Basel II Pillar 3 Disclosures

Year ended 31 December 2009

DBS Group Holdings Ltd and its subsidiaries (the Group) have adopted Basel II as set out in the revised Monetary Authority of Singapore Notice to Banks No. 637 (Notice on Risk Based Capital Adequacy Requirements for Banks incorporated in Singapore or MAS Notice 637) with effect from 1 January 2008.

The Group views Basel II as part of continuing efforts to strengthen its risk management culture and ensure that the Group pursues business growth across segments and markets with the right risk management discipline, practices and processes in place.

The following information concerning the Group's risk exposures, risk management practices and capital adequacy is disclosed as accompanying information to the annual report, and does not form part of the audited accounts.

1 SCOPE OF APPLICATION

The Group applies the Basel II Internal Ratings-Based Approach (IRBA) for computing part of its regulatory capital requirements for credit risk. Approved wholesale portfolios are on the Foundation IRBA, while the approved retail portfolios are on the Advanced IRBA. Most of the remaining credit exposures are on the Standardised Approach. The Group also adopts the Standardised Approach for operational and market risks.

The Group's capital requirements are generally based on the principles of consolidation adopted in the preparation of its financial statements, as discussed in Note 2.2 to the Financial Statements, except where deductions from eligible capital are required under MAS Notice 637 or where entities meet separation requirements set by the MAS. Refer to Note 52 to the Financial Statements for the list of consolidated entities.

Certain subsidiaries are subject to minimum capital requirements imposed by their respective regulatory agencies. During the course of the year, these subsidiaries did not experience any impediments in the distribution of dividends.

2 REGULATORY CAPITAL MANAGEMENT

2.1 Key capital management principles

The Group's capital management policies are to diversify its sources of capital; to allocate capital efficiently, guided by the need to maintain a prudent relationship between available capital and the risks of its underlying businesses; and to meet the expectations of key constituencies, including investors, regulators and rating agencies.

The capital management process, which is centrally supervised by the Capital and Balance Sheet Committee, includes periodic reviews of both the demand for and supply of capital across the Group. Available capital is allocated across competing demands, guided by the policies outlined above, and to ensure regulatory compliance. Quarterly updates are provided to the Board of Directors.

2.2 Capital structure and adequacy

The following table sets forth details on the capital resources and capital adequacy ratios for the Group as at 31 December 2009. MAS Notice 637 sets out the current requirements relating to the minimum capital adequacy ratios for a bank incorporated in Singapore and the methodology for calculating these ratios. The Group's Tier 1 and total capital adequacy ratios as at 31 December 2009 were 13.1% and 16.7% respectively, which are above the MAS minimum requirements of 6.0% and 10.0%.

The constituents of total eligible capital are set out in MAS Notice 637 Part VI. These include shareholders' funds after regulatory-related adjustments, minority interests, and eligible capital instruments issued by the Group. Refer to Notes 35 and 38 to the Financial Statements for the terms of these capital instruments.

In $ millions	2009
Tier 1 capital	
Share capital	8,435
Disclosed reserves	16,802
Paid-up non-cumulative preference shares	1,100
Minority interests	408
Innovative Tier 1 instruments	2,618
Less: Deductions from Tier 1 capital	
Goodwill and deferred tax assets	5,970
Other deductions (50%)	128
Eligible Tier 1 capital	23,265
Tier 2 capital subject to limits	6,491
Less: Deductions from Tier 2 capital	
Other deductions (50%)	128
Total eligible capital	29,628
Risk-Weighted Assets (RWA)	
Credit	137,389
Market	28,669
Operational	11,164
Total RWA	177,222
Tier 1 Capital Adequacy Ratio (%)	13.1
Total Capital Adequacy Ratio (%)	16.7

In $ millions	RWA 2009
Credit risk:	
Internal ratings-based approach (IRBA)	
Retail exposures	
Residential mortgage exposures	3,121
Qualifying revolving retail exposures	1,821
Other retail exposures	1,360
Wholesale exposures	
Sovereign exposures	3,005
Bank exposures	11,627
Corporate exposures	52,671
Corporate small business exposures	2,424
Specialised lending exposures	20,508
Equity exposures	5,087
Securitisation exposures	57
Total IRBA RWA	101,681
Adjusted IRBA RWA post scaling factor of 1.06	107,782
Standardised approach (SA)	
Residential mortgage exposures	674
Regulatory retail exposures	765
Corporate exposures	16,240
Private equity and venture capital (PE/VC) investment exposures	155
Other exposures	
Real estate, premises, equipment and other fixed assets	1,532
Exposures to individuals	5,979
Others	4,262
Total SA RWA	29,607
Total RWA for credit risk	137,389
Market risk:	
Standardised approach (SA)	
Interest rate risk	21,616
Equity position risk	251
Foreign exchange risk	6,800
Commodity risk	2
Total RWA for market risk	28,669
Operational risk standardised approach	11,164
Total RWA	177,222

