Standard Chartered Bank Malaysia Berhad
and its subsidiaries

Pillar 3 Disclosures
31 December 2010

Incorporated in Malaysia with registered Company No. 115793P

Registered Office and Principal Place of Businesses

Level 16, Menara Standard Chartered

No. 30, Jalan Sultan Ismail 50250 Kuala Lumpur

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1. Regulatory capital requirement

Disclosure on capital adequacy under the Standardised and IRB approach

Group 2010 Exposure class	Gross exposures RM'000	Net exposures RM'000	Risk weighted assets RM'000	Capital requirement RM'000
(a) Credit risk				
Exposures under the Standardised approach				
On-balance sheet exposures:-				
Corporates	1,328,033	1,194,708	1,184,746	94,780
Regulatory retail	1,443,699	998,919	749,060	59,924
Residential mortgages	17,649	17,649	6,260	501
Higher risk assets	58,784	58,784	88,177	7,054
Other assets	664,253	859,966	600,338	48,027
Defaulted exposures	44,079	31,501	62,803	5,024
Total on-balance sheet exposures	3,556,497	3,161,527	2,691,384	215,310
Off-balance sheet exposures:-				
OTC derivatives	49,843	49,843	49,295	3,944
Off-balance sheet exposures other than OTC derivative transactions and credit derivative	767,789	626,521	536,137	42,891
Defaulted exposures	223	223	334	27
Total off-balance sheet exposures	817,855	676,587	585,766	46,862
Total on and off-balance sheet exposures	4,374,352	3,838,114	3,277,150	262,172
Exposures under the IRB approach				
On-balance sheet exposures:-				
Sovereigns/Central banks	6,398,013	6,398,013	333,259	26,660
Banks, development financial institutions & multilateral development banks ("MDBs")	6,042,392	6,201,195	629,766	50,381
Insurance companies, securities firms & fund managers	51,985	51,985	21,890	1,751
Corporates	6,263,327	6,104,524	4,127,853	330,228
Residential mortgages	11,440,183	11,440,183	2,193,270	175,462
Qualifying revolving retail exposures	1,559,237	1,559,237	1,085,714	86,857
Other retail	4,718,707	4,718,707	3,009,988	240,799
Defaulted exposures	705,398	705,398	998,231	79,859
Total on-balance sheet exposures	37,179,242	37,179,242	12,399,971	991,997
Off-balance sheet exposures:-				
OTC derivatives	5,654,915	5,654,915	1,854,588	148,367
Off-balance sheet exposures other than OTC derivative transactions and credit derivative	9,342,857	9,342,857	2,675,183	214,014
Defaulted exposures	22,199	22,199	13,118	1,050
Total off-balance sheet exposures	15,019,971	15,019,971	4,542,889	363,431
Total on and off-balance sheet exposures	52,199,213	52,199,213	16,942,860	1,355,428
(b) Large exposures risk requirement			621	50
(c) Market risk (Standardised approach)	**Long position**	**Short position**		
Interest rate risk	42,188,969	32,033,656	933,873	74,710
Foreign currency risk	56,788,624	56,726,163	441,559	35,325
Options risk	1,440,060	3,486,902	340,337	27,227
(d) Operational risk			2,802,491	224,199
Total RWA and capital requirements			**24,738,891**	**1,979,111**

1. Regulatory capital requirement (continued)

Disclosure on capital adequacy under the Standardised and IRB approach

Bank 2010 Exposure class	Gross exposures RM'000	Net exposures RM'000	Risk weighted assets RM'000	Capital requirement RM'000
(a) Credit risk				
Exposures under the Standardised approach				
On-balance sheet exposures:-				
Corporates	1,252,683	1,119,357	1,109,395	88,752
Regulatory retail	1,402,941	958,917	719,058	57,525
Residential mortgages	17,621	17,621	6,250	500
Higher risk assets	58,784	58,784	88,177	7,054
Other assets	612,086	807,044	554,204	44,336
Defaulted exposures	41,779	29,201	59,354	4,748
Total on-balance sheet exposures	3,385,894	2,990,924	2,536,438	202,915
Off-balance sheet exposures:-				
OTC derivatives	49,843	49,843	49,295	3,944
Off-balance sheet exposures other than OTC derivative transactions and credit derivative	760,052	618,784	529,779	42,382
Defaulted exposures	223	223	334	27
Total off-balance sheet exposures	810,118	668,850	579,408	46,353
Total on and off-balance sheet exposures	4,196,012	3,659,774	3,115,846	249,268
Exposures under the IRB approach				
On-balance sheet exposures:-				
Sovereigns/Central banks	5,104,012	5,104,012	272,731	21,818
Banks, development financial institutions & MDBs	6,697,773	6,826,576	737,457	58,997
Insurance companies, securities firms & fund managers	51,985	51,985	21,890	1,751
Corporates	6,415,207	6,286,404	4,313,029	345,042
Residential mortgages	11,093,082	11,093,082	2,102,033	168,163
Qualifying revolving retail exposures	1,559,237	1,559,237	1,085,714	86,857
Other retail	3,847,840	3,847,840	1,772,497	141,800
Defaulted exposures	654,474	654,474	887,321	70,986
Total on-balance sheet exposures	35,423,610	35,423,610	11,192,672	895,414
Off-balance sheet exposures:-				
OTC derivatives	5,675,248	5,675,248	1,813,426	145,074
Off-balance sheet exposures other than OTC derivative transactions and credit derivative	9,138,798	9,138,798	2,576,578	206,126
Defaulted exposures	22,171	22,171	13,087	1,047
Total off-balance sheet exposures	14,836,217	14,836,217	4,403,091	352,247
Total on and off-balance sheet exposures	50,259,827	50,259,827	15,595,763	1,247,661
(b) Large exposures risk requirement			621	50
(c) Market risk (Standardised approach)	**Long position**	**Short position**		
Interest rate risk	42,188,969	32,033,656	933,873	74,710
Foreign currency risk	56,788,624	56,726,163	441,559	35,325
Options risk	1,440,060	3,486,902	340,337	27,227
(d) Operational risk (Standardised approach)			2,610,212	208,817
Total RWA and capital requirements			**23,038,211**	**1,843,058**

2. Credit risk

Credit risk is the risk that the counterparty to a financial transaction will fail to discharge an obligation, resulting in financial loss to the Bank. Credit exposures may arise from both the banking and trading book. Credit risk is managed through a framework which sets out policies and procedures covering the measurement and management of credit risk. There is a clear segregation of duties between transaction originators in the businesses and the approvers in the Risk function. All credit exposure limits are approved within a defined credit approval authority framework.

Credit policies

The Bank adopts credit policies and standards issued by Standard Chartered PLC Group. Standard Chartered PLC Group-wide credit policies and standards are considered and approved by its Group Risk Committee ("GRC"), which also oversees the delegation of credit approval and loan impairment provisioning authorities. Policies and procedures that are specific to each business are established by authorised risk committees within Wholesale and Consumer Banking and covers loans, advances and financing, investment securities and deposits and placements. These are consistent with the Standard Chartered PLC Group-wide credit policies, but are more detailed and adapted to reflect the different risk environments and portfolio characteristics.

Risk reporting and measurement

Risk measurement plays a central role, along with judgment and experience, in informed risk-taking and portfolio management decisions. It is a primary area for sustained investment and senior management attention.

Various risk measurement systems are available to risk officers to enable them to assess and manage the credit portfolio. These include systems to calculate Probability of Default (“PD”), Loss Given Default (“LGD”) and Exposure at Default (“EAD”), Risk-Weighted Assets ("RWA") and capital requirements on a transaction, counterparty and portfolio basis. The Bank has implemented a single risk reporting system to aggregate risk data. This is used to generate regulatory returns and management information to assist Business and Risk users with risk monitoring and management.

A number of internal risk management reports are produced on a regular basis, providing information on individual counterparty, group of connected counterparty, portfolio exposure, credit grade migration, the status of accounts or portfolios showing signs of weakness or financial deterioration, models performance and updates on credit markets. Internal Ratings Based ("IRB") portfolio metrics are widely used in these reports. Regular portfolio risk reports are made available at senior management committee meetings including Risk Management Committee ("RMC"), GRC and functional business and country level risk committees.

For IRB portfolios, risk measurement models are approved by the responsible risk committee, on the recommendation of the Bank's Model Assessment Committee (“MAC”). The MAC supports risk committees in ensuring risk identification and measurement capabilities are objective and consistent, so that risk control and risk origination decisions are properly informed. Prior to review by the MAC, all IRB models are validated in detail by a model validation team, which is separate from the teams which develop and maintain the models. Models undergo a detailed annual review. Such reviews are also triggered if the performance of a model deteriorates materially against predetermined thresholds during the ongoing model performance monitoring process.

Credit approval

Major credit exposures to individual counterparties, groups of connected counterparties and portfolios of retail exposures are reviewed and approved by Standard Chartered PLC Group’s Credit Committee (“GCC”). The GCC derives its authority from the GRC.

2. Credit risk (continued)

Credit approval (continued)

All other credit approval authorities are delegated by the GRC to individuals based on their judgment and experience, and a risk adjusted scale which takes account of the estimated maximum potential loss from a given customer or portfolio. Credit origination and approval roles are segregated in all except for a few authorised cases. In those very few exceptions where they are not, originators can only approve limited exposures within defined risk parameters.

