

Incorporated in England with registered number 966425

Registered Office: 1 Aldermanbury Square, London, EC2V 7SB, England

## Overview

The Group complies with the Basel II framework which has been implemented in the UK through the Financial Services Authority's (FSA's) General Prudential Sourcebook (GENPRU) and its Prudential Sourcebook for Banks, Building Societies and Investment Firms (BIPRU). Basel II is structured around three 'pillars' which are outlined below:

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

Basel II provides three approaches of increasing sophistication to the calculation of credit risk capital; the Standardised Approach, the Foundation Internal Ratings Based Approach and the advanced Internal Ratings Based approaches (IRB). Basel II also introduces capital requirements for operational risk.

The EU Capital Requirements Directive (CRD) is the means by which Basel II has been implemented in the EU. In the case of the provisions relating to advanced approaches for credit risk and

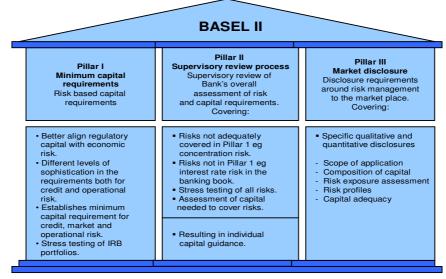
operational risk, implementation commenced from 1 January 2008. In the UK the CRD is implemented by the FSA through its GENPBU and BIPRU.

From 1 January 2008 the Group has been using the Advanced Internal Ratings Based approach for the measurement of credit risk capital. This approach builds on the Group's risk management practices and is the result of a significant investment in data warehouse and risk models.

The Group<sup>(1)</sup> uses a Value at Risk (VaR) model for the measurement of market risk capital for part of the trading book exposures where permission to use such models has been granted by the FSA. Where the Group's market risk exposures are not approved for inclusion in VaR models, the capital requirements are determined using standard rules provided by the regulator.

The Group applies the Standardised Approach for determining the capital requirements for operational risk.

During the initial years of Basel II implementation, the minimum capital requirements were restricted by reference to the Basel I framework, so they could not fall below 80 per cent of the Basel I capital requirements in 2009. This restriction was due to expire at the end of 2009, but the FSA has decided to retain this capital floor as Basel III is implemented. Estimates of the Basel III impact on the Group can be found in the capital management section on page 5.



Under Pillar 1 approach the Group has calculated the Risk Weighted Assets (RWA) and the minimum regulatory capital requirement as at 31 December 2011 presented in the table below, comprising 81 per cent credit risk, 11 per cent operational risk and 8 per cent market risk.

	31.12.	11	31.12.10		
	Regulatory capital requirement <sup>(2)</sup> \$million	Risk Weighted Assets \$million	Regulatory capital requirement <sup>(2)</sup> \$million	Risk Weighted Assets \$million	
Credit Risk	17,630	220,394	16,187	202,333	
Operational Risk	2,301	28,762	2,158	26,972	
Market Risk	1,708	21,354	1,262	15,772	
Total	21,639	270,510	19,607	245,077	

<sup>(1)</sup> The 'Group' refers to Standard Chartered PLC together with its subsidiary undertakings, see note 2 page 3.

<sup>(2)</sup> Regulatory capital requirement is calculated at eight per cent of risk weighted assets.

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<sup>(1)</sup> Standard Chartered PLC is headquartered in London where it is regulated by the UK's FSA.

<sup>(2)</sup> Within this document 'the Group' refers to Standard Chartered PLC together with its subsidiary undertakings. The Hong Kong Special Administrative Region of the People's Republic of China is referred to as Hong Kong and includes Macau; India includes Nepal; The Republic of Korea is referred to as Korea; Middle East and Other South Asia (MESA) includes, amongst others: Afghanistan, Bahrain, Bangladesh, Egypt, Jordan, Lebanon, Oman, Pakistan, Qatar, Sri Lanka, United Arab Emirates (UAE); and Other Asia Pacific includes, amongst others: Australia, Brunei, Cambodia, China, Indonesia, Japan, Laos, Malaysia, Mauritius, the Philippines, Taiwan, Thailand and Vietnam.

<sup>(3)</sup> Throughout this document, unless another currency is specified, the word 'dollar' or symbol \$ means United States dollar.

<sup>(4)</sup> Throughout this document IRB refers to internal ratings based models used. The Group does not use the Foundation IRB approach.

<sup>(5)</sup> In January 2012 the Group's subsidiary in Korea, SC First Bank Korea Ltd was rebranded to Standard Chartered Bank Korea Ltd, and will be referred to as such throughout this document.

## 1. Scope of Basel II framework

#### Pillar 1

The Group's lead supervisor, the FSA, formally approved the Group's use of the IRB approach for calculating regulatory capital in 2007 and since 1 January 2008, the Group has been using the IRB approach for the measurement of credit risk capital. The IRB models cover 79 per cent of the Group's credit RWA (2010: 78 per cent). Although the FSA's approval covers the Group's global operations, the Group also continues to work closely with other regulators and anticipates making further IRB applications to local regulators as and when permitted, and where it is considered appropriate to do so.

The Group applies a VaR model for the measurement of market risk capital in accordance with the scope of the permission to use such a model granted by the FSA. Where the Group's market risk exposures are not approved for inclusion in its VaR model, capital requirements are based on standard rules provided by the regulator which are less risk sensitive.

The Group is also required to calculate a capital charge to cover operational risk for which the Group applies the Standardised Approach.

#### Pillar 2

Pillar 2 requires banks to undertake a comprehensive assessment of their risks and to determine the appropriate amounts of capital to be held against these risks where other suitable mitigants are not available. This risk and capital assessment is commonly referred to as the Internal Capital Adequacy Assessment Process (ICAAP). The range of risks that need to be covered by the ICAAP is much broader than Pillar 1, which covers only credit risk, market risk and operational risk.

The Group has developed an ICAAP framework which closely integrates the risk and capital assessment processes, and ensures that adequate levels of capital are maintained to support the Group's current and projected demand for capital under expected and stressed conditions.

The ICAAP framework has been designed to be applied consistently across the organisation to meet the Pillar 2 requirements of local regulators. A description of the risk management framework is set out in section 3 Risk Management.

Under Pillar 2, regulators are required to undertake a review of banks' ICAAPs. This is referred to as the Supervisory Review and Evaluation Process (SREP). The SREP forms part of the FSA's

Advanced Risk Response Operating Framework (ARROW) and determines the minimum regulatory capital requirements of the Group, referred to as Individual Capital Guidance (ICG).

#### Pillar 3

Pillar 3 aims to provide a consistent and comprehensive disclosure framework that enhances comparability between banks and further promotes improvements in risk practices. The Group has implemented a Pillar 3 policy and procedure framework to address the requirements laid down for Pillar 3 disclosure. The information provided here has been reviewed and validated by senior management and is in accordance with the rules in force at the time of publication and laid out in the FSA Handbook and BIPRU chapter 11, covering both the qualitative and quantitative items. Disclosure relating to remuneration follows the requirements of FSA Policy Statement PS10/21 issued in December 2010. Further details and disclosure of risk, liquidity, capital management and remuneration are presented in the Annual Report and Accounts. In accordance with the Group's policy the full Pillar 3 disclosures will be made annually as at 31 December, and will be published on the Standard Chartered PLC website www.standardchartered.com as soon as is practical after the Group announces its annual results.

### Accounting and prudential treatment

The full Pillar 3 disclosures are made for the consolidated Standard Chartered PLC Group. Additional disclosures of the capital requirements of the Group's significant subsidiaries are shown in section 2.1 on page 11.

The accounting policy for consolidation is provided in the notes to the financial statements, published in the Annual Report and Accounts. All subsidiaries are fully consolidated and the treatment is the same for both regulatory and accounting purposes. For associates, the regulatory treatment differs from the accounting policy, which applies the equity accounting method. Investments in associates that are between 20 and 50 per cent owned are proportionally consolidated for regulatory purposes and the investment in associates that are between 10 and 20 per cent owned are deducted from capital resources. Joint ventures are proportionally consolidated for both accounting and regulatory purposes.

Section 8. Group entities on page 54, lists the entities where regulatory treatment differs from the accounting treatment. The Group's principal subsidiary undertakings are also detailed in this section.

## 2. Capital management

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

Strategic, business and capital plans are drawn up annually covering a five year horizon and are approved by the Board. The capital plan ensures that adequate levels of capital and an optimum mix of the different components of capital are maintained to support the Group's strategy.

The capital plan takes the following into account:

- current regulatory capital requirements and the Group's assessment of future standards;
- demand for capital due to business growth forecasts, loan impairment outlook and market shocks or stresses;
- forecast demand for capital to support credit ratings and as a signalling tool to the market;
- available supply of capital and capital raising options.

The Group formulates a capital plan with the help of internal models and other quantitative techniques. The models help to estimate potential future losses arising from credit, market and other risks, and using regulatory formulae the amount of capital required to support them. In addition, the models enable the Group to gain an enhanced understanding of its risk profile, e.g. by identifying potential concentrations and assessing the impact of portfolio management actions. Stress testing and scenario analysis are used to ensure that the Group's internal capital assessment considers the impact of extreme but plausible scenarios on its risk profile and capital position. They provide an insight into the potential impact of significant adverse events and how these could be mitigated.

The Group uses a capital model to assess the capital requirement for material risks, and support its internal capital adequacy assessment. Each material risk is assessed, relevant mitigants considered, and appropriate levels of capital determined. The capital modelling process is a key part of the Group's management disciplines.

A strong governance and process framework is embedded in the capital planning and assessment methodology. Overall responsibility for the effective management of risk rests with the Board. The Board Risk Committee (BRC) reviews specific risk areas and the key issues discussed at the capital management committees, namely the Capital Management Committee and the Group Asset and Liability Committee (GALCO)

At a country level, capital is monitored by the local Asset and Liability Committee (ALCO), which is responsible for managing

the country level balance sheet, capital and liquidity. Appropriate policies are in place governing the transfer of capital within the Group. These ensure that capital is remitted as appropriate, subject to complying with local regulatory requirements and statutory and contractual restrictions. There are no current material practical or legal impediments to the prompt transfer of capital resources in excess of those required for regulatory purposes or repayment of liabilities between the parent company, Standard Chartered PLC and its subsidiaries when due.

Group Treasury is responsible for the ongoing assessment of the demand for capital and the updating of the Group's capital plan.

### **Current Compliance with Capital Adequacy Regulations**

The Group's lead supervisor is the FSA. The capital that the Group is required to hold by the FSA is determined by the Group's balance sheet, off-balance sheet, counterparty and other risk exposures.

Capital in branches and subsidiaries is maintained on the basis of host regulator's requirements and the Group's assessment of capital requirements under normal and stress conditions. Suitable processes and controls are in place to monitor and manage capital adequacy and ensure compliance with local regulatory ratios in all legal entities of the Group. These processes are designed to ensure that the Group has sufficient capital available to meet local regulatory capital requirements at all times.

#### Basel III

The Basel III rules text published in December 2010 by the Basel Committee on Banking Supervision (BCBS) serves to bring together the details of global regulatory standards on bank capital adequacy and liquidity. While these give us greater clarity on the global regulatory standards and the various timelines for transition, significant uncertainty remains around the specific application and the combined impact of these proposals, in particular their effect at Group level via the implementation of changes to European Union legislation (the package of reforms commonly referred to as the Capital Requirements Directive IV ("CRD IV").

The Group estimates that the impact of adjustments to risk-weighted assets and regulatory capital as a result of Basel III will reduce the Group's future Core Tier 1 capital ratio by around 100 basis points. On a Basel III basis the Group's capital position remains strong. The actual outcome will depend on how the emerging rules are implemented, what the future shape of the Group is and the extent to which the Group's regulators give recognition to the Group's schedule of model-based calculation of risk weighted assets (RWA).

## 2.1. Capital structure

### Group's capital resources

The table below summarises the consolidated capital position of the Group.

### Movement in capital

Core Tier 1 capital increased by \$2,911 million. The movement in core Tier 1 capital is set out on page 7 below.

Non-Core Tier 1 capital decreased by \$194 million since 31 December 2010, due to increased material holdings deductions.

Tier 2 capital decreased by \$271 million since 31 December 2010, largely due to increased material holdings deductions and excess expected losses.

In light of the uncertain economic environment and evolving regulatory debate on banks' capital structures, the Group continues to believe it is appropriate to remain strongly capitalised with Tier 1 capital ratio of 13.7 per cent and total capital ratio of 17.6 per cent.

	31.12.11 \$million	31.12.10 \$million
Shareholders' equity		
Parent company shareholders' equity per balance sheet	40,714	38,212
Preference share classified as equity included in Tier 1 capital	(1,494)	(1,494)
	39,220	36,718
Non-controlling interests		
Non-controlling interest per balance sheet	661	653
Non-controlling Tier 1 capital included in other Tier 1 capital	(320)	(321)
	341	332
Regulatory adjustments		
Unrealised gains on available-for-sale debt securities	282	175
Unrealised gains on available-for-sale equity securities included in Tier 2 capital	(241)	(530)
Cash flow hedge reserve	13	(58)
Other adjustments	(46)	(46)
	8	(459)
Deductions		
Goodwill and other intangible assets	(7,061)	(6,998)
50 per cent of excess of expected losses <sup>(1)</sup>	(702)	(664)
50 per cent of tax on excess expected losses	186	185
50 per cent of securitisation positions	(106)	(132)
Other regulatory adjustments	(53)	(60)
	(7,736)	(7,669)
Core Tier 1 capital	31,833	28,922
Other Tier 1 capital		
Preference shares included within shareholder's equity	1,494	1,494
Preference shares included within 'subordinated debt and other borrowings'	1,194	1,192
Innovative Tier 1 securities (excluding non-controlling Tier 1 capital)	2,506	2,507
Non-controlling Tier 1 capital	320	321
	5,514	5,514
Deductions		
50 per cent of tax on excess expected losses	186	185
50 per cent of material holdings	(521)	(326)
	(335)	(141)
Total Tier 1 capital	37,012	34,295

	31.12.11 \$million	31.12.10 \$million
Tier 2 capital		
Qualifying subordinated liabilities; <sup>(2)</sup>		
Subordinated liabilities as per balance sheet	16,717	15,939
Preference shares eligible for Tier 1 capital	(1,194)	(1,192)
Innovative Tier 1 securities eligible for Tier 1 capital	(2,506)	(2,507)
Adjustments relating to fair value hedging and non-eligible securities	(1,669)	(1,144)
	11,348	11,096
Regulatory adjustments	244	500
Reserves arising on revaluation of property	241	530
Portfolio impairment provision	239	266
	480	796
Tier 2 deductions		
50 per cent of excess of expected losses <sup>(1)</sup>	(702)	(664)
50 per cent of material holdings	(521)	(326)
50 per cent of securitisation positions	(106)	(132)
	(1,329)	(1,122)
Total Tier 2 capital	10,499	10,770
Deductions from Tier 1 and Tier 2 capital	(4)	(3)
Total capital base	47,507	45,062
Movement in Core Tier 1 capital	31.12.11 \$million	31.12.10 <sup>(</sup> \$million
Opening Core Tier 1 capital:	28,922	19,102
Ordinary shares issued in the year end and share premium	64	719
Rights issue	-	5,137
Profit for the year	4,849	4,332
Dividends, net of scrip	(1,152)	(745)
Changes in goodwill and other intangible assets	(63)	(378)
Foreign currency translation differences	(982)	773
Other	195	(18)
Closing Core Tier 1 capital	31,833	28,922
Risk weighted assets		
Credit risk	220,394	202,333
Operational risk	28,762	26,972
Market risk	21,354	15,772
Total risk weighted assets	270,510	245,077
Capital ratios		
Core Tier 1 capital	11.8%	11.8%
Tier 1 capital	13.7%	14.0%
Total capital ratio	17.6%	18.4%
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 $<sup>^{\</sup>mbox{\scriptsize (1)}}$  Excess of expected losses in respect of IRB portfolios are shown gross.

<sup>&</sup>lt;sup>(2)</sup> Consists of perpetual subordinated debt \$1,489 million (2010: \$1,494 million) and other eligible subordinated debt \$9,859 million (2010: \$9,602 million).

### Capital instruments issued by the Group

All capital instruments included in the capital base have been issued in accordance with the rules and guidance in GENPRU. For regulatory purposes, capital is categorised into two main categories, or tiers, depending on the degree of permanency and loss absorbency exhibited. These are Tier 1 and Tier 2 capital which are described below where relevant.

### Tier 1 capital

Tier 1 capital is comprised of permanent share capital, profit and loss account and other eligible reserves, equity non-controlling interests, perpetual non-cumulative preference shares and innovative Tier 1 instruments, after the deduction of certain regulatory adjustments.

Permanent share capital is an item of capital issued by an organisation to an investor, which is fully paid-up and where the proceeds of issue are immediately and fully available. There is no obligation to pay a coupon or dividend to the shareholder. The

capital is available for unrestricted and immediate use to cover risks and losses, and enable the organisation to continue trading. It can only be redeemed on the winding-up of the organisation.

Profit and loss account and other eligible reserves are accumulated resources included in shareholders' funds in an organisation's balance sheet, with certain regulatory adjustments applied.

Equity non-controlling interests represent the equity stakes held by non-controlling shareholders in the Group's undertakings.

Perpetual non-cumulative preference shares are permanent holdings, for which there is no obligation to pay a dividend, and the dividend payment is not cumulative. Such shares do not generally carry voting rights, but rank higher than ordinary shares for dividend payments and in the event of a winding-up or other return of capital. The following table sets out details of the preference shares in issue and their primary terms:

Description	Terms			31.12.11 \$million	31.12.10 \$million				
Preference Shares (Hybrid Tier 1 capital with no incentive to redeem) <sup>(1)</sup>									
£100 million 8.250 per cent Preference shares	Perpetual	Non- cumulative	Irredeemable <sup>(3)</sup>	143	142				
£100 million 7.375 per cent Preference shares	Perpetual	Non- cumulative	Irredeemable <sup>(3)</sup>	137	136				
\$750 million 7.014 per cent Preference shares	Perpetual	Non- cumulative	Redeemable (callable Jul 2037, re-fix to 3 month LIBOR plus 1.46 per cent) (2)	747	747				
\$750 million 6.409 per cent Preference shares	Perpetual	Non- cumulative	Redeemable (callable Jan 2017, re-fix to 3 month LIBOR plus 1.51 per cent) (2)	747	747				
\$925 million 8.125 per cent Preference shares	Perpetual	Non- cumulative	Redeemable (callable Nov 2013, re-fixing to 5 year Treasuries plus 6.78 per cent in 2019 (3)	914	914				
				2,688	2,686				

<sup>(1)</sup> Treated as Tier 1 capital under GENPRU TP 8A.