3 CREDIT RISK - GENERAL DISCLOSURES

3.1 Credit risk management

Credit risk is the risk of loss resulting from the failure of borrowers or counterparties to meet their debt or contractual obligations. Credit exposure can arise from financial activities including lending, sales, trading, derivatives, payment transactions and securities settlements.

The Group Credit Risk Committee serves as an executive forum for discussion on credit trends and all aspects of credit risk management, including the identification, measurement, monitoring, mitigation and control processes.

The Group Credit Risk Committee sets and ensures adherence to the credit limits and policies at the country, sector and business levels. An enterprise-wide Core Credit Risk Policy sets forth the principles by which the Group conducts its credit risk management activities. The Policy ensures consistency in credit risk underwriting across the Group, and provides guidance in the formulation of business-specific credit policies.

Consumer credit risks are generally managed on a portfolio basis. Each account is assigned to a risk pool, taking into consideration factors such as borrower characteristics and collateral type. On the other hand, wholesale credit risks are analysed individually and approved by experienced credit officers who consider a number of factors related to the borrower's financial condition in the identification and assessment of credit risk. Exposures are monitored on a regular basis so that deteriorating exposures are systematically identified and appropriate remedial actions can be taken.

Credit control functions ensure that credit risks are being taken and maintained in compliance with group-wide credit policies and guidelines. These functions ensure proper activation of approved limits, appropriate endorsement of excesses and policy exceptions, and also monitor compliance with credit standards and/or credit covenants established by management and/or regulators.

An independent credit risk review team conducts regular reviews of credit exposures and judgmental credit risk management processes. It also conducts independent validation of internal credit risk rating processes on an annual basis. These reviews provide senior management with objective and timely assessments of the effectiveness of credit risk management practices and ensure group-wide policies, internal rating models and guidelines are being adopted consistently across different business units including relevant subsidiaries.

Stress testing of credit risk has assumed increasing importance in the discipline of credit risk management. DBS uses credit risk stress testing approaches to assess the vulnerability of the portfolio to "exceptional but plausible" adverse credit risk events.

3.2 Country risk

The principles and approach in the management of cross-border risk are set out in the Group's Country Risk Management Framework. The Framework includes an internal country (and sovereign) risk rating system where the assessments are made independent of business decisions. Benchmark country limits are set to alert the Group when exposures rise to levels that may imply concentration risk. Day-to-day operational country limits, called working limits, are also imposed to manage the shape and growth of the cross-border exposures as they build up. A rigorous scanning process is established, with the objective of adjusting country exposures according to risks perceived at the global, regional and country level. There are close consultations with the businesses and credit management in right sizing cross-border exposures to take into account not only risks and opportunities, but also the strategic intent of the Group.

3.3 Summary of credit exposures[(a)]

The following table summarises the Group's credit exposures:

In $ millions	2009 Exposures
Advanced IRBA	
Retail exposures	
Residential mortgage exposures	35,019
Qualifying revolving retail exposures	3,885
Other retail exposures	3,073
Foundation IRBA	
Wholesale exposures	
Sovereign exposures	44,672
Bank exposures	47,373
Corporate exposures	77,019
Corporate small business exposures	2,723
Specialised lending exposures	18,625
IRBA for equity exposures	2,700
IRBA for securitisation exposures	312
Total IRBA	235,401
SA	
Residential mortgage exposures	1,832
Regulatory retail exposures	1,012
Corporate exposures	16,926
PE/VC investment exposures	78
Other exposures	
Real estate, premises, equipment and other fixed assets	1,532
Exposures to individuals	5,954
Others	6,718
Total SA	34,052
Total	**269,453**

(a) *Amounts represent exposures after credit risk mitigation and where applicable include on-balance sheet amounts and credit equivalent amounts of off-balance sheet items determined in accordance with MAS Notice 637*

Refer to Notes 46 and 48 to the Financial Statements for an analysis of maximum exposures to credit risk by geographic location, industry and residual contractual maturity distribution.