Concentration risk

Credit concentration risk is managed within concentration caps set by counterparty or groups of connected counterparties, by industry sector and country in Wholesale Banking; and by product in Consumer Banking. Additional targets are set and monitored for concentrations by credit rating. Credit concentrations are monitored by the responsible risk committees in each of the businesses and concentration limits that are material to Standard Chartered PLC Group are reviewed and approved at least annually by the GCC at Group and Country level.

Section 2.1 provides further analysis on the Group's and the Bank's credit risk exposures.

Credit monitoring

The Bank regularly monitors credit exposures, portfolio performance, and external trends which may impact risk management outcomes. Internal risk management reports are presented to risk committees, containing information on key environmental, political and economic trends, portfolio delinquency and loan impairment performance, as well as IRB portfolio metrics including credit grade migration.

The Wholesale Banking Credit Issues Forum, which is a subcommittee of the Wholesale Banking Risk Committee, meets regularly to assess the impact of external events and trends on the credit risk portfolio and to define and implement the response in terms of appropriate changes to portfolio shape, underwriting standards, risk policy and procedures.

Corporate accounts or portfolios are placed on Early Alert when they display signs of weakness or financial deterioration, for example, where there is a decline in the customer’s position within the industry, a breach of covenants, non-performance of an obligation, or there are issues relating to ownership or management. Such accounts and portfolios are subjected to a dedicated process overseen by Group Special Assets Management (“GSAM”), the specialist recovery unit. Account plans are re-evaluated and remedial actions are agreed and monitored. Remedial actions include, but are not limited to, exposure reduction, security enhancement, exiting the account or immediate movement of the account into the control of GSAM.

In Consumer Banking, portfolio delinquency trends are monitored continuously at a detailed level. Individual customer behaviour is also tracked and informs lending decisions. Accounts which are past due are subject to a collections process, managed independently by the Risk function. Charged-off accounts are managed by a specialised recovery team.

The Small and Medium Enterprise (“SME”) business is managed within Consumer Banking in two distinct segments: small businesses, and medium enterprises, differentiated by the annual turnover of the counterparty. Medium enterprise accounts are monitored in line with Wholesale Banking procedures, while small business accounts are monitored in line with other Consumer Banking accounts. Medium enterprise past due accounts are managed by GSAM.

(i) Internal Ratings Based approach to credit risk

The Bank uses the IRB approach to manage credit risk for its portfolios. This allows the Bank to use its own internal estimates of PD, LGD, EAD and Credit Conversion Factor (“CCF”) to determine an asset risk weighting.

2. Credit risk (continued)

Credit monitoring (continued)

(i) Internal Ratings Based approach to credit risk (continued)

PD is the likelihood that an obligor will default on an obligation. It is the Bank's internal estimate of PD for all borrowers in each borrower grade. EAD is the expected amount of exposure to a particular obligor at the point of default. CCF is an internally modeled parameter based on historical experience to determine the amount that is expected to be further drawn down from the undrawn portion in a committed facility. LGD is the percentage of EAD that a lender expects to lose in the event of obligor default.

All assets under the IRB approach have sophisticated PD, LGD and EAD/CCF models developed to support the credit decision making process. RWA under the IRB approach is determined by BNM's specified formulae. The development, use and governance of models under the IRB approach is covered in more detail in Section 2 (iv).

Banks are allowed to elect to permanently exclude certain exposures from the IRB approach and use the standardised approach. These are known as permanent exemptions, and are required to be no greater than 15 per cent of the Bank's credit risk-weighted assets.

(ii) Standardised approach to credit risk

The Standardised approach is applied to portfolios that are classified as permanently exempt from the IRB approach.

The Standardised approach to credit risk measures credit risk pursuant to fixed risk weights and is the least sophisticated of the capital calculation methodologies. The risk weight applied under the Standardised approach is given by BNM and is based on the asset class to which the exposure is assigned.

For sovereigns, corporates and 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 RAM, MARC, Moody's, Standard & Poor's and Fitch. 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.

The Bank currently does not use assessments provided by external credit agencies for the purpose of evaluating RWA in the Standardised approach.

(iii) Credit risk mitigation

Potential credit losses from any given account, customer or portfolio are mitigated using a range of tools such as collateral, netting agreements, credit insurance, credit derivatives and other guarantees. The reliance that can be placed on these mitigants is carefully assessed in light of issues such as legal certainty and enforceability, market valuation correlation and counterparty risk of the guarantor.

Risk mitigation policies determine the eligibility of collateral types. Collateral types which are eligible for risk mitigation include cash, residential, commercial and industrial properties, marketable securities, commodities, bank guarantees and letters of credit.

2. Credit risk (continued)

Credit monitoring (continued)

(iii) Credit risk mitigation (continued)

Where guarantees or credit derivatives are used as Credit Risk Mitigation (“CRM”) the creditworthiness of the guarantor is assessed and established using the credit approval process in addition to that of the obligor or main counterparty. The main types of guarantors include bank guarantees, insurance companies, parent companies, shareholders and external credit agencies. Credit derivatives, due to their potential impact on income volatility are used in a controlled manner with reference to their expected volatility.

Collateral is valued in accordance with the risk mitigation policy, which prescribes the frequency of valuation for different collateral types, based on the level of price volatility of each type of collateral and the nature of the underlying product or risk exposure. Collateral held against impaired loans is maintained at fair value.

For further information regarding credit risk mitigation in the trading book see Section 2 (vii).

<u>Wholesale Banking</u>
The process of managing and recognising credit risk mitigation is governed by policies which set out the eligibility criteria that must be met. The credit risk mitigation policy sets out clear criteria that must be satisfied if the mitigation is to be considered effective:-

- Excessive exposure to any particular risk mitigants or counterparties should be avoided. Collateral concentration mitigation standards are maintained at both the portfolio and counterparty level;
- Risk mitigants should not be correlated with the underlying assets such that default would coincide with a lowering of the Forced Sale Value (“FSV”) of the collateral;
- Where there is a currency mismatch, haircuts should be applied to protect against currency fluctuations;
- Legal opinions and documentation must be in place; and
- Ongoing review and controls exist where there is a maturity mismatch between the collateral and exposure.

For all credit risk mitigants that meet the policy criteria, a clear set of procedures are applied to ensure that the value of the underlying collateral is appropriately recorded and updated regularly.

<u>Consumer Banking</u>
The effective use of collateral is a key tool by which credit risk is mitigated in Consumer Banking. All eligible collateral accepted by Consumer Banking is covered by a product proposal approved by senior credit officers delegated with the relevant authority. New collateral types have to be vetted through a stringent ‘New Business Approval’ process and approved by the Consumer Banking Risk Committee.

In order to be recognised as security and for the loan to be classified as secured, all items pledged must be valued and there must exist an active secondary resale market for the collateral. Documentation must be held to enable Consumer Banking to realise the asset without the cooperation of the asset owner in the event that this is necessary.

2. Credit risk (continued)

Credit monitoring (continued)

(iii) Credit risk mitigation (continued)

Regular valuation of collateral is required in accordance with Standard Chartered PLC Group's risk mitigation policy, which prescribes both the process of valuation and the frequency of valuation for different collateral types. The valuation frequency is driven by the level of price volatility of each type of collateral and the nature of the underlying product or risk exposure. Stress tests are performed on changes in collateral values for key portfolios to assist senior management in managing the risks in those portfolios. Physical collateral is required to be insured at all times and against all risks, with the Group and the Bank as the loss payee under the insurance policy.

Detailed procedures over collateral management are in place for each business within the Group and the Bank.

Section 2.2 provides further analysis on the Group's and the Bank's credit risk exposures after the effect of CRM.

(iv) Internal Ratings Based models

<u>Model governance</u>

The IRB models used by the Bank calculate a conservative PD, LGD and EAD, as borne out by the model performance data. The product of this is a conservative view of Regulatory Expected Loss, which is considered necessary for the calculation of regulatory capital.

Models are developed by Standard Chartered PLC’s Group Analytics teams within the Consumer Banking and Wholesale Banking risk functions and Standard Chartered PLC’s Group Risk. The model development process is conducted and documented in line with specific criteria setting out the minimum standards for model development. All IRB models are validated annually by a model validation team reporting to Standard Chartered PLC’s Chief Credit Officer, thereby maintaining independence from the model building processes. Model validation findings are presented to Standard Chartered PLC Group’s MAC which in turn makes approval recommendations to the Consumer Banking and Wholesale Banking Risk Committees. These decision making bodies are comprised of divisional senior management whose role is to challenge model assumptions and performance and agree on appropriate model use for business decision making. The GRC and RMC periodically review overall model performance.

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

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

2. Credit risk (continued)

(iv) Internal Ratings Based models (continued)

Model governance (continued)

Statistical testing is used to determine a model's discriminatory power, predicted versus actual performance and stability over time with pre-defined thresholds for passing such tests. The model development teams also conduct annual model reviews, which are informed by regular monitoring, to ascertain whether the model is fit for purpose and performing within acceptable boundaries or whether there are potential improvements in performance.

Models are tabled with the Bank's MAC which in turn makes approval recommendations to the RMC. These decision making bodies are comprised of divisional senior management whose role is to review model assumptions, performance, local regulatory requirements and agree on appropriate model use for local business decision making. Updates are provided to the Board Risk Committee ("BRC") and the Board of Directors (the "Board").