Innovative Tier 1 securities are deeply subordinated debt instruments which despite their legal form, have loss absorbency qualities and can therefore be included as Tier 1 capital. The following table sets out the Innovative Tier 1 securities in issue and their primary terms:

Description	Terms			31.12.11 \$million	31.12.10 \$million					
Innovative Tier 1 securities	Innovative Tier 1 securities (Hybrid Tier 1 capital with incentive to redeem)(1)									
£600 million 8.103 per cent Preferred securities	Perpetual	Cumulative	Redeemable (callable May 2016 and annually thereafter, step-up from May 2016 to 5 year UK gilts plus 4.275 per cent) (2)	1,017	1,019					
\$300 million 7.267 per cent Hybrid tier 1 securities	Non- perpetual	Non- Cumulative	Redeemable (callable Mar 2014, maturity Mar 2034, extendable for 30 year periods, 7.267 per cent to Mar 2014, step up 3 month LIBOR plus 4.29 per cent) (2)	320	320					
\$1,500 million 9.5 per cent Preferred Securities	Perpetual	Cumulative	Redeemable, (callable Dec 2014, step up in Dec 2014 to 5 year Treasuries plus 6.78 per cent) (2)	1,489	1,489					
				2,826	2,828					

<sup>(1)</sup> Treated as Tier 1 capital under GENPRU TP 8A

<sup>(2)</sup> These preference shares are treated as equity from an accounting perspective, and included in 'other Tier 1 Capital' on page 6.

<sup>(3)</sup> These preference shares are treated as subordinated debt from an accounting perspective, and included in 'subordinated debt and other borrowings' on page 6.

<sup>&</sup>lt;sup>(2)</sup> These securities are treated as non-controlling interests for accounting purposes and are included in 'other Tier 1 Capital' on page 6.

## Tier 2 capital

Tier 2 capital is comprised of Upper Tier 2 and Lower Tier 2 capital. The main components are subordinated debt instruments. Upper Tier 2 capital includes perpetual subordinated debt instruments, revaluation reserves and general provisions. The following table sets out the Upper Tier 2 instruments in issue and their primary terms:

Description	Terms		31.12.11 \$million	31.12.10 \$million
Primary capital floa	ting rate			
\$400 million	Perpetual	Either 6 month LIBOR plus 0.125 per cent or Residual Period LIBOR plus 0.0625 per cent <sup>(1)</sup>	57	57
£150 million	Perpetual	3 month LIBOR plus 0.1875 per cent <sup>(1)</sup>	234	234
\$300 million	Perpetual	6 month LIBOR plus 0.25 per cent <sup>(1)</sup>	81	81
\$400 million	Perpetual	6 month LIBOR plus 0.275 per cent <sup>(1)</sup>	83	83
\$200 million	Perpetual	6 month LIBOR plus 0.15 per cent <sup>(1)</sup>	51	51
Subordinated notes	S			
£675 million	Perpetual	Callable Jul 2020, 5.375 per cent coupon with step up to 3 month LIBOR plus 1.89 per cent	602	605
£200 million	Perpetual	Callable Jan 2022, 7.75 per cent coupon with step-up to 5 year benchmark gilt plus 3.8 per cent	381	383
			1,489	1,494

<sup>(1)</sup> These securities are past their first call date and are callable at the option of the issuer on any future interest payment date, in accordance with their terms and conditions.

## Lower Tier 2 capital

Lower Tier 2 capital consists of dated capital instruments i.e. of a fixed term, which are normally of medium to long-term maturity with an original maturity of at least five years. For regulatory purposes, it is a requirement that these instruments be amortised on a straight-line basis in their final five years of maturity. The following table sets out the Lower Tier 2 instruments in issue net of amortisation and their primary terms:

Description	Terms		31.12.11 \$million	31.12.10 \$million
£300 million	6 per cent subordinated notes	Maturing Jan 2018, callable 2013, step up 3 month LIBOR plus 0.79 per cent	465	467
£700 million	7.75 per cent subordinated notes	Maturing Apr 2018	1,085	1,088
€750 million	3.625 per cent subordinated notes	Maturing Feb 2017, callable Feb 2012, step up 3 month EURIBOR plus 0.87 per cent	974	1,004
€675 million	Floating rate subordinated notes	Maturing Mar 2018, callable Mar 2013, coupon 3 month EURIBOR plus 0.30 per cent, step up 3 month LIBOR plus 0.80 per cent	876	904
€1,100 million	5.875 per cent subordinated notes	Maturing Sep 2017	1,426	1,473
\$700 million	8 per cent subordinated notes	Maturing Mar 2031	426	426
\$100 million	Floating rate subordinated notes	Maturing Mar 2018, callable Mar 2013, coupon 3 month LIBOR plus 0.30 per cent, step-up 3 month LIBOR plus 0.80 per cent	100	100
\$1,000 million	6.4 per cent subordinated notes	Maturing Sep 2017	996	996
\$500 million	Floating rate subordinated notes	Maturing Jun 2016, coupon 3 month LIBOR 0.30 per cent, callable Jun 2011, step up 3 month LIBOR plus 0.80 per cent (1)	-	500
\$300 million	Floating rate subordinated notes	Maturing Apr 2017, callable Apr 2012, coupon 3 month LIBOR plus 0.25 per cent, step-up 3 month LIBOR plus 0.75 per cent	300	298
S22 million	9.75 per cent subordinated notes	Maturing Jun 2021, callable Jun 2016, step up 6 month LIBOR plus 6.6035 per cent	25	25
3750 million	5.875 per cent subordinated notes	Maturing Jun 2020	745	743
BWP 75 million	Floating rate subordinated notes	Maturing Nov 2017, callable Nov 2012, 91 day BOBC plus 0.40 per cent, step up 91 day BOBC plus 0.90 per cent	10	12
BWP 50 million	Floating rate subordinated notes	Maturing Dec 2015, callable Mar 2011, coupon 91 day BOBC plus 0.70 per cent, step-up 91 day BOBC plus 1.20 per cent <sup>(2)</sup>	-	8
DR 1,750 Billion	11 per cent subordinated notes	Maturing Jun 2018	82	-
JPY 10,000 million	3.35 per cent subordinated notes	Maturing Apr 2023, callable Apr 2018, step-up 4.35 per cent.	130	123
(RW 90 billion	6.05 per cent subordinated notes	Maturing Mar 2018	78	89
KRW 260 billion	6.08 per cent subordinated notes	Maturing Apr 2018, callable Apr 2013	225	242
KRW 300 billion	7.05 per cent subordinated notes	Maturing Apr 2019, callable Apr 2014, step up to 7.55 per cent	260	264
KRW 270 billion	4.67 per cent subordinated notes	Maturing Dec 2021, callable Dec 2016	234	-
MYR 500 million	4.28 per cent subordinated notes	Maturing Nov 2017, callable Nov 2012, step-up 3 month KLIBOR plus 0.69 per cent	155	162
SGD 450 million	5.25 per cent subordinated notes	Maturing Apr 2023, callable Apr 2018, step-up 6 month SGDSOR plus 3.1025 per cent	346	350
SGD 750 million	4.15 per cent subordinated notes	Maturing Oct 2021, callable Oct 2016, re-fix to 5 year SOR plus 2.975 per cent	591	-
TWD 10 billion	2.9 per cent subordinated note	Maturing Oct 2019, callable Oct 2014, step up 3.4 per cent	330	328
			9,859	9,602

<sup>(1)</sup> On June 2011, Standard Chartered Bank exercised its right to redeem these securities in full.

<sup>(2)</sup> On June 2011, Standard Chartered Bank Botswana Limited exercised its right to call these securities in full.

### Regulatory deductions

The FSA requires deductions and prudential filters to be applied in calculating capital for regulatory purposes. The following items are deducted from Core Tier 1 capital:

- Goodwill, which is the accounting adjustment recognised in the preparation of a group's consolidated accounts arising on an acquisition; and
- Intangible assets such as software licences.

The following are deducted from Core Tier 1 and Tier 2 capital in equal proportions:

- The excess of expected loss over related provisions;
- The retained portion of the securitisation asset pool which has been assigned a risk weighting of 1250 per cent; and
- Material holdings (being investments in excess of 10 per cent of the share capital of a credit or financial institution) are deducted from Tier 1 and Tier 2 capital in equal proportions.

Lending of a capital nature to a connected party or guarantees provided to such a party is deducted from total Tier 1 and Tier 2 capital.

### Capital resources of significant subsidiaries

For local capital adequacy purposes, a range of approaches are applied in accordance with the regulatory requirements in force in each jurisdiction. Wherever possible, the approaches adopted at the Group level are applied locally.

The capital resources of the Group's more significant subsidiaries are presented below. These subsidiaries are Standard Chartered Bank (a UK incorporated banking entity including overseas branches, and certain subsidiaries which are permitted to be consolidated for capital adequacy purposes), Standard Chartered Bank (Hong Kong) Limited and Standard Chartered Bank Korea Limited. The capital resources of these subsidiaries are calculated in accordance with the regulatory requirements applicable in the countries in which they are incorporated, and presented to align with the Group format.

The capital resources of the Group's significant subsidiaries are set out in the following table:

		31.12.11	J		31.12.10		
	Standard Chartered Bank \$million	Standard Chartered Bank (HK) Ltd \$million	Standard Chartered Bank Korea Ltd \$million	Standard Chartered Bank \$million	Standard Chartered Bank (HK) Ltd \$million	Standard Chartered Bank Korea Ltd \$million	
Core Tier 1 capital	фітііііОгі	фітіпіют	фітішогі	фітішогі	фітіпіюн	фітіппот	
Called up ordinary share capital	12,054	12	1,139	11,687	12	1,153	
Eligible reserves (2)(3)	10,088	4,281	2,316	9,077	4,707	2,341	
Non-controlling interests	-	7	_,0.0	-	9	_,0	
50 per cent of excess of expected losses	(408)	-	-	(428)	(42)	_	
50 per cent of securitisation positions	(90)	_	-	(108)	(3)	_	
Goodwill and other intangible assets	(1,615)	(186)	(39)	(1,429)	(183)	(24)	
Other regulatory adjustments	(7)	(37)	(100)	(6)	(51)	-	
Total Core Tier 1 capital	20,022	4,077	3,316	18,793	4,449	3,470	
Innovative Tier 1 securities	2,507	-	300	2,508	-	300	
Preference shares	2,415	_	-	2,414	-	-	
50 per cent tax on excess expected losses <sup>(3)</sup>	113	-	-	133	-	-	
50 per cent of material holdings	(7,113)	(381)	-	(6,231)	(292)	-	
Total Tier 1 capital	17,944	3,696	3,616	17,617	4,157	3,770	
Tier 2 capital							
Eligible revaluation reserves	85	-	6	214	-	29	
Regulatory Reserve	-	42	100	-	17	88	
Portfolio impairment provision (applicable to Standardised portfolios)	66	20	78	98	24	147	
Excess provision over EL	_	174	-	-	-	-	
50 per cent of excess of expected losses	(408)	_	-	(428)	(42)	-	
Qualifying subordinated liabilities:							
Perpetual subordinated debt	3,289	-	258	3,293	-	-	
Other eligible subordinated debt	8,123	1,686	798	7,430	1,036	599	
Amortisation of qualifying subordinated liabilities	-	-	-	-	-	(22)	
50 per cent of material holdings	(7,113)	(381)	-	(6,231)	(292)	-	
50 per cent of securitisation positions	(90)	-	-	(108)	(3)	-	
Other regulatory deductions	-	(21)	-	-	(10)	-	
Total Tier 2 capital	3,952	1,520	1,240	4,268	730	841	
Deductions from Tier 1 and Tier 2 capital <sup>(1)</sup>	(2,268)	(26)	-	(2,162)	(26)	(150)	
Total capital base	19,628	5,190	4,856	19,723	4,861	4,461	

<sup>(1)</sup> Total deductions from Tier 1 and Tier 2 for Standard Chartered Bank primarily relate to lending of a capital nature.

<sup>(2)</sup> SCB Hong Kong restated 2010 eligible reserves due to change in accounting policy for investment properties (previously \$4,698 million).

<sup>(3)</sup> The tax benefit on excess expected losses is included 50 per cent in 'Eligible reserves' and '50 per cent in tax on excess expected losses'.

## 3. Risk management

The management of risk lies at the heart of the Group's business. One of the main risks incurred arises from extending credit to customers through trading and lending operations. Beyond credit risk, the Group is also exposed to a range of other risk types such as country cross-border, market, liquidity, operational, pension, reputational and other risks that are inherent to the Group's strategy, product range and geographical coverage.

#### Risk management framework

Effective risk management is fundamental to being able to generate profits consistently and sustainably and is thus a central part of the financial and operational management of the Group.

Through the risk management framework the Group manages enterprise-wide risks, with the objective of maximising risk-adjusted returns while remaining within the Group's risk appetite.

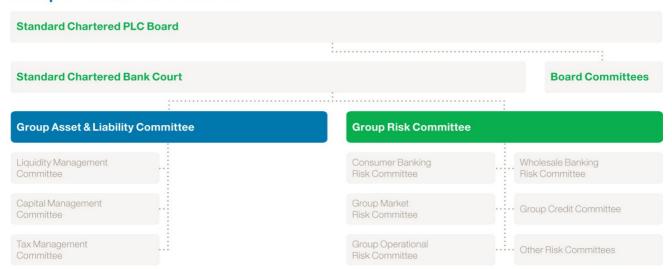
As part of this framework, the Group uses a set of principles that describe the risk management culture it wishes to sustain:

- Balancing risk and return: risk is taken in support of the requirements of stakeholders, in line with the Group's strategy and within the Group's risk appetite;
- Responsibility: it is the responsibility of all employees to ensure that risk-taking is disciplined and focused. The Group takes account of its social responsibilities, and its commitment to customers in taking risk to produce a return;
- Accountability: risk is taken only within agreed authorities and where there is appropriate infrastructure and resource. All risktaking must be transparent, controlled and reported;
- Anticipation: the Group seeks to anticipate future risks and ensure awareness of all known risks;
- Competitive advantage: the Group seeks to achieve competitive advantage through efficient and effective risk management and control.

The following diagrams illustrate the Group board committee structure and the Group risk committee structure respectively:

#### **Group board committee structure** Standard Chartered PLC Board Primary Committees **Enabling Committees** .... Governance Audit Risk Brand and Values Remuneration Nomination Oversight and Oversight and Oversight and Oversight of overall Oversight and Oversight and review of financial, review of review of brand review of board board effectiveness review of audit and internal fundamental positioning, treating remuneration, and executive and governance prudential risks customers fairly, share plans and reputational risk, including credit, market, capital ethics and and liquidity sustainability issues

## Group risk committee structure



### Risk governance

Ultimate responsibility for setting the Group's risk appetite and for the effective management of risk rests with the Board.

Acting within an authority delegated by the Board, the Board Risk Committee (BRC), whose membership is comprised exclusively of non-executive directors of the Group, has responsibility for oversight and review of prudential risks including but not limited to credit, market, capital, liquidity, operational and reputational. It reviews the Group's overall risk appetite and makes recommendations thereon to the Board. Its responsibilities also include reviewing the appropriateness and effectiveness of the Group's risk management systems and controls, considering the implications of material regulatory change proposals, ensuring effective due diligence on material acquisitions and disposals, and monitoring the activities of the Group Risk Committee (GRC) and the Group Asset and Liability Committee (GALCO).

The BRC receives regular reports on risk management, including the Group's portfolio trends, policies and standards, stress testing, liquidity and capital adequacy, and is authorised to investigate or seek any information relating to an activity within its term of reference.

The Board Brand and Values Committee (BVC) oversees the brand, values and good reputation of the Group. It ensures that the management of reputational risk is consistent with the risk appetite approved by the Board and with the creation of long term shareholder value.

The role of the Board Audit Committee is to have oversight and review of financial, audit and internal control issues.

Overall accountability for risk management is held by the Standard Chartered Bank Court (the Court) which comprises the group executive directors and other senior executives of Standard Chartered Bank.

The Court is the highest executive body of the Group and its terms of reference are approved by the Board of Standard Chartered PLC. The Court delegates authority for the management of risk to the GRC and the GALCO.

The GRC is responsible for the management of all risks other than those delegated by the Court to the GALCO. The GRC is responsible for the establishment of, and compliance with, policies relating to credit risk, country cross-border risk, market risk, operational risk, pension risk and reputational risk. The GRC also defines the overall risk management framework.

The GALCO is responsible for the management of capital and the establishment of, and compliance with, policies relating to balance sheet management, including management of liquidity, capital adequacy and structural foreign exchange and interest rate risk.

Members of the Court are also members of both the GRC and the GALCO. The GRC is chaired by the Group Chief Risk Officer (GCRO). The GALCO is chaired by the Group Finance Director.

Risk limits and risk exposure approval authority frameworks are set by the GRC in respect of credit risk, country cross-border risk, market risk and operational risk. The GALCO sets the approval authority framework in respect of liquidity risk. Risk approval authorities may be exercised by risk committees or authorised individuals.

The committee governance structure ensures that risk-taking authority and risk management policies are cascaded down from the Board through to the appropriate functional, divisional and country-level committees. Information regarding material risk issues and compliance with policies and standards is

communicated to the country, business, functional and Group-level committees.

Roles and responsibilities for risk management are defined under a Three Lines of Defence model. Each line of defence describes a specific set of responsibilities for risk management and control.

The first line of defence is that all employees are required to ensure the effective management of risks within the scope of their direct organisational responsibilities. Business, function and geographic governance heads are accountable for risk management in their respective businesses and functions, and for countries where they have governance responsibilities.

The second line of defence comprises the Risk Control Owners, supported by their respective control functions. Risk Control Owners are responsible for ensuring that the risks within the scope of their responsibilities remain within appetite. The scope of a Risk Control Owner's responsibilities is defined by a given Risk Type and the risk management processes that relate to that Risk Type. These responsibilities cut across the Group and are not constrained by functional, business and geographic boundaries. The major risk types are described individually in the following sections.

The third line of defence is the independent assurance provided by the Group Internal Audit (GIA) function. Its role is defined and overseen by the Board Audit Committee.

The findings from the GIA's audits are reported to all relevant management and governance bodies – accountable line managers, relevant oversight function or committee and committees of the Board.

GIA provides independent assurance of the effectiveness of management's control of its own business activities (the first line) and of the processes maintained by the Risk Control Functions (the second line). As a result, GIA provides assurance that the overall system of control effectiveness is working as required within the risk management framework.

### The Risk function

The GCRO directly manages a Risk function that is separate from the origination, trading and sales functions of the businesses. The GCRO also chairs the GRC and is a member of the Group Management Committee.