4 CREDIT RISK ASSESSED USING INTERNAL RATINGS-BASED APPROACH

4.1 Scope of application

The Group adopts various rating systems for the different asset classes under IRBA. There is a robust governance process for the development and approval of a credit risk model. Credit risk models developed are validated by an independent risk unit in the Group to ensure they are fit for purpose. The models are placed through a rigorous review process prior to endorsement by the Group Credit Risk Committee and have to be approved by the Board Risk Management Committee before use.

To ensure the adequacy and robustness of these rating systems on an ongoing basis, Risk Management Group – Credit Portfolio Analytics conducts monthly performance monitoring on these rating systems and reports the results to the Group Credit Risk Committee. This process will highlight any material deterioration in the credit systems for management attention. In addition, an independent risk unit, Risk Management Group – Model Validation, conducts formal validation annually for each of the rating systems. The validation processes are also subject to an independent review by Group Audit.

The internal credit risk ratings produced by credit rating models are used to calculate the IRBA capital requirements. In addition, the ratings from the credit models are used as the basis to support the underwriting of credit, monitor the performance of the portfolios and determine business strategies.

The Group applies the supervisory Loss Given Default (LGD) estimate provided by MAS for its Foundation IRBA portfolios. These supervisory LGD estimates are used in the computation of risk weights and regulatory capital calculations for the portfolios. For its Advanced IRBA portfolios, the LGD is estimated using internal models, and used in capital calculations and risk-return assessments.

Exposure or Exposure-at-Default (EAD) is the sum of the on-balance sheet amount and/or credit equivalent of the off-balance sheet item (multiplied by a credit conversion factor) determined in accordance with MAS Notice 637.

4.2 Retail exposures

Retail portfolios under the Advanced IRBA are categorised into asset classes, namely Residential Mortgages, Qualifying Revolving Retail Exposures and Other Retail Exposures, which includes vehicle loans extended to individuals.

Within each asset class, exposures are managed on a portfolio basis. Each account is assigned to a risk pool, taking into consideration factors such as borrower characteristics and

collateral type. Loss estimates are based on historical default and realised losses within a defined period. The definition of default is applied at the level of a particular facility, rather than at the level of the obligor. Business-specific credit risk policies and procedures including underwriting criteria, scoring models, approving authorities, frequency of asset quality and business strategy reviews, as well as systems, processes and techniques to monitor portfolio performance against benchmarks are in place. Credit Risk models for secured loans are used to update the risk level of each loan on a monthly basis, reflecting the broad usage of risk models in portfolio quality reviews in accordance with Basel II principles.

The following tables summarise the Group's retail credit exposures measured using IRBA as at 31 December 2009:

(A) Residential mortgage exposures

Expected Loss (EL) % range	Exposures[(a)] (In $ millions)	Exposure-weighted average risk weight[(b)] (%)
Up to 0.10%	30,505	6
> 0.10% to 0.50%	4,133	24
> 0.50%	381	70
Total	**35,019**	**9**

(a) Includes undrawn commitments set out in table (D) below
(b) Percentages disclosed are before the application of IRBA scaling factor

(B) Qualifying revolving retail exposures

EL % range	Exposures[(a)] (In $ millions)	Exposure-weighted average risk weight[(b)] (%)
Up to 5%	3,599	28
> 5%	286	285
Total	**3,885**	**47**

(a) Includes undrawn commitments set out in table (D) below
(b) Percentages disclosed are before the application of IRBA scaling factor

(C) Other retail exposures

EL % range	Exposures (In $ millions)	Exposure-weighted average risk weight[(a)] (%)
Up to 0.30%	1,223	19
> 0.30%	1,850	61
Total	**3,073**	**44**

(a) Percentages disclosed are before the application of IRBA scaling factor

(D) Undrawn commitment for retail exposures

In $ millions	Notional amount	Credit equivalent amount[(a)]
Qualifying revolving retail exposures	7,998	2,893
Residential mortgage exposures	4,923	4,923
Total	**12,921**	**7,816**

(a) Credit equivalent amount represents notional amounts multiplied by the applicable credit conversion factors

4.3 Wholesale exposures

Wholesale exposures comprise sovereign, bank, corporate, corporate small business, specialised lending and securitisation exposures. These exposures are assessed under the Foundation IRBA. The risk ratings for the wholesale exposures (other than securitisation exposures) have been mapped to likely corresponding external rating equivalents. A description of the rating grades is provided in the following table to give a qualitative explanation of the risk benchmarks.