PD model development

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

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

The general approaches fall into three categories:-

Default History Based ('Good-Bad') – where a sufficient number of defaults is available, Standard Chartered PLC Group deploys a variety of statistical methods to determine the likelihood of default on existing exposures. These methods afford very high discriminatory power by identifying exposure characteristics that have a significant predictive ability.

Shadow Rating Approach – if it is determined that Standard Chartered PLC Group's internal data does not provide a sufficient default history (for example, so called 'low default portfolios'), then Standard Chartered PLC Group develops models which are designed to reflect ratings made by established ECAIs, those agencies having access to large databases of defaults on a variety of credit obligations. These external ratings are customised to develop Standard Chartered PLC Group's own customer rating systems.

Constrained Expert Judgement – for certain types of exposure there is little or no internal or external default history, and therefore no reliable external ratings. In such rare cases, Standard Chartered PLC Group develops quantitative frameworks which include the expert opinions of Standard Chartered PLC Group's credit risk management personnel. These frameworks are called 'knowledge based systems' and are regularly reviewed with respect to historical outcomes.

LGD model development

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

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

2. Credit risk (continued)

(iv) Internal Ratings Based models (continued)

LGD model development (continued)
All LGD models are conservatively calibrated to a 'downturn' – with lower assumed collateral values and lower recoveries on unsecured exposures.

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

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

Model use
In addition to supporting credit decisions, IRB models also support risk-based pricing methodologies and measures used to assess business performance such as Economic Capital, Economic Revenue and Economic Profit.

The use of models is governed by a suite of policies:-
- Each model is governed by a separate policy and procedure which defines the applicability of that model and details the procedure for use;
- The model review policy governs the regular review of models and specifies statistical thresholds and other triggers which determine when models need to be redeveloped;
- The model override policy sets the conditions and approval authority required to override model output; and the parental support policy, for Wholesale Banking, determines the extent to which parental support may be utilised to adjust the credit grade of corporates' and financial institutions' subsidiaries.

Section 2.3 provides further analysis on the Group's and the Bank's credit risk exposures under the IRB approach.

(v) Risk grade profile

Exposures by internal credit grading
For IRB portfolios, a standard alphanumeric credit risk-grading system are used in both Wholesale and Consumer Banking. The grading is based on Standard Chartered PLC Group's internal estimate of PD over a one-year horizon, with customers or portfolios assessed against a range of quantitative and qualitative factors. The numeric grades run from 1 to 14 and some of the grades are sub-classified A, B or C. Lower credit grades are indicative of a lower likelihood of default. In Wholesale Banking, credit grades 1A to 12C are assigned to performing customers or accounts, while credit grades 13 and 14 are assigned to non-performing or defaulted customers. In Consumer Banking, credit grades 1A to 12D are assigned to performing customers or accounts. Non performing accounts are treated as Default whilst debt relief accounts are treated as "DRP" (restructured accounts under the Bank's Debt Relief Program).

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

2. Credit risk (continued)

(v) Risk grade profile (continued)

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

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

** Represents corporates/non-bank financial institutions.

Credit grades for Consumer Banking accounts covered by IRB models are based on a probability of default. These models are based on application and behavioural scorecards which make use of credit bureau information as well as Standard Chartered PLC Group's own data. For Consumer Banking portfolios where IRB models have not yet been developed, the probability of default is calculated using historical portfolio delinquency flow rates and expert judgment, where applicable.

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

2. Credit risk (continued)

(v) Risk grade profile (continued)

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

- Credit Approval and Decision – The level of authority required for the sanctioning of credit requests and the decision made is based on a combination of PD, LGD and EAD of the obligor with reference to the nominal exposure;
- Pricing – In Wholesale Banking a pre-deal pricing calculator is used which takes into consideration PD, LGD and EAD in the calculation of expected loss and economic capital for the proposed transactions to ensure appropriate return. In Consumer Banking a scorecard approach is taken to assess the level of risk using PD, LGD and EAD;
- Limit Setting – In Wholesale Banking concentration limits for some portfolios, as counterparty limits are determined by PD, LGD and EAD. The limits operate on a sliding scale to ensure that the Group and the Bank do not have over concentration of low credit quality assets. This process operates similarly in Consumer Banking;
- Provisioning – The Bank complies with BNM's "Guidelines on Classification and Impairment Provisions for Loans/Financing" issued on 8 January 2010 prescribes that banking institutions are required to maintain Collective Impairment Provisions ("CIP") of at least 1.5% of total outstanding loans, advances and financing, net of individual impairment provisions;
- Risk Appetite – PD, LGD and EAD models provide some of the key inputs into the risk-based methodologies used in the assessment of business and market variables which in turn are key components in the approach taken in setting Risk Appetite; and
- Economic Capital – PD, LGD and EAD are key components of the model used to calculate Economic Capital which is used in the strategic planning, budgeting, pricing and performance measurement processes at business unit, portfolio and client relationship level.

(vi) Problem credit management and provisioning

Consumer Banking

In Consumer Banking, where there are large numbers of small value loans, a primary indicator of potential impairment is delinquency. However, not all delinquent loans (particularly those in the early stage of delinquency) will be impaired. Within Consumer Banking an account is considered to be delinquent when payment is not received on the due date. For delinquency reporting purposes the Bank measures delinquency as of 1, 30, 60, 90, 120 and 150 days past due. Accounts that are overdue by more than 30 days are more closely monitored and subject to specific collections processes.

For unsecured products, individual impairment provisions ("IIP") are raised at 90 days past due and the entire outstanding amount is generally written off at 150 days past due. Secured loans IIP are raised at 90 days past due.

The provisions are based on the estimated present values of future cash flows, in particular those resulting from the realisation of securities. Following such realisations any remaining amount will be written off. The days past due used to trigger write offs and IIP are broadly driven by past experience, which shows that once an account reaches the relevant number of days past due, the probability of recovery (other than by realising security where appropriate) is low. For all products, there are certain situations where the individual impairment provisioning or write off process is accelerated, such as in cases involving bankruptcy, fraud and death. Write off is accelerated for all restructured accounts to 90 days past due (unsecured).

2. Credit risk (continued)

(vi) Problem credit management and provisioning (continued)

The procedures for managing problem credits for medium enterprises in the SME segment of Consumer Banking are similar to those adopted in Wholesale Banking.

Wholesale Banking
Loans are classified as impaired and considered impaired where analysis and review indicates that full payment of either interest or principal is questionable, or as soon as payment of interest or principal is 90 days overdue. Impaired accounts are managed by GSAM, which is separate from the main businesses. Where any amount is considered irrecoverable, an IIP is raised. This provision is the difference between the loan carrying amount and the present value of estimated future cash flows.

The individual circumstances of each customer are taken into account when GSAM estimates future cash flow. All available sources, such as cash flow arising from operations, selling of assets or subsidiaries, realising collateral or payments under guarantees, are considered. In any decision relating to the raising of provisions, the Bank attempts to balance economic conditions, local knowledge and experience, and the results of independent asset reviews.

Where it is considered that there is no realistic prospect of recovering a portion of an exposure against which an impairment provision has been raised, that amount will be written off.

Section 2.5 provides further analysis on the Group's and the Bank's exposures on problem credit management and provisioning.

(vii) Counterparty credit risk in the trading book

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

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

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

The Bank further reduces its credit exposures to counterparties by entering into contractual netting agreements which result in a single amount owed by or to the counterparty through netting the sum of the positive (amounts owed by the counterparty) and negative (amounts owed by the Bank) mark-to-market (“MTM”) values of these transactions. Following Financial Reporting Standard ("FRS") 132 requirements, exposures are however presented on a gross basis in the financial statements as such transactions are not intended to be settled net in the ordinary course of business.

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

2. Credit risk (continued)

(vii) Counterparty credit risk in the trading book (continued)

Credit reserves

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

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

Wrong way risk

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

Exposure value calculation

Exposure values for regulatory capital purposes on over the counter traded products are calculated according to the CCR MTM method. This is calculated as a sum of the current replacement cost and the potential future credit exposure. The current replacement cost is the Ringgit equivalent amount owed by the counterparty to the 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 vary according to the underlying asset class and tenor of each trade. The benefit from master netting agreements is applied to the portfolio of counterparty trades in the CCR calculation according to the Net to Gross Ratio rules.

Section 2.6 provides further analysis on the Group's and the Bank's off-balance sheet and counterparty credit risk.

2.1 Exposure values

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

Geographical analysis

The below tables provide the Group's and the Bank's EAD analysed by location of the exposures as at 31 December 2010.