The role of the Risk function is:

- to maintain the risk management framework, ensuring it remains appropriate to the Group's activities, is effectively communicated and implemented across the Group and for administering related governance and reporting processes;
- to uphold the overall integrity of the Group's risk/return decisions, and in particular for ensuring that risks are properly assessed, that risk/return decisions are made transparently on the basis of this proper assessment, and are controlled in accordance with the Group's standards;
- to exercise direct Risk Control Ownership for Credit, Market, Country Cross-Border, Short-Term Liquidity and Operational Risk types.

The Group appoints Chief Risk Officers (CROs) for its two business divisions and principal countries and regions. CROs at all levels of the organisation, fulfil the same role as the GCRO, in respect of the business, geography or legal entity for which they are responsible. The roles of CROs are aligned at each level.

The Risk function is independent of the origination, trading and sales functions to ensure that the necessary balance in risk/return decisions is not compromised by short-term pressures to

generate revenues. This is particularly important given that revenues are recognised from the point of sale while losses arising from risk positions typically manifest themselves over time.

In addition, the Risk function is a centre of excellence that provides specialist capabilities of relevance to risk management processes in the wider organisation.

## Risk policy framework



### Risk appetite

The Group manages its risks to build a sustainable franchise in the interests of all stakeholders.

Risk appetite is an expression of the amount of risk the Group is willing to take in pursuit of its strategic objectives, reflecting the Group's capacity to sustain losses and continue to meet its obligations arising from a range of different stress trading conditions.

Risk appetite is defined in terms of both volatility of earnings and the maintenance of minimum regulatory capital requirements under stress scenarios. The Group also defines risk appetite with respect to liquidity risk and reputational risk.

The Group's quantitative risk profile is assessed through a bottomup analytical approach covering all of its major businesses, countries and products.

The Group's risk appetite statement is approved by the Board and forms the basis for establishing the risk parameters within

which the businesses must operate, including policies, concentration limits and business mix.

The GRC and GALCO are responsible for ensuring that the Group's risk profile is managed in compliance with the risk appetite set by the Board.

### Stress testing

Stress testing and scenario analysis are used to assess the financial and management capability of the Group to continue operating effectively under extreme but plausible trading conditions. Such conditions may arise from economic, legal, political, environmental and social factors.

The Group's stress testing framework is designed to:

- contribute to the setting and monitoring of risk appetite;
- identify key risks to the Group's strategy, financial position, and reputation:
- examine the nature and dynamics of the risk profile and assess the impact of stresses on the Group's profitability and business plans:
- ensure effective governance, processes and systems are in place to co-ordinate and integrate stress testing;
- inform senior management;
- ensure adherence to regulatory requirements.

The Group's stress testing activity focuses on the potential impact of macroeconomic, geopolitical and physical events on relevant geographies, customer segments and asset classes.

A Stress Testing Committee, led by the Risk function with participation from the businesses, Group Finance, Global Research and Group Treasury, aims to ensure that the earnings and capital implications of specific stress scenarios are fully understood. The Stress Testing Committee generates and considers pertinent and plausible scenarios that have the potential to adversely affect the Group's business and considers the impact across different risk types and countries.

Stress tests are also performed at country and business level.

## 4. Credit risk

Credit risk is the potential for loss due to the failure of a counterparty to meet its obligations to pay the Group in accordance with agreed terms. Credit exposures may arise from both the banking and trading books.

Credit risk is managed through a framework that 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 approvers in the Risk function. All credit exposure limits are approved within a defined credit approval authority framework.

#### Credit policies

Group-wide credit policies and standards are considered and approved by the GRC, which also oversees the delegation of credit approval and loan impairment provisioning authorities.

Policies and procedures specific to each business are established by authorised risk committees within Wholesale and Consumer Banking. These are consistent with Group-wide credit policies, but are more detailed and adapted to reflect the different risk environments and portfolio characteristics.

### Credit rating and measurement

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

Since 1 January 2008, Standard Chartered has used the advanced Internal Ratings Based (IRB) approach under the Basel II regulatory framework to calculate credit risk capital.

For IRB portfolios, a standard alphanumeric credit risk grade (CG) system is used in both Wholesale and Consumer Banking. The grading is based on the Group's internal estimate of probability of default over a one-year horizon, with customers or portfolios assessed against a range of quantitative and qualitative factors. The numeric grades run from 1 to 14 and some of the grades are further sub-classified A, B or C. Lower credit grades are indicative of a lower likelihood of default. 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.

The Group'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 the Group's internal credit grades. Nonetheless, as the factors used to grade a borrower may be similar, a borrower rated poorly by an external rating agency is typically assigned a worse internal credit grade.

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

IRB risk measurement models are approved by the responsible risk committee, on the recommendation of the Group 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 that develop and maintain the models. Models undergo a detailed annual review. 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 the Group Credit Committee (GCC). The GCC derives its authority from the GRC.

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

### Credit risk mitigation

The Group's credit risk mitigation policy, processes and amounts of collateral held are discussed in section 4.5 Credit risk mitigation on page 25.

### Concentration risk

Credit concentration risk is managed within concentration caps set by counterparty or groups of connected counterparties, by country and industry in Wholesale Banking and tracked by product and country 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 the Group are reviewed and approved at least annually by the GCC.

### Credit monitoring

The Group regularly monitors credit exposures, portfolio performance, and external trends that may impact risk management outcomes.

Internal risk management reports are presented to risk committees, containing information on key environmental, political and economic trends across major portfolios and countries; portfolio delinquency and loan impairment performance; and IRB portfolio metrics including credit grade migration.

The Wholesale Banking Credit Issues Forum (WBCIF) is a sub-committee of the Wholesale Banking Risk Committee, which in turn is a sub-committee of and derives its authority from the GRC. The WBCIF meets regularly to assess the impact of external events and trends on the Wholesale Banking credit risk portfolio and to define and implement the response in terms of appropriate changes to portfolio shape, portfolio and underwriting standards, risk policy and procedures.

Clients or portfolios are placed on early alert when they display signs of actual or potential weakness. For example, where there is a decline in the client's position within the industry, financial deterioration, a breach of covenants, non-performance of an obligation within the stipulated period, or there are concerns relating to ownership or management.

Such accounts and portfolios are subjected to a dedicated process overseen by Early Alert Committees in countries. Client account plans and credit grades are re-evaluated. In addition, 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 Group Special Assets Management (GSAM), the Group's specialist recovery unit.

In Consumer Banking, portfolio delinquency trends are monitored continuously at a detailed level. Individual customer behaviour is also tracked and is considered for lending decisions. Accounts that are past due are subject to a collections process, managed independently by the Risk function. Charged-off accounts are managed by specialist recovery teams. In some countries, aspects of collections and recovery functions are outsourced.

The Small and Medium-sized Enterprise (SME) business is managed within Consumer Banking in two distinct customer subsegments: small businesses and medium enterprises, differentiated by the annual turnover of the counterparty. The credit processes are further refined based on exposure at risk. Larger exposures are managed through the Discretionary Lending approach, in line with Wholesale Banking procedures, and smaller exposures are managed through Programmed Lending, in line with Consumer Banking procedures. Discretionary Lending and Private Banking past due accounts are managed by GSAM.

### Traded products

Credit risk from traded products is managed within the overall credit risk appetite for corporates and financial institutions.

The credit risk exposure from traded products is derived from the positive mark-to-market value of the underlying instruments, and an additional component to cater for potential market movements.

For derivative contracts, the Group limits exposure to credit losses in the event of default by entering into master netting

agreements with certain counterparties. As required by IAS 32, exposures are not presented net in the financial statements.

In addition, the Group enters into Credit Support Annexes (CSAs) with counterparties where collateral is deemed a necessary or desirable mitigant to the exposure.

#### Securities

Within Wholesale Banking, the Underwriting Committee approves the portfolio limits and parameters by business unit for the underwriting and purchase of all pre-defined securities assets to be held for sale. The Underwriting Committee is established under the authority of the GRC. Wholesale Banking operates within set limits, which include country, single issuer, holding period and credit grade limits.

Day to day credit risk management activities for traded securities are carried out by Traded Credit Risk Management whose activities include oversight and approval within the levels delegated by the Underwriting Committee. Issuer credit risk, including settlement and pre-settlement risk, is controlled by Wholesale Banking Risk, while price risk is controlled by Group Market Risk.

The Underwriting Committee approves individual proposals to underwrite new security issues for our clients. Where an underwritten security is held for a period longer than the target sell-down period, the final decision on whether to sell the position rests with the Risk function.

## 4.1. Internal Ratings Based Approach to credit risk

The Group uses the IRB approach to manage credit risk for the majority of its portfolios. This allows the Group to use its own internal estimates of Probability of Default (PD), Loss Given Default (LGD), Exposure at Default (EAD) and Credit Conversion Factor (CCF) to determine an asset risk weighting.

PD is the likelihood that an obligor will default on an obligation. All banks utilising an IRB approach must assign internal PD to 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 regulatory specified formulae dependent on the Group's estimates of PD, LGD, EAD and CCF. The development, use and governance of models under the IRB approach is covered in more detail in section 4.6 Internal Ratings Based models.

Regulation BIPRU 4.2.30 allows IRB banks 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 Group's credit RWA.

The permanent exemptions for Consumer Banking include:

- Africa all retail portfolios;
- · Private Banking; and
- Portfolios where the size or nature makes application of the advanced approach inefficient.

For Wholesale Banking, permanent exemptions apply to:

- · Private Equity;
- Development Organisations;
- Jordan and Lebanon;
- · Purchased receivables.

The Group also applies the Standardised Approach to portfolios that are currently being transitioned to the IRB approach in accordance with the Group's 'IRB Roll Out Plan'. Direct comparability between current and prior year data for certain portfolios may not be possible during this transition period.

The Group has developed and is waiting approval from the FSA on a number of models.

## 4.2. Standardised Approach to credit risk

The Standardised Approach is applied to portfolios that are classified as permanently exempt from the IRB approach, and those portfolios that are currently under transition to the IRB approach in accordance with the Group's 'IRB Roll Out Plan'.

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 the FSA 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 FSA approved rating agencies, known as External Credit Assessment Institutions (ECAI); namely Moody's, Standard & Poor's and Fitch. The Group 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 the FSA.

The Group currently does not use assessments provided by export credit agencies for the purpose of evaluating RWA in the Standardised Approach.

## 4.3. Regulatory capital requirements

The table below presents the minimum regulatory credit risk capital requirements as at 31 December 2011, calculated as 8 per cent of RWA based on the approaches described above in sections 4.1 and 4.2.

	Regulatory Capital Requirement		
Credit Risk Capital	31.12.11 \$million	31.12.10 \$million	
IRB Exposure Class	фітішот	фітініОт	
Central governments or central banks	917	722	
Institutions	1,301	1,329	
Corporates	7,919	7,198	
Retail, of which	2,001	1,934	
Secured by real estate collateral	620	628	
Qualifying revolving retail	555	563	
Retail SME	39	37	
Other retail	787	706	
Securitisation positions	248	223	
Non-credit obligation assets	26	16	
Total IRB	12,412	11,422	
Standardised Exposure Class			
Central governments or central banks	87	47	
Institutions	56	46	
Corporates	985	853	
Retail	906	759	
Secured on real estate property	724	714	
Past due items	107	65	
Items belonging to regulatory high risk categories	40	71	
Other items (2)	1,100	1,104	
Total Standardised	4,005	3,659	
Counterparty credit risk capital component (credit risk in the trading book)	1,213	1,106	
Concentration risk capital component (1)	-	-	
Total	17,630	16,187	

<sup>(1)</sup> The concentration risk capital component is the additional capital requirement to be held where exposure to a connected counterparty exceeds 25 per cent of capital resources.

 $<sup>^{(2)}</sup>$  Other items' includes cash equity holdings, fixed assets, prepayments and accrued income.

The minimum credit risk capital requirements of the Group's significant subsidiaries are calculated in accordance with the regulatory requirements applicable in the countries in which they are incorporated and presented to align with the Group format.

		31.12.11		31.12.10		
	Standard Chartered Bank	Standard Chartered Bank (HK) Ltd	Standard Chartered Bank Korea Ltd	Standard Chartered Bank	Standard Chartered Bank (HK) Ltd	Standard Chartered Bank Korea Ltd
Credit Risk Capital	\$million	\$million	\$million	\$million	\$million	\$million
IRB Exposure Class						
Central governments or central banks	378	21	-	294	12	-
Institutions	1,258	253	-	1,330	218	-
Corporates	4,958	1,357	538	4,498	1,126	648
Retail, of which	618	475	680	593	336	659
Secured by real estate collateral	305	102	157	261	90	150
Qualifying revolving retail	179	129	45	210	171	47
Retail SME	-	13	-	-	-	-
Other retail	134	231	478	122	75	462
Securitisation positions	154	8	13	133	11	15
Non-credit obligation assets	17	-	-	-	-	-
Other <sup>(1)</sup>	-	216	-	-	87	-
Total IRB	7,383	2,330	1,231	6,848	1,790	1,322
Standardised Exposure Class						
Central governments or central banks	22	-	3	16	-	6
Institutions	43	3	56	37	17	44
Corporates	422	126	402	357	167	403
Retail	408	10	15	302	54	11
Secured on real estate property	128	19	-	116	67	-
Past due items	27	46	-	18	38	-
Items belonging to regulatory high risk categories	4	-	138	5	-	136
Securitisation positions	-	-	-	-	-	-
Other items	433	22	206	382	28	227
Total Standardised	1,487	226	820	1,233	371	827
Counterparty credit risk capital component (credit risk in the trading book)	1,064	2	175	974	1	169
Concentration risk capital component (2)	-	-	-	-	-	-
Total	9,934	2,558	2,226	9,055	2,162	2,318

 $<sup>^{(1)}</sup>$  The IRB exposure class 'Other' is an asset class under the Hong Kong Monetary Authority regulations.

<sup>(2)</sup> The concentration risk capital component is the additional capital requirement to be held where exposure to a connected counterparty exceeds 25 per cent of capital resources.

## 4.4. Exposure values

The following tables detail the Group'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 outstandings and accrued interest and fees, plus a proportion of the undrawn component of the facility. The amount of the undrawn facility included is dependent on the product type, and for IRB exposure classes this amount is modelled internally.

### Geographical analysis

The table below provides EAD analysed by the booking location of the exposure. The Group's exposure to credit risk is concentrated in Hong Kong, Korea, Singapore, Other Asia Pacific and Americas, UK & Europe. In Wholesale Banking the increase is driven by Trade Finance and balances with central governments and central banks due to higher clearing balances and increased requirement to meet regulatory liquidity ratios.

The Group sets limits on the exposure to any counterparty and credit risk is spread over a variety of different personal customers and commercial clients. Single borrower concentration risk has been mitigated by active distribution of assets to banks and institutional investors, some of which is achieved through credit-default swaps and synthetic risk transfer structures. The portfolio remains well diversified across geographies.

	31.12.11									
		Asia Pa	acific							
EAD	Hong Kong \$million	Singapore \$million	Korea \$million	Other Asia Pacific \$million	India \$million	Middle East & Other S Asia \$million	Africa \$million	Americas UK & Europe \$million	Period End Total \$million	Average Total \$million
IRB Exposure Class										
Central governments or										
central banks	12,398	8,776	10,996	27,013	5,380	6,040	2,730	35,866	109,199	98,792
Institutions	28,774	16,223	7,525	17,031	4,069	5,849	1,124	57,409	138,004	128,572
Corporates	24,929	21,733	10,652	24,765	9,860	20,161	5,486	53,853	171,439	162,307
Retail	28,741	17,367	32,621	8,417	2,196	898	-	-	90,240	90,147
Securitisation positions	562	252	-	-	-	-	-	20,013	20,827	19,693
Non-credit obligation assets	111	-	-	-	-	-	-	210	321	264
Total IRB	95,515	64,351	61,794	77,226	21,505	32,948	9,340	167,351	530,030	499,775
Standardised Exposure Cla	ss									
Central governments or										
central banks	-	-	-	1,198	-	427	-	-	1,625	1,324
Multilateral development										
banks	46	1,725	-	50	11	82	43	3,441	5,398	4,146
Institutions	145	835	83	451	6	23	15	472	2,030	1,784
Corporates	3,299	6,071	888	4,597	740	841	307	2,711	19,454	17,913
Retail	1,448	3,493	309	6,020	1,087	2,711	1,150	337	16,555	15,251
Secured on real estate	1,976	1,495	85	12,648	898	857	60	682	18,701	18,258
Past due items	331	98	99	413	105	132	23	2	1,203	1,016
Items belong to regulatory										
high risk category	95	-	61	123	48	-	5	10	342	477
Other items	3,299	989	2,229	2,667	760	1,658	916	3,819	16,337	16,065
Total Standardised	10,639	14,706	3,754	28,167	3,655	6,731	2,519	11,474	81,645	76,234
Total	106,154	79,057	65,548	105,393	25,160	39,679	11,859	178,825	611,675	576,009

_					31.12.1	10				
_		Asia Pac	ific							
EAD	Hong Kong \$million	Singapore \$million	Korea \$million	Other Asia Pacific \$million	India \$million	Middle East & Other S Asia \$million	Africa \$million	Americas UK & Europe \$million	Period End Total \$million	Average Total \$million
IRB Exposure Class										
Central governments or										
central banks	12,245	7,691	8,416	21,856	6,207	6,407	3,777	21,786	88,385	81,674
Institutions	25,364	15,114	8,398	16,055	3,319	4,986	1,032	44,871	119,139	118,906
Corporates	20,858	16,718	11,452	23,520	9,813	20,457	4,665	45,692	153,175	140,850
Retail	27,262	15,858	35,213	8,288	2,620	814	-	-	90,055	81,919
Securitisation positions	869	50	-	-	-	9	-	17,631	18,559	17,661
Non-credit obligation assets	-	-	3	-	-	-	-	203	206	168
Total IRB	86,598	55,431	63,482	69,719	21,959	32,673	9,474	130,183	469,519	441,178
Standardised Exposure Class	ss									
Central governments or central banks	_	-	-	652	-	371	-	-	1,023	922
Multilateral development										
banks	775	749	-	77	18	60	7	1,208	2,894	1,996
Institutions	169	995	-	80	38	-	1	256	1,539	1,626
Corporates	2,350	4,840	606	4,081	1,064	674	281	2,476	16,372	14,389
Retail	1,287	2,143	47	5,636	870	2,651	984	328	13,946	13,176
Secured on real estate	1,660	1,422	3	12,589	938	729	65	410	17,816	14,738
Past due items	104	27	18	432	105	118	22	3	829	960
Items belong to regulatory										
high risk category	490	5	-	51	44	-	2	19	611	380
Other items	2,882	874	3,123	2,176	974	1,761	645	3,358	15,793	14,617
Total Standardised	9,717	11,055	3,797	25,774	4,051	6,364	2,007	8,058	70,823	62,804
Total	96,315	66,486	67,279	95,493	26,010	39,037	11,481	138,241	540,342	503,982

## Industry analysis

The mortgage portfolio, makes up 67 per cent of the Consumer Banking IRB asset classes, compared to 69 per cent in 2010. The Wholesale Banking portfolio is well diversified across industry, with no significant concentration within the broad industry classifications of Manufacturing; Financing, insurance and business services; Commerce; or Transport, storage and communication.