Sovereign exposures are risk rated using internal risk rating models and guidelines in line with IRBA portfolios. Country specific macro-economic risk factors, political risk factors, social risk factors and liquidity risk factors are reviewed objectively in the sovereign rating models to assess the sovereign credit risk in a disciplined and systematic approach.

Bank exposures are assessed using a bank rating model covering various credit risk factors such as capital levels and liquidity, asset quality, earnings, management and market sensitivity. The risk ratings derived are benchmarked against external credit risk ratings to ensure that the internal rating systems are well-aligned and appropriately calibrated.

Individual corporate credit are assessed using approved credit models, and reviewed and analysed by experienced credit approvers taking into consideration the relevant credit risk factors. Large corporate credits are assessed using approved models as well as reviews by designated credit approvers. Credit factors considered in the risk assessment process include the obligor's financial standing and outlook, industry and economic conditions, market position, access to capital and management strength. The Counterparty Risk Rating assigned to smaller business borrowers is primarily based on the borrower's financial position and strength, which are assessed via the use of a validated quantitative tool. This is supplemented by expert judgement of qualitative factors, such as management strength, by credit officers.

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Credit ratings under the IRBA portfolios are, at a minimum, reviewed on an annual basis unless credit conditions require more frequent assessment. The Counterparty Risk Rating process is reinforced by the Facility Risk Rating Systems which considers other exposure risk mitigants, such as collateral, third party guarantees and transfer risk.

A default is considered to have occurred with regard to a particular obligor when either or both of the two following events have taken place:

- Subjective default: Obligor is unlikely to pay its credit obligations in full, without recourse by the Group to actions such as realising security (if held).

- Technical default: Obligor is past due more than 90 days on any credit obligation to the Group.

This is consistent with the guidance provided under MAS Notice 637.

A description of the internal ratings used for the various portfolios is as follows:

DBS Group PD Grade (ACRR)	Description of Rating Grade	Internal Classification	Likely Corresponding MAS Classification	Likely Corresponding S&P Rating Equivalent
PD Grade 1	Taking into account the impact of relevant economic, social or geopolitical conditions, capacity to meet its financial commitment is exceptional	Exceptional	Passed	AAA
PD Grade 2	Taking into account the impact of the relevant economic, social or geopolitical conditions, capacity to meet its financial commitment is excellent	Excellent	Passed	AA+, AA, AA-
PD Grade 3	More susceptible to adverse economic, social, geopolitical conditions and other circumstances. Capacity to meet its financial commitment is strong	Strong	Passed	A+, A, A-
PD Grade 4A/4B	Adequate protection against adverse economic, social or geopolitical conditions or changing circumstances. More likely to lead to a weakened capacity of the obligor to meet its financial commitment	Good	Passed	BBB+/BBB
PD Grade 5	Relatively worse off than an obligor rated "4B" but exhibits adequate protection parameters	Satisfactory	Passed	BBB-
PD Grade 6A/6B	Satisfactory capacity to meet its financial commitment but capacity may become inadequate due to adverse business, financial, economic, social or geopolitical conditions and changing circumstances	Acceptable	Passed	BB+/BB
PD Grade 7A/B	Marginal capacity to meet its financial commitment but capacity may become inadequate or uncertain due to adverse business, financial, economic, social or geopolitical conditions and changing circumstances	Marginal	Passed	BB-
PD Grade 8A	Sub-marginal capacity to meet its financial commitment. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment	Sub-Marginal	Passed	B+

DBS Group PD Grade (ACRR)	Description of Rating Grade	Internal Classification	Likely Corresponding MAS Classification	Likely Corresponding S&P Rating Equivalent
PD Grade 8B/8C	Low capacity to meet its financial commitment. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment	Special Caution	Special Mention	B/B-
PD Grade 9	Vulnerable to non-payment and is dependent upon favourable business, financial, and economic conditions for the obligor to meet its financial commitment. Likely to have little capacity to meet its financial commitment under adverse conditions	Sub-Performing	Sub-Standard (Non-Defaulting)	CCC-C
PD Grade 10 and Above	An obligor rated '10' and above is in default (as defined under Basel II)	Default	Sub-Standard and Below (Defaulting)	D

The following tables summarise the Group's wholesale credit exposures using IRBA as at 31 December 2009:

(A) Sovereign exposures

PD grade	PD range (%)	Exposures (In $ millions)	Exposure-weighted average risk weights[a] (%)
PD grade 1-3	0.00 – 0.10	43,504	5
PD grade 4A-5B	0.10 – 0.47	–	–
PD grade 6A/6B	0.47 – 1.11	778	68
PD grade 7A-9	1.11 – 99.99	390	106
Total		**44,672**	**7**

(a) Percentages disclosed are before the application of IRBA scaling factor

(B) Bank exposures

PD grade	PD range (%)	Exposures (In $ millions)	Exposure-weighted average risk weights[a] (%)
PD grade 1-3	0.03[b] – 0.10	27,363	11
PD grade 4A/4B	0.10 – 0.33	12,550	33
PD grade 5	0.33 – 0.47	3,462	47
PD grade 6A/6B	0.47 – 1.11	2,964	66
PD grade 7A-9	1.11 – 99.99	939	101
PD 10	Default	95	–
Total		**47,373**	**25[c]**

(a) Percentages disclosed are before the application of IRBA scaling factor
(b) For bank exposures, the PD is the greater of the one-year PD associated with the internal borrower grade to which that exposure is assigned, or 0.03% as specified in MAS Notice 637
(c) Excludes default exposures

(C) Corporate exposures

PD grade	PD range (%)	Exposures (In $ millions)	Exposure-weighted average risk weights[a] (%)
PD grade 1-3	0.03[b] – 0.10	11,289	18
PD grade 4A/4B	0.10 – 0.33	7,563	43
PD grade 5	0.33 – 0.47	11,370	53
PD grade 6A/6B	0.47 – 1.11	20,001	70
PD grade 7A-9	1.11 – 99.99	24,518	111
PD 10	Default	2,278	–
Total		**77,019**	**70[c]**

(a) Percentages disclosed are before the application of IRBA scaling factor
(b) For corporate exposures, the PD is the greater of the one-year PD associated with the internal borrower grade to which that exposure is assigned, or 0.03% as specified in MAS Notice 637
(c) Excludes default exposures

(D) Corporate small business[(a)] exposures

PD grade	PD range (%)	Exposures (In $ millions)	Exposure-weighted average risk weights[(b)] (%)
PD grade 1-3	0.03[(c)] – 0.10	–	–
PD grade 4A/4B	0.10 – 0.33	5	31
PD grade 5	0.33 – 0.47	79	51
PD grade 6A/6B	0.47 – 1.11	655	65
PD grade 7A-9	1.11 – 99.99	1,896	103
PD 10	Default	88	–
Total		**2,723**	**92[(d)]**

(a) Corporate small business refers to corporations with reported annual sales of less than S$100 million as defined under MAS Notice 637
(b) Percentages disclosed are before the application of IRBA scaling factor
(c) For corporate small business exposures, the PD is the greater of the one-year PD associated with the internal borrower grade to which that exposure is assigned, or 0.03% as specified in MAS Notice 637
(d) Excludes default exposures

4.4 Specialised lending exposures

Specialised lending IRBA portfolios, consisting of income-producing real estate finance, project finance, object finance, hotel finance and structured trade/commodities finance, adopt the supervisory slotting criteria specified under Annex 7V of MAS Notice 637. The supervisory slotting criteria guidelines under the supervisory rating categories are used to determine the risk weights to calculate the credit risk-weighted exposures.

The following table summarises the Group's specialised lending exposures as at 31 December 2009:

2009	RWA (In $ millions)	Exposures (In $ millions)	Exposure-weighted average risk weights[(a)] (%)
Strong	2,080	3,858	54
Good	5,338	7,257	74
Satisfactory	4,286	3,727	115
Weak	8,804	3,522	250
Default	–	261	–
Total	**20,508**	**18,625**	**112[(b)]**

(a) Percentages disclosed are before the application of IRBA scaling factor
(b) Excludes default exposures

4.5 Securitisation exposures

As at 31 December 2009, the Group does not have significant investments in securitised assets. Additionally, the Group is not active in securitisation activities that are motivated by credit risk transfer or other strategic considerations.

The Group's investments in securitised assets are accounted for using the principles of Financial Reporting Standards (FRS) 39. Refer to Note 2.7 to the Financial Statements for the Group's accounting policies on financial assets.

Where securitised assets are rated by external rating agencies, the Ratings-Based Method (RBM) is used to calculate the risk weights of the exposures. The Group only accepts ratings from Standard & Poor's, Moody's and Fitch for such exposures.

The table below sets out the securitisation exposures (net of specific allowances) purchased by the Group, analysed by risk weights:

2009 In $ millions	Exposures subject to Rating-Based Method (RBM)	Exposures not subject to RBM	RWA	Deductions from Tier 1 and Tier 2 capital
Risk weights				
0% – 12%	18	–	1	–
15% – 18%	93	–	15	–
20% – 50%	131	–	30	–
60% – 650%	14	–	11	–
Deducted	48	8	–	56
Total	**304**	**8**	**57**	**56**

The table below sets out the securitisation exposures (net of specific allowances) purchased by the Group, analysed by exposure type:

2009 In $ millions	Total exposures	Exposures risk-weighted	Deductions from Tier 1 and Tier 2 capital
Exposure type			
ABS collateralised debt/loan obligations (CDO)	76	28	48
Non-ABS CDO, Mortgage-Backed Securities (MBS) and others	236	228	8
Total	**312**	**256**	**56**

4.6 Provisioning policies for past due and impaired exposures

Refer to the Notes to the Financial Statements listed in the following table for the Group's provisioning policies in relation to past due and impaired exposures.

Notes to the Financial Statements	Financial disclosures
2.8	The Group's accounting policies on the assessment of specific and general allowances on financial assets
46.3	Classified loans and past due loans by geographic and industry distribution
13, 20, 21 and 33	Movements in specific and general allowances during the year for the Group

4.7 Comparison of Expected Loss against Actual Losses

The following table sets out the actual loss incurred in 2009 compared with expected loss reported for certain IRBA asset classes at December 2008. Actual loss refers to specific impairment loss allowance and charge-offs to the Group's income statement during the financial year ended 31 December 2009.

Basel Asset Class	31 Dec 08 Expected Loss In $ millions	2009 Actual Loss In $ millions
Wholesale Exposures		
Sovereigns	7	–
Banks	56	33
Corporates (including SME & Specialised Lending)	731	739
Retail Exposures		
Residential Mortgage Loans ("RML")	21	6
Auto-loans	9	7

Expected Loss is a Basel II measure of expected future losses based on Internal Ratings-Based (IRB) models where PDs are more through-the-cycle and LGDs are on a downturn basis, floored by regulatory minimums. Actual Loss is an accounting construct which includes impairment allowances for new loans originated, other incremental impairment provisions on defaulted exposures and charge-offs during the year. The two measures of loss are therefore not directly comparable.

4.8 IRB Model performance

As estimated IRB parameters are based on a through-the-cycle methodology, it is inappropriate to assess performance based solely on 2009 experience and observations.

5 CREDIT RISK ASSESSED USING STANDARDISED APPROACH

5.1 Scope of application

The Group applies the SA for portfolios which are individually immaterial in terms of both size and risk profile and for transitioning portfolios. These portfolios include:

- IRBA-transitioning retail and wholesale exposures
- IRBA-exempt retail exposures
- IRBA-exempt wholesale exposures

The transitioning retail exposures are expected to transition to the Advanced IRBA over the next few years, subject to certification by MAS. In the meantime, the SA has been applied.

The portfolios under the SA are subject to the Group's overall governance framework and credit risk management practices. Under this framework, the Group continues to monitor the size and risk profile of these portfolios and will look to enhance risk measurement processes should these risk exposures become material.

The Group uses external ratings for credit exposures under the SA, where relevant, and the Group only accepts ratings from Standard & Poor's, Moody's and Fitch's in such cases. The Group follows the process prescribed in MAS Notice 637 to map the ratings to the relevant risk weights.

5.2 Exposures by risk weights

The following table represents the exposures under SA (excluding PE/VC investment exposures disclosed in Note 10 of the Basel II Pillar 3 Disclosures), analysed by risk weights:

In $ millions	2009 Exposures
Risk weights	
0%	2,090
20%	454
35%	1,782
50%	1,444
75%	1,001
100%	27,080
150%	123
Total	**33,974**

6 CREDIT RISK MITIGATION

Credit risk mitigation techniques are taken into account when determining credit RWA. Exposures are adjusted for eligible financial collateral or other eligible collaterals allowed under MAS Notice 637.

Recognised collaterals include both financial and physical assets. Financial collaterals consist of mainly cash deposits, debt securities and shares, while physical collaterals include land and buildings, vehicles and equipment.

Eligible credit protection is also used to abate credit losses upon default. Refer to Note 46 to the Financial Statements for the policies and procedures on credit risk mitigation techniques. The Group adopts the comprehensive approach for credit risk mitigation and the impact on PD or LGD is based on the same guidelines for Foundation IRBA portfolios.

The following table summarises the extent to which credit exposures are covered by eligible financial collateral, other eligible collateral and eligible credit protection after the application of haircuts:

2009 In $ millions	Eligible financial collateral	Other eligible collateral	Amount by which credit exposures have been reduced by eligible credit protection
Foundation IRBA			
Wholesale exposures			
Sovereign exposures	109	–	–
Bank exposures	671	–	86
Corporate exposures	2,471	3,523	2,536
Corporate small business exposures	203	1,131	150
Sub-total	3,454	4,654	2,772
SA			
Residential mortgage exposures	165	–	–
Regulatory retail exposures	158	1	1
Corporate/other exposures	2,803	62	687
Sub-total	3,126	63	688
Total	**6,580**	**4,717**	**3,460**

The above table excludes exposures where collateral has been taken into account directly in the risk weights, such as the specialised lending and residential mortgage exposures. It also excludes exposures where the collateral generally considered as eligible under Basel II may not meet the required legal/ operational standards e.g. in the case of legal enforcement uncertainty in specific jurisdictions. Certain exposures where the collateral is eligible under Foundation IRBA and not under SA have also been excluded for portfolios where the SA is applied (for example, exposures collateralised by commercial properties).

7 COUNTERPARTY CREDIT RISK-RELATED EXPOSURES

7.1 Notional principal amounts of credit derivatives

In $ millions	Notional of Credit Derivatives Protection Bought	Protection Sold
Own Credit Portfolio	33,884	31,619
Client Intermediation Activities	15,104	14,725
Total	**48,988**	**46,344**
Credit default swaps	48,863	46,344
Total return swaps	125	–
Total	**48,988**	**46,344**

Notional values of credit derivatives do not accurately reflect their economic risks. They comprise both beneficiary and guarantor (buy and sell protection) positions.

The Group generally has a mismatch between the total notional amounts of protection bought and sold as these credit derivatives are used to hedge risks from other instruments, including those from customer flows. The protection sold in credit derivatives are largely matched with the protection bought after notional amounts are adjusted either to a duration-based equivalent basis, or to reflect the level of subordination in tranched structures.

The Group actively monitors its counterparty credit risk in credit derivative contracts. More than 95% of the notional value of the Group's credit derivative positions as at 31 December 2009 are to 15 large, established names with which the Group maintains collateral agreements.

7.2 Counterparty risk management

Counterparty credit exposure is managed as loan exposures and included under the Group's overall lending limits to counterparties.

The Group actively monitors and manages its exposure to counterparties in over-the-counter derivative trades to protect its balance sheet in the event of counterparty default. Counterparty risk exposures which may be materially and adversely affected by market risk events are identified, reviewed, managed and highlighted to the appropriate risk committees. The current exposure method is used to calculate the Group's net credit exposure and regulatory capital for counterparty exposures, using the mark-to-market exposures and an appropriate add-on factor to account for potential future exposures.

The Group further manages its credit exposure by entering into master netting arrangements with counterparties where it is appropriate and feasible to do so. The credit risk associated with favourable contracts is reduced by a master netting arrangement to the extent that, upon an event of default, all amounts with the counterparty are settled on a net basis.

The Group may also enter into Credit Support Annexes with counterparties for credit risk reduction and increased competitiveness. These are governed by internal guidelines with respect to the eligibility of various collaterals and the frequency of collateral calls.

7.3 Credit equivalent amounts for counterparty exposures

In $ millions	2009
Replacement cost	15,963
Potential future exposure	14,817
Gross credit equivalent amount	30,780
Comprising:	
Interest rate contracts	9,644
Credit derivative contracts	6,117
Equity contracts	336
Foreign exchange contracts and gold	14,682
Commodities contracts	1
Gross credit equivalent amount	30,780
Less: Effect of netting arrangement	14,486
Credit equivalent amount after netting	16,294
Less: Collateral amount	
Eligible financial collateral	293
Other eligible collateral	1
Net credit equivalent amount	**16,000**

Counterparty credit exposure is mitigated by exposure netting through ISDA agreements and recognition of eligible collateral, the effects of which have been included in regulatory capital calculations where appropriate.

8 MARKET RISK

8.1 Market risk management

Market risk is managed in accordance with the Group's market risk management framework. Details on how the Group manages market risk, including quantitative data on the Group's VaR, may be found in Note 47 to the Financial Statements.

8.2 Capital treatment for market risk

As at 31 December 2009, the Group used the Standardised Approach to calculate market risk capital requirements under MAS Notice 637. Please refer to Note 2.2 of the Basel II Pillar 3 Disclosures for details on market risk capital requirements.

9 OPERATIONAL RISK

9.1 Operational risk management

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people or systems, or from external events, including legal risk, but does not include strategic or reputational risk. An Operational Risk Management Framework, approved by the Board Risk Management Committee, has been developed to ensure that operational risks within the Group are identified, monitored, managed and reported in a structured, systematic and consistent manner.

To manage and control operational risk, the Framework encompasses various tools including control self-assessment, risk event management, key risk indicator monitoring and process risk mapping. Risk events, including any significant incidents that may impact the Group's reputation, are required to be reported based on certain established thresholds. Key risk indicators with pre-defined escalation triggers are employed to facilitate risk monitoring in a forward-looking manner.

A key component of the Framework is a set of Core Operational Risk Standards which provides guidance on the baseline controls to ensure a controlled and sound operating environment. Each new product or service introduced as well as outsourcing initiatives are subject to a risk review and sign-off process where relevant risks are identified and assessed by departments independent of the risk-taking unit proposing the product or service. Variations of existing products or services and outsourcing initiatives are also subject to a similar process. Major operational risk mitigation programmes include Business Continuity Management and Global Insurance Programme. On an annual basis, the Chief Executive Officer provides an attestation to the Board on the state of business continuity management of the Group, including any residual risks.

The Group Operational Risk Committee oversees the Group's operational risk management infrastructure, including the Framework, policies, processes, information, methodologies and systems. The Group Operational Risk Committee also performs regular reviews of the operational risk profiles of the Group, and endorses and recommends corporate operational risk policies to be approved by senior management.

9.2 Capital treatment for operational risk

The Standardised Approach has been adopted to calculate the operational risk RWA as at 31 December 2009.

10 EQUITY EXPOSURES IN BANKING BOOK

10.1 Scope of application

The Group's banking book equity investments consist of:

- Investments held for yield and/or long-term capital gains;
- Strategic stakes in entities held as part of growth initiatives and/or in support of business operations.

The Group's banking book equity investments are classified and measured in accordance with FRS and are categorised as either AFS investments or Investments in Associates. Refer to Notes 2.2 and 2.7 to the Financial Statements for the Group's accounting policies. Entities in which the Group holds significant interests are disclosed in Note 52 to the Financial Statements.

10.2 Capital treatment

The Group has adopted the IRBA simple risk weight method to calculate regulatory capital for equity exposures in its banking book, except for PE/VC investments which are subject to supervisory risk weights and capital deductions as set out in MAS Notice 637.

The following table summarises the Group's equity exposures, in the banking book, including investments in Tier 1 capital instruments of financial institutions:

2009 In $ millions	Exposures subject to risk-weighting	Risk weights (%)	Deductions from Tier 1 and Tier 2 Capital
Simple risk weight method			
Equities listed on MAS recognised exchanges	625	150	25
Equities not listed on MAS recognised exchanges	2,075	200	71
Sub-total	2,700	–	96
Supervisory risk weight method			
PE/VC	78	200	#
Total	**2,778**	**–**	**96**

\# *Amount under $500,000*

Details of the Group's investments in AFS securities and Associates are set out in Notes 21 and 25 to the Financial Statements respectively.

Equity exposures under the simple risk weight method are further analysed by the following equity groupings:

2009	Exposures (in $ millions)	Exposure-weighted average risk weights[(a)] (%)
Major stake companies approved under section 32 of the Banking Act	571	195
Capital investments in financial institutions incorporated in Singapore, approved, licensed, registered or otherwise regulated by the Authority <= 2% of Eligible Total Capital	35	150
Other equity exposures	2,094	187
Total	**2,700**	**188**

(a) Percentages disclosed are before the application of IRBA scaling factor

Realised gains arising from sales and liquidations of equity exposures:

In $ millions	Realised gains
2009	214

Total unrealised gains for equity that have not been reflected in the Group's income statement, but have been included in Tier 2 Capital, amounted to $87 million.