Group	Malaysia RM'000	Others RM'000	Total RM'000
IRB exposures			
Sovereigns/Central banks	6,676,069	5,001	6,681,070
Banks, development financial institutions & MDBs	5,734,067	5,003,359	10,737,426
Insurance companies, securities firms & fund managers	102,565	75,193	177,758
Corporate exposures (excluding specialised lending and firm-size adjustment)	10,910,241	601,244	11,511,485
Corporate exposures (with firm-size adjustment)	296,343	-	296,343
Specialised lending	131,049	-	131,049
Retail exposures	22,664,082	-	22,664,082
Residential mortgages	*12,527,689*	-	*12,527,689*
Qualifying revolving retail exposures	*3,657,015*	-	*3,657,015*
Other retail exposures	*6,479,378*	-	*6,479,378*
Total IRB exposures	46,514,416	5,684,797	52,199,213
Standardised exposures			
Corporates	1,699,267	19,911	1,719,178
Regulatory retail	1,910,579	-	1,910,579
Residential mortgages	18,861	-	18,861
Higher risk assets	59,017	-	59,017
Other assets	666,717	-	666,717
Total Standardised exposures	4,354,441	19,911	4,374,352
Total credit risk exposures	**50,868,857**	**5,704,708**	**56,573,565**

2.1 Exposure values (continued)

Geographical analysis (continued)

Bank	**Malaysia RM'000**	**Others RM'000**	**Total RM'000**
IRB exposures			
Sovereigns/Central banks	5,300,073	5,001	5,305,074
Banks, development financial institutions & MDBs	6,736,702	4,759,365	11,496,067
Insurance companies, securities firms & fund managers	101,754	75,193	176,947
Corporate exposures (excluding specialised lending and firm-size adjustment)	11,101,009	569,744	11,670,753
Corporate exposures (with firm-size adjustment)	232,717	-	232,717
Specialised lending	22,690	-	22,690
Retail exposures	21,355,579	-	21,355,579
Residential mortgages	*12,157,672*	-	*12,157,672*
Qualifying revolving retail exposures	*3,657,015*	-	*3,657,015*
Other retail exposures	*5,540,892*	-	*5,540,892*
Total IRB exposures	44,850,524	5,409,303	50,259,827
Standardised exposures			
Corporates	1,621,693	19,911	1,641,604
Regulatory retail	1,862,008	-	1,862,008
Residential mortgages	18,833	-	18,833
Higher risk assets	59,017	-	59,017
Other assets	614,550	-	614,550
Total Standardised exposures	4,176,101	19,911	4,196,012
Total credit risk exposures	**49,026,625**	**5,429,214**	**54,455,839**

2.1 Exposure values (continued)

Sector or economic purpose analysis

The below table provides the Group's and the Bank's EAD analysed by sector or economic purpose of the exposure as at 31 December 2010.

Group	Agricultural, hunting, forestry and fishing RM'000	Mining and quarrying RM'000	Manufacturing RM'000	Electricity, gas and water RM'000	Construction RM'000	Wholesale & retail trade restaurants & hotels RM'000	Transportation storage and communication RM'000	Finance, insurance and business services RM'000	Real estate RM'000	Household RM'000	Others RM'000	Total RM'000
IRB exposures												
Sovereigns/Central banks	-	-	-	-	-	-	-	6,681,070	-	-	-	6,681,070
Banks, development financial institutions & MDBs	-	-	-	-	-	-	-	10,737,426	-	-	-	10,737,426
Insurance companies, securities firms & fund managers	-	-	-	-	-	-	-	177,758	-	-	-	177,758
Corporate exposures (excluding specialised lending and firm-size adjustment)	410,810	616,386	3,450,735	913,861	1,592,318	1,509,457	819,118	925,614	374,215	-	898,971	11,511,485
Corporate exposures (with firm-size adjustment)	-	3,466	55,295	-	3,865	24,972	6,632	20,489	-	-	181,624	296,343
Specialised lending	-	-	6,451	15,412	-	-	-	-	109,186	-	-	131,049
Retail exposures	164	-	14,255	164	11,907	49,753	7,868	23,772	2,401	19,648,175	2,905,623	22,664,082
Residential mortgages	-	-	-	-	-	-	-	-	-	*12,527,689*	-	*12,527,689*
Qualifying revolving retail exposures	-	-	-	-	-	-	-	-	-	*3,657,015*	-	*3,657,015*
Other retail exposures	*164*	-	*14,255*	*164*	*11,907*	*49,753*	*7,868*	*23,772*	*2,401*	*3,463,471*	*2,905,623*	*6,479,378*
Total IRB exposures	410,974	619,852	3,526,736	929,437	1,608,090	1,584,182	833,618	18,566,129	485,802	19,648,175	3,986,218	52,199,213
Standardised exposures												
Corporates	55,524	17,149	469,383	1,289	115,201	624,482	28,061	68,036	70,951	-	269,102	1,719,178
Regulatory retail	5,738	4,102	361,582	619	76,659	699,171	40,367	86,269	10,528	253,213	372,331	1,910,579
Residential mortgages	-	-	-	-	-	-	-	-	-	18,861	-	18,861
Higher risk assets	-	-	-	-	-	-	-	-	-	604	58,413	59,017
Other assets	-	-	-	-	-	-	-	-	-	-	666,717	666,717
Total Standardised exposures	61,262	21,251	830,965	1,908	191,860	1,323,653	68,428	154,305	81,479	272,678	1,366,563	4,374,352
Total credit risk exposures	**472,236**	**641,103**	**4,357,701**	**931,345**	**1,799,950**	**2,907,835**	**902,046**	**18,720,434**	**567,281**	**19,920,853**	**5,352,781**	**56,573,565**

2.1 Exposure values (continued)

Sector or economic purpose analysis (continued)

Bank	Agricultural, hunting, forestry and fishing RM'000	Mining and quarrying RM'000	Manufacturing RM'000	Electricity, gas and water RM'000	Construction RM'000	Wholesale & retail trade restaurants & hotels RM'000	Transportation storage and communication RM'000	Finance, insurance and business services RM'000	Real estate RM'000	Household RM'000	Others RM'000	Total RM'000
IRB exposures												
Sovereigns/Central banks	-	-	-	-	-	-	-	5,305,074	-	-	-	5,305,074
Banks, development financial institutions & MDBs	-	-	-	-	-	-	-	11,496,067	-	-	-	11,496,067
Insurance companies, securities firms & fund managers	-	-	-	-	-	-	-	176,947	-	-	-	176,947
Corporate exposures (excluding specialised lending and firm-size adjustment)	445,012	610,205	3,639,934	913,861	1,580,270	1,684,503	706,202	998,834	317,198	-	774,734	11,670,753
Corporate exposures (with firm-size adjustment)	-	3,466	21,163	-	565	10,055	6,632	9,213	-	-	181,623	232,717
Specialised lending	-	-	6,451	15,412	-	-	-	-	827	-	-	22,690
Retail exposures	164	-	14,255	164	11,907	48,348	5,561	23,772	2,401	18,408,190	2,840,817	21,355,579
Residential mortgages	-	-	-	-	-	-	-	-	-	*12,157,672*	-	*12,157,672*
Qualifying revolving retail exposures	-	-	-	-	-	-	-	-	-	*3,657,015*	-	*3,657,015*
Other retail exposures	*164*	-	*14,255*	*164*	*11,907*	*48,348*	*5,561*	*23,772*	*2,401*	*2,593,503*	*2,840,817*	*5,540,892*
Total IRB exposures	445,176	613,671	3,681,803	929,437	1,592,742	1,742,906	718,395	18,009,907	320,426	18,408,190	3,797,174	50,259,827
Standardised exposures												
Corporates	54,211	17,149	453,450	1,289	111,918	622,883	26,239	67,972	40,867	-	245,626	1,641,604
Regulatory retail	5,738	4,017	336,836	427	76,447	688,558	39,587	76,376	10,462	252,173	371,387	1,862,008
Residential mortgages	-	-	-	-	-	-	-	-	-	18,833	-	18,833
Higher risk assets	-	-	-	-	-	-	-	-	-	604	58,413	59,017
Other assets	-	-	-	-	-	-	-	-	-	-	614,550	614,550
Total Standardised exposures	59,949	21,166	790,286	1,716	188,365	1,311,441	65,826	144,348	51,329	271,610	1,289,976	4,196,012
Total credit risk exposures	**505,125**	**634,837**	**4,472,089**	**931,153**	**1,781,107**	**3,054,347**	**784,221**	**18,154,255**	**371,755**	**18,679,800**	**5,087,150**	**54,455,839**

2.1 Exposure values (continued)

Contractual maturity analysis

The following tables show the Group's and the Bank's maturity of EAD by each principal category of exposure class as at 31 December 2010.

Group	Up to 1 year RM'000	> 1 - 5 years RM'000	Over 5 years RM'000	Total RM'000
IRB exposures				
Sovereigns/Central banks	5,610,292	1,070,535	243	6,681,070
Banks, development financial institutions & MDBs	7,497,941	2,007,887	1,231,598	10,737,426
Insurance companies, securities firms & fund managers	75,969	89,066	12,723	177,758
Corporate exposures (excluding specialised lending and firm-size adjustment)	8,360,431	2,914,242	236,812	11,511,485
Corporate exposures (with firm-size adjustment)	139,541	23,450	133,352	296,343
Specialised lending	109,022	6,615	15,412	131,049
Retail exposures	1,999,227	5,341,433	15,323,422	22,664,082
Residential mortgages	*584,995*	*383,539*	*11,559,155*	*12,527,689*
Qualifying revolving retail exposures	*518,032*	*3,085,538*	*53,445*	*3,657,015*
Other retail exposures	*896,200*	*1,872,356*	*3,710,822*	*6,479,378*
Total IRB exposures	23,792,423	11,453,228	16,953,562	52,199,213
Standardised exposures				
Corporates	1,090,238	279,270	349,670	1,719,178
Regulatory retail	928,530	498,386	483,663	1,910,579
Residential mortgages	271	975	17,615	18,861
Higher risk assets	4,302	54,164	551	59,017
Other assets	300,550	71,274	294,893	666,717
Total Standardised exposures	2,323,891	904,069	1,146,392	4,374,352
Total credit risk exposures	**26,116,314**	**12,357,297**	**18,099,954**	**56,573,565**

2.1 Exposure values (continued)

Contractual maturity analysis (continued)

Bank	**Up to 1 year RM'000**	**> 1 - 5 years RM'000**	**Over 5 years RM'000**	**Total RM'000**
IRB exposures				
Sovereigns/Central banks	4,316,291	988,540	243	5,305,074
Banks, development financial institutions & MDBs	8,046,699	2,102,202	1,347,166	11,496,067
Insurance companies, securities firms & fund managers	75,934	88,290	12,723	176,947
Corporate exposures (excluding specialised lending and firm-size adjustment)	8,541,437	2,715,504	413,812	11,670,753
Corporate exposures (with firm-size adjustment)	92,701	6,664	133,352	232,717
Specialised lending	1,714	5,564	15,412	22,690
Retail exposures	1,936,902	4,475,531	14,943,146	21,355,579
Residential mortgages	*572,206*	*379,735*	*11,205,731*	*12,157,672*
Qualifying revolving retail exposures	*518,032*	*3,085,538*	*53,445*	*3,657,015*
Other retail exposures	*846,664*	*1,010,258*	*3,683,970*	*5,540,892*
Total IRB exposures	23,011,678	10,382,295	16,865,854	50,259,827
Standardised exposures				
Corporates	1,089,082	202,853	349,669	1,641,604
Regulatory retail	924,159	454,634	483,215	1,862,008
Residential mortgages	271	947	17,615	18,833
Higher risk assets	4,302	54,164	551	59,017
Other assets	248,382	71,274	294,894	614,550
Total Standardised exposures	2,266,196	783,872	1,145,944	4,196,012
Total credit risk exposures	**25,277,874**	**11,166,167**	**18,011,798**	**54,455,839**

2.2 Credit risk mitigation

The following tables disclose the amount of exposure after the effect of CRM (excluding the impact of guarantees and credit derivatives) in the IRB portfolio as at 31 December 2010. For the IRB portfolios, there is no requirement to disclose the value of collateral as this is typically captured within the LGD models. The amount of the exposure that is covered by guarantees/credit derivatives is also shown by asset class.

Group	Exposures before CRM RM'000	Exposures covered by guarantees or credit derivatives RM'000	Exposures covered by eligible financial collateral RM'000	Exposures covered by Other eligible collateral RM'000
On-balance sheet exposures				
Sovereigns/Central banks	6,398,013	2,896	-	-
Banks, development financial institutions & MDBs	6,042,392	-	-	-
Insurance companies, securities firms & fund managers	51,985	48,000	-	-
Corporates	7,484,052	764,006	173,675	374,928
Regulatory retail	7,721,643	186,113	258,895	-
Residential mortgages	11,457,832	-	-	11,143,141
Higher risk assets	58,784	-	-	-
Other assets	664,253	-	-	-
Specialised financing/investment	107,308	-	-	-
Defaulted exposures	749,477	-	12,578	311,781
Total on-balance sheet exposures	40,735,739	1,001,015	445,148	11,829,850
Off-balance sheet exposures				
OTC derivatives	5,704,758	-	-	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	10,110,646	33,580	180,714	583,683
Defaulted exposures	22,422	-	-	2,460
Total off-balance sheet exposures	15,837,826	33,580	180,714	586,143
Total on and off-balance sheet exposures	**56,573,565**	**1,034,595**	**625,862**	**12,415,993**

2.2 Credit risk mitigation (continued)

Bank	**Exposures before CRM RM'000**	**Exposures covered by guarantees or credit derivatives RM'000**	**Exposures covered by eligible financial collateral RM'000**	**Exposures covered by other eligible collateral RM'000**
On-balance sheet exposures				
Sovereigns/Central banks	5,104,012	2,896	-	-
Public sector entities	-	-	-	-
Banks, development financial institutions & MDBs	6,697,773	-	-	-
Insurance companies, securities firms & fund managers	51,985	48,000	-	-
Corporates	7,667,890	710,006	144,452	309,910
Regulatory retail	6,810,018	185,357	258,895	-
Residential mortgages	11,110,703	-	-	10,845,593
Higher risk assets	58,784	-	-	-
Other assets	612,086	-	-	-
Specialised financing/investment	-	-	-	-
Equity exposures	-	-	-	-
Securisation exposures	-	-	-	-
Defaulted exposures	696,253	-	12,578	305,469
Total on-balance sheet exposures	38,809,504	946,259	415,925	11,460,972
Off-balance sheet exposures				
OTC derivatives	5,725,091	-	-	-
Credit derivatives	-	-	-	-
Off-balance sheet exposures other than OTC derivatives or credit derivatives	9,898,850	33,580	179,301	551,925
Defaulted exposures	22,394	-	-	2,434
Total off-balance sheet exposures	15,646,335	33,580	179,301	554,359
Total on and off-balance sheet exposures	**54,455,839**	**979,839**	**595,226**	**12,015,331**

2.3 Exposures under IRB approach

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

The below tables analyse the Group's and the Bank's PD range or internal risk grading of non retail exposures as at 31 December 2010.

Group	**0<0.04% RM'000**	**0.04<0.17% RM'000**	**0.17<0.59% RM'000**	**0.59<3.05% RM'000**	**3.05<12.00% RM'000**	**12.00<100% RM'000**	**Default or 100% RM'000**
Total non retail exposures (EAD)							
Sovereign	5,933,176	464,837	-	-	-	-	-
Bank	2,446,362	3,135,025	362,137	98,448	420	-	-
Corporate	80,304	1,725,487	1,137,155	2,910,916	416,664	44,786	105,511
Total exposures	8,459,842	5,325,349	1,499,292	3,009,364	417,084	44,786	105,511
Undrawn commitments							
Sovereign	5,001	-	-	-	-	-	-
Bank	23,302	30,475	6,841	4,000	-	-	-
Corporate	7,789	166,686	136,143	146,132	3,865	100	-
Total undrawn commitments	36,092	197,161	142,984	150,132	3,865	100	-
Derivatives							
Sovereign	155,971	81,995	-	-	-	-	-
Bank	1,739,176	2,066,232	351,240	8,116	-	-	-
Corporate	3,265	316,750	378,923	515,937	36,157	1,152	-
Total derivatives	1,898,412	2,464,977	730,163	524,053	36,157	1,152	-
Contingent							
Sovereign	40,090	-	-	-	-	-	-
Bank	215,852	128,011	37,777	79,226	4,292	494	-
Corporate	198,270	792,406	1,437,739	1,404,129	139,177	-	11,192
Total contingent	454,212	920,417	1,475,516	1,483,355	143,469	494	11,192
Exposure weighted average LGD (%)							
Sovereign	26.22%	26.20%	0.00%	0.00%	0.00%	0.00%	0.00%
Bank	26.14%	26.11%	30.86%	31.33%	30.10%	41.20%	0.00%
Corporate	33.75%	46.37%	47.93%	46.36%	45.81%	56.92%	58.44%
Exposure weighted average risk weight (%)							
Sovereign	5.04%	8.26%	0.00%	0.00%	0.00%	0.00%	0.00%
Bank	8.07%	11.99%	32.17%	60.14%	79.83%	205.41%	0.00%
Corporate	9.49%	28.04%	43.33%	83.23%	85.54%	323.06%	44.83%

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and its subsidiaries
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2.3 Exposures under IRB approach (continued)

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

Bank	**0<0.04%**	**0.04<0.17%**	**0.17<0.59%**	**0.59<3.05%**	**3.05<12.00%**	**12.00<100%**	**Default or 100%**
	RM'000	**RM'000**	**RM'000**	**RM'000**	**RM'000**	**RM'000**	**RM'000**
Total non retail exposures (EAD)							
Sovereign	4,639,175	464,837	-	-	-	-	-
Bank	2,233,750	3,927,158	362,138	174,307	420	-	-
Corporate	56,304	1,670,327	1,494,088	2,800,428	401,259	44,786	105,511
Total exposures	6,929,229	6,062,322	1,856,226	2,974,735	401,679	44,786	105,511
Undrawn commitments							
Sovereign	5,001	-	-	-	-	-	-
Bank	23,302	30,475	6,841	4,000	-	-	-
Corporate	7,789	163,686	93,648	129,064	1,886	100	-
Total undrawn commitments	36,092	194,161	100,489	133,064	1,886	100	-
Derivatives							
Sovereign	155,971	-	-	-	-	-	-
Bank	1,735,722	2,210,501	351,240	1,384	-	-	-
Corporate	3,265	316,750	378,923	514,277	6,061	1,152	-
Total derivatives	1,894,958	2,527,251	730,163	515,661	6,061	1,152	-
Contingent							
Sovereign	40,090	-	-	-	-	-	-
Bank	185,029	128,011	37,777	79,226	4,292	494	-
Corporate	198,270	792,406	1,437,351	1,354,053	120,531	-	11,192
Total contingent	423,389	920,417	1,475,128	1,433,279	124,823	494	11,192
Exposure weighted average LGD (%)							
Sovereign	26.23%	26.20%	0.00%	0.00%	0.00%	0.00%	0.00%
Bank	26.20%	26.25%	30.86%	40.64%	30.10%	41.20%	0.00%
Corporate	30.48%	46.15%	44.17%	44.54%	49.46%	56.92%	58.44%
Exposure weighted average risk weight (%)							
Sovereign	5.14%	6.92%	0.00%	0.00%	0.00%	0.00%	0.00%
Bank	7.69%	11.74%	32.17%	75.30%	79.83%	205.41%	0.00%
Corporate	9.22%	28.16%	41.01%	78.19%	104.04%	323.06%	44.83%

2.3 Exposures under IRB approach (continued)

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

The below tables analyse the Group's and the Bank's PD range of retail exposures as at 31 December 2010.

Group	0<0.11% RM'000	0.11<0.30% RM'000	0.30<0.43% RM'000	0.43<3.05% RM'000	3.05<9.20% RM'000	9.20<100% RM'000	Default or 100% RM'000
Total retail exposures (EAD)							
Residential mortgage	122,173	2,327,408	1,126,179	6,344,558	908,579	611,287	397,227
Qualifying revolving retail	31,242	117,980	52,001	613,839	489,008	255,168	77,615
Other retail	625,106	385,113	324,826	2,099,943	974,127	309,593	125,045
Total exposures	778,521	2,830,501	1,503,006	9,058,340	2,371,714	1,176,048	599,887
Undrawn commitments							
Residential mortgage	-	1,039	1,741	656,755	8,928	17,185	4,630
Qualifying revolving retail	319,170	247,947	152,139	931,302	291,579	78,025	-
Other retail	11,108	99,268	138,407	1,258,678	77,867	43,920	6,377
Total undrawn commitments	330,278	348,254	292,287	2,846,735	378,374	139,130	11,007
Exposure weighted average LGD (%)							
Residential mortgage	12.29%	12.47%	12.68%	13.08%	13.31%	13.67%	16.60%
Qualifying revolving retail	67.07%	67.07%	67.07%	67.07%	67.07%	67.07%	60.35%
Other retail	20.87%	20.52%	23.43%	35.96%	81.03%	74.29%	67.20%
Exposure weighted average risk weight (%)							
Residential mortgage	2.97%	5.48%	8.37%	17.69%	46.63%	74.02%	99.06%
Qualifying revolving retail	3.48%	7.37%	12.52%	29.83%	82.74%	172.83%	308.49%
Other retail	3.72%	10.16%	14.81%	43.14%	124.83%	157.25%	244.63%

2.3 Exposures under IRB approach (continued)

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

Bank	0<0.11% RM'000	0.11<0.30% RM'000	0.30<0.43% RM'000	0.43<3.05% RM'000	3.05<9.20% RM'000	9.20<100% RM'000	Default or 100% RM'000
Total retail exposures (EAD)							
Residential mortgage	122,118	2,319,590	1,118,476	6,087,524	854,417	590,957	389,608
Qualifying revolving retail	31,242	117,980	52,001	613,839	489,008	255,168	77,615
Other retail	615,175	370,044	318,945	1,824,874	565,605	153,197	81,740
Total exposures	768,535	2,807,614	1,489,422	8,526,237	1,909,030	999,322	548,963
Undrawn commitments							
Residential mortgage	-	1,039	1,741	642,515	8,808	16,277	4,602
Qualifying revolving retail	319,170	247,947	152,139	931,302	291,579	78,025	-
Other retail	11,103	99,257	138,276	1,243,129	70,412	42,758	6,377
Total undrawn commitments	330,273	348,243	292,156	2,816,946	370,799	137,060	10,979
Exposure weighted average LGD (%)							
Residential mortgage	12.29%	12.47%	12.68%	13.07%	13.30%	13.66%	16.56%
Qualifying revolving retail	67.07%	67.07%	67.07%	67.07%	67.07%	67.07%	60.35%
Other retail	20.87%	20.49%	23.39%	31.23%	72.59%	59.22%	57.73%
Exposure weighted average risk weight (%)							
Residential mortgage	2.97%	5.48%	8.36%	17.60%	46.69%	74.05%	98.80%
Qualifying revolving retail	3.48%	7.37%	12.52%	29.83%	82.74%	172.83%	308.49%
Other retail	3.72%	10.13%	14.79%	36.29%	111.00%	123.97%	248.72%

2.3 Exposures under IRB approach (continued)

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

Group	**Up to 0.10% RM'000**	**>0.10 to 0.20% RM'000**	**>0.20 to 0.50% RM'000**	**>0.50 to 1.00% RM'000**	**>1.00 to 30.00% RM'000**	**>30 to <100% RM'000**	**100% RM'000**
Total retail exposures (EAD)							
Residential mortgage	6,754,301	1,590,517	1,845,589	470,483	1,176,521	-	-
Qualifying revolving retail	61,517	87,706	202,751	195,827	991,908	97,145	-
Other retail	1,370,853	913,330	544,309	100,660	1,763,262	151,337	-
Total exposures	8,186,671	2,591,553	2,592,649	766,970	3,931,691	248,482	-
Undrawn commitments							
Residential mortgage	174,549	145,037	342,432	5,111	23,149	-	-
Qualifying revolving retail	386,953	180,164	555,136	328,700	566,213	2,995	-
Other retail	330,846	308,692	829,001	51,602	112,338	3,148	-
Total undrawn commitments	892,348	633,893	1,726,569	385,413	701,700	6,143	-
Exposure weighted average risk weight (%)							
Residential mortgage	9.04%	17.89%	28.90%	46.66%	80.37%	0.00%	0.00%
Qualifying revolving retail	3.88%	8.12%	16.26%	26.52%	90.19%	279.66%	0.00%
Other retail	9.31%	18.61%	32.37%	40.28%	135.76%	221.99%	0.00%
Bank							
Total retail exposures (EAD)							
Residential mortgage	6,644,372	1,531,888	1,713,918	452,547	1,139,965	-	-
Qualifying revolving retail	61,517	87,706	202,751	195,827	991,908	97,145	-
Other retail	1,339,972	895,358	538,714	89,422	997,067	69,046	-
	8,045,861	2,514,952	2,455,383	737,796	3,128,940	166,191	-
Undrawn commitments							
Residential mortgage	172,873	141,834	332,987	5,090	22,198	-	-
Qualifying revolving retail	386,953	180,164	555,136	328,700	566,213	2,995	-
Other retail	330,698	308,684	817,337	51,475	99,971	3,148	-
	890,524	630,682	1,705,460	385,265	688,382	6,143	-
Exposure weighted average risk weight (%)							
Residential mortgage	9.00%	17.88%	28.85%	46.60%	80.44%	0.00%	0.00%
Qualifying revolving retail	3.88%	8.12%	16.26%	26.52%	90.19%	279.66%	0.00%
Other retail	9.30%	18.61%	32.32%	36.40%	127.08%	217.22%	0.00%

2.3 Exposures under IRB approach (continued)

The following tables set out exposures subject to the supervisory risk weights under the IRB approach for the Group and the Bank as at 31 December 2010.

Group	Strong or 70% RM'000	Good or 90% RM'000	Satisfactory or 115% RM'000	Weak or 250% RM'000	Default or 0% RM'000
Income producing real estate					
- Total Exposures	-	51,357	57,828	-	-
- Risk Weighted Assets		46,221	66,503	-	-

Bank	Strong or 70% RM'000	Good or 90% RM'000	Satisfactory or 115% RM'000	Weak or 250% RM'000	Default or 0% RM'000
Income producing real estate					
- Total Exposures	-	-	826	-	-
- Risk Weighted Assets			950	-	-

2.4 Exposures under Standardised approach

Risk weights under the Standardised approach

The following tables set out analysis of risk weights under the Standardised approach for the Group and the Bank as at 31 December 2010.

Group	Exposures after netting and credit risk mitigation: Corporates RM'000	Regulatory retail RM'000	Residential mortgages RM'000	Higher risk assets RM'000	Other assets RM'000	Total exposures after netting and credit risk mitigation RM'000	Total risk weighted assets RM'000
Risk weights							
0%	-	146	-	-	155,599	155,745	-
20%	-	-	-	-	130,756	130,756	26,151
35%	-	148	17,299	-	-	17,447	6,107
50%	20,473	1,577	870	-	-	22,920	11,460
75%	-	1,360,082	-	-	-	1,360,082	1,020,062
100%	1,487,403	726	691	-	574,417	2,063,237	2,063,237
150%	2,634	24,618	-	59,017	-	86,269	129,403
1250%	-	-	-	-	1,658	1,658	20,730
Total exposures	1,510,510	1,387,297	18,860	59,017	862,430	3,838,114	3,277,150
Risk-weighted assets by exposures	1,501,591	1,058,555	7,181	88,525	621,298	3,277,150	
Average risk weight	99.4%	76.3%	38.1%	150.0%	72.0%	85.4%	

Bank	Exposures after netting and credit risk mitigation: Corporates RM'000	Regulatory retail RM'000	Residential mortgages RM'000	Higher risk assets RM'000	Other assets RM'000	Total exposures after netting and credit risk mitigation RM'000	Total risk weighted assets RM'000
Risk weights							
0%	-	146	-	-	148,924	149,070	-
20%	-	-	-	-	130,613	130,613	26,123
35%	-	148	17,272	-	-	17,420	6,097
50%	20,473	1,577	870	-	-	22,920	11,460
75%	-	1,314,565	-	-	-	1,314,565	985,924
100%	1,409,830	726	691	-	528,311	1,939,558	1,939,558
150%	2,634	22,319	-	59,017	-	83,970	125,954
1250%	-	-	-	-	1,658	1,658	20,730
Total exposures	1,432,937	1,339,481	18,833	59,017	809,506	3,659,774	3,115,846
Risk-weighted assets by exposures	1,424,018	1,020,968	7,171	88,525	575,164	3,115,846	
Average risk weight	99.4%	76.2%	38.1%	150.0%	71.1%	85.1%	

2.4 Exposures under Standardised approach (continued)

Rated exposures according to ratings by ECAIs

The following table sets out analysis of unrated on and off-balance sheet credit exposures for the Group and the Bank as at 31 December 2010.

	Group RM'000	Bank RM'000
Corporates	1,510,510	1,432,937
Total	**1,510,510**	**1,432,937**

2.5 Problem credit management and provisioning

Impairment provisions analysed by borrowers' business or industry

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

Group	Collective impairment provisions as at 31 December 2010 RM'000	Individual impairment provisions held as at 1 January 2010 RM'000	Net individual impairment charge during the financial year RM'000	Amounts written off or other movements during the financial year RM'000	Individual impairment provisions held as at 31 December 2010 RM'000
Loans to individuals					
Mortgages	191,015	117,392	58,120	(66,729)	108,783
Others	57,943	46,467	89,975	(90,049)	46,393
Small and medium enterprises and others	70,313	38,204	37,719	(36,348)	39,575
Consumer Banking	**319,271**	**202,063**	**185,814**	**(193,126)**	**194,751**
Agriculture	3,419	15,445	-	(1,464)	13,981
Mining and quarrying	2,095	-	-	-	-
Manufacturing	36,881	22,101	4,984	(10,895)	16,190
Electricity, gas and water	9,591	-	-	-	-
Construction	1,338	42,314	20,472	(2,172)	60,614
Real estate	5,155	-	-	-	-
Wholesale & retail trade and restaurants & hotels	10,467	26,646	3,151	(4,237)	25,560
Transportation, storage and communication	3,579	-	-	-	-
Finance, insurance and business services	23,098	-	-	-	-
Others	12,352	-	-	-	-
Wholesale Banking	**107,975**	**106,506**	**28,607**	**(18,768)**	**116,345**

2.5 Problem credit management and provisioning (continued)

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

Bank	**Collective impairment provisions as at 31 December 2010 RM'000**	**Individual impairment provisions held as at 1 January 2010 RM'000**	**Net individual impairment charge during the financial year RM'000**	**Amounts written off or other movements during the financial year RM'000**	**Individual impairment provisions held as at 31 December 2010 RM'000**
Loans to individuals					
Mortgages	191,009	116,443	56,337	(65,365)	107,415
Others	41,109	36,288	45,712	(46,481)	35,519
Small and medium enterprises and others	68,648	38,090	37,719	(36,348)	39,461
Consumer Banking	**300,766**	**190,821**	**139,768**	**(148,194)**	**182,395**
Agriculture	1,790	15,445	-	(1,464)	13,981
Mining and quarrying	2,013	-	-	-	-
Manufacturing	34,284	22,101	4,984	(10,895)	16,190
Electricity, gas and water	9,591	-	-	-	-
Construction	1,179	42,314	20,472	(2,172)	60,614
Real estate	3,251	-	-	-	-
Wholesale & retail trade and restaurants & hotels	9,934	26,646	3,151	(4,237)	25,560
Transportation, storage and communication	542	-	-	-	-
Finance, insurance and business services	21,874	-	-	-	-
Others	10,723	-	-	-	-
Wholesale Banking	**95,181**	**106,506**	**28,607**	**(18,768)**	**116,345**

2.5 Problem credit management and provisioning (continued)

Loans, advances and financing past due

The following table analyses the Group's and the Bank's loans, advances and financing past due but not impaired, analysed by borrowers' business and industry for Consumer Banking and Wholesale Banking as at 31 December 2010.

	Group RM'000	Bank RM'000
Loans to individuals		
Mortgages	1,270,453	1,141,682
Others	399,998	359,455
Small and medium enterprises and others	148,992	133,890
Consumer Banking	1,819,443	1,635,027
Manufacturing	417	417
Wholesale Banking	417	417

The following table analyses the Group's and the Bank's loans, advances and financing past due but not impaired, analysed by significant geographical areas as at 31 December 2010.

	Group RM'000	Bank RM'000
Malaysia	1,819,860	1,635,444
Others	-	-
	1,819,860	1,635,444

2.6 Off-balance sheet and counterparty credit risk

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

Group	Principal amount RM'000	Positive fair value of contracts RM'000	Negative fair value of contracts RM'000	Credit equivalent amount RM'000	Risk weighted assets RM'000
Direct credit substitutes	1,277,004	-	-	1,277,004	362,744
Transaction related contingent items	3,202,905	-	-	3,131,157	801,467
Short term self liquidating trade related contingencies	195,473	-	-	163,000	65,924
Lending of banks' securities or the posting of securities as collateral by banks, including instances where these arise out of repo-style transactions	70,797	-	-	70,797	2,235
Foreign exchange related contracts					
One year or less	41,166,278	709,424	397,396	1,131,926	307,874
Over one year to five years	11,916,400	393,862	460,156	1,177,274	372,210
Over five years	4,504,133	331,953	129,438	826,478	185,849
Interest/profit rate related contracts					
One year or less	24,924,926	81,248	76,571	103,836	21,433
Over one year to five years	44,561,020	332,880	367,411	1,129,231	305,227
Over five years	7,360,722	222,258	320,809	699,656	263,169
Equity related contracts					
One year or less	10,505	6,038	437	4,177	2,197
Over one year to five years	245,654	2,924	8,053	29,968	16,987
Over five years	10,000	-	509	1,000	580
Commodity contracts					
One year or less	5,223,816	58,764	58,839	308,969	225,947
Over one year to five years	1,358,839	101,182	65,815	186,909	195,838
Credit derivative contracts *					
One year or less	213,522	94,658	615	105,334	6,572
Other commitments, such as formal facilities and credit lines, with an original maturity of over one year	4,346,479	-	-	1,750,451	774,013
Other commitments, such as formal facilities and credit lines, with an original maturity of up to one year	4,747,222	-	-	1,720,487	556,676
Any commitments that are at any time by the bank without prior notice or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness	7,022,140	-	-	2,020,172	661,713
	162,357,835	2,335,191	1,886,049	15,837,826	5,128,655

** Credit derivative contracts*	Principal amount RM'000	Credit equivalent amount RM'000	Risk weighted assets RM'000
Total return swaps			
- protection bought	19,823	20,811	973
- protection sold	20,000	1,000	333
Credit link notes			
- protection bought	74,882	4,104	1,550
- protection sold	98,816	79,419	3,716
	213,521	105,334	6,572

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

Bank	**Principal amount RM'000**	**Positive fair value of contracts RM'000**	**Negative fair value of contracts RM'000**	**Credit equivalent amount RM'000**	**Risk weighted assets RM'000**
Direct credit substitutes	1,243,177	-	-	1,243,177	348,639
Transaction related contingent items	3,178,218	-	-	3,106,471	794,194
Short term self liquidating trade related contingencies	184,877	-	-	152,404	62,612
Lending of banks' securities or the posting of securities as collateral by banks, including instances where these arise out of repo-style transactions	39,972	-	-	39,972	793
Foreign exchange related contracts					
One year or less	41,166,278	709,424	397,396	1,131,953	307,861
Over one year to five years	11,860,301	391,875	458,169	1,172,483	369,197
Over five years	4,504,133	331,953	129,438	826,478	185,849
Interest rate related contracts					
One year or less	24,924,926	81,248	76,571	103,836	21,433
Over one year to five years	44,761,020	332,945	368,394	1,166,559	313,438
Over five years	7,360,722	222,258	320,809	687,425	216,821
Equity related contracts					
One year or less	10,505	6,038	437	4,177	2,197
Over one year to five years	245,654	2,924	8,053	29,968	16,987
Over five years	10,000	-	509	1,000	580
Commodity contracts					
One year or less	5,223,816	58,764	58,839	308,969	225,947
Over one year to five years	1,358,839	101,182	65,815	186,909	195,838
Over five years	-	-	-	-	-
Credit derivative contracts *					
One year or less	213,522	94,658	615	105,334	6,572
Other commitments, such as formal facilities and credit lines, with an original maturity of over one year	3,975,398	-	-	1,729,671	757,052
Other commitments, such as formal facilities and credit lines, with an original maturity of up to one year	3,780,677	-	-	1,629,379	494,775
Any commitments that are at any time by the bank without prior notice or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness	7,022,140	-	-	2,020,170	661,714
	161,064,175	2,333,269	1,885,045	15,646,335	4,982,499

** Credit derivative contracts*	**Principal amount RM'000**	**Credit equivalent amount RM'000**	**Risk weighted assets RM'000**
Total return swaps			
- protection bought	19,823	20,811	973
- protection sold	20,000	1,000	333
Credit link notes			
- protection bought	74,882	4,104	1,550
- protection sold	98,816	79,419	3,716
	213,521	105,334	6,572

3. Market risk

The Bank recognises market risk as the risk of loss resulting from changes in market prices and rates. The Bank is exposed to market risk arising principally from customer-driven transactions. The objective of the Bank's market risk policies and processes is to obtain the best balance of risk and return while meeting customers' requirements.

The primary categories of market risk for the Bank are:-

- Interest rate risk: arising from changes in yield curves, credit spreads and implied volatilities on interest rate options;
- Currency exchange rate risk: arising from changes in exchange rates and implied volatilities on foreign exchange options;

The Bank has adopted the Standardised approach for market risk.

Market risk governance

The BRC approves the Bank's market risk appetite taking account of market volatility, the range of traded products and asset classes, the business volumes and transaction sizes. Market risk appetite has remained broadly stable in 2010.

The BRC is responsible, under authority delegated by the Board, for setting Value at Risk ("VaR") limits at a business level. The BRC is also responsible for policies and other standards for the control of market risk and overseeing their effective implementation. These policies cover both trading and non-trading books of the Bank. Limits by portfolios are proposed by the businesses within the terms of agreed policy.

Standard Chartered PLC Group Market Risk ("GMR") approves the limits within delegated authorities and monitors exposures against these limits. Additional limits are placed on specific instruments and position concentrations where appropriate. Sensitivity measures are used in addition to VaR as risk management tools. For example, interest rate sensitivity is measured in terms of exposure to a one basis point increase in yields, whereas foreign exchange is measured in terms of the underlying values or amounts involved. Option risks are controlled through revaluation limits on underlying price and volatility shifts, limits on volatility risk and other variables that determine the options' value.

Value at Risk

The Bank measures the risk of losses arising from future potential adverse movements in market rates, prices and volatilities using a VaR methodology. VaR, in general, is a quantitative measure of market risk which applies recent historic market conditions to estimate the potential future loss in market value that will not be exceeded in a set time period at a set statistical confidence level. VaR provides a consistent measure that can be applied across trading businesses and products over time and can be set against actual daily trading profit and loss outcome.

VaR is calculated for expected movements over a minimum of one business day and to a confidence level of 97.5 per cent. This confidence level suggests that potential daily losses, in excess of the VaR measure, are likely to be experienced six times per year.

The Bank applies two VaR methodologies:-

- Historic simulation: involves the revaluation of all unmatured contracts to reflect the effect of historically observed changes in market risk factors on the valuation of the current portfolio. This approach is applied for general market risk factors.
- Monte Carlo simulation: this methodology is similar to historic simulation but with considerably more input risk factor observations. These are generated by random sampling techniques, but the results retain the essential variability and correlations of historically observed risk factor changes. This approach is applied for credit spread VaR.

3. Market risk (continued)

Value at Risk (continued)

In both methods an historical observation period of one year is chosen and applied.

VaR is calculated as the Bank's exposure as at the close of business. Intra-day risk levels may vary from those reported at the end of the day.

Back testing

To assess their predictive power, VaR models are back tested against actual results. Back testing is conducted daily against clean profit and loss, which is the actual profit and loss for a given business day adjusted to remove the effect of certain items unrelated to market risk. Back testing is also conducted against clean hypothetical profit and loss which is the clean profit and loss that would have occurred for a given business day if the portfolio on which the VaR number for that business day is based remained unchanged.

Stress testing

Losses beyond the confidence interval are not captured by a VaR calculation, which therefore gives no indication of the size of unexpected losses in these situations.

GMR complements the VaR measurement by quarterly stress testing market risk exposures to highlight potential risk that may arise from extreme market events that are rare but plausible.

Stress testing is an integral part of the market risk management framework and considers both historical market events and forward looking scenarios. A consistent stress testing methodology is applied to trading and non-trading books.

Stress scenarios are regularly updated to reflect changes in risk profile and economic events. The BRC has responsibility for reviewing stress exposures and, where necessary, enforcing reductions in overall market risk exposure. The BRC considers stress testing results as part of its supervision of risk appetite. The stress testing methodology assumes that scope for management action would be limited during a stress event, reflecting the decrease in liquidity that often occurs.

Regular stress test scenarios are applied to interest rates, credit spreads and exchange rates. This covers all major asset classes in the non-trading and trading books.

Ad-hoc scenarios are also prepared reflecting specific market conditions and for particular concentrations of risk that arise within the businesses.

Valuation framework

Products may only be traded subject to a formally approved Product Programme which identifies the risks, controls and regulatory treatment. The control framework is assessed by the relevant Bank functions as well as Standard Chartered PLC Group's Internal Audit on an ongoing basis. It is the Bank's policy that all assets and liabilities held are to be recorded in the financial accounts on a fair-value basis that is consistent with FRS.

3. Market risk (continued)

Valuation framework (continued)

The Product Control function is responsible for valuation controls in accordance with policy. Where possible, positions held are marked to market on a consistent and daily basis using quoted prices within active markets. Where this is not possible, positions are marked to model using models which have been independently and periodically validated by GMR. Product Control ensure adherence to Standard Chartered PLC Group’s policy for valuation adjustments to incorporate counterparty risk, bid/ask spreads, market liquidity and where appropriate model risk reserves to mark all positions on a prudent basis. The BRC provides oversight and governance of all policy.

Market risk VaR coverage

Interest rate risk from across the non-trading book portfolios is transferred to Financial Markets where it is managed by the Bank's Asset and Liability Management ("ALM") desks under the supervision of ALCO. The ALM desks deal in the market in approved financial instruments in order to manage the net interest rate risk, subject to approved VaR and risk limits.

VaR and stress tests are therefore applied to non-trading book exposures in the same way as for the trading book, including listed available for sale securities. Securities classed as Loans and receivables or Held to Maturity are not reflected in VaR or stress tests since they are accounted on an amortised cost basis, so market price movements have no effect on either profit and loss or reserves.

Foreign exchange risk on the non-trading book portfolios is minimised by match funding assets and liabilities in the same currency. Structural foreign exchange currency risks are not included within the Bank's VaR.

The table below analyses the Bank's VaR by primary categories of market risk:-

Value at Risk (VaR at 97.5%, 1 day)

	←	2010	→	Actual as at
	Average	High	Low	31 December 2010
	RM'000	RM'000	RM'000	RM'000
<u>Trading</u>				
Interest rate risk	5,197	12,559	2,053	3,958
Foreign exchange risk	1,767	10,886	312	3,755
<u>Non-trading</u>				
Interest rate risk	2,851	4,074	1,413	1,413

4. Operational risk

Operational risk is the risk of direct or indirect loss due to an event or action resulting from inadequate or failed internal processes, people and systems, or from external events.

Objective

Operational risk exposures arise as a result of business activities. It is the Bank’s objective to minimise such exposures, subject to cost tradeoffs. This objective is met through a framework of policies and procedures originating from Standard Chartered PLC Group that drive risk identification, assessment, control and monitoring.

Governance structure

Governance over operational risk management is achieved through a defined structure of committees at the group, business and function. At each level, operational risk governance committees integrate into Standard Chartered PLC Group’s and the Bank's overall risk governance structure. Standard Chartered PLC Group Operational Risk Committee ("GORC"), a subcommittee of Standard Chartered PLC Group's RMC, supervises the management of operational risks across all businesses and functions, while at a Country level, this role is performed by the Country Operational Risk Group ("CORG"). Escalation rules, linked to risk tolerance limits, are in place to ensure that operational risk decisions are taken at the right level within the governance structure.

Roles and responsibilities

Responsibility for the management of operational risk rests with business and function management as an integral component of the management task. An independent Operational Risk function within the Risk function works alongside them to ensure that exposure to operational risk remains within acceptable levels.

Risk management approach

Standard Chartered PLC Group’s operational risk management procedures and processes are integral components of the broader Risk Management Framework and is approved and adopted by the Board for local adoption. Operational risks are managed through an end to end process of identification, assessment, control and monitoring. This four step management process is performed at all levels across Standard Chartered PLC Group and is the foundation of the management approach. Once identified, risks are assessed against standard criteria to determine their significance and the degree of risk mitigation effort required to reduce the exposure to acceptable levels. Risk mitigation plans are overseen by the appropriate local and Standard Chartered PLC Group's governance committee.

Assurance

Independent assurance and audit/reviews provide management and governance bodies with confirmation that Standard Chartered PLC Group’s risk management standards and controls are being adhered to. These audit/reviews are conducted by specialised control functions with the support of an independent audit and assurance function. Standard Chartered PLC Group’s audit function conducts regular audits of assurance activities.

Measurement

The Bank uses the Standardised approach to assess its regulatory and internal capital requirements for Operational Risk. The Standardised approach for operational risk capital calculation applies a beta to the average income that was achieved in the previous three years by the Bank.

Chief Executive Officer Attestation

In accordance with Bank Negara Malaysia's Risk Weighted Capital Adequacy Framework (Basel II) – Disclosure Requirements (Pillar 3), I hereby attest that to the best of my knowledge, the disclosures contained in Standard Chartered Bank Malaysia Berhad's Pillar 3 Disclosures report for the financial year ended 31 December 2010 are consistent with the manner in which the Group and the Bank assesses and manages its risk, and are not misleading in any particular way.

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Osman Tarique Morad
Chief Executive Officer

Date: 16 March 2011