity of below three months and denominated in RM are all risk-weighted at 20% regardless of credit rating.

Sovereigns and Central Banks

Rating Category	Standard & Poor's Rating Services (S&P)	Moody's Investors Service (Moody's)	Risk weight
1	AAA to AA-	Aaa toAa3	0%
2	A+ to A-	A1 to A3	20%
3	BBB+ to BBB-	Baa1 to Baa3	50%
4	BB+ to B-	Ba1 to B3	100%
5	CCC+ to D	Caa1 to C	150%
Unrated			100%

Banking Institutions

Rating Category	S&P	Moody's	RAM Rating Services Berhad (RAM)	Malaysian Rating Corporation Berhad (MARC)	Risk weight	Risk weight (original maturity of 6 months or less)	Risk weight (original maturity of 3 months or less)
1	AAA to AA-	Aaa to Aa3	AAA to AA3	AAA to AA-	20%	20%	20%
2	A+ to A-	A1 to A3	A1 to A3	A+ to A-	50%	20%	
3	BBB+ to BBB-	Baa1 to Baa3	BBB1 to BBB3	BBB+ to BBB-	50%	20%	
4	BB+ to B-	Ba1 to B3	BB1 to B3	BB+ to B-	100%	50%	
5	CCC+ to D	Caa1 to C	C1 to D	C+ to D	150%	150%	
Unrated					50%	20%	

Deutsche Bank (Malaysia) Berhad

(Company No. 312552-W)
(Incorporated in Malaysia)

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4 Credit Risk (continued)

4.9 Standardised Approach to Credit Risk (continued)

Corporates

Rating Category	S&P	Moody's	RAM	MARC	Risk weight
1	AAA to AA-	Aaa to Aa3	AAA to AA3	AAA to AA-	20%
2	A+ to A-	A1 to A3	A1 to A3	A+ to A-	50%
3	BBB+ to BB-	Baa1 to Ba3	BBB1 to BB3	BBB+ to BB-	100%
4	B+ to D	B1 to C	B1 to D	B+ to D	150%
Unrated					100%

Table 12: Rated and Unrated Counterparties (2016)

CREDIT EXPOSURE (31-Dec-2016)	Ratings of Sovereigns and Central Banks by Approved ECAIs						
	Moodys S&P	Aaa to Aa3 AAA to AA-	A1 to A3 A+ to A-	Baa1 to Baa3 BBB+ to BBB-	B1 to B3 BB+ to B-	Caa1 to C CCC+ to D	Unrated Unrated
On and Off Balance-Sheet Exposures							
Sovereigns/Central Banks		-	4,170,749	-	-	-	-
Total	4,170,749	-	4,170,749	-	-	-	-

CREDIT EXPOSURE (31-Dec-2016)	Ratings of Banking Institutions by Approved ECAIs						
	Moodys S&P RAM MARC	Aaa to Aa3 AAA to AA- AAA to AA3 AAA to AA-	A1 to A3 A+ to A- A1 to A3 A+ to A-	Baa1 to Baa3 BBB+ to BBB- BBB1 to BBB3 BBB+ to BBB-	B1 to B3 BB+ to B- BB1 to B3 BB+ to B-	Caa1 to C CCC+ to D C1 to D C+ to D	Unrated Unrated Unrated Unrated
On and Off Balance-Sheet Exposures							
Banks, Development Financial Institutions & MDBs		1,939,878	1,751,986	882,851	-	-	878,327
Total	5,453,042	1,939,878	1,751,986	882,851	-	-	878,327

CREDIT EXPOSURE (31-Dec-2016)	Ratings Corporate by Approved ECAIs					
	Moodys S&P RAM MARC	Aaa to Aa3 AAA to AA- AAA to AA3 AAA to AA-	A1 to A3 A+ to A- A to A3 A+ to A-	Baa1 to Ba3 BBB+ to BB- BBB1 to BB3 BBB+ to BB-	B1 to C B+ to D B to D B+ to D	Unrated Unrated Unrated Unrated
On and Off Balance-Sheet Exposures **Credit Exposures (using Corporate Risk Weights)**						
Public Sector Entities		-	-	-	-	-
Insurance Cos, Securities Firms & Fund Managers		-	-	-	-	12,550
Corporates		14,200	34,152	3,234	-	2,565,800
Regulatory Retail		-	-	-	-	0
Residential Mortgages		-	-	-	-	15,417
Other Assets		-	1,546	-	-	277,382
Equity Exposure		1,348	-	-	-	283
Defaulted Exposure		-	-	-	-	2,456
Total	2,928,368	15,548	35,698	3,234	-	2,873,888

4 Credit Risk (continued)

4.9 Standardised Approach to Credit Risk (continued)

Table 12.1: Rated and Unrated Counterparties (2015)

CREDIT EXPOSURE (31-Dec-2015)	Ratings of Sovereigns and Central Banks by Approved ECAIs						
	Moodys S&P	Aaa to Aa3 AAA to AA-	A1 to A3 A+ to A-	Baa1 to Baa3 BBB+ to BBB-	B1 to B3 BB+ to B-	Caa1 to C CCC+ to D	Unrated Unrated
On and Off Balance-Sheet Exposures							
Sovereigns/Central Banks		-	684,953	-	-	-	-
Total	684,953	-	684,953	-	-	-	-

CREDIT EXPOSURE (31-Dec-2015)	Ratings of Banking Institutions by Approved ECAIs						
	Moodys S&P RAM MARC	Aaa to Aa3 AAA to AA- AAA to AA3 AAA to AA-	A1 to A3 A+ to A- A1 to A3 A+ to A-	Baa1 to Baa3 BBB+ to BBB- BBB1 to BBB3 BBB+ to BBB-	B1 to B3 BB+ to B- BB1 to B3 BB+ to B-	Caa1 to C CCC+ to D C1 to D C+ to D	Unrated Unrated Unrated Unrated
On and Off Balance-Sheet Exposures							
Banks, Development Financial Institutions & MDBs		1,967,325	1,380,467	1,138,571	-	-	664,052
Total	5,150,415	1,967,325	1,380,467	1,138,571	-	-	664,052

CREDIT EXPOSURE (31-Dec-2015)	Ratings Corporate by Approved ECAIs					
	Moodys S&P RAM MARC	Aaa to Aa3 AAA to AA- AAA to AA3 AAA to AA-	A1 to A3 A+ to A- A to A3 A+ to A-	Baa1 to Ba3 BBB+ to BB- BBB1 to BB3 BBB+ to BB-	B1 to C B+ to D B to D B+ to D	Unrated Unrated Unrated Unrated
On and Off Balance-Sheet Exposures						
Credit Exposures (using Corporate Risk Weights)						
Public Sector Entities		-	-	-	-	-
Insurance Cos, Securities Firms & Fund Managers		-	-	-	-	13,635
Corporates		35,064	47,924	19,633	-	3,359,365
Regulatory Retail		-	-	-	-	830
Residential Mortgages		-	-	-	-	18,052
Other Assets		-	1,891	-	-	103,992
Equity Exposure		1,348	-	-	-	283
Defaulted Exposure		-	-	-	-	2,667
Total	3,604,684	36,412	49,815	19,633	-	3,498,824

The Bank has opted for the comprehensive approach for credit risk mitigation ("CRM") which takes into account the scaling factor when applying the standard haircut.

Deutsche Bank (Malaysia) Berhad

(Company No. 312552-W)
(Incorporated in Malaysia)

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4 Credit Risk (continued)

4.9 Standardised Approach to Credit Risk (continued)

The following table shows the DBMB Group's exposure values in the standardised approach by risk weight. The information is shown after credit risk mitigation obtained in the form of eligible financial collateral, guarantees and credit derivatives.

Table 13 – Risk Weights under the Standardised Approach (2016)

31-Dec-2016

Risk Weights	Exposures after Netting & Credit Risk Mitigation												Total Exposures after Netting and Credit Risk Mitigation	Total Risk Weighted Assets
	Sovereigns and Central Banks	Public Sector Entities	Banks, DFIs and MDBs	Insurance Companies, Securities Firms and Fund Managers	Corporates	Regulatory Retail	Residential Mortgages	Higher Risk Assets	Other Assets	Specialised Financing / Investment	Securitisation	Equity Exposures		
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
0%	3,562,109	-	-	-	-	-	-	-	1,546	-	-	-	3,563,655	-
20%	-	-	1,620,920	3,366	14,200	-	-	-	-	-	-	-	1,638,486	327,697
35%	-	-	-	-	-	-	15,416	-	-	-	-	-	15,416	5,395
50%	-	-	2,818,180	-	35,327	-	-	-	-	-	-	-	2,853,507	1,426,753
75%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100%	-	-	431	9,184	2,566,684	-	2,456	-	277,382	-	-	1,611	2,857,748	2,857,750
1250%	-	-	-	-	-	-	-	-	-	-	-	20	20	250
Total Exposures	3,562,109	-	4,439,531	12,550	2,616,211	-	17,872	-	278,928	-	-	1,631	10,928,832	4,617,845
Risk-Weighted Assets by Exposures	-	-	1,733,705	9,857	2,587,188	-	7,852	-	277,382	-	-	1,861	4,617,845	
Average Risk Weight	0.0%	0.0%	39.1%	78.5%	98.9%	0.0%	43.9%	0.0%	99.4%	0.0%	0.0%	114.1%	42.3%	
Deduction from Capital Base	-	-	-	-	-	-	-	-	-	-	-	-	-	

4 Credit Risk (continued)

4.9 Standardised Approach to Credit Risk (continued)

Table 13.1 - Risk Weights under the Standardised Approach (2015)

31-Dec-2015

Risk Weights	Exposures after Netting & Credit Risk Mitigation												Total Exposures after Netting and Credit Risk Mitigation	Total Risk Weighted Assets
	Sovereigns and Central Banks	Public Sector Entities	Banks, DFIs and MDBs	Insurance Companies, Securities Firms and Fund Managers	Corporates	Regulatory Retail	Residential Mortgages	Higher Risk Assets	Other Assets	Specialised Financing / Investment	Securitisation	Equity Exposures		
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
0%	154,813	-	-	-	-	-	-	-	1,891	-	-	-	156,704	-
20%	-	-	1,588,645	3,703	35,064	-	-	-	-	-	-	-	1,627,412	325,482
35%	-	-	-	-	-	-	17,229	-	-	-	-	-	17,229	6,030
50%	-	-	2,217,831	-	278,239	-	808	-	-	-	-	-	2,496,878	1,248,439
75%	-	-	-	-	-	830	-	-	-	-	-	-	830	622
100%	-	-	6,604	9,932	2,661,798	-	2,667	-	103,992	-	-	1,611	2,786,604	2,786,606
1250%	-	-	-	-	-	-	-	-	-	-	-	20	20	250
Total Exposures	154,813	-	3,813,080	13,635	2,975,101	830	20,704	-	105,883	-	-	1,631	7,085,677	4,367,429
Risk-Weighted Assets by Exposures	-	-	1,433,248	10,672	2,807,932	622	9,101	-	103,992	-	-	1,861	4,367,428	
Average Risk Weight	0.0%	0.0%	37.6%	78.3%	94.4%	74.9%	44.0%	0.0%	98.2%	0.0%	0.0%	114.1%	61.6%	
Deduction from Capital Base	-	-	-	-	-	-	-	-	-	-	-	-	-	

4 Credit Risk (continued)

4.10 Credit Risk Mitigation under Standardised Approach

Credit Risk Mitigation Techniques

In addition to determining counterparty credit quality and the risk appetite, the Bank also uses various credit risk mitigation techniques to optimize credit exposure and reduce potential credit losses. Credit risk mitigants are applied in the following forms:

- Comprehensive and enforceable credit documentation with adequate terms and conditions.
- Collateral held as security to reduce losses by increasing the recovery of obligations.
- Risk transfers, which shift the probability of default risk of an obligor to a third party including hedging executed by Credit Portfolio Strategies Group.
- Netting and collateral arrangements which reduce the credit exposure from derivatives and repo- and repo-style transactions.

Collateral Held as Security

The Bank regularly agrees on collateral to be received from or to be provided to customers in contracts that are subject to credit risk. Collateral is security in the form of an asset or third-party obligation that serves to mitigate the inherent risk of credit loss in an exposure, by either substituting the borrower default risk or improving recoveries in the event of a default. While collateral can be an alternative source of repayment, it generally does not replace the necessity of high quality underwriting standards.

The Bank segregate collateral received into the following two types:

- Financial and other collateral, which enables the Bank to recover all or part of the outstanding exposure by liquidating the collateral asset provided, in cases where the borrower is unable or unwilling to fulfill its primary obligations. Cash collateral, securities (equity, bonds), and collateral assignments of other claims or inventory, equipment (i.e., plant, machinery) and real estate typically fall into this category.
- Guarantee collateral, which complements the borrower’s ability to fulfill its obligation under the legal contract and as such is provided by third parties. Letters of credit, insurance contracts, export credit insurance, guarantees, credit derivatives and risk participations typically fall into this category.

Our processes seek to ensure that the collateral the Bank accept for risk mitigation purposes is of high quality. This includes seeking to have in place legally effective and enforceable documentation for realizable and measureable collateral assets which are evaluated regularly by dedicated teams. The assessment of the suitability of collateral for a specific transaction is part of the credit decision and must be undertaken in a conservative way, including collateral haircuts that are applied. The Bank has collateral type specific haircuts in place which are regularly reviewed and approved. In this regard, the Bank strive to avoid “wrong-way” risk characteristics where the borrower’s counterparty risk is positively correlated with the risk of deterioration in the collateral value. For guarantee collateral, the process for the analysis of the guarantor’s creditworthiness is aligned to the credit assessment process for borrowers.

Risk Transfers

Risk transfers to third parties form a key part of the Bank’s overall risk management process and are executed in various forms, including outright sales, single name and portfolio hedging, and securitizations. Risk transfers are conducted by the respective business units.

4 Credit Risk (continued)

4.10 Credit Risk Mitigation under Standardised Approach (continued)

Netting and Collateral Arrangements for Derivatives and Securities Financing Transactions

Netting is applicable to over-the-counter ("OTC") derivative transactions. Netting is also applied to securities financing transactions as far as documentation, structure and nature of the risk mitigation allow netting with the underlying credit risk.

In order to reduce the credit risk resulting from OTC derivative transactions, where central counterparty clearing is not available, the Bank regularly seeks the execution of standard master agreements (such as master agreements for derivatives published by the International Swaps and Derivatives Association, Inc. (ISDA) with our counterparts. A master agreement allows for the close-out netting of rights and obligations arising under derivative transactions that have been entered into under such a master agreement upon the counterparty's default, resulting in a single net claim owed by or to the counterparty. For parts of the derivatives business (i.e., foreign exchange transactions) the Bank also enter into master agreements under which payment netting applies in respect to transactions covered by such master agreements, reducing the settlement risk. In the risk measurement and risk assessment processes, the Bank apply close-out netting only to the extent that legal validity and enforceability of the master agreement in all relevant jurisdictions are satisfied.

Also, the Bank enter into credit support annexes ("CSA") to master agreements in order to further reduce derivatives-related credit risk. These annexes generally provide risk mitigation through periodic, usually daily, and margining of the covered exposure. The CSAs also provide for the right to terminate the related derivative transactions upon the counterparty's failure to honor a margin call. As with netting, when the Bank believe the annex is enforceable, we reflect this in our exposure measurement.

Certain CSAs to master agreements provide for rating dependent triggers, where additional collateral must be pledged if a party's rating is downgraded. The Bank also enter into master agreements that provide for an additional termination event upon a party's rating downgrade. These downgrading provisions in CSAs and master agreements usually apply to both parties but may also apply to us only. We analyze and monitor our potential contingent payment obligations resulting from a rating downgrade in our stress testing approach for liquidity risk on an ongoing basis.

Table 14 shows gross credit exposures by Basel II portfolio (Corporate, Sovereign and Bank) under the Standardised approach and the amount of risk exposure which is mitigated by BNM's defined eligible collateral, guarantees or credit derivatives.

Concentrations within Credit Risk Mitigation
Concentrations within credit risk mitigations taken may occur if a number of guarantors and credit derivative providers with similar economic characteristics are engaged in comparable activities with changes in economic or industry conditions affecting their ability to meet contractual obligations. We use a range of quantitative tools and metrics to monitor our credit risk mitigating activities. These also include monitoring of potential concentrations within collateral types.

4 Credit Risk (continued)

4.10 Credit Risk Mitigation under Standardised Approach (continued)

Guarantees and credit derivative contracts are primarily entered into with banks and insurance companies. The majority of these exposures carry a rating within the investment grade band.

Table 14 Credit Risk Mitigation (2016)

31-Dec-2016

Exposure Class	Exposures before CRM	Exposures Covered by Guarantees/Credit Derivatives	Exposures Covered by Eligible Financial Collateral	Exposures Covered by Other Eligible Collateral
Credit Risk	**RM'000**	**RM'000**	**RM'000**	**RM'000**
On-Balance Sheet Exposures				
Sovereigns/Central Banks	4,170,750	-	608,641	-
Public Sector Entities	-	-	-	-
Banks, Development Financial Institutions and Multilateral Development Banks	2,878,723	-	-	-
Insurance Companies, Securities Firms and Fund Managers	-	-	-	-
Corporates	1,106,678	401,557	-	-
Regulatory Retail	-	-	-	-
Residential Mortgages	15,416	-	-	-
Higher Risk Assets	-	-	-	-
Other Assets	278,928	-	-	-
Equity Exposure	1,631	-	-	-
Defaulted Exposures	2,456	-	-	-
Total On-Balance Sheet Exposures	**8,454,582**	**401,557**	**608,641**	**-**
Off-Balance Sheet Exposures				
OTC Derivatives	3,072,123	-	1,013,512	-
Credit Derivatives	29,757	-	-	-
Direct Credit Substitutes	-	-	-	-
Transaction related contingent Items	362,234	-	1,174	-
Short Term Self Liquidating trade related contingencies	55,966	-	-	-
Other commitments, such as formal standby facilities and credit lines	577,497	-	-	-
Defaulted Exposures	-	-	-	-
Total for Off-Balance Sheet Exposures	**4,097,577**	**-**	**1,014,686**	**-**
Total On and Off- Balance Sheet Exposures	**12,552,159**	**401,557**	**1,623,327**	**-**

4 Credit Risk (continued)

4.10 Credit Risk Mitigation under Standardised Approach (continued)

Table 14.1 Credit Risk Mitigation (2015)

31-Dec-2015

Exposure Class	Exposures before CRM	Exposures Covered by Guarantees/Credit Derivatives	Exposures Covered by Eligible Financial Collateral	Exposures Covered by Other Eligible Collateral
Credit Risk	**RM'000**	**RM'000**	**RM'000**	**RM'000**
On-Balance Sheet Exposures				
Sovereigns/Central Banks	678,451	-	530,140	-
Public Sector Entities	-	-	-	-
Banks, Development Financial Institutions and Multilateral Development Banks	2,026,106	-	-	-
Insurance Companies, Securities Firms and Fund Managers	-	-	-	-
Corporates	1,104,133	424,611	-	-
Regulatory Retail	830	-	-	-
Residential Mortgages	18,037	-	-	-
Higher Risk Assets	-	-	-	-
Other Assets	105,883	-	-	-
Equity Exposure	1,631	-	-	-
Defaulted Exposures	2,667	-	-	-
Total On-Balance Sheet Exposures	**3,937,738**	**424,611**	**530,140**	**-**
Off-Balance Sheet Exposures				
OTC Derivatives	4,385,033	-	1,821,333	-
Credit Derivatives	46,251	-	-	-
Direct Credit Substitutes	-	-	-	-
Transaction related contingent Items	498,969	-	2,902	-
Short Term Self Liquidating trade related contingencies	94,240	-	-	-
Other commitments, such as formal standby facilities and credit lines	477,821	-	-	-
Defaulted Exposures	-	-	-	-
Total for Off-Balance Sheet Exposures	**5,502,314**	**-**	**1,824,235**	**-**
Total On and Off- Balance Sheet Exposures	**9,440,052**	**424,611**	**2,354,375**	**-**

4 Credit Risk (continued)

4.11 Off Balance Sheet Exposures and Counterparty Credit Risk (CCR)

Credit Exposure
The Bank defines its credit exposure as all transactions where losses might occur due to the fact that counterparties may not fulfill their contractual payment obligations. Counterparty credit exposure arises from the Bank's traditional non-trading lending activities which include elements such as loans and contingent liabilities. Counterparty credit exposure also arises via the Bank's direct trading activity with clients in certain instruments which include OTC derivatives, FX forwards and Forward Rate Agreements. A default risk also arises from the Bank's positions in traded credit products such as bonds. The Bank calculates the gross amount of the exposure without taking into account any collateral, other credit enhancement or credit risk mitigating transactions. In Table 15 below, the Bank shows details about several of its main credit exposure categories, namely loans, irrevocable lending commitments, contingent liabilities, over-the-counter ("OTC") derivatives, tradable assets and repo style transactions following the FRS-principles for consolidation.

Credit Exposure from Derivatives
Exchange-traded derivative transactions (e.g., futures and options) are regularly settled through a central counterparty, the rules and regulations of which provide for daily margining of all current and future credit risk positions emerging out of such transactions.

The credit risk arising from all financial derivatives is managed as part of the overall lending limits to banks and customers. Also, the Bank enters into collateral support annexes ("CSA") to master agreements in order to further reduce the Bank's derivatives-related credit risk. These CSA generally provide risk mitigation through periodic (usually daily) margining of the covered exposure. The CSA also provides for the right to terminate the related derivative transactions upon the counterparty's failure to honor a margin call. As with netting, when the Bank believes the CSA is enforceable, the Bank reflects this in its exposure measurement.

Exposure value calculation
In respect of exposure values calculation for regulatory capital purposes, OTC traded products are calculated according to the Counterparty Credit Risk ("CCR") mark to market method. This is calculated as a sum of the current replacement cost and the potential future credit exposure. The current replacement cost is the MYR equivalent amount owed by the counterparty to the Bank 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 are prescribed by BNM in the Basel II - RWCAF guidelines and vary according to the underlying asset class and tenor of each trade.

4 Credit Risk (continued)

4.11 Off Balance Sheet Exposures and Counterparty Credit Risk (CCR) (continued)

Credit Risk Limit Setting and Monitoring Credit Limits
Credit limits set forth the maximum credit exposures the Bank is willing to assume over specified periods. They relate to products, conditions of the exposure and other factors. Credit limits are established by the DB Group Credit Risk Management function via the execution of assigned credit authorities. Credit authority reflects the mandate to approve new credit limits as well as increases or the extension of existing credit limits. Credit authority is generally assigned to individuals as personal credit authority according to the individual's professional qualification and experience.

Ongoing active monitoring and management of credit risk positions is an integral part of the Bank's credit risk management activities. Monitoring tasks are primarily performed by the divisional risk units in close cooperation with the Bank's portfolio management function.

Credit counterparties are allocated to credit officers. The individual credit officers have the relevant expertise and experience to manage the credit risks associated with these counterparties and their associated credit related transactions. It is the responsibility of each credit officer to undertake ongoing credit monitoring for their allocated portfolio of counterparties. The Bank also has procedures in place intended to identify at an early stage credit exposures for which there may be an increased risk of loss. In instances where the Bank has identified counterparties where problems might arise, the respective exposure is generally placed on a watchlist. The Bank aims to identify counterparties that, on the basis of the application of the Bank's risk management tools, demonstrate the likelihood of problems well in advance in order to effectively manage the credit exposure and maximise the recovery. The objective of this early warning system is to address potential problems while adequate options for action are still available. This early risk detection is a tenet of the Bank's credit culture and is intended to ensure that greater attention is paid to such exposures.

Credit Ratings Downgrade
The Bank has no collateral arrangements under CSA which contains rating triggers as at 31 December 2016.

Credit Derivatives
The Bank has no credit derivatives transactions for its own credit portfolio except for its intermediation activities.

4 Credit Risk (continued)

4.11 Off Balance Sheet Exposures and Counterparty Credit Risk (CCR) (continued)

Table 15: Off-Balance Sheet and Counterparty Credit Risk (2016)

31-Dec-2016 Group and Bank	Principal Amount	Positive Fair Value of Derivative Contracts	Credit Equivalent Amount	Risk Weighted Assets
	RM'000	RM'000	RM'000	RM'000
Direct Credit Substitutes	-		-	-
Transaction related contingent Items	724,468		362,234	335,371
Short Term Self Liquidating trade related contingencies	279,829		55,966	47,622
Foreign exchange related contracts				
One year or less	8,725,219	267,096	404,482	394,771
Over one year to five years	1,264,985	6,036	84,078	84,078
Over five years	310,475	-	34,152	17,076
Interest/Profit rate related contracts				
One year or less	247,678	39,654	83,038	83,038
Over one year to five years	1,187,649	7,753	31,645	18,541
Over five years	33,663	-	3,366	673
Equity related contracts				
One year or less	-	-	-	-
Over one year to five years	-	-	-	-
Over five years	-	-	-	-
Credit Derivative Contracts				
One year or less	-	-	-	-
Over one year to five years	-	-	-	-
Over five years	-	-	-	-
OTC Derivative transactions and credit derivative contracts subject to valid bilateral netting agreements	97,368,433	2,458,066	2,461,119	515,432
Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year	224,027		112,014	112,014
Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year	2,327,414		465,483	454,123
Total	112,693,840	2,778,605	4,097,577	2,062,739

4 Credit Risk (continued)

4.11 Off Balance Sheet Exposures and Counterparty Credit Risk (CCR) (continued)

Table 15.1: Off-Balance Sheet and Counterparty Credit Risk (2015)

31-Dec-2015 Group and Bank	Principal Amount	Positive Fair Value of Derivative Contracts	Credit Equivalent Amount	Risk Weighted Assets
	RM'000	RM'000	RM'000	RM'000
Direct Credit Substitutes	-		-	-
Transaction related contingent Items	997,938		498,969	456,566
Short Term Self Liquidating trade related contingencies	471,201		94,240	81,346
Foreign exchange related contracts				
One year or less	9,732,796	134,519	289,204	273,484
Over one year to five years	6,915,014	805,632	1,116,077	510,014
Over five years	311,586	71	34,312	17,237
Interest/Profit rate related contracts				
One year or less	1,136,150	380	2,952	2,202
Over one year to five years	872,040	10,123	31,010	18,646
Over five years	33,663	-	3,703	741
Equity related contracts				
One year or less	-	-	-	-
Over one year to five years	-	-	-	-
Over five years	-	-	-	-
Credit Derivative Contracts				
One year or less	-	-	-	-
Over one year to five years	-	-	-	-
Over five years	-	-	-	-
OTC Derivative transactions and credit derivative contracts subject to valid bilateral netting agreements	97,580,200	2,696,548	2,954,026	612,350
Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year	29		15	15
Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year	2,389,030		477,806	442,995
Total	120,439,647	3,647,273	5,502,314	2,415,596

5 Market Risk

Market risk arises from the uncertainty concerning changes in market prices and rates (including interest rates, equity prices, foreign exchange rates and commodity prices), the correlations among them and their levels of volatility.

The primary objective of DB Group Market Risk Management is to ensure that the DB Group's business units optimise the risk-reward relationship and do not expose it to unacceptable losses. To achieve this objective, DB Group Market Risk Management works closely together with risk takers (the business units) and other control and support groups.

5.1 Market Risk Management Framework

The DB Group's primary instrument to manage trading market risk is the limit setting process. The DB Group's Management Board, supported by DB Group Market Risk Management, which is part of the DB Group's independent risk function, sets Group-wide value-at-risk, stress loss, and economic capital limits for the market risk in the trading book. DB Group Market Risk Management sub-allocates this overall limit to the group divisions and individual business areas based on anticipated business plans and risk appetite. Within the individual business areas, the DB Group business heads or the DB Group entities' Chief Operating Officers may establish business limits by sub-allocating the DB Group Market Risk Management limit down to individual portfolios or geographical regions. VaR limits for the Bank are endorsed by the BRMC and the Bank's Board of Directors ("BOD").

In the Bank, for the majority of the interest rate risk arising from non-trading asset and liability positions is transferred through internal hedges to the trading desks in Global Markets and is thus managed on the basis of Value-at-Risk, EC and other applicable risk metrics as reflected in the trading Value-at-Risk. Residual risk, if applicable, is managed in accordance with the requirements of the Non-Traded Market Risk (NTMR) – Interest Rate Risk in the Banking Book Policy and included in the NTMR VaR report as well as in the local RCP report. Market risk in Treasury is managed through VaR for which a limit is in place.

5.2 Quantitative Risk Management Tools

Value-At-Risk

Value-at-risk ("VaR") is a quantitative measure of the potential loss (in value) of trading positions due to market movements that will not be exceeded in a defined period of time and with a defined confidence level.

The DB Group's value-at-risk for the trading businesses is based on its own internal value-at-risk model, which is calculated using a 99% confidence level and a holding period of one day. This means the DB Group estimates that there is a 1 in 100 chance that a mark-to-market loss from the DB Group's trading positions will be at least as large as the reported value-at-risk.

The DB Group uses historical market data to estimate value-at-risk, with an equally weighted 261 trading day history. The calculation employs a Monte Carlo Simulation technique, and we assume that changes in risk factors follow a well-defined distribution, e.g. normal, lognormal, or non-normal (t, skew-t, Skew-Normal). To determine the DB Group's aggregated value-at-risk, the DB Group uses observed correlations between the risk factors during this 261 trading day period.

5 Market Risk (continued)

5.2 Quantitative Risk Management Tools (continued)

Value-At-Risk (Continued)
The DB Group's value-at-risk model is designed to take into account the following risk factors: interest rates, credit spreads, equity prices, foreign exchange rates and commodity prices, as well as their implied volatilities and common basis risk. The model incorporates both linear and, especially for derivatives, non-linear effects of the risk factors on the portfolio value.

The value-at-risk measure enables the DB Group to apply a constant and uniform measure across all of DB Group's trading businesses and products. It allows a comparison of risk in different businesses, and also provides a means of aggregating and netting positions within a portfolio to reflect correlations and offsets between different asset classes. Furthermore, it facilitates comparisons for the DB Group's market risk both over time and against the daily trading results.

The DB Group continuously analyses potential weaknesses of the DB Group's VaR model using statistical techniques such as back-testing, in addition to risk management experience and expert opinion. Back-testing provides an analysis of the predictive power of the value-at-risk calculations based on actual experience. The DB Group compares the hypothetical daily profits and losses under the buy-and-hold assumption with the estimates from the DB Group's value-at-risk model.

The value-at-risk measures are used by the Bank for internal control purposes. The regulatory capital computation for market risk is based on the Standardised Approach prescribed by BNM.

Market Risk Stress Testing
Stress testing is a key risk management technique, which evaluates the potential effects of extreme market events and movements on individual risk factors. It is one of the core quantitative tools used to assess the market risk of DB Group's positions and complements VaR and Economic Capital. Market Risk Management DB Group performs several types of stress testing to capture a variety of risks: Portfolio stress testing, individual business-level stress tests, Event Risk Scenarios, and also contributes to Group wide stress testing.

Portfolio Stress Testing measures the profit and loss impact of potential market evens based on pre-defined scenarios of different severities, which are either historical or hypothetical and defined at macro level. For individual business-level stress tests, Market Risk Managers identify relevant risk factors and develop stress scenarios relating either to macro-economic or business specific developments. Business-level stress test capture idiosyncratic and basis risks.

Event Risk Scenario stress test measures the profit and loss impact of historically observed events or hypothetical situation on trading positions for specific emerging market countries and regions. The bank's trading book exposure to an individual country is stressed under a single scenario, which replicates market movements across that country in times of significant market crisis and reduced liquidity.

5 Market Risk (continued)

5.3 Standardised Approach to Market Risk Capital Charge

Under the standardised approach for market risk defined by BNM, the market risk capital charge is divided into interest / profit rate risk, equity risk, foreign exchange risk and commodities risk charges. The capital charges for interest / profit rate and equity are applied to the current market value of the interest / profit rate and equity related financial instruments or positions in the trading book. The capital charge for foreign exchange risk and commodities risk however are applied to all foreign currency and commodities positions. Some of the foreign exchange commodity positions will be reported and hence evaluated at market value, while some may be reported and evaluated at book value.

The Standardised market risk approach is based on a building block approach where standardised supervisory capital charge is applied separately to each risk category. Interest / profit rate sensitive instruments are normally affected by general risk charges in market interest / profit rate, known as general risk and charges in factors related to a specific issuer, in particular issuer's credit quality, which would affect the instrument, known as specific risk.

Interest / profit rate risk
The capital requirements for general risk are designed to capture the risk of loss arising from changes in market interest / profit rate. Positions are allocated across a maturity ladder template of time bands and the capital charge is then calculated as the sum of four components:

- The net short or long weighted position across the entire time bands.
- The smaller proportion of the matched positions in each time band to capture basis risk
- The larger proportion of the matched positions across different time bands to capture yield curve risk; and
- A net charge or positions in options, where appropriate.

Foreign exchange risk
Under the standardised approach, single currency position and the risk inherent in a banking institution's mix of net long and short positions in different currencies need to be measured, and capital charge of 8% of the higher total net long or total net short foreign currency position will be applied.

5.4 Risk weighted assets and capital requirements for market risk

Table 16: Risk weighted assets and capital requirements for market risk

	31-Dec-2016	31-Dec-2015
Minimum Capital Requirement at 8%	Standardised Approach RM'000	Standardised Approach RM'000
Interest Rate Risk	143,325	162,088
Equity Position Risk	-	-
Foreign Exchange Risk	40,366	113,083
Commodity Risk	-	-
Options	21,945	21,360
Total Risk Weighted Assets for Market Risk	2,570,452	3,706,633

6 Operational Risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. It includes legal risk but excludes business and reputational risk.

DB Group continues to develop and further enhanced its capabilities in Operational Risk Management (“ORM”), in conjunction with the Three Lines of Defence (“3LoD”) Program. This included the increased clarification of the roles and responsibilities of the first and second line in managing operational risk, strengthening governance and delivery of improved tools to support risk identification and assessment. As of 2016 the responsibility for the 3LoD program resides at Group ORM.

Group ORM has responsibility for the design, implementation and maintenance of the Operational Risk Management Framework (ORMF) including the associated governance structures. Group ORM also has the responsibility for providing a cross-risk assessment and aggregation of risks to provide a holistic portfolio view of the non-financial risk profile of the Bank, which includes oversight of risk and control mitigation plans to return risk within risk tolerance, where required.

We take decisions to manage operational risks, both strategically as well as in day-to-day business. Four principles form the foundation of ORM at DB Group:

Operational Risk Principle I: Risk Owners have full accountability for their operational risks and have to manage against a defined risk specific appetite. Risk owners are accountable for managing all operational risks in their business/processes with an end-to-end process view, within defined operational risk specific appetite and for identifying, establishing and maintaining first level controls. In addition they mitigate identified and assessed risk within the risk specific appetite through remediation actions, insurance, risk acceptance or by ceasing/reducing business activities.

Divisional Control Officers (“DCO”) support the Risk Owners. They are responsible for embedding the framework within the relevant business division or infrastructure function. They assess the first level controls effectiveness, monitor the aggregated risk profile and put the appropriate control and mitigating actions in place within the relevant division. The DCOs also establish appropriate governance forums to oversee the Operational Risk (OR) profile and support decision making.

Operational Risk Principle II: Risk Type Controllers (2nd LoD control functions) establish the risk management framework and define specific risk appetite statements for the Risk Type they own and perform independent controls. Risk Type Controllers are independent 2nd LoD control functions which control specific risk types as identified in the risk taxonomy. We are working towards full implementation of these responsibilities.

The Risk Type Controllers are responsible for establishing an effective risk management framework for the risk type, including setting and monitoring minimum control standards. They challenge, assess and report risks within their risk types and set the risk specific appetite in accordance with the Group’s Risk Appetite statement. Risk Type Controllers monitor group-wide tolerances, perform second level controls, complementary to the first level controls, and define the risk taxonomy for the risk type they own. Finally they establish independent non-financial risk governance, and prepare aggregated reporting into the Group Non-Financial Risk Executive Committee (“NFR ExCo”).

Operational Risk Principle III: Group ORM establishes and maintains the Group ORMF. Group ORM develops and maintains the Group's framework, defining the roles and responsibilities for the management of operational risk across the bank and for defining the process to identify, assess, mitigate, monitor, report and escalate operational risks. Group ORM also maintains an operational risk taxonomy and oversees the completeness of coverage of risk types identified in the taxonomy by Second Line Control Functions. It also monitors execution and results of DB Group’s Risk and Control Assessment process and operational risk concentrations.

6 Operational Risk (continued)

Group ORM also provides independent challenge of the Group's operational risk profile providing independent risk views to facilitate forward looking management of the risks. The function independently monitors, reviews and assesses material risks and key controls at a divisional and infrastructure level across DB Group. It further monitors and reports on the Group's operational risk profile in comparison to the Bank's Group Risk Appetite, to systematically identify operational risk themes and concentrations, and to agree risk mitigating measures and priorities. To adhere to reporting requirements, Group ORM establishes reporting and escalating procedures up to the Management Board for risk assessment results and identified material control gaps, while informing Group Audit of material control gaps.

Operational Risk Principle IV: Group ORM aims to maintain sufficient capital to underpin Operational Risk. Group ORM is accountable for the design, implementation and maintenance of an appropriate approach to determine a sufficient level of capital demand for Operational Risk for recommendation to the Management Board. To fulfil this requirement Group ORM is accountable for the calculation and allocation of Operational Risk Capital demand and Expected Loss planning under the Advanced Measurement Approach ("AMA") approach. Group ORM is also accountable for the execution of data input controls for the Operational Risk capital calculation and for the facilitation of the annual OR Capital budgeting and monthly review process.

Organisational & Governance Structure

Group ORM is part of the Group Risk function, which is headed by the Chief Risk Officer ("CRO"). The CRO appoints the Head of Group Operational Risk Management, Within Group ORM the Head of Group ORM is accountable for the design, implementation and maintenance of an effective and efficient Group ORMF.

The NFR ExCo, which is chaired by the CRO, is responsible for the oversight, governance and coordination of the Non-Financial Risk management in the DB Group on behalf of the Management Board by establishing a cross-risk and holistic perspective of the key Non-Financial Risks of the Group. The decision-making and policy related authorities include the review, advice and management in a diligent manner of all Non-Financial Risk issues which may impact the holistic / cross risk profile reported by a business division or infrastructure function.

While the day-to-day management of operational risk is the primary responsibility of our business divisions and infrastructure functions, Group ORM manages the cross divisional and cross regional operational risk as well as risk concentrations and promotes a consistent application of the ORMF across the bank. In line with our 3LoD model, we aim to maintain close monitoring and high awareness of operational risks.

Managing Operational Risk

DB Group manage operational risk using the Group Operational Risk Management framework which enables us to determine our operational risk profile in comparison to our risk tolerance, to systematically identify operational risk themes and concentrations, and to define risk mitigating measures and priorities.

In order to cover the broad range of risk types underlying operational risk, DB Group framework contains a number of operational risk management techniques. These aim to efficiently manage the operational risk in the business and are used to identify, assess and mitigate operational risks:

- Loss Data Collection: The continuous collection of operational risk loss events, as a prerequisite for operational risk management, includes detailed analyses, the identification of mitigating actions, and provision of timely information to senior management. All losses above € 10,000 are collected in our incident reporting system ("dbIRS"). Locally, the zero loss threshold applies to ensure compliance with the ORION guidelines issued by BNM.

6 Operational Risk (continued)

Managing Operational Risk (continued)

- The Lessons Learned process is triggered for events, including near misses, above € 500 thousand. This process includes, but is not limited to:
  — systematic risk analyses, including a description of the business environment in which the loss occurred, previous events, near misses and event-specific Key Risk Indicators ("KRI"),
  — root cause analysis,
  — review of control improvements and other actions to prevent or mitigate the recurrence, and
  — assessment of the residual risk exposure.
  The execution of corrective actions identified in this process are systematically tracked and reported monthly to senior management.
- Scenario Analyses: DB Group complete risk profile using a set of scenarios including relevant external cases provided by a public database and additional internal scenarios, thereby systematically utilize information on external loss events occurring in the banking industry to prevent similar incidents from happening to DB Group, for example through particular deep dive analyses or risk profile reviews.
- Emerging Risk Identification: DB Group assess and approve the impact of changes on the risk profile as a result of new products, outsourcing activities, strategic initiatives, acquisitions and divestments as well as material systems and process changes. Once operational risks are identified and assessed, they are compared to the relevant specific risk appetite statement and either mitigated or accepted. Risks which violate applicable national or international regulations and legislation cannot be accepted; once identified, such risks must always be mitigated.
- Read-across Analysis: DB Group continuously seek to enhance the process to assess whether identified issues require a broader approach across multiple entities and locations within Deutsche Bank. A review of material findings is performed in order to assess their relevance to areas other than where they originated. DB Group is developing business intelligence software to identify risk clusters across DB Group accessing various sources of information. DB Group aim to increase our predictive analysis and clustering capabilities and to identify risk concentrations in a timely manner through the use of this tool.
- Risk Mitigation: When DB Group implement risk mitigating measures, we systematically monitor their resolution. Residual operational risks rated significant or above need to be accepted by the risk bearing division and reviewed for decision by the Head of Group ORM.
- DB Group perform Top Risk Analyses in which the results of the aforementioned activities are considered. The Top Risk Analyses are a primary input for the annual operational risk management strategy and planning process and aim to identify our most critical risks in terms of probability and severity.
- Key Risk Indicators are used to monitor the operational risk profile and alert the organization to impending problems in a timely fashion. KRIs enable the monitoring of DB Group's control culture and business environment and trigger risk mitigating actions. They facilitate the forward looking management of operational risks, based on early warning signals.
- In DB Group bottom-up Self-Assessment ("SA") process, which is conducted at least annually, areas with high risk potential are highlighted, and risk mitigating measures to resolve issues are identified. On a regular basis, DB Group conduct risk workshops aiming to evaluate risks specific to local legal entities and the countries we operate in, and take appropriate risk mitigating actions. We are in the course of replacing this existing SA process by an enhanced Risk and Control Assessment process, supported by a group wide IT tool. We plan to substantially cover the Bank's nonfinancial operating units under this enhanced approach in 2016.

6 Operational Risk (continued)

Managing Operational Risk (continued)

Additional functions, methodologies and tools implemented by the responsible second line Risk Type Controllers are utilized to complement the Group Operational Risk Framework and specifically address the risk types. These include but are not limited to:
– Legal Risk is a significant risk factor for DB Group, which as described in detail in the “Provisions” note of DB Group Consolidated Financial Statements. A Legal Risk Management (“LRM”) function within the Legal Department is exclusively dedicated to the identification and management of legal risk. It undertakes a broad variety of tasks aimed at proactively managing legal risk, including: devising, implementing and overseeing an annual Legal Risk Assessment Program analyzing existing and historic legal risks; agreeing and participating in resulting portfolio reviews and mitigation plans; and administering the Legal Lessons Learned process.
– The operational risk from outsourcing is managed by the Vendor Risk Management (“VRM”) Process. The outsourcing risk is assessed and managed for all outsourcing arrangements individually, following DB Group Vendor Risk Management Policy and in line with the overall Group Operational Risk Management Framework. A broad governance structure is established to promote appropriate risk levels.
– Fraud Risk is managed based on section 25a of the German Banking Act (“KWG”) as well as other legal and regulatory requirements via a risk based approach, governed by DB Group’s Global Anti-Fraud Policy and corresponding Compliance and Anti-Money-Laundering (“AML”) framework. In line with regulatory requirements, a global risk assessment is performed on a regular basis. Within the general management of operational risks, dedicated Fraud Risk relevant aspects are part of the self-assessment process.
– DB Group manage Business Continuity Risk with its Business Continuity Management (“BCM”) Program which outlines core procedures for the relocation or the recovery of operations in response to varying levels of disruption. Within this program, each of our core businesses functions and infrastructure groups set up, maintain and periodically test business continuity plans to promote continuous and reliable service. The BCM Program has defined roles and responsibilities which are documented in corporate standards. Compliance with these standards is monitored regionally by dedicated business continuity teams. Furthermore, key information on the established BCM control environment feed into operational risk KRIs.
– The Operational Risk in Technology is managed within the Group Technology Organization, following international standards for IT management. Applications and IT infrastructure are catalogued and assessed on a regular basis. Stability monitoring is established. Key outcomes of the established assessment and control environment are used as input for KRIs or self-assessments.

Measuring Our Operational Risks

Whilst at a DB Group level the regulatory and economic capital requirements for operational risk are calculated using the Advanced Measurement Approach (AMA) methodology. Locally, the Bank uses the Basic Indicator Approach (BIA) to assess its local regulatory capital requirements for Operational Risk. The operational risk capital charge using BIA is equal to the average of a fixed percentage (15%) of positive annual gross income over the previous three years. Gross income figures are categorised into twelve quarters (equivalent to three years) and recent annual gross income is calculated by aggregating the gross income of the last four financial quarters. The calculation of the annual gross income for the two years preceding the most recent year is computed in a similar manner. If the annual gross income for any given year is negative or zero, the figure shall not be included for the purposes of calculating the operational risk charge.

The Bank’s total operational risk capital charge is the sum of operational risk capital charge for conventional banking operations and operational risk capital charge for Islamic banking operations.

6 Operational Risk (continued)

Measuring Our Operational Risks (continued)

Group AMA capital calculation is based upon the loss distribution approach ("LDA"). Gross losses from historical internal and external loss data (Operational Riskdata eXchange Association (ORX) consortium data) and external scenarios from a public database (IBM OpData) complemented by internal scenario data are used to estimate the risk profile (i.e., a loss frequency and a loss severity distribution). DB Group LDA model includes conservatism by recognizing losses on events that arise over multiple years as single events in historical loss profile.

Moreover, DB Group have submitted an additional model change request to Germany supervisory authority BaFin to replace the € 1 billion regulatory capital safety margin, which DB Group have continuously applied since its implementation in 2011. This change will make DB Group model more risk sensitive by including reasonably possible litigation losses in "Relevant Loss Data" set. Reasonably possible litigation losses may result from ongoing and new legal matters which are reviewed quarterly and are based on the judgment provided by DB Group Legal Department.

While DB Group dialogue with the joint supervisory team on these model enhancements is ongoing, management had decided to recognize the impact of material model changes in the second quarter 2014 wherever they will lead to an increase in the capital requirement over the models that have previously been approved by BaFin.

Within the LDA model, the frequency and severity distributions are combined in a Monte Carlo simulation to generate potential losses over a one year time horizon. Finally, the risk mitigating benefits of insurance are applied to each loss generated in the Monte Carlo simulation. Correlation and diversification benefits are applied to the net losses in a manner compatible with regulatory requirements to arrive at a net loss distribution at Group level, covering expected and unexpected losses. Capital is then allocated to each of the business divisions after considering qualitative adjustments and expected loss.

The regulatory capital requirement for operational risk is derived from the 99.9 % percentile. The economic capital is set at a level to absorb at a 99.98 % percentile very severe aggregate unexpected losses within one year. Both regulatory and economic capital requirements are calculated for a time horizon of one year.

The Regulatory and Economic Capital demand calculations are performed on a quarterly basis. Group ORM aims to ensure that for the approach for capital demand quantification appropriate development, validation and change governance processes are in place, whereby the validation is performed by an independent validation function and in line with Deutsche Bank's model risk management process.

7 Liquidity Risk

The objective of the Liquidity Risk Management (LRM) function is to ensure that the DB Group can fulfill its payment obligations at all times for both expected and unexpected current and future cash flows and collateral needs at reasonable cost, without affecting daily operations of DB Group. All relevant and significant drivers of liquidity risk, on balance sheet as well as off-balance sheet, must be taken into account. Prices of all asset and liability types need to reflect their liquidity risk characteristics and DB Group's cost of funding.
At the country level, Treasury is responsible for overall liquidity risk management of DB Group, including the setting of liquidity risk limits. Day-to-day funding and cash management of the branch and other DB Group subsidiaries is undertaken by central Pool, acting within the parameters set by Treasury and the local Asset & Liability Committee (ALCO). Liquidity risk is monitored through the Bank Negara Malaysia Liquidity Coverage Ratio and the internal DB Malaysia liquidity risk management policy. Ongoing liquidity management is discussed as a regular item at the DB Malaysia ALCO meeting, which takes place as stated in the ALCO Terms of Reference (ToR). At the ALCO meeting, DB Malaysia's liquidity position, the limit utilization, changes in exposure and liquidity policy compliance is presented to the committee.
DB Malaysia has implemented a comprehensive toolbox that ensures the prudent liquidity risk management such as (1) Stress testing, (2) funding matrix. The liquidity stress testing reflects market-wide and bank specific shocks as well as a combination of both by relevant assets and liabilities classes to ensure the risk taken by DB Malaysia is in line with the approved risk appetites. The funding matrix addresses the long-term liquidity risk management issue of DB Malaysia, identifies the excess or shortfall of assets over liabilities in each time bucket, The funding matrix ensures all term assets are term funded therefore reducing stress on the short term liquidity positions.

Further to the above, the Basel Committee published new standards for an 'International framework for liquidity risk measurement, standards and monitoring'. Within this framework two newly developed regulatory ratios have been introduced, the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR), as well as some additional monitoring tools. At country level, BNM has implemented LCR effective June 2015. For NSFR, Basel III observation period reporting document has been issued by Bank Negara Malaysia. This sets out the reporting instructions and provides guidance on the interpretation of key items under NSFR. NSFR will be effective by January 2018.

Business (Strategic) Risk Management

Management of business (strategic) risk at the Bank is fully integrated into the Group's strategic risk management framework.

Strategic Risk is the risk of a potential earnings downside due to revenues and/or costs underperforming plan targets. Strategic Risk may arise from poor strategic positioning, failure to execute strategy or lack of effective responses to material negative plan deviations caused by either external or internal factors (including macro, financial and idiosyncratic drivers). Strategic Risk has been defined as part of overall Business Risk.

The key aim of Strategic Risk Management is to strengthen the bank´s earnings resilience and protect it against undue earnings volatility to support overall risk appetite targets (especially CET 1 ratio and Leverage Ratios). We aim to achieve this by identifying, assessing, limiting, mitigating and monitoring key strategic risks.

7 Liquidity Risk (continued)

Reputational Risk Management

Management of reputational risk at the Bank is fully integrated into the Group's reputational risk management framework.

Within Group's risk management process, define reputational risk is defined as the risk of possible damage to DB's brand and reputation, and the associated risk to earnings, capital or liquidity, arising from any association, action or inaction which could be perceived by stakeholders to be inappropriate, unethical or inconsistent with DB's values and beliefs.

DB's reputational risk is governed by the Reputational Risk Framework. The Framework was established to provide consistent standards for the identification, assessment and management of reputational risk issues. While every employee has a responsibility to protect DB's reputation, the primary responsibility for the identification, assessment, management, monitoring and, if necessary, referring or reporting, of reputational risk matters lies with DB's Business Divisions. Each employee is under an obligation, within the scope of his/her activities, to be alert to any potential causes of reputational risk and to address them according to the Framework.

8 Equity Investments in the Banking Book

Equity investments which are neither consolidated for regulatory purposes nor deducted from the Bank's own funds are held as equity positions in the regulatory banking book. In the Bank's consolidated statement of financial position, these equity investments are classified as "Financial investments available-for-sale ("AFS")".

9 Interest Rate Risk in the Banking Book

In the Bank, for the majority of the interest rate risk arising from non-trading asset and liability positions is transferred through internal hedges to the trading desks in Global Markets and is thus managed on the basis of Value-at-Risk, EC and other applicable risk metrics as reflected in the trading Value-at-Risk. Residual risk, if applicable, is managed in accordance with the requirements of the NTMR – Interest Rate Risk in the Banking Book Policy and included in the NTMR VaR report as well as in the local RCP report. Market risk in Treasury is managed through VaR for which a limit is in place. Further details on interest rate risk in Trading Book can be found in Note 32 to the Financial Statements.

10 Islamic Banking Operations

BNM had given its approval on 22 August 2007 for the Bank to conduct Islamic banking business under Section 124 of the Banking and Financial Institutions Act 1989.

10.1 Shariah Governance

The Bank conducts Islamic Banking through its Islamic Banking Window ("IBW") which commenced business on 20 April 2009.

The Shariah Committee was established under BNM's "Guidelines on the Governance of Shariah Committee for the Islamic Financial Institutions" (BNM/GPS1) to advise the Board of Directors on Shariah matters in its Islamic business operations and to provide technical assistance in ensuring the Islamic banking products and services offered by the Bank and the relevant documentation are in compliance with Shariah principles. The committee currently comprises Dr Hussain Hamed Sayed Hassan, Dr Muhammad Qaseem and Encik Mohd Hilmi bin Ramli.

The Bank has obtained approval from BNM to operate with 3 Shariah Committee members.

10.2 Restricted Profit Sharing Investment Accounts ('RPSIA')

These deposits are used to fund specific financing and follow the principle of Mudharabah which state that profits will be shared with the Bank as Mudharib and losses shall be borne solely by depositors.

In accordance with BNM's guidelines on the Recognition and Measurement of Profit Sharing Investment Account ('PSIA') as Risk Absorbent, the credit and market risks on the assets funded by the PSIA are excluded from the risk weighted capital ('RWCR') calculation.

As at 31 December 2016, RPSIA assets excluded from the RWCR calculation amounted to nil (2015 Nil).

10.3 Islamic Banking Window - Capital Adequacy

The capital adequacy ratios of the Islamic banking business of the DBMB Group are computed in accordance with the Capital Adequacy Framework for Islamic Banks (CAFIB). The DBMB Group's Islamic banking business has adopted the Standardised Approach for Credit Risk and Market Risk, and the Basic Indicator Approach for Operational Risk.

Table 17: Risk weighted assets and capital requirement

	2016		2015	
	Risk Weighted Assets	Min Capital Requirement at 8%*	Risk Weighted Assets	Min Capital Requirement at 8%
Islamic Banking Window	RM'000	RM'000	RM'000	RM'000
Credit Risk	689	55	1,103	88
Market Risk	1,376	110	206	16
Operational Risk	1,866	149	3,033	243
Total	**3,931**	**314**	**4,342**	**347**

* The minimum regulatory capital requirement before including capital conservation buffer and countercyclical capital buffer.

10 Islamic Banking Operations (continued)

10.3 Islamic Banking Window - Capital Adequacy (continued)

Table 17.1: Risk weighted capital ratio and Tier 1 capital

	Islamic Banking Window	
	31-Dec-16 RM'000	**31-Dec-15 RM'000**
Tier 1 capital		
Paid-up share capital	25,000	25,000
Share premium	-	-
Statutory reserve	-	-
Retained profits	6,128	5,718
Less: Deferred tax assets	-	-
Total Tier 1 Capital	31,128	30,718
Tier 2 Capital		
Collective assessment allowance	-	-
Total Capital	31,128	30,718
Less: Investments in subsidiary companies	-	-
Capital Base	31,128	30,718
Tier 1 Capital Ratio	791.910%	707.543%
Risk-Weighted Capital Ratio	791.910%	707.543%

The capital ratios have been computed in accordance with the Capital Adequacy Framework for Islamic Banks (CAFIB).

10 Islamic Banking Operations (continued)

10.4 Islamic Banking Window - Risk Weighted Assets and Capital Requirements for Credit Risk

Table 18: Islamic Banking Window - Risk Weighted Assets and Capital Requirements for Credit Risk (2016)

31-Dec-2016

RISK TYPE	Gross Exposures	Net Exposures	Risk-Weighted Assets	Risk-Weighted Assets Absorbed by PSIA	Total Risk-Weighted Assets after effects of PSIA	Minimum Capital Requirement at 8% *
Credit Risk	**RM'000**	**RM'000**	**RM'000**	**RM'000**	**RM'000**	**RM'000**
On-Balance Sheet Exposures						
Sovereigns/Central Banks	65,793	65,793	-	-	-	-
Public Sector Entities	-	-	-	-	-	-
Banks, Development Financial Institutions and Multilateral Development Banks	1,377	1,377	689	-	-	55
Insurance Companies, Securities Firms and Fund Managers	-	-	-	-	-	-
Corporates	-	-	-	-	-	-
Regulatory Retail	-	-	-	-	-	-
Residential Mortgages	-	-	-	-	-	-
Higher Risk Assets	-	-	-	-	-	-
Other Assets	-	-	-	-	-	-
Equity Exposure	-	-	-	-	-	-
Defaulted Exposures	-	-	-	-	-	-
Total On-Balance Sheet Exposures	**67,170**	**67,170**	**689**	**-**	**-**	**55**
Off-Balance Sheet Exposures						
OTC Derivatives	-	-	-	-	-	-
Credit Derivatives	-	-	-	-	-	-
Defaulted Exposures	-	-	-	-	-	
Total for Off-Balance Sheet Exposures	**-**	**-**	**-**	**-**	**-**	**-**
Total On and Off- Balance Sheet Exposures	**67,170**	**67,170**	**689**	**-**	**-**	**55**

Table 18.1: Islamic Banking Window - Risk Weighted Assets and Capital Requirements for Credit Risk (2015)

31-Dec-2015

RISK TYPE	Gross Exposures	Net Exposures	Risk-Weighted Assets	Risk-Weighted Assets Absorbed by PSIA	Total Risk-Weighted Assets after effects of PSIA	Minimum Capital Requirement at 8%
Credit Risk	**RM'000**	**RM'000**	**RM'000**	**RM'000**	**RM'000**	**RM'000**
On-Balance Sheet Exposures						
Sovereigns/Central Banks	67,968	67,968	-	-	-	-
Public Sector Entities	-	-	-	-	-	-
Banks, Development Financial Institutions and Multilateral Development Banks	206	206	103	-	-	8
Insurance Companies, Securities Firms and Fund Managers	-	-	-	-	-	-
Corporates	-	-	-	-	-	-
Regulatory Retail	-	-	-	-	-	-
Residential Mortgages	-	-	-	-	-	-
Higher Risk Assets	-	-	-	-	-	-
Other Assets	1,000	1,000	1,000	-	-	80
Equity Exposure	-	-	-	-	-	-
Defaulted Exposures	-	-	-	-	-	-
Total On-Balance Sheet Exposures	**69,174**	**69,174**	**1,103**	**-**	**-**	**88**
Off-Balance Sheet Exposures						
OTC Derivatives	-	-	-	-	-	-
Credit Derivatives	-	-	-	-	-	-
Defaulted Exposures	-	-	-	-	-	
Total for Off-Balance Sheet Exposures	**-**	**-**	**-**	**-**	**-**	**-**
Total On and Off- Balance Sheet Exposures	**69,174**	**69,174**	**1,103**	**-**	**-**	**88**

Deutsche Bank (Malaysia) Berhad

(Company No. 312552-W)
(Incorporated in Malaysia)

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10 Islamic Banking Operations (continued)

10.4 Islamic Banking Window - Risk Weighted Assets and Capital Requirements for Credit Risk (continued)

Table 19: Islamic Banking Window - Risk Weights Under the Standardised Approach (2016)

31-Dec-2016

Risk Weights	Exposures after Netting & Credit Risk Mitigation												Total Exposures after Netting and Credit Risk Mitigation	Total Risk Weighted Assets
	Sovereigns and Central Banks	Public Sector Entities	Banks, DFIs and MDBs	Insurance Companies, Securities Firms and Fund Managers	Corporates	Regulatory Retail	Residential Mortgages	Higher Risk Assets	Other Assets	Specialised Financing / Investment	Securitisation	Equity Exposures		
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
0%	65,793	-	-	-	-	-	-	-	-	-	-	-	65,793	-
20%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50%	-	-	1,377	-	-	-	-	-	-	-	-	-	1,377	689
75%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Exposures	65,793	-	1,377	-	-	-	-	-	-	-	-	-	67,170	689
Risk-Weighted Assets by Exposures	0%	-	689	-	-	-	-	-	-	-	-	-	689	
Average Risk Weight	-	-	50.0%	-	-	-	-	-	-	-	-	-	1.0%	
Deduction from Capital Base	-	-	-	-	-	-	-	-	-	-	-	-	-	

Deutsche Bank (Malaysia) Berhad

(Company No. 312552-W)
(Incorporated in Malaysia)

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10 Islamic Banking Operations (continued)

10.4 Islamic Banking Window - Risk Weighted Assets and Capital Requirements for Credit Risk (continued)

Table 19.1: Islamic Banking Window - Risk Weights Under the Standardised Approach (2015)

31-Dec-2015

Risk Weights	Exposures after Netting & Credit Risk Mitigation												Total Exposures after Netting and Credit Risk Mitigation	Total Risk Weighted Assets
	Sovereigns and Central Banks	Public Sector Entities	Banks, DFIs and MDBs	Insurance Companies, Securities Firms and Fund Managers	Corporates	Regulatory Retail	Residential Mortgages	Higher Risk Assets	Other Assets	Specialised Financing / Investment	Securitisation	Equity Exposures		
	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000	RM'000
0%	67,968	-	-	-	-	-	-	-	-	-	-	-	67,968	-
20%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50%	-	-	206	-	-	-	-	-	-	-	-	-	206	103
75%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100%	-	-	-	-	-	-	-	-	1,000	-	-	-	1,000	1,000
150%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Exposures	67,968	-	206	-	-	-	-	-	1,000	-	-	-	69,174	1,103
Risk-Weighted Assets by Exposures	0%	-	103	-	-	-	-	-	1,000	-	-	-	1,103	
Average Risk Weight	-	-	50.0%	-	-	-	-	-	100.0%	-	-	-	1.6%	
Deduction from Capital Base	-	-	-	-	-	-	-	-	-	-	-	-	-	