_						31.12.11					
EAD	Loans to Individuals - Mortgage \$million	Loans to Individuals - Other \$million	SME \$million	Commerce \$million	Manu- facturing \$million	Commercial Real Estate \$million	Government \$million	Financing Insurance & Business Services \$million	Transport & Storage & Communi- cation \$million	Other \$million	Total \$million
IRB Exposure Class											
Central governments or central banks	-	-	-	221	30	485	103,434	4,007	-	1,022	109,199
Institutions	-	28	-	291	8	69	369	137,189	50	-	138,004
Corporates	2	43	5,563	35,145	43,455	10,930	805	16,294	17,264	41,938	171,439
Retail	60,675	28,386	1,179	-	-	-	-	-	-	-	90,240
Securitisation positions	-	-	-	17	-	-	-	1,622	150	19,038	20,827
Non-credit obligation assets	-	-	-	-	56	-	-	-	262	3	321
Total IRB	60,677	28,457	6,742	35,674	43,549	11,484	104,608	159,112	17,726	62,001	530,030
Standardised Exposure Class	ss										
Central governments or central banks	-	-	-	-	-	-	7	-	-	1,618	1,625
Multilateral development banks	-	-	-	50	-	-	774	1,369	-	3,205	5,398
Institutions	-	-	-	-	-	-	-	1,438	-	592	2,030
Corporates	-	-	13,711	1,208	1,744	-	5	154	350	2,282	19,454
Retail	-	10,489	6,066	-	-	-	-	-	-	-	16,555
Secured on real estate	15,386	-	3,228	-	-	-	-	-	-	87	18,701
Past due items	162	382	326	84	30	2	27	61	-	129	1,203
Items belonging to regulatory high risk category	_	_	78	28	110	92	-	26	_	8	342
Other items	1	121	_	133	171	_	-	576	80	15,255	16,337
Total Standardised	15,549	10,992	23,409	1,503	2,055	94	813	3,624	430	23,176	81,645
Total	76,226	39,449	30,151	37,177	45,604	11,578	105,421	162,736	18,156	85,177	611,675

						31.12.10					
EAD	Loans to Individuals - Mortgage \$million	Loans to Individuals - Other \$million	SME \$million	Commerce \$million	Manu- facturing \$million	Commercial Real Estate \$million	Government \$million	Financing Insurance & Business Services \$million	Transport & Storage & Communi- cation \$million	Other \$million	Total \$million
IRB Exposure Class											
Central governments or central banks	-	-	-	481	-	-	85,555	1,844	-	505	88,385
Institutions	-	28	-	361	-	136	668	117,496	26	424	119,139
Corporates	3	95	5,563	30,981	40,030	8,605	1,465	14,416	15,829	36,188	153,175
Retail	62,564	26,377	1,114	-	-	-	-	-	-	-	90,055
Securitisation positions	-	-	-	39	-	-	-	2,135	-	16,385	18,559
Non-credit obligation assets	-	-	-		-	-	-	-	203	3	206
Total IRB	62,567	26,500	6,677	31,862	40,030	8,741	87,688	135,891	16,058	53,505	469,519
Standardised Exposure Clas	ss										
Central governments or central banks	-	-	-	-	-	-	10	-	-	1,013	1,023
Multilateral development banks	_	_	-	-	_	-	425	161	-	2,308	2,894
Institutions	-	-	-	-	-	-	113	1,055	-	371	1,539
Corporates	-	-	11,591	848	1,575	-	-	234	130	1,994	16,372
Retail	-	8,445	5,501	-	-	-	-	-	-	-	13,946
Secured on real estate	14,916	-	2,865	-	-	-	-	-	-	35	17,816
Past due items	174	299	193	19	26	3	39	35	-	41	829
Items belonging to regulatory high risk category	-	-	157	111	90	-	-	35	-	218	611
Other items	1	154	-	461	582	43	-	245	70	14,237	15,793
Total Standardised	15,091	8,898	20,307	1,439	2,273	46	587	1,765	200	20,217	70,823
Total	77,658	35,398	26,984	33,301	42,303	8,787	88,275	137,656	16,258	73,722	540,342

## Maturity analysis

Approximately 59 per cent (2010: 60 per cent) of the Group's exposure is short term, having residual maturity of one year or less. The Wholesale Banking portfolio is predominantly short term with 70 per cent (2010: 72 per cent) of EAD having a residual maturity of one year or less. In Consumer Banking the longer maturity profile of the IRB portfolio is driven by the mortgage book which makes up 67 per cent (2010: 69 per cent) of the portfolio and is traditionally longer term in nature and well secured. Whilst the Other and SME loans in Consumer Banking have short contractual maturities, typically they may be renewed and repaid over longer terms in the normal course of business.

31.12.11 One to

Over

One year

The following tables show the maturity of EAD by each principal category of exposure class.

EAD	or less \$million	five years \$million	five years \$million	Total \$million
IRB Exposure Class				
Central governments or central banks	91,360	15,167	2,672	109,199
Institutions	107,500	26,552	3,952	138,004
Corporates	105,427	51,795	14,217	171,439
Retail	10,851	20,989	58,400	90,240
Securitisation positions	1,386	18,105	1,336	20,827
Non-credit obligation assets	66	99	156	321
Total IRB	316,590	132,707	80,733	530,030
Standardised Exposure Class				<u> </u>
Central governments or central banks	1,625	_	-	1,625
Multilateral development banks	856	4,277	265	5,398
Institutions	2,028	2	-	2,030
Corporates	16,037	834	2,583	19,454
Retail	6,354	6,049	4,152	16,555
Secured on real estate	1,963	718	16,020	18,701
Past due items	511	334	358	1,203
Items belonging to regulatory high risk category	113	229	-	342
Other items	16,278	37	22	16,337
Total Standardised	45,765	12,480	23,400	81,645
Total	362,355	145,187	104,133	611,675
			·	·
		31.12.1		
	One year or less	One to five years	Over five years	Total
	\$million	\$million	\$million	\$million
IRB Exposure Class				
Central governments or central banks	73,235	13,123	2,027	88,385
Institutions	92,381	23,912	2,846	119,139
Corporates	102,964	40,741	9,470	153,175
Retail	10,305	19,362	60,388	90,055
Securitisation positions	6,158	10,821	1,580	18,559
Non-credit obligation assets	30	45	131	206
Total IRB	285,073	108,004	76,442	469,519
Standardised Exposure Class				
Central governments or central banks	1,023	-	-	1,023
Multilateral development banks	249	2,505	140	2,894
Institutions	1,441	96	2	1,539
Corporates	13,394	691	2,287	16,372
Retail	6,017	4,034	3,895	13,946
Secured on real estate	1,581	493	15,742	17,816
Past due items	347	118	364	829
Items belonging to regulatory high risk category	318	290	3	611
Other items	15,298	40	455	15,793
Total Standardised	39,668	8,267	22,888	70,823
Total	324,741	116,271	99,330	540,342

## 4.5. 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. Where appropriate, credit derivatives are used to reduce credit risks in the portfolio. Due to their potential impact on income volatility, such derivatives are used in a controlled manner with reference to their expected volatility. Risk mitigation policies determine the eligibility of collateral types.

#### Collateral

Collateral is held to mitigate credit risk exposures and risk mitigation policies determine the eligibility of collateral types. Collateral types that are eligible for risk mitigation include: cash; residential, commercial and industrial property; fixed assets such as motor vehicles, aircraft, plant and machinery; marketable securities; commodities; bank guarantees and letters of credit. The Group also enters into collateralised reverse repurchase agreements.

For certain types of lending – typically mortgages, asset financing – the right to take charge over physical assets is significant in terms of determining appropriate pricing and recoverability in the event of default.

Collateral is reported in accordance with the Group's 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. Where appropriate, collateral values are adjusted to reflect, current market conditions, the probability of recovery and the period of time to realise the collateral in the event of possession. The collateral values reported are also adjusted for the effects of over-collateralisation.

### Loans and advances

The requirement for collateral is not a substitute for the ability to pay, which is the primary consideration for any lending decisions. In determining the financial effect of collateral held against loans neither past due or impaired, the Group has assessed the significance of the collateral held in relation to the type of lending.

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 export credit agencies. Credit derivatives, due to their potential impact on income volatility are used in a controlled manner with reference to their expected volatility.

The Group uses bilateral and multilateral netting to reduce presettlement and settlement counterparty risk. Pre-settlement risk exposures are normally netted using the bilateral netting documentation in legally approved jurisdictions. Settlement exposures are generally netted using Delivery versus Payments or Payment versus Payments systems.

#### Wholesale Banking

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.

For further information regarding credit risk mitigation in the trading book see section 4.9 Counterparty credit risk in the trading book on page 39.

## Consumer Banking

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 an active secondary resale market must exist 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.

Regular valuation of collateral is required in accordance with the 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 as the loss payee under the insurance policy. Detailed procedures over collateral management must be in place for each business at the country level.

The following table discloses the amount of exposure after the effect of CRM (excluding the impact of guarantees and credit derivatives) in the IRB portfolio. 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.

	31.12.1	31.12.11		
		Of which: EAD covered by	54D (1 11	Of which: EAD covered by
	EAD after the effect of CRM \$million	guarantees/credit derivatives \$million	EAD after the effect of CRM \$million	guarantees/credit derivatives <sup>(1)</sup> \$million
IRB Exposure Class				
Central governments or central banks	103,340	79	82,811	68
Institutions	114,571	2,662	99,108	1,833
Corporates	141,016	9,200	126,667	9,361
Retail	32,352	-	30,269	-
Securitisation positions	19,758	1,286	17,646	2,234
Non-credit obligation assets	321	-	206	-
Total IRB	411,358	13,227	356,707	13,496

For the purposes of this table 'EAD after the effect of CRM' is shown against the exposure class of the original counterparty rather than the guarantor.

The table below identifies the effect of credit risk mitigation on EAD for the standardised portfolio. Eligible financial collateral consists primarily of cash, debt securities, equities and gold. All collateral shown below meets FSA Handbook BIPRU Chapter 5 eligibility rules.

The main type of collateral for the Group's standardised portfolio is real estate property which accounts for 69 per cent (2010: 70 per cent) of all credit risk mitigants.

		31.12.11					
	EAD before the effect of CRM \$million	EAD covered by eligible financial collateral \$million	EAD covered by other eligible collateral \$million	EAD after the effect of CRM \$million	EAD covered by guarantees/credit derivatives \$million		
Standardised Exposure Class							
Central governments or central banks	1,625	-	-	1,625	7		
Multilateral development banks	5,398	-	-	5,398	11		
Institutions	2,030	-	-	2,030	1,928		
Corporates	19,454	6,526	-	12,928	4		
Retail	16,555	1,415	-	15,140	-		
Secured on real estate property	18,701	67	18,135	499	-		
Past due items	1,203	16	155	1,032	-		
Items belonging to regulatory high risk categories	342	9	1	332	-		
Other items	16,337	49	-	16,288	-		
Total Standardised	81,645	8,082	18,291	55,272	1,950		

For the purposes of this table 'EAD is shown against the exposure class of the guarantor.

	31.12.10						
	EAD before the effect of CRM \$million	EAD covered by eligible financial collateral \$million	EAD covered by other eligible collateral \$million	EAD after the effect of CRM \$million	EAD covered by guarantees/credit derivatives \$million		
Standardised Exposure Class							
Central governments or central banks	1,023	-	-	1,023	11		
Multilateral development banks	2,894	-	-	2,894	5		
Institutions	1,539	-	-	1,539	1,300		
Corporates	16,372	5,345	-	11,027	1		
Retail	13,946	1,264	-	12,682	-		
Secured on real estate property	17,816	73	15,862	1,881	-		
Past due items	829	13	166	650	-		
Items belonging to regulatory high risk categories	611	17	-	594	-		
Other items	15,793	40	-	15,753	-		
Total Standardised	70,823	6,752	16,028	48,043	1,317		

<sup>(1) 2010</sup> Securitisation figure has been restated as \$2,234 million, from \$1,342 million.

## 4.6. Internal Ratings Based models

### Model governance

The IRB models used by the Group calculate a conservative Probability of Default (PD), Loss Given Default (LGD) and Exposure at Default (EAD), as borne out by the model performance data contained in this section. The product of this is a conservative view of Regulatory Expected Loss, which is considered necessary for the prudent calculation of regulatory capital.

Models are developed by analytics teams within the Consumer Banking and Wholesale Banking risk functions. 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 the Group Chief Credit Officer, thereby maintaining independence from the model build processes. Model validation findings are presented to the Group Model Assessment Committee (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 BRC 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.

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.

## PD model development

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

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

The general approaches fall into three categories:

Default History Based ('Good-Bad') – where a sufficient number of defaults are available, the 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. The majority of the Group's consumer and corporate exposures are rated under such an approach.

Shadow Rating Approach - if it is determined that the Group's internal data does not provide a sufficient default history (for example, so called 'low default portfolios'), then the Group

develops models which are designed to be comprobable to the ranking of PD ratings assigned by established external credit assessment institutions, to avail of those agencies having access to large databases of defaults on a variety of credit obligations.

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

#### LGD model development

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

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

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

### 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 the Group's experience (and supplemented by external data), EAD models assess changes to limits and the likely drawdown 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 credit conversion factor (CCF).

The 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 Group Model Risk Policy IRB Models specifies that models are subject to regular monitoring and review with the underlying Group Model Standards for IRB Credit Risk Models specifying 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

### Wholesale Banking model results

Wholesale Banking models have been developed from a data-set which runs to over a decade, including default and recovery experience from the 1997 Asian financial crisis. This data has been used to calibrate estimates of PD to the Group's long run experience. Actual ('point in time') default rates will typically differ from this 'through the cycle' experience as economies move above or below cyclical norms.

IRB PD estimates are computed as of 1 January 2011 and are compared with default observations through 31 December 2011. The historical loss experience for institutions, central governments or central banks is minimal, so the predicted PD for institutions reflects a particularly low number of defaults. For central governments or central banks, there were no defaults during 2011. The actual default rate among corporates and institutions exposures in 2011 remained below IRB model predictions as at beginning of 2011 reflecting the positive out-turn of corporate performance in the Group's footprint and continual government support for institutions.

The calculation of realised versus predicted LGD is affected by the fact that it takes a number of years for the workout process to complete. As such, an observed recovery value cannot be assigned to the majority of the 2011 defaults, making it less meaningful to compare realised versus predicted outcomes in a manner similar to that for PD and EAD.

The predicted LGD is therefore based on the model outputs as of 1 January 2011, similar to the predicted PD calculations. For the realised LGD, instead of restricting its computation to 2011 defaults only, the long run realisations from 1995 to 2011,

including downturn periods have been used. The predicted LGD estimate takes into account the impact of enhanced risk mitigation techniques (e.g. netting) and proactive Early Alert risk management actions. These have been more prevalent in recent years and are, therefore, not reflected in the long run average LGD to the same extent as they are in the predicted LGD.

The increased level of netting agreements achieved with institutions over recent years results in the predicted LGD for institutions being materially lower than the long run realised value. This is further compounded by the low number of defaults historically observed in institutions, making the long run average LGD susceptible to the impact of a few outliers.

The same effect, albeit to a lesser degree, applies to corporates, where realised LGD largely reflects losses during the Asian financial crisis and may not reflect recent trends and mitigation techniques put in place in recent years.

EAD takes into consideration potential drawdown of commitment as a counterparty defaults, by estimating the credit conversion factor (CCF, also known as k-factor) of undrawn commitments. The comparison of realised versus predicted EAD is summarised, for assets which defaulted in 2011, the ratio of the EAD one year before default, to the outstanding at the point of default. The ratio for both corporates and institutions are larger than one, indicating that the predicted EAD is higher than actual outstanding at default. This is due to the guidance by the regulator to assign conservatism to the CCF/k-factor of certain exposure types, as well as the impact of management action leading to a reduction in actual exposure prior to default.

	Predicted PD %	Observed PD %	Predicted LGD %	Realised LGD <sup>(1)</sup> %	Predicted/Realised EAD
IRB Exposure Class					
Central governments or central banks	0.14	0.00	27.74	N/A	N/A
Institutions	0.26	0.05	19.22	44.24	1.2
Corporates	1.63	0.46	41.75	51.26	1.1

<sup>(1)</sup> While in previous reports this figure was the long-run LGD realisation up to one year prior to the reporting year, it now incorporates recovery data up to the year of reporting. The equivalent restated figures for 2010 would have been N/A for central governments or central banks, 44.24 per cent for institutions and 49.44 per cent for corporates.

## Consumer Banking model results

The Group has a strong monitoring and governance process in place to identify and mitigate model performance issues. While the majority of Consumer Banking's IRB models are conservative and over predict for PD, LGD and EAD, any under predicting portfolios are subject to a model adjustment and have a remediation plan

attached. Due to the wide spread of countries and products within Consumer Banking, an aggregation of the predicted and observed values for the IRB models at asset class level are deemed not meaningful, while disclosures at country and product level are considered to be proprietary information.

# Regulatory expected loss versus Individual Impairment charges

The table below shows regulatory expected loss as at 31 December 2010 and net individual impairment charges raised during the 2011 financial year for the IRB exposure classes. Regulatory expected loss is based on a through-the-cycle methodology using risk parameters and observations over a period of time. It is a conservative and appropriately prudent calculation underpinning regulatory capital requirements, and:

- does not take account of any benefit from management actions to reduce exposures to riskier customers, clients or segments as conditions deteriorate;
- does not take account of any diversification benefit; and
- is calculated in accordance with rules which enforce a certain level of conservatism.

The net individual impairment charge is a point in time actual charge raised in accordance with accounting standards that require the Group to either provide for or write-off debts when certain conditions are met as described in section 4.8 Problem credit management and provisioning.

The gap between the two measures has further increased through 2011 due to a higher regulatory expected loss versus a lower individual impairment charge, due to Consumer Banking as it benefited from increased recoveries from a number of loan sales, and benign credit conditions particularly in MESA and India. The Group continues to be disciplined in its approach to risk management and proactive in collection efforts to minimise account delinquencies.

	31.12.10	31.12.11	31.12.09	31.12.10
	Regulatory expected loss \$million	Net individual impairment charge <sup>(1)</sup> \$million	Regulatory expected loss \$million	Net individual impairment charge \$million
IRB Exposure Class				
Central governments or central banks	45	-	60	-
Institutions	447	1	406	1
Corporates	1,751	328	1,680	318
Retail, of which	954	255	773	340
Secured by real estate collateral	127	3	101	6
Qualifying revolving retail	470	126	380	163
Retail SME	17	36	31	38
Other retail	340	90	261	133
Securitisation positions	-	-	-	-
Non-credit obligation assets	-	-	-	-
Total IRB	3,197	584	2,919	659

<sup>(1)</sup> Excludes 'other credit risk provisions'

## 4.7. Risk grade profile

### Exposures by internal credit grading

For IRB portfolios a standard alphanumeric credit risk-grading system is used in both Wholesale and Consumer Banking. The grading is based on the Group's internal estimate of probability of default 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. 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.

The Group's credit grades in Wholesale Banking are not intended to replicate external credit grades, and ratings assigned by External Credit Ratings Institutions (ECAI) 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 weak internal credit grade.

As an indicative guide for reference the table below presents the Group's credit grades in relation to that of Standard and Poor's credit ratings.

	Standard and Poor's Mapping					
SCB Credit Grade	Corporate/NBFI	Bank				
1A	AAA	AAA/AA+				
1B	AA+	AA/AA-				
2A	AA	A+				
2B	AA-	А				
3A	AA-	A/A-				
3B	A+	A-/BBB+				
4A	A/A-	BBB+				
4B	A-/BBB+	BBB				
5A	BBB	BBB/BBB-				
5B	BBB-	BBB-/BB+				
6A	BB+	BB+				
6B	BB+	BB				
7A	BB	BB/BB-				
7B	BB	BB-				
8A	BB-	BB-/B+				
8B	BB-	B+				
9A	B+	В				
9B	B+	B/B-				
10A	В	B-				
10B	В	B-/CCC				
11A/B/C	B-	CCC				
12A/B/C	NA	NA				

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 the 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 judgement, where applicable.

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

The Group makes use of internal risk estimates of PD, LGD and FAD 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 standard approach to risk-return assessment is used to assess the risk using PD, LGD and EAD against the expected income for pricing and risk decisions;
- Limit Setting In Wholesale Banking single name concentration limits are determined by PD, LGD and EAD. The limits operate on a sliding scale to ensure that the Group does not have over concentration of low credit quality assets. In Consumer Banking, the estimates of PD, LGD and EAD are used in the credit approval documents to define the credit boundaries and risk limits. It is also used in the score cut-off analysis to limit underwriting within the lower quality or unprofitable score bands;
- Provisioning Portfolio Impairment Provisions (PIP) are raised at the portfolio level and are set with reference to expected loss which is based on PD, LGD and EAD amongst other quantitative and qualitative factors;
- 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.

The following table sets out analysis of EAD within the IRB portfolios by internal credit grading and Basel II exposure classes. EAD has been calculated after taking into account the impact of credit risk mitigation. Where exposure is guaranteed or covered by credit derivatives, exposure is shown against the asset class of the guarantor or derivative counterparty 75 per cent (2010: 73 per cent) of exposures are classified as credit grades 1 to 5.

			31.12.	11						
EAD	Grades 1-5 \$million	Grades 6-8 \$million	Grades 9-11 \$million	Grade 12 \$million	Grades 13-14 \$million	Total \$million				
Total exposure										
Central government and central banks	102,331	3,950	1,855	1	-	108,137				
Institutions	105,166	9,696	959	250	582	116,653				
Corporates	69,519	48,727	11,515	1,633	2,743	134,137				
Retail, of which	14,005	9,918	7,333	596	500	32,352				
Retail exposures secured by real estate collateral	1,519	989	210	16	52	2,786				
Qualifying revolving retail	9,587	4,035	3,349	400	236	17,607				
Retail SME	401	676	76	9	17	1,179				
Other retail	2,498	4,218	3,698	171	195	10,780				
Securitisation positions (1)	19,573	124	61	-	-	19,758				
Non-credit obligation assets	169	106	25	21	-	321				
Total IRB	310,763	72,521	21,748	2,501	3,825	411,358				

<sup>(1)</sup> For securitisations the ratings of the tranches within the programmes have been mapped to internal credit grade buckets, previously the rating was per the Special Purpose Entity (SPE).

			31.12.	.10						
EAD	Grades 1-5 \$million	Grades 6-8 \$million	Grades 9-11 \$million	Grade 12 \$million	Grades 13-14 \$million	Total \$million				
Total exposure										
Central government and central banks	80,720	3,541	1,400	-	-	85,661				
Institutions	89,459	11,277	1,067	250	665	102,718				
Corporates	59,397	45,729	10,943	1,509	2,629	120,207				
Retail, of which	12,924	9,294	6,957	615	479	30,269				
Retail exposures secured by real estate collateral	1,543	841	330	14	49	2,777				
Qualifying revolving retail	8,575	3,769	3,346	434	250	16,374				
Retail SME	361	648	77	10	19	1,115				
Other retail	2,445	4,036	3,204	157	161	10,003				
Securitisation positions (1)	17,297	162	187	-	-	17,646				
Non-credit obligation assets	83	81	31	11	-	206				
Total IRB	259,880	70,084	20,585	2,385	3,773	356,707				

<sup>(1) 2010</sup> securitisation positions have been represented to reflect a revised approach, where the ratings of the tranches within the programmes have been mapped to internal credit grade buckets; previously the rating was per the SPE.

The following table sets out analysis of undrawn commitments by internal credit grading and Basel II exposure classes.

	31.12.11							
	Grades 1-5 \$million	Grades 6-8 \$million	Grades 9-11 \$million	Grade 12 \$million	Grades 13-14 \$million	Total \$million		
Undrawn commitments								
Central government and central banks	38	17	47	-	-	102		
Institutions	3,115	626	13	35	9	3,798		
Corporates	30,931	11,726	2,910	38	51	45,656		
Retail, of which	4,206	2,463	666	14	2	7,351		
Retail exposures secured by real estate collateral	2,548	1,025	467	2	1	4,043		
Qualifying revolving retail	-	-	-	-	-	-		
Retail SME	13	153	1	-	-	167		
Other retail	1,645	1,285	198	12	1	3,141		
Securitisation positions	-	-	-	-	-	-		
Non-credit obligation assets	-	-	-	-	-	-		
Total IRB	38,290	14,832	3,636	87	62	56,907		

_	31.12.10							
	Grades 1-5 \$million	Grades 6-8 \$million	Grades 9-11 \$million	Grade 12 \$million	Grades 13-14 \$million	Total \$million		
Undrawn commitments								
Central government and central banks	25	18	49	-	-	92		
Institutions	3,620	2,276	57	8	-	5,961		
Corporates	20,036	17,142	3,356	115	35	40,684		
Retail, of which	3,837	2,361	1,057	13	1	7,269		
Retail exposures secured by real estate collateral	2,408	770	849	4	1	4,032		
Qualifying revolving retail	-	-	-	-	-	-		
Retail SME	8	146	-	-	-	154		
Other retail	1,421	1,445	208	9	-	3,083		
Securitisation positions	-	-	-	-	-	-		
Non-credit obligation assets	-	-	-	-	-	-		
Total IRB	27,518	21,797	4,519	136	36	54,006		

The following tables set out exposure weighted average LGD and exposure weighted average risk weight of the credit risk trading and non-trading books. These weighted averages have been calculated using EAD before taking into account the impact of credit risk mitigation. The average exposure weighted LGD across the IRB portfolio is 33.1 per cent (2010: 34.6 per cent).

	31.12.11							
_	Grades 1-5 %	Grades 6-8 %	Grades 9-11 %	Grade 12 %	Grades 13-14 %	Tota %		
Exposure weighted average LGD								
Central government and central banks	28.1	41.1	41.2	41.2	-	28.8		
Institutions	25.1	29.0	32.7	35.4	45.0	25.7		
Corporates	43.3	39.2	31.2	45.7	55.0	40.5		
Retail, of which	28.0	44.4	53.7	66.1	49.4	35.8		
Retail exposures secured by real estate collateral	13.0	17.7	17.6	18.8	18.5	14.3		
Qualifying revolving retail	84.9	82.5	81.1	82.3	75.6	83.5		
Retail SME	21.0	42.7	68.1	55.1	51.0	37.2		
Other retail	71.1	78.7	82.6	84.7	81.9	78.5		
Securitisation positions	-	-	-	-	-	-		
Non-credit obligation assets	-	-	-	-	-	-		
Total IRB	30.5	39.0	39.4	49.9	52.6	33.1		
	31.12.10							
	Grades 1-5 %	Grades 6-8 %	Grades 9-11	Grade 12 %	Grades 13-14 %	Total %		
Exposure weighted average LGD		,-	,,			,,,		
Central government and central banks	27.1	40.5	41.2	-	-	27.8		
Institutions	26.7	30.0	33.3	41.2	34.2	27.2		
Corporates	45.2	39.6	28.7	53.6	56.6	41.1		
Retail, of which	27.5	42.0	57.8	68.1	52.0	34.9		
Retail exposures secured by real estate collateral	14.7	17.8	18.5	19.6	21.9	15.6		
Qualifying revolving retail	84.7	81.9	80.2	80.8	76.0	82.9		
Retail SME	21.8	38.6	75.6	57.9	60.9	36.3		
Other retail	68.8	77.8	80.6	83.5	82.1	76.7		
Securitisation positions	-	-	-	-	-	-		
Non-credit obligation assets	-	-	-	-	-	-		
Total IRB	31.6	39.2	42.4	56.2	51.5	34.6		

-	31.12.11						
	Grades 1-5 %	Grades 6-8 %	Grades 9-11 %	Grade 12 %	Grades 13-14 %	Total %	
Exposure weighted average risk weight							
Central government and central banks	6.4	72.9	108.7	210.6	-	10.5	
Institutions	10.5	46.8	94.7	194.8	119.7	15.6	
Corporates	32.0	73.7	85.0	240.8	339.7	62.2	
Retail, of which	6.1	38.4	90.3	200.1	115.3	27.8	
Retail exposures secured by real estate collateral	4.1	22.3	53.8	114.0	86.2	12.9	
Qualifying revolving retail	7.3	32.1	107.8	239.9	160.8	39.4	
Retail SME	7.6	49.7	104.4	142.3	167.2	41.4	
Other retail	35.7	85.0	129.0	212.3	116.1	91.3	
Securitisation positions (1)	8.0	193.2	1,144.6	-	-	14.4	
Non-credit obligation assets	100.0	100.0	100.0	100.0	-	100.0	
Total IRB	13.5	63.2	88.4	226.1	269.7	32.42	

<sup>(1)</sup> For securitisations the ratings of the tranches within the programmes have been mapped to internal credit grade buckets, previously the rating was per the SPE.

-	31.12.10						
	Grades 1-5 %	Grades 6-8 %	Grades 9-11 %	Grade 12 %	Grades 13-14 %	Total %	
Exposure weighted average risk weight							
Central government and central banks	6.4	71.9	115.6	-	-	10.8	
Institutions	11.8	50.7	101.5	221.3	120.8	18.9	
Corporates	34.5	74.6	89.0	280.7	360.8	66.6	
Retail, of which	6.3	37.4	98.3	205.2	132.6	26.8	
Retail exposures secured by real estate collateral	4.6	23.0	60.7	117.8	116.3	12.5	
Qualifying revolving retail	7.3	32.7	112.7	236.6	152.5	43.0	
Retail SME	8.1	45.5	115.4	149.6	204.5	41.9	
Other retail	34.2	83.5	127.2	212.3	130.4	88.2	
Securitisation positions (1)	8.0	264.0	1,206.0	-	-	14.6	
Non-credit obligation assets	100.0	100.0	100.0	100.0	-	100.0	
Total IRB	14.1	62.7	88.2	255.9	272.3	34.3	

<sup>(1) 2010</sup> securitisation positions have been represented to reflect a revised approach, where the ratings of the tranches within the programmes have been mapped to internal credit grade buckets; previously the rating was per the SPE.

## 4.8. Problem credit management and provisioning

A non-performing loan is any loan that is more than 90 days past due or is otherwise individually impaired, (which represents those loans against which individual impairment provisions have been raised) and excludes:

- loans renegotiated before 90 days past due, and on which no default in interest payments or loss of principal is expected; and
- loans renegotiated at or after 90 days past due, but on which there has been no default in interest or principal payments for more than 180 days since renegotiation, and against which no loss of principal is expected.

The Group's loan loss provisions are established to recognise incurred impairment losses either on specific loan assets or within a portfolio of loans and receivables. Individually impaired loans are those loans against which individual impairment provisions (IIP) have been raised.

### Consumer Banking

In Consumer Banking, where there are large numbers of small-value loans, a primary indicator of potential impairment is delinquency. A loan is considered delinquent (past due) when the counterparty has failed to make a principal or interest payment when contractually due. However, not all delinquent loans (particularly those in the early stage of delinquency) will be impaired. For delinquency reporting purposes industry standards are followed, measuring 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.

Provisioning within Consumer Banking reflects the fact that the product portfolios (excluding medium sized enterprises among SME customers and private banking customers) consist of a large number of comparatively small exposures. Mortgages are assessed for individual impairment on an account-by-account basis, but for other products it is impractical to monitor each delinquent loan individually and individual impairment is therefore assessed collectively.

For the main unsecured products and loans secured by automobiles, the entire outstanding amount is generally written off at 150 days past due. Unsecured consumer finance loans are written off at 90 days past due. For secured loans (other than those secured by automobiles) individual impairment provisions (IIPs) are generally raised at either 150 days (mortgages) or 90 days (wealth management) past due.

The provisions are based on the estimated present values of future cash-flows, in particular those resulting from the realisation of security. Following such realisation any remaining loan will be written off. The days past due used to trigger write-offs and IIPs 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, customer fraud and death. Write-offs and IIPs are accelerated for all restructured accounts to 90 days past due (unsecured and automobile finance) and 120 days past due (secured) respectively.

Individually impaired loans for Consumer Banking will therefore not equate to those reported as non-performing in the Group's Annual Report and Accounts, because non-performing loans include all those over 90 days past due. This difference reflects the fact that, while experience shows that an element of delinquent loans are impaired it is not possible to identify which individual loans the impairment relates to until the delinquency is sufficiently prolonged that loss is almost certain, which, in the Group's experience, is generally around 150 days in Consumer Banking. Up to that point the inherent impairment is captured by portfolio impairment provisions (PIP).

The PIP methodology provides for accounts for which an individual impairment provision has not been raised, either individually or collectively. PIP is raised on a portfolio basis for all products, and is set using expected loss rates, based on past experiences supplemented by an assessment of specific factors affecting the relevant portfolio. These include an assessment of the impact of economic conditions, regulatory changes and portfolio characteristics such as delinquency trends and early alert trends. The methodology applies a larger provision against accounts that are delinquent but not yet considered impaired.

The procedures for managing problem credits for the Private Bank and the medium-sized enterprises in the SME segment of Consumer Banking are similar to those adopted in Wholesale Banking (described below). The following table shows impaired loans and advances, and the movement in impairment provisions by each principal category of borrower for Consumer Banking. This section follows International Financial Reporting Standards (IFRS) definitions used in the Annual Report and Accounts.

	Impaired loans	Individual impairment	Net individual	Amounts written off/	Individual impairment
	and advances	provision held	impairment charge	other movements	provision held
	at 31.12.11	at 01.01.11	2011	2011	at 31.12.11
	\$million	\$million	\$million	\$million	\$million
Loans to individuals					
Mortgages	356	128	38	(29)	137
Other	352	180	395	(423)	152
Small and medium enterprises	381	198	101	(97)	202
Consumer Banking	1,089	506	534	(549)	491
	Impaired loans	Individual impairment	Net individual	Amounts written off/	Individual impairment
	and advances	provision held	impairment charge	other movements	provision held
	at 31.12.10	at 01.01.10	2010	2010	at 31.12.10
	\$million	\$million	\$million	\$million	\$million
Loans to individuals					
Mortgages	322	107	47	(26)	128
Other	245	201	487	(508)	180
Small and medium enterprises	360	230	129	(161)	198
ornan and mediam enterprises					

### Wholesale Banking

Loans are classified as impaired and considered non-performing in line with definition on page 34 and 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 a specialist recovery unit, GSAM, which is separate from the Group's main businesses. Where any amount is considered irrecoverable, an individual impairment provision 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 assets or subsidiaries, realising collateral or payments under guarantees, are considered. In any decision relating to the raising of provisions, the Group 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.

As with Consumer Banking, a PIP is held to cover the inherent risk of losses which, although not identified, are known through experience to be present in any loan portfolio. In Wholesale Banking, this is set with reference to historic loss rates and subjective factors such as the economic environment and the trends in key portfolio indicators. The PIP methodology provides for accounts for which an individual impairment provision has not been raised.

The following table shows impaired loans and advances, and the movement in impairment provisions during the reporting period by each principal category of borrowers' business or industry for Wholesale Banking.

	Impaired loans and advances at 31.12.11 \$million	Individual impairment provision held at 01.01.11 \$million	Net individual impairment charge/(release) <sup>(1)</sup> 2011 \$million	Amounts written off/ other movements 2011 \$million	Individual impairment provision held at 31.12.11 \$million
Agriculture, forestry and fishing	104	42	(1)	(1)	40
Banks	232	93	1	(12)	82
Construction	129	57	10	1	68
Commerce	596	467	34	(28)	473
Electricity, gas and water	8	7	(1)	-	6
Financing, insurance and business services	883	120	118	(71)	167
Mining and quarrying	10	1	-	-	1
Manufacturing	1,077	558	159	(166)	551
Commercial real estate	181	23	-	1	24
Transport, storage and communication	249	23	5	12	40
Other	25	20	8	1	29
Wholesale Banking	3,494	1,411	333	(263)	1,481

(1) Excludes 'Other cred	lit risk provisions
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	Impaired	Individual	Net individual	Amounts	Individual
	loans and advances	impairment provision held	impairment charge/(release) <sup>(1)</sup>	written off/ other movements	impairment provision held
	at 31 .12.10	at 01.01.10	2010	2010	31.12.10
	\$million	\$million	\$million	\$million	\$million
Agriculture, forestry and fishing	79	59	4	(21)	42
Banks	249	132	1	(40)	93
Construction	113	36	21	-	57
Commerce	653	425	95	(53)	467
Electricity, gas and water	11	7	-	-	7
Financing, insurance and business services	863	130	45	(55)	120
Mining and quarrying	10	6	-	(5)	1
Manufacturing	1,217	590	146	(178)	558
Commercial real estate	165	13	15	(6)	22
Transport, storage and communication	64	24	8	(9)	23
Other	34	25	4	(8)	21
Wholesale Banking	3,458	1,447	339	(375)	1,411

<sup>(1)</sup> Excludes 'Other credit risk provisions'

## Impaired loans and advances by geography

The following table shows a geographical breakdown of the impaired loans and advances net of individual impairment provisions for the Group along with loans and advances that are past due but not individually impaired. Past due but not individually impaired loans total \$5,019 million (2010: \$3,959 million), of which 76 per cent (2010: 71 per cent) are 30 days or less past due.

					31.12.11				
_		Asia Pad	cific						
	Hong Kong \$million	Singapore \$million	Korea \$million	Other Asia Pacific \$million	India \$million	Middle East & Other S Asia \$million	Africa \$million	Americas UK & Europe \$million	Total \$million
Gross Impaired Loans	137	186	368	999	307	1,857	166	563	4,583
Individual impairment provision	(78)	(38)	(136)	(471)	(112)	(972)	(61)	(104)	(1,972)
Net Impaired Loans	59	148	232	528	195	885	105	459	2,611
Total past due but not individually impaired	551	537	925	1,338	414	1,097	97	60	5,019
Total past due & impaired loans net of individual impairment provisions	610	685	1,157	1,866	609	1,982	202	519	7,630
_					31.12.10				
_		Asia Pa	cific						
	Hong Kong \$million	Singapore \$million	Korea \$million	Other Asia Pacific \$million	India \$million	Middle East & Other S Asia \$million	Africa \$million	Americas UK & Europe \$million	Total \$million
Gross Impaired Loans	152	52	413	1,100	331	1,995	132	210	4,385
Individual impairment provision	(102)	(25)	(193)	(507)	(112)	(782)	(60)	(136)	(1,917)
Net Impaired Loans	50	27	220	593	219	1,213	72	74	2,468
Total past due but not individually impaired	254	292	707	1,191	323	941	208	43	3,959
Total past due & impaired loans net of individual impairment provisions	304	319	927	1,784	542	2,154	280	117	6,427

### Movement in Group Impairment provisions

The following table sets out the movements in the Group's total individual and portfolio impairment provisions against loans and advances.

	2011 \$million	2010 \$million
At 1 January	2,679	2,861
Exchange translation differences	(54)	52
Amounts written off	(957)	(1,252)
Releases of acquisition fair values	(10)	(27)
Recoveries of amounts previously written off	265	236
Discount unwind	(70)	(62)
Other	-	(1)
New provisions	1,396	1,528
Recoveries/provisions no longer required	(515)	(656)
Net impairment charge against profit	881	872
Provisions held at 31 December	2,734	2,679
Of which:		
Individual Impairment Provision	1,972	1,917
Portfolio Impairment Provision	762	762

#### Loans and advances past due

The following table sets out the industry analysis of loans and advances which are past due including those assets on which an individual impairment provision has been raised. A loan is considered to be past due when the counterparty has failed to make a principal or interest payment when contractually due. Past due does not necessarily mean that the counterparty is impaired.

	31.12.11 \$million	31.12.10 \$million
Loans to individuals		
Mortgages	2,377	2,107
Other	1,812	1,405
Small and medium enterprises	935	818
Consumer Banking	5,124	4,330
Agriculture, forestry and fishing	133	93
Banks	307	255
Construction	168	116
Commerce	688	731
Electricity, gas and water	163	61
Financing, insurance and business services	957	996
Mining and quarrying	47	24
Manufacturing	1,351	1,424
Commercial real estate	288	119
Transport, storage and communication	325	107
Other	51	88
Wholesale Banking	4,478	4,014
Total	9,602	8,344

# Forbearance and other renegotiated loans Forbearance

Forbearance strategies assist customers that are temporarily in financial distress and are unable to meet their original contractual repayment terms. Forbearance can be initiated by the customer, the bank or a third party (including government sponsored programmes or a conglomerate of credit institutions) and includes debt restructuring, such as a new repayment schedule, payment deferrals, tenor extensions and interest only payments.

The Group's impairment policy generally requires higher impairment charges for restructured assets than for fully performing assets. A discount provision is raised if there is a shortfall when comparing the present value of future cash flows under the revised terms and the carrying value of the loan before restructuring. Individual impairment recognition is accelerated compared to those under normal contractual policy.

In Consumer Banking excluding Medium Enterprises and Private Banking, all loans subject to forbearance (in addition to other renegotiated loans) are managed within a separate portfolio. If such loans subsequently become past due, write off and IIP is accelerated to 90 days past due (unsecured loans and automobile finance) or 120 days past due (secured loans). The accelerated loss rates applied to this portfolio are derived from experience with other renegotiated loans, rather than the Consumer Banking portfolio as a whole, to recognise the greater degree of inherent risk

At 31 December 2011, \$708 million (2010: \$747 million) of Consumer Banking loans were subject to forbearance programmes, which represents 0.5 per cent of total loans and advances to Consumer Banking customers. These loans were largely concentrated in countries that have active government sponsored forbearance programmes. Provision coverage against these loans was 16 per cent (2010: 18 per cent); reflecting collateral held and expected recovery rates.

For Wholesale Banking and Medium Enterprise and Private Banking accounts, forbearance and other renegotiations are applied on a case-by-case basis and are not subject to business wide programmes. In some cases, a new loan is granted as part of the restructure and in others, the contractual terms and repayment of the existing loans are changed or extended (for example, interest only for a period).

These accounts are managed by GSAM even if they are not impaired (that is the present value of the new cash flows is the same or greater than the present value of the original cash flows) and are reviewed at least quarterly to assess and confirm the client's ability to adhere to the restructured repayment strategy. Accounts are also reviewed if there is a significant event that could result in deterioration in their ability to repay.

If the terms of the restructure are such that an independent party in the same geographic area would not be prepared to provide financing on substantially the same terms and conditions, or where the present value of the new cash flows is lower than the present value of the original cash flows, the loan would be considered to be impaired and at a minimum a discount provision would be raised.

# Renegotiated loans that would otherwise be past due or impaired

Renegotiated loans, which are included within forborne loans, that would otherwise be past due or impaired if their terms had not been renegotiated were \$834 million (2010: \$1,475 million), \$225 million (2010: \$312 million) of which relates to Consumer Banking loans to customers and \$609 million (2010: \$1,163 million) of which relates to Wholesale Banking loans to customers. Loans whose terms have been renegotiated to include concessions that the Group would not ordinarily make will usually be classified as impaired. Renegotiated loans that have not defaulted on interest or principal payments for 180 days post renegotiation and against which no loss of principal is expected are excluded from non-performing loans but remain impaired because they are subject to discount provisions.

### 4.9. Counterparty credit risk in the trading book

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

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

The Group will seek to negotiate Credit Support Annexes (CSAs) 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 Group 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 Group) mark-to-market (MTM) values of these transactions. Following International Accounting Standard (IAS) 32 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. Additional collateral may be required from the counterparty to provide an extra buffer to the daily variation margin process.

#### 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 Group negotiates CSA terms for certain counterparties where the thresholds related to each party are dependent on their External Credit Assessment Institutions (ECAI) long term rating. Such clauses are typically mutual in nature. It is therefore recognised that a downgrade in the Group's rating could result in counterparties seeking additional collateral calls to cover negative MTM portfolios where thresholds are lowered.

#### Wrong way risk

Wrong way risk occurs when an EAD increase is coupled with a decrease in the credit quality of the obligor. For example, as the MTM on a derivative contract increases in favour of the Group, the counterparty may increasingly be unable to meet its payment, margin call or collateral posting requirements. The Group employs various policies and procedures to ensure that wrong way risk exposures are recognised upfront and monitored.

#### Exposure value calculation

Exposure values for regulatory capital purposes on over the counter traded products are calculated according to the CCR mark to market method. This is calculated as the sum of the current replacement cost and the potential future credit exposure. The current replacement cost is the USD equivalent amount owed by the counterparty to the Group for various financial derivative transactions. The potential future credit exposure is an add-on based on a percentage of the notional principal of each transaction. Such percentages are prescribed by the FSA in the BIPRU guidelines and 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 provided in the FSA Handbook BIPRU 13 guidelines.

The following tables cover the credit exposure on derivative transactions after taking into account the benefits from legally enforceable netting agreements and collateral arrangements.

		31.12.11				
	EAD before credit risk mitigation \$million	Netting benefits \$million	Netted current credit exposure \$million	Collateral held \$million	Net derivatives credit exposure \$million	
Derivative contracts	88,561	48,285	40,276	2,610	37,666	
Repo style transactions	13,100	-	13,100	10,296	2,804	
Credit derivatives <sup>(1)</sup>	5,043	4,135	908	4	904	
Total	106,704	52,420	54,284	12,910	41,374	

<sup>(1)</sup> Of the \$908 million netted current credit exposure, \$817 million of protection has been purchased, and \$91 million of protection has been sold.

			31.12.10		
	EAD before credit risk mitigation \$million	Netting benefits \$million	Netted current credit exposure \$million	Collateral held \$million	Net derivatives credit exposure \$million
Derivative contracts	73,501	38,890	34,611	2,251	32,360
Repo style transactions	15,322	-	15,322	11,485	3,837
Credit derivatives <sup>(1)</sup>	4,786	2,939	1,847	95	1,752
Total	93,609	41,829	51,780	13,831	37,949

<sup>(1)</sup> Of the \$1,847 million netted current credit exposure, \$1,439 million of protection has been purchased and \$408 million of protection has been sold.

The following tables cover the notional value, the credit exposure on derivative transactions after taking into account the benefits from legally enforceable netting agreements and collateral arrangements and the capital requirement by derivative type.

		31.12.11			
	Notional value \$million	Netted current credit exposures \$million	Regulatory capital requirement \$million		
Derivative contracts:					
Interest rate contracts	2,525,804	9,210	339		
Foreign exchange contracts	2,228,871	27,846	652		
Equity and stock index options	12,057	395	18		
Commodity contracts	62,426	2,825	162		
Credit derivatives:					
Credit default swaps	75,901	749	11		
Total return swaps	1,875	159	7		
Total derivatives	4,906,934	41,184	1,189		
Repo style transactions:					
Repo		4,646	6		
Reverse repo		8,454	17		
Total		54,284	1,212		

		31.12.10			
	Notional value	Netted current credit exposures	Regulatory capital requirement		
	\$million	\$million	\$million		
Derivative contracts:					
Interest rate contracts	2,600,071	7,394	289		
Foreign exchange contracts	1,553,761	23,877	561		
Equity and stock index options	8,842	283	11		
Commodity contracts	36,524	3,057	180		
Credit derivatives:					
Credit default swaps	65,711	1,815	25		
Total return swaps	275	32	1		
Total derivatives	4,265,184	36,458	1,067		
Repo style transactions:					
Repo		2,662	10		
Reverse repo		12,660	29		
Total		51,780	1,106		
-	·				

#### 4.10. Securitisation

Securitisation is defined as a structure where the cash flow from a pool of assets is used to service obligations to at least two different tranches or classes of creditors.

Securitisations may be categorised as either:

- traditional securitisation: assets are sold to a Special Purpose Entity (SPE), which finances the purchase by issuing notes in different tranches with different risk and return profiles. Cash flow arising from those assets is used by the SPE to service its debt obligations, or:
- synthetic transaction: a securitisation whereby only the credit risk, or part of the credit risk of a pool of assets is transferred to a third party via credit derivatives. The pool of assets remains on the Group's balance sheet.

Securitisation activities undertaken by the Group are for a variety of purposes, by various businesses acting in a different capacity:

- Risk Mitigation, Funding and Capital Management (as Originator);
- Fee Generation (as Arranger/ Lead Manager);
- Risk Taking (as Investor).

The Group has \$20.8 billion (2010: \$18.6 billion) of EAD classified as securitisation positions, as shown in Section 4.4 Exposure Values. These transactions meet the criteria to qualify as securitisation positions under the FSA's securitisation framework and the particulars of these transactions are discussed below. In addition to these positions, the Group has transferred the rights to any collection of principal and interest on customer loan assets with a face value of \$2.2 billion (2010: \$3.1 billion), which do not qualify as securitisation positions under the FSA framework and are not detailed within this section.

#### **Asset Backed Securities**

Wholesale Banking through the Capital Markets unit has purchased as investments or arranged for clients and held Asset Backed Securities (ABS) of \$2.4 billion (2010: \$2.7 billion), the carrying value of which represents 0.3 per cent of the Group's total assets (2009 0.5 per cent).

The credit quality of the ABS exposures remains strong. With the exception of those securities which have been subject to an impairment charge, 67 per cent of the overall portfolio is rated A, or better, and 15 per cent of the overall portfolio is rated as AAA. The portfolio is broadly diversified across asset classes and geographies, and there is no direct exposure to the US sub-prime market. The portfolio has an average credit grade of A.

32 per cent of the overall portfolio is invested in Residential Mortgage Backed Securities (RMBS), with a weighted average credit rating of AA- (AA in 2010). 38 per cent of the RMBS exposures were originated in 2005 or earlier.

26 per cent of the overall portfolio is in Commercial Mortgage Backed Securities (CMBS), of which \$120 million is in respect of US CMBS with a weighted average credit grade of AA- (AA in 2010). The weighted average credit rating of the remaining CMBS exposure is BBB.

13 per cent of the overall portfolio is in Collateralised Debt Obligations (CDOs). This includes \$30 million of exposures to CDOs of ABS (Mezzanine and High Grade), of which \$20 million have been impaired. The remainder of the other CDOs amounting to \$278 million has a weighted average credit rating of A+.

29 per cent of the overall portfolio is in Other ABS, which includes securities backed by loans to corporates or corporate SMEs, student loans, auto loans, and diversified payment types, with a weighted credit rating of A.

The notional and carrying value of the asset backed securities purchased or retained by the Group are shown in the table below analysed by underlying asset type, alongside any recognised net gain or loss on sale in the period. ABS are accounted for as financial assets. For further details regarding recognition and impairment refer to Note 1 of the Group's Annual Report and Accounts. The ABS portfolio is assessed frequently for objective evidence of impairment. In 2011, \$16 million of mezzanine CMBS, US RMBS and Trust Preferred CDO's were impaired.

Valuation of retained interest is initially and subsequently determined using market price quotations where available or internal pricing models that utilise variables such as yield curves, prepayment speeds, default rates, loss severity, interest rate volatilities and spreads. The assumptions used for valuation are based on observable transactions in similar securities and are verified by external pricing sources, where available.

The ABS portfolio is closely managed by a centralised dedicated team. This team has all the capabilities (Legal, Risk, GSAM, Credit Analysis, Asset Surveillance, Trading and Distribution) and authority to manage this portfolio effectively. The team has developed a detailed analysis and reporting framework of the underlying portfolio to allow senior management to make an informed holding decision with regards to specific assets, asset classes or parts of an asset class.

	31.12.11				
	Notional amount				
	Carrying value of asset backed securities \$million	Traditional securitisation programmes \$million	Synthetic securitisation programmes \$million	Recognised net gain/(loss) on sale \$million	
Residential mortgages (RMBS)	688	769	-	-	
Commercial mortgages (CMBS)	488	621	12	-	
CDOs of ABS – RMBS	9	30	-	-	
CDOs Other: Leveraged loans/Trust preferred/Real Estate	232	268	10	-	
Other ABS:					
Credit card receivables	-	-	-	-	
Loans to corporates or Corporate SMEs	24	25	-	-	
Student loans	124	138	-	-	
Auto loans	51	52	-	-	
Diversified payment types	291	299	-	-	
Other assets	189	198	-	-	
Total	2,096	2,400	22	-	

	31.12.10				
		Notional a	Notional amount		
	Carrying value of asset backed securities \$million	Traditional securitisation programmes \$million	Synthetic securitisation programmes \$million	Recognised net gain/(loss) on sale \$million	
Residential mortgages (RMBS)	772	844	-	-	
Commercial mortgages (CMBS)	569	685	32	-	
CDOs of ABS – RMBS	10	65	-	-	
CDOs Other: Leveraged loans/Trust preferred/Real Estate	268	299	11	-	
Other ABS:					
Credit card receivables	20	21	-	-	
Loans to corporates or Corporate SMEs	94	38	58	-	
Student loans	172	189	-	-	
Auto loans	183	185	-	-	
Diversified payment types	83	90	-	-	
Other assets	138	156	-	-	
Total	2,309	2,572	101	-	

#### Wholesale Banking Portfolio Management

Wholesale Banking via its Portfolio Management unit buys synthetic protection for its banking book credit portfolio. Securitisation provides capacity for client-focused growth and improves efficiency of economic and regulatory capital. The Group as the originator performs multiple roles, including protection buyer, calculation agent and credit event monitor agent. The protection buyer executes and maintains securitisation transactions. The calculation agent computes periodic coupon payments and loss payouts. The credit event monitor agent validates and provides notifications of credit events.

The Asset & Liability Management (ALM) unit, performs a different role, acting as deposit taker for funds collected from the credit protection provider for certain funded securitisation transactions. Deposits collected enhance the liquidity position of the Group and eliminates counterparty risk for deals where the Group is the protection buyer.

The securitised assets consist of commercial loans and trade finance facilities extended to clients by the Group's branches and subsidiaries to borrowers mainly from the emerging markets of Asia, Africa and Middle East. The securitised assets are subject to changes in general economic conditions, performance of certain financial markets, political events and developments or trends in a particular industry. Historically, the trading volume of loans in these

emerging markets has been small relative to other debt markets due to limited liquidity in the secondary loan market.

Underlying securitised exposures are originated by the Group in its ordinary course of business. Given the synthetic nature of securitisations originated by Portfolio Management, the securitised assets remain on the Group's balance sheet and continue to be subject to the Group's credit review and monitoring process and risk methodology. Accordingly retained positions are not hedged.

As credit event monitor agent, Portfolio Management monitors the credit risk of the underlying securitised assets by leveraging on the Group's client and risk management system.

As of 31 December 2011 \$56 million of Trade Finance and \$3 million of Commercial Loans totalling \$59 million (2010: \$110 million) of securitised exposures were classified as impaired and past due.

Wholesale Banking has nine securitisation transactions listed in the following table, with an aggregate hedge capacity of \$19.3 billion (2010: \$16.9 billion). Of the nine transactions, six are private deals with bilateral investors and three are public deals distributed to a broad spectrum of investors. The Group originated five synthetic securitisations in 2011 with an aggregate hedge capacity of up to \$12.5 billion.

All nine transactions are structured as synthetic protection to facilitate the hedging of commercial loans and trade finance facilities extended to clients by the Group's branches and subsidiaries. All transactions are also structured as non-disclosed pools for reason of client confidentiality.

Portfolio Management is the originator for the securitisations below, and have not acted as sponsor to securitise third-party exposure, and does not manage or advise any third party entity that invests in the securitisation positions.

The table below provides detail of securitisation programmes that have been originated by the Group.

							31.12.11	
	Underlying facilities hedged	ECAI	Public/ Private	Start date	Scheduled maturity	Max notional \$million	Outstanding exposures <sup>(1)</sup> \$million	Retained exposures <sup>(2)</sup> \$million
Asiamea	Commercial Loan	Not Rated	Private	Dec 2007	Dec 2012	1,500	1,248	1,399
Mana II	Trade Finance	Moody's	Private	Nov 2011	Feb 2013	3,500	3,288	3,290
SUPRA TF	Trade Finance	Not Rated	Private	Apr 2010	Oct 2013	850	812	799
Start VI	Commercial Loan	Not Rated	Public	Nov 2010	Apr 2014	1,250	1,127	1,162
Sumeru	Commercial Loan	Not Rated	Private	Jun 2010	Sep 2014	3,246	2,966	2,995
Sealane II	Trade Finance	Moody's	Public	Aug 2011	Feb 2015	3,000	2,732	2,820
Shangren II	Trade Finance	Moody's	Private	Dec 2011	Mar 2015	2,500	2,235	2,325
Pamir	Trade Finance	Moody's	Private	Oct 2011	Apr 2015	1,500	1,370	1,410
Start VII	Commercial Loan	Moody's	Public	Dec 2011	Jun 2015	2,000	1,748	1,860
Total						19,346	17,526	18,060

							31.12.10	
	Underlying facilities hedged	ECAI	Public/ private	Start date	Scheduled maturity	Max notional \$million	Outstanding exposures <sup>(1)</sup> \$million	Retained exposures <sup>(2)</sup> \$million
Sealane	Trade Finance	Moody's & S&P	Public	Nov 2007	May 2011	2,996	2,104	1,808
Mana	Trade Finance	Not Rated	Private	Sep 2010	Dec 2011	3,500	3,253	3,290
START V	Commercial Loan	Moody's & S&P	Public	July 2008	Jan 2012	1,000	938	928
Shangren	Trade Finance	Moody's	Private	Aug 2008	Feb 2012	2,495	2,250	2,230
Asiamea	Commercial Loan	S&P	Private	Dec 2007	Dec 2012	1,500	1,405	1,399
SUPRA TF	Trade Finance	Not Rated	Private	Apr 2010	Oct 2013	850	825	799
Start VI	Commercial Loan	Not Rated	Public	Nov 2010	Apr 2014	1,250	1,209	1,163
Sumeru	Commercial Loan	Not Rated	Private	Jun 2010	Sep 2014	3,353	3,222	3,093
Total						16,944	15,206	14,710

<sup>(1)</sup> Underlying exposures that have been securitised in the programmes.

The table below provides detail of the capital requirement for securitisation programmes that have been originated by the Group:

					31.12.11	
	Underlying facilities hedged	Start date	Scheduled maturity	Max notional \$million	Capital Requirement before securitisation \$million	Capital Requirement after securitisation \$million
Asiamea	Commercial Loan	Dec 2007	Dec 2012	1,500	84	48
Mana II	Trade Finance	Nov 2011	Feb 2013	3,500	182	51
SUPRA TF	Trade Finance	Apr 2010	Oct 2013	850	35	13
Start VI	Commercial Loan	Nov 2010	Apr 2014	1,250	77	24
Sumeru	Commercial Loan	Jun 2010	Sep 2014	3,246	189	76
Sealane II	Trade Finance	Aug 2011	Feb 2015	3,000	155	57
Shangren II	Trade Finance	Dec 2011	Mar 2015	2,500	124	23
Pamir	Trade Finance	Oct 2011	Apr 2015	1,500	77	29
Start VII	Commercial Loan	Dec 2011	Jun 2015	2,000	123	43
2011 Total				19,346	1,046	364
2010 Total				16,944	1,042	458

As at 31 December 2011, Sealane and Mana have passed their scheduled maturity date. The Group no longer applies the securitisation framework set out in BIPRU 9 when determining regulatory capital requirements of Shangren and Start V. The Group has engaged in structures such as the ones outlined in

the table above in order to transfer credit risk of a pool of assets to a third party via credit derivatives.

Typically, these synthetic securitisation transactions are facilitated through entities which are considered to be SPEs for accounting purposes.

<sup>(2)</sup> Exposures that have not been sold to investors but have been retained by the Group.

In these transactions, the underlying assets are not sold into the relevant SPE. Instead, the credit risk of the underlying assets is transferred to the SPEs synthetically via credit default swaps whereby the SPEs act as sellers of credit protection and receive premiums paid by the Group in return. The SPEs in turn issue credit-linked notes to third party investors who fund the credit protection in exchange for coupon on the notes purchased. The premium received by the SPEs and interest earned on the funded amount of the purchased notes are passed through to the third party investors as coupon on the purchased notes. Payment to the third party investors is made in accordance with the priority of payments stipulated in the transaction documents.

These securitisation transactions are outlined in the table above. For all transactions except Mana II, notes were issued by SPEs. For the Mana II transaction, notes were issued directly by Standard Chartered Bank under its Structured Product Programme.

#### Accounting policy

The SPEs associated with the programmes above are not consolidated into the Group. SPEs are only consolidated when the Group has control of the SPE. Control is assessed based on the Group's exposure to the majority of the risks of the SPE and the right to obtain the majority of the benefits of the SPE. The assessment of risks and benefits is based on the assessed risk exposures at inception and these risks and benefits are reconsidered if and when circumstances change. These circumstances may include situations when the Group acquires additional interests in the SPE, or the Group acquires control of the financial and operating policies of the SPE.

In the synthetic securitisation tranches such as those listed above, the underlying assets are not transferred into the associated SPE. Since the Group continues to own or hold all of the risks and returns relating to these assets and the credit protection afforded by the synthetic securitisation only serves to protect the Group against losses upon the occurrence of certain credit events, the assets are not de-recognised from the Group balance sheet. The assets will be fully de-recognised from the Group balance sheet if all the risks and returns relating to the assets have been transferred to the relevant SPE, and this typically entails a true sale of the assets to the SPE. Alternatively, the assets can be partially de-recognised from the Group balance sheet if a significant portion of risks and returns relating to the assets are transferred to the SPE and only a portion of the assets that commensurate with the retained risk and return of the assets is recognised on the Group balance sheet.

Retained notes are initially valued at cost and subsequently determined using market price quotations where available, or in their absence, dealer quotes. The assumptions used for valuation are based on observable transactions in similar securities and are verified by external pricing sources, where available.

#### Governance of securitisation activities

Securitisation transactions proposed for funding and capital management must first obtain support from the respective Balance Sheet Committee (BSC), which manages the capital requirements of the business, before going to Group Capital Management Committee (GCMC) for final approval and Liquidity Management Committee (LMC) for noting.

Execution of each securitisation transaction must either be under an individual Transaction Programme Authorisation or Product Program Framework; such that all relevant support, control and risk functions are involved in the transaction. Specifically, Compliance covers issues like confidentiality of clients' information and insider information, Finance advises on the accounting treatment, Credit Risk advises on the regulatory treatment, Group Tax provides an opinion on taxation and Group Regulatory Reporting facilitates communication with the regulator.

#### Basel II for securitisation positions

The calculation of risk-weighted exposure amounts for securitisation positions is based on the following two calculation methods advised by the FSA:

- IRB method for third party senior securitisation positions bought and securitisation positions originated and retained by SCB (including haircuts due to currency and collateral mismatch); and
- Standardised Approach for the residual risk-weighted exposure amounts for all other securitisation positions originated by the Group and sold.

All existing securitisation transactions originated by Wholesale Banking, in the table above, meet the credit risk transfer requirement to be accounted for as securitisation under the Basel II regulatory capital regime.

The table below presents a summary of the securitisation positions retained and the carrying value of ABS purchased or arranged by the Group, analysed by risk weight band. The majority of the exposures are rated AAA.

	31.12.11	
Risk weight bands	Securitisation programmes <sup>(1)</sup> AE \$million \$milli	3S <sup>(2)</sup> Total on \$million
0% - 20%	17,315 1,27	75 18,590
20% - 40%	387 31	13 700
40% - 60%	100 26	360
60% - 80%	70 7	78 148
80% – 100%	- 4	16 46
100% and above	26	39 115
1250% or Deducted	162 3	35 197
Total	18,060 2,09	96 20,156

	31.12.10				
Risk weight bands	Securitisation programmes <sup>(1)</sup> \$million	ABS <sup>(2)</sup> \$million	Total \$million		
0% - 20%	14,464	1,731	16,195		
20% - 40%	-	268	268		
40% - 60%	-	93	93		
60% - 80%	20	75	95		
80% – 100%	-	56	56		
100% and above	55	49	104		
1250% or Deducted	171	37	208		
Total	14,710	2,309	17,019		

<sup>(1)</sup> Retained exposures that are included in the securitisation programmes originated by the Group and have not been sold to investors.

<sup>(2)</sup> ABS exposures purchased from a third party by the Group. 2010 has been re-presented to reflect carrying value rather than the notional value

#### 5. Market risk

Standard Chartered recognises market risk as the potential for loss of earnings or economic value due to adverse changes in financial market rates or prices. The Group is exposed to market risk arising principally from customer-driven transactions. The objective of the Group'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 Standard Chartered 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;
- commodity price risk: arising from changes in commodity prices and commodity option implied volatilities; covering energy, precious metals, base metals and agriculture; and
- equity price risk: arising from changes in the prices of equities, equity indices, equity baskets and implied volatilities on related options.

#### Market risk governance

The GRC approves the Group's market risk appetite taking account of market volatility, the range of products and asset classes, business volumes and transaction sizes. Market risk exposures have remained broadly stable in 2011.

The Group Market Risk Committee (GMRC), under authority delegated by the GRC, is responsible for setting VaR and stress loss triggers for market risk within the Group's risk appetite. The GMRC 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 nontrading books of the Group. The trading book is defined as per the FSA's Handbook BIPRU. This is more restrictive than the broader definition within IAS 39 'Financial Instruments: Recognition and Measurement', as the FSA only permits certain types of financial instruments or arrangements to be included within the trading book. Limits by location and portfolio are proposed by the businesses within the terms of agreed policy.

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, commodity and equity sensitivities are 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 Group 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 that applies recent historical 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 Group applies two VaR methodologies:

- historical simulation: involves the revaluation of all existing positions 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 historical 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.

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

VaR is calculated as the Group's exposure as at the close of business, generally London time. 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. In 2011 there have been four exceptions in the regulatory back testing, compared with one in 2010. This is within the 'green zone' applied internationally to internal models by bank supervisors, and implies that model reliability is statistically greater than 95 per cent.

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 weekly stress testing of market risk exposures to highlight the 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. The stress testing methodology assumes that scope for management action would be limited during a stress event, reflecting the decrease in market liquidity that often occurs.

Stress scenarios are regularly updated to reflect changes in risk profile and economic events. The GMRC has responsibility for reviewing stress exposures and, where necessary, enforcing reductions in overall market risk exposure. The GRC considers the results of stress tests as part of its supervision of risk appetite.

Regular stress test scenarios are applied to interest rates, credit spreads, exchange rates, commodity prices and equity prices. This covers all asset classes in the Financial Markets 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.

#### Market Risk changes

Total average VaR and trading book average VaR in 2011 have dropped slightly compared to 2010. Non-trading book average VaR has risen by 10 per cent with increased non-trading equity risk in the Private Equity portfolio. Within the trading book Commodities average VaR in 2011 was 16 per cent higher than in 2010, which reflects increased volatility in the commodities markets in 2011. Foreign exchange average VaR, however was 23 per cent lower.

#### Market risk regulatory capital

The FSA specifies minimum capital requirements against market risk in the trading book. Interest rate risk in the non-trading book is covered separately under the Pillar 2 framework. The FSA has granted the Group Capital Adequacy Directive 2 (CAD2) internal model approval covering the majority of interest rate and foreign exchange risk in the trading book. In 2008 the scope was extended to include precious and base metals market risk and in November 2010 the scope was extended further to cover energy and agriculture risks. Positions outside the CAD2 scope are assessed according to standard FSA rules.

At 31 December 2011 the Group's market risk regulatory capital requirement was \$1,708 million (31 December 2010: \$1,262 million). The increase was driven primarily by the introduction of Stressed VaR, contributing an additional capital requirement of \$341 million. Stress VaR is a VaR measure with market risk factors reflecting a 12-month period of significant financial stress relevant to the Group's portfolio. The relevant stressed period being applied for Stressed VaR during 2011 was the 12 months to 30 June, 2009.

#### 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 Group functions as well as GIA on an ongoing basis.

Valuation of financial assets and liabilities held at fair value are subject to an independent review by Valuation Control within the Finance function. For those financial assets and liabilities whose fair value is determined by reference to externally quoted prices or market observable pricing inputs to a valuation model, an assessment is made by Valuation Control against external market data and consensus services. Valuation Control also ensures adherence to the valuation adjustment policies to incorporate counterparty risk, bid/ask spreads, market liquidity, model risk and other reserves, where appropriate, to mark all positions in accordance with prevailing accounting and regulatory guidelines. The GMRC provides oversight and governance of all valuation adjustment and price testing policies and reviews the results of the valuation control process on a monthly basis.

The minimum regulatory market risk capital requirements for the trading book are presented below for the Group.

	31.12.1	1	31.12.10		
Market Risk Capital Requirements for Trading Book	Regulatory capital requirement \$million	Risk Weighted Assets \$million	Regulatory capital requirement \$million	Risk Weighted Assets \$million	
Interest rate <sup>(1)</sup>	404	5,054	540	6,748	
Equity	86	1,073	19	233	
Options	414	5,183	219	2,739	
Collective investment schemes	-	-	-	-	
Commodity <sup>(2)</sup>	36	445	14	175	
Foreign exchange <sup>(2)</sup>	98	1,220	164	2,052	
Internal Models Approach <sup>(3)</sup>	670	8,379	306	3,825	
Total	1,708	21,354	1,262	15,772	

<sup>(1)</sup> Securitisation positions contributed \$2.3m to the interest rate Position Risk Requirement (PRR) and \$28.8m to Interest rate RWA as at 31 December 2011.

<sup>(2)</sup> Commodity and foreign exchange cover non-trading book as well as trading book.

<sup>(9)</sup> Where risks are not within the approved scope of the internal models approach they are captured in the relevant category above.

The minimum regulatory market risk capital requirement for the trading book is presented below for the Group's significant subsidiaries in accordance with local regulatory requirements applicable in the countries in which they are incorporated.

		31.12.11			31.12.10		
	Standard Chartered Bank	Standard Chartered Bank (HK) Ltd	Standard Chartered Bank Korea Ltd	Standard Chartered Bank	Standard Chartered Bank (HK) Ltd	Standard Chartered Bank Korea Ltd	
Market Risk Capital Requirements for Trading Book	\$million	\$million	\$million	\$million	\$million	\$million	
Interest rate	322	112	4	474	85	-	
Equity	86	-	5	19	-	-	
Options	412	-	-	219	-	-	
Collective investment schemes	-	-	-	-	-	-	
Commodity (1)	36	-	-	14	-	-	
Foreign exchange <sup>(1)</sup>	130	19	-	186	33	-	
Internal Models Approach <sup>(2)</sup>	670	9	23	295	9	40	
Total	1,656	140	32	1,207	127	40	
Market Risk – RWA	20,695	1,750	400	15,088	1,586	505	

<sup>(1)</sup> Commodity and foreign exchange cover non-trading book as well as trading book.

The tables below show the average, high and low trading and non-trading VAR over the year 2011, and the actual position on 31 December 2011. The highest and lowest VaR are independent and could have occurred on different days.

#### Daily value at risk (VaR at 97.5%, 1 day)

		2011				2010		
	Average	High <sup>(3)</sup>	Low <sup>(3)</sup>	Actual (4)	Average	High <sup>(3)</sup>	Low <sup>(3)</sup>	Actual (4)
Trading and Non-trading	\$million	\$million	\$million	\$million	\$million	\$million	\$million	\$million
Interest rate risk <sup>(1)</sup>	20.4	25.1	15.2	23.5	20.1	25.5	16.3	19.2
Foreign exchange risk	4.3	8.8	2.6	3.4	5.6	12.5	3.1	7.6
Commodity risk	2.2	3.7	1.1	1.2	1.9	4.0	0.7	3.5
Equity risk	11.2	13.9	9.0	12.7	9.5	11.3	6.9	10.7
Total (2)	21.4	27.7	15.3	24.5	22.1	31.0	17.3	25.2
Trading								
Interest rate risk <sup>(1)</sup>	8.4	11.4	5.4	8.7	8.7	11.9	5.1	6.7
Foreign exchange risk	4.3	8.8	2.6	3.4	5.6	12.5	3.1	7.6
Commodity risk	2.2	3.7	1.1	1.2	1.9	4.0	0.7	3.5
Equity risk	1.9	3.1	1.1	1.1	1.9	2.9	1.2	1.4
Total (2)	10.7	14.4	7.0	9.7	11.2	16.7	8.1	9.6
Non-trading								
Interest rate risk <sup>(1)</sup>	16.0	21.6	11.1	20.1	15.0	22.2	11.2	14.3
Equity risk	11.4	13.7	9.4	12.7	9.4	10.8	8.1	10.0
Total (2)	19.2	25.3	11.0	22.6	17.4	23.2	13.5	16.9

<sup>(1)</sup> Interest rate risk VaR includes credit spread risk arising from securities held for trading or available-for-sale.

<sup>(2)</sup> Where risks are not within the approved scope of the internal models approach they are captured in the relevant category above.

<sup>(2)</sup> The total VaR shown in the tables above is not a sum of the component risks due to offsets between them.

<sup>(3)</sup> Highest and lowest VaR for each risk factor are independent and usually occur on different days.

<sup>(4)</sup> Actual one day VaR as at period end date.

#### Internal Models Approach - Stressed VaR

The table below shows the average, high and low Stressed VaR for the period October 2011 to December 2011 and the actual

position on 31 December 2011. The Stressed VaR results reflect only the Group portfolio covered by the internal model approach and are calculated at a 99 per cent confidence level.

	October – December, 2011			
	Average	High <sup>(1)</sup>	Low <sup>(1)</sup>	Actual (2)
	\$million	\$million	\$million	\$million
	32.8	42.9	24.1	30.6

<sup>(1)</sup> Highest and lowest VaR for each risk factor are independent and usually occur on different days.

#### Interest rate risk in the non-trading book

Interest rate risk from the non-trading book portfolios is transferred to Financial Markets where it is managed by local Asset and Liability Management (ALM) desks under the supervision of local Asset and Liability Committees (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 (except Group Treasury) 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 the profit and loss account or reserves.

Market basis risk, or the risk arising from hedging exposure to one interest rate with exposure to a rate which re-prices under slightly different conditions, is also analysed.

The proceeds of Group Treasury's debt and equity capital raising activities are invested within the Group as capital or placed with ALM. Interest rate risk arises due to the investment of equity and reserves into rate-sensitive assets, as well as some tenor mismatches between debt issuance and placements. This risk is hedged to floating rate, and measured using the projected sensitivity of net interest income (NII) to a parallel shift in yield curves and interest rate gap re-pricing tables and is monitored over a one year time horizon (see table below).

The risk is monitored and controlled by the Group's Capital Management Committee (CMC).

#### Group Treasury NII sensitivity to parallel shifts in yield curves

\$1.12.11 \$million	31.12.10 \$million
+30.9	+29.9
(30.9)	(29.9)
	+30.9

<sup>(2)</sup> Actual one day VaR as at period end date.

### 6. Operational risk

Operational risk is defined as the 'potential for loss arising from the failure of people, process or technology or the impact of external events'.

#### Objective

The Group's exposure to operational risk arises as a consequence of the Group's business activities. It is the Group's objective to minimise exposure to operational risk, subject to cost trade-offs.

#### Governance

The Group Operational Risk Committee (GORC) oversees the management of operational risks across the Group, supported by business, functional and country-level committees. All operational risk committees operate on the basis of a defined structure of delegated authorities and terms of reference, derived from the GRC.

#### Risk Management

Operational risk exposures are managed through consistent policies and procedures that drive risk identification, assessment, control and monitoring. These policies and procedures are challenged and revised regularly to ensure their ongoing effectiveness.

Responsibility for the management of operational risk rests with business and function management as an integral component of their first line risk management responsibilities.

Group Operational Risk is responsible for setting and maintaining standards for operational risk management and measurement. In addition, specialist operational Risk Control Owners have responsibility for the management of operational risk arising from the following activities Group-wide: legal processes, people management, technology management, vendor management, property management, security management, accounting and financial control, tax management, corporate authorities and structure and regulatory compliance. Each Risk Control Owner is responsible for identifying risks that are material to the Group and for maintaining an effective control environment, which includes defining appropriate policies and procedures for approval by authorised risk committees.

Identified operational risk exposures are classified as 'Low', 'Medium', 'High' or 'Very High' in accordance with standard risk assessment criteria. Risks which are outside of set materiality thresholds receive a differential level of management attention and are reported to senior management and risk committees up to Board level.

#### Measurement

The Group uses the Standardised Approach consistent with the FSA's BIPRU 6.4 requirements to assess its regulatory and internal capital requirements for operational risk. Under the Standardised Approach, a pre-determined beta co-efficient is applied to the average income for the previous three years across each of the eight business lines prescribed in FSA's BIPRU, to determine the operational risk capital requirement. The table below details the operational risk capital requirement for the Group:

_	31.12.11	31.12.10
	Operational risk	Operational risk
	capital	capital
	requirement	requirement
	\$million	\$million
Consumer Banking	744	776
Wholesale Banking	1,557	1,382
Total	2,301	2,158

The table below details the operational risk capital requirement for the Group's significant subsidiaries presented in accordance with the regulatory requirements applicable in the countries in which they are incorporated.

	31.12.11	31.12.10
	Operational risk	Operational risk
	capital	capital
	requirement	requirement
	\$million	\$million
Standard Chartered Bank	1,259	977
Standard Chartered Bank (HK) Ltd	355	326
Standard Chartered Bank Korea Ltd	237	249

### 7. Remuneration

The following tables show the remuneration decisions made by the Group in respect of 2011 and the subsequent sections provide brief information on the decision-making policies for remuneration and the links between pay and performance. More detailed information on the Group's remuneration process and policies is contained in the Directors' Remuneration Report (DRR) of the Group's Annual Report and Accounts.

These disclosures reflect the requirements of the Financial Services Authority (FSA) Prudential Sourcebook for Banks, Building Societies and Investment Firms (BIPRU) 11.5.18 (1) - (7).

Aggregate remuneration expenditure for Code Staff (1)	Consumer Banking \$000's	Wholesale Banking \$000's	Other <sup>(2)</sup> \$000's
2011	18,676	124,759	97,479
2010	15,001	138,369	92,572

<sup>(1)</sup> Code staff are those Group employees whose professional activities could have a material impact on the Group's risk profile. Further information is shown below.

<sup>(2)</sup> Includes all support functions and general management positions, executive and non-executive directors.

	201	1	2010	
Analysis of remuneration for Code Staff employees split between fixed and variable compensation	Senior Management <sup>(4)</sup> \$000's	Other Code Staff Employees \$000's	Senior Management <sup>(4)</sup> \$000's	Other Code Staff Employees \$000's
Fixed compensation (1)	41,357	14,794	37,036	14,442
Variable compensation	112,816	71,946	108,541	85,923
Up front cash	21,041	15,691	19,773	17,448
Up front shares	20,095	14,208	19,773	17,448
Deferred awards (2)	46,816	35,713	46,372	47,101
Performance shares (3)	24,864	6,334	22,623	3,926
Number of code staff	77	35	73	33

<sup>(1)</sup> Fixed compensation includes base salary and other cash allowances, and in the case of non-executive directors, any fees.

<sup>(4)</sup> Senior Management is defined below in the section on Code Staff on page 53.

	201	1	2010	
Analysis of deferred remuneration <sup>(1)</sup>	Senior Management \$000's	Other Code Staff Employees \$000's	Senior Management \$000's	Other Code Staff Employees \$000's
Start of the year (1 January)	254,916	110,869	179,489	53,630
Awarded during the financial year <sup>(2)</sup>	84,928	46,417	88,841	51,266
Vested during the year <sup>(3)</sup>	67,547	38,171	32,776	5,079
Non vested due to performance adjustments <sup>(4)</sup>	7,480	123	5,002	104
Close of the year (31 December) <sup>(5) (6)</sup>	223,718	101,155	261,294	109,264

<sup>(1)</sup> Deferred remuneration includes both deferred awards and performance shares. Code staff population in 2011 and 2010 differ.

<sup>(2)</sup> Includes any element of deferred cash in 2011 for senior management (\$8,537,280) and other code staff employees (\$14,172,362).

<sup>(3)</sup> Includes the expected value of any performance shares award to be granted in respect of 2011 and 2010 performance respectively.

<sup>&</sup>lt;sup>(2)</sup> Value of deferred remuneration awarded during the year is based on the share price at grant.

<sup>(3)</sup> Value of vested deferred remuneration during the year is based on the share price as at 31 December in that year.

<sup>(4)</sup> Value of deferred remuneration which has lapsed as a result of (i) performance conditions not being satisfied or (ii) claw-back policy.

<sup>(5)</sup> Value of deferred remuneration as at 31 December is based on the share price at the respective dates in that year.

<sup>(6)</sup> The closing balance for deferred remuneration as at 31 December 2010 for senior management was incorrectly stated as \$262,631 in 2010. The correct amount is \$261,294.

	2011		2010		
Analysis of sign-on payments and severance	Senior Management \$000's	Other Code Staff Employees \$000's	Senior Management \$000's	Other Code Staff Employees \$000's	
Sign-on payments (1)	700	-	671	7,158	
Severance payments <sup>(2)</sup>	381	-	1,826		

<sup>(1)</sup> Includes the value of any guaranteed performance awards (cash or shares) which were made on appointment. In 2011 there was one employee who received a sign on payment.

#### Governance and alignment to regulatory best practice

The Board Remuneration Committee (the Committee) has oversight of all reward policies for the Group's employees. It is responsible for setting the principles and governance framework for all compensation decisions.

In particular the Committee:

- determines and agrees the remuneration of the senior executives and employees with the potential to have a material impact on the risk profile of the Group;
- approves any proposal to award a high remuneration package to new recruits or a high level individual bonus award to a Group employee;
- ensures that the remuneration policy is appropriate and consistent with effective risk management; with the Group Chief Risk Officer attending key meetings of the Committee during the year;
- approves the overall total variable compensation paid globally on an annual basis.

The Committee's terms of reference are available at www.standardchartered.com

To ensure there is appropriate, formal input to the decision making process there are a number of business specific Reward Plan Committees (RPCs) responsible for making sure that information from the risk, compliance and human resources functions are taken into account. The accuracy of the finance data used in the decision making process is overseen by risk and finance representatives jointly.

Decision on reward for control function employees are determined independently of the business and they do not personally participate in any business specific plan to maintain independence.

The Group Reward Plan Committee (GRPC), which includes the Group Chief Executive, the Group Finance Director, the Group Head of Human Resources and Communications and the Group Chief Risk Officer (GCRO), oversees each of the business specific RPCs to ensure consistency across the Group. The GRPC ensures compensation decision making is in accordance with the Group's established performance and reward strategy and acts as a link to the Committee, providing feedback to the other RPCs as necessary.

Further information on how the Group's remuneration practices are aligned to regulatory best practice are set out in the DRR in the Group's Annual Report and Accounts.

#### Performance and reward philosophy and principles

The Group's success depends upon the performance and commitment of talented employees. The Group's performance, reward and benefits approach supports and drives the Group's business strategy and reinforces values in the context of a clearly articulated risk appetite and a Group wide framework.

The Group's approach:

- supports a strong performance-oriented culture, ensuring that individual reward and incentives are aligned with: (i) the performance and behaviour of the individual; (ii) the performance of the business; and (iii) the interests of shareholders;
- ensures a competitive reward package that reflects the Group's international nature and enables us to attract, retain and motivate employees;
- reflects the fact that many of the Group's employees bring international experience and expertise, and the Group recruits from a global marketplace;
- encourages an appropriate mix of fixed and variable compensation based on: (i) the individual's accountability; and (ii) the individual's business' risk profile.

The Committee reviews the policy on a regular basis against significant regulatory developments, market practice and shareholder views and makes appropriate adjustments.

#### Aligning performance and reward

The Group's One Bank philosophy and approach to remuneration applies consistently to all employees including Code Staff and is central to the Group's performance and reward philosophy. This ensures that behaviours, including prudent risk management and values are rewarded as well as business performance. The Group believes that performance and related reward outcomes should be a consequence of both how performance is delivered and what is delivered. This is taken into account in all personal objectives, performance assessments and reward decisions made within the Group and has a tangible impact on the reward that employees receive.

Target total compensation is determined with reference to the market in which the individual is employed, while the potential total compensation is set at upper quartile or higher for excellent individual and business performance.

All employees have the opportunity to receive an element of performance-related compensation, subject to their contractual entitlement. Typically, the higher the total compensation, the greater the proportion delivered in variable compensation (through a mix of cash and shares, both upfront and deferred, depending on the individual and quantum of the award).

The variable compensation element is differentiated by performance. The Group's aim is to achieve a high performance culture in which every employee has a clear set of objectives, receives ongoing feedback on performance and behaviour and is appropriately rewarded for their individual contribution. Differentiating performance and values ratings at all levels enables targeting of spend towards those who have made the most effective contribution to the Group's performance and unique culture, recognises and aids retention of the Group's highest performers and balances this with affordability considerations. There is no direct formulaic link between business income generated by an individual and that individual's reward.

<sup>(2)</sup> In 2011 this relates to one employee.

#### Variable compensation funding

The Group's total variable compensation (TVC) spend is calculated after sufficient profit has been accrued to accord shareholders an adequate risk adjusted return and in the context of the forward looking capital plan. The two key elements to pool determination are overall payout and allocation of the TVC spend between respective businesses and functions.

The Group operates a single discretionary annual performance plan comprised of a number of pools. Reward issues are governed on a top down basis and our variable compensation awards deliberately do not contain any direct formulaic link between business income and individual reward to avoid the shortcomings of incentive plans which are based purely on short-term financial results.

Although each performance award pool has an initial funding mechanism, the Committee approves the TVC spend, including the amount to be spent on any performance share awards, for the Group in aggregate and specifically for Wholesale Banking taking into account submissions it receives from the GRPC. The Committee exercises its judgement to ensure that the overall payout appropriately reflects Group performance, the control environment, and any other qualitative factors that the Committee considers appropriate.

The Committee then uses this information and exercises discretion to determine the final pool and approve allocations to business and support functions. In arriving at its decision the Committee looks at the proposed aggregate payouts relative to both operating profit and risk capital adjusted profit. The Committee is also informed by the underlying funding frameworks for individual pools and has oversight for the allocation of the overall Group pool across businesses.

The GRPC is responsible for allocating the approved pools to each business specific RPC, which then oversees the allocation of variable compensation spend within their areas.

#### Understanding the Code Staff criteria

The following groups of employees have been identified as meeting the FSA's criteria for Code Staff:

- employees performing a Significant Influence Function (SIF) within the Group:
- senior managers. In accordance with the FSA Remuneration Code this includes direct reports to a director of Standard Chartered Bank (the regulated entity) who are the head of a significant business function or business group with Risk and/or profit and loss accountability and not previously classified as SIF;
- other staff identified as risk takers.

The combination of the first two categories above are referred to in this report as "senior management".

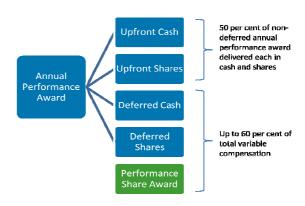
Per the FSA's definition, "risk takers", are those whose professional activities are deemed to have a potentially material impact on the firm's risk profile, and are drawn from the following areas:

 heads of material support or control functions (not already classified as senior managers or SIFs);

- heads of significant Corporate Finance (CF) and Financial Markets (FM) units (this includes all product sales or trading businesses) and who sit on the CF or FM leadership teams;
- other designated risk professionals not otherwise caught above;
- other designated Wholesale Banking employees not otherwise caught above.

#### Structure of remuneration for Code Staff

Remuneration for Code Staff is typically delivered through a combination of base salary, benefits and variable compensation (split between an annual performance award and a performance share award). Non-executive directors only receive a base fee. More information is contained in the DRR.



Variable compensation for Code Staff is structured in line with the FSA Remuneration Code requirements. 40 to 60 per cent of variable compensation is deferred over a period of three years.

Non-deferred variable compensation is delivered 50 per cent in upfront shares and 50 per cent in cash.

Deferred variable compensation is delivered through a mix of the following depending on the individual and quantum of the award:

- deferred restricted shares;
- deferred cash (eligible employees may elect to receive 50 per cent of the deferred amount in cash rather than just deferred restricted shares);
- · performance shares.

Deferred compensation (cash and shares) is subject to the Group's claw-back policy and continued employment (which may be terminated by the Group in the event of material misconduct). Both upfront and deferred shares are subject to the Group Shareholding Requirement Policy. More details on claw-back and Shareholding Requirement can be found in the DRR.

Performance share awards are subject to the satisfaction of conditions being met over a three year performance period - one third of each award is subject to a Total Shareholder Return (TSR), Earnings per Share (EPS) or a Return on Risk Weighted Assets (RoRWA) measure.

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### 8. Group entities

At 31 December 2011, the principal subsidiary undertakings, all indirectly held and principally engaged in the business of banking and provision of other financial services, were as follows:

Country and place of incorporation or registration	Main areas of operation	Group interest in ordinary share capital %
, 1	'	<del> </del>
Standard Chartered Bank, England and Wales	United Kingdom, Middle East, South Asia, Asia Pacific, Americas and, through Group companies, Africa	100.00
Standard Chartered Bank Korea Limited, Korea	Korea	100.00
Standard Chartered Bank Malaysia Berhad, Malaysia	Malaysia	100.00
Standard Chartered Bank (Pakistan) Limited, Pakistan	Pakistan	98.99
Standard Chartered Bank (Taiwan) Limited, Taiwan	Taiwan	100.00
Standard Chartered Bank (Hong Kong) Limited, Hong Kong	Hong Kong	100.00
Standard Chartered Bank (China) Limited, China	China	100.00
Standard Chartered Bank (Thai) Public Company Limited, Thailand	Thailand	99.99
Standard Chartered Bank Nigeria Limited	Nigeria	100.00
Standard Chartered Bank Kenya Limited	Kenya	73.90
Standard Chartered Private Equity Limited, Hong Kong	Hong Kong	100.00

The table below lists the entities where accounting treatment differs from the prudential treatment as described on page 4.

Accounted for as an associate	Prudential treatment	Main areas of operation	Group interest in ordinary share capital %
Asia Commercial Bank	Deducted from capital resources	Vietnam	15.00
China Bohai Bank	Deducted from capital resources	China	19.99
Corsair IV	Deducted from capital resources	Hong Kong	19.66
Fleming Family & Partners	Proportionally consolidated	Asia	20.00

### 9. Immaterial portfolios

#### Non Trading Book Equities & Specialised Lending Exposures

For the purposes of BIPRU requirements 11.5.15 and 11.5.11 the holdings of non-trading book equities and the specialised lending portfolio are considered immaterial. At 31 December 2011, non-trading book equity holdings amount to \$2.2 billion (2010: \$2.2 billion) and specialised lending exposure total \$3.9 billion (2010: \$3.0 billion), which together total less than 1 per cent of the Group's total exposure.

### 10. Forward looking statements

It is possible that this document could or may contain forward-looking statements that are based on current expectations or beliefs, as well as assumptions about future events. These forward-looking statements can be identified by the fact that they do not relate only to historical or current facts. Forward-looking statements often use words such as anticipate, target, expect, estimate, intend, plan, goal, believe, will, may, should, would, could or other words of similar meaning. Undue reliance should not be placed on any such statements because, by their very nature, they are subject to known and unknown risks and uncertainties and can be affected by other factors that could cause actual results, and the Group's plans and objectives, to differ materially from those expressed or implied in the forward-looking statements.

There are several factors that could cause actual results to differ materially from those expressed or implied in forward looking statements. Among the factors that could cause actual results to differ materially from those described in the forward looking statements are changes in the global, political, economic, business, competitive, market and regulatory forces, future exchange and interest rates, changes in tax rates and future business combinations or dispositions.

The Group undertakes no obligation to revise or update any forward looking statement contained within this document, regardless of whether those statements are affected as a result of new information, future events or otherwise.

# Standard Chartered Pillar 3 Disclosures

#### **31 December 2011**

### 11. Acronyms

ABS Asset Backed Securities
ALCO Asset and Liability Committee
ALM Asset and Liability Management

ARROW Advanced Risk Response Operating Framework

BIPRU Prudential Sourcebook for Banks, Building Societies and Investment Firms

BRC Board Risk Committee

CAD2 Capital Adequacy Directive 2

CCF Credit Conversion Factor

CCR Counterparty Credit Risk

CDOs Collateralised Debt Obligations

CMBS Commercial Mortgage Backed Securities

CMC Capital Management Committee
CRD Capital Requirements Directive

CRM Credit Risk Mitigation
CRO Chief Risk Officer
CSA Credit Support Annex

DRR Directors Remuneration Report

EAD Exposure at Default

ECAl External Credit Assessment Institutions FSA Financial Services Authority (UK)

FSV Forced Sale Value

GALCO Group Asset and Liability Committee

GCC Group Credit Committee

GCMC Group Capital Management Committee

GCRO Group Chief Risk Officer

GENPRU General Prudential Sourcebook for Banks, Building Societies, Insurers, and Investment Firms

GIA Group Internal Audit GMR Group Market Risk

GMRC Group Market Risk Committee
GORC Group Operational Risk Committee

GRC Group Risk Committee

GRPC Group Reward Plan Committee
GSAM Group Special Asset Management
IAS International Accounting Standard

ICAAP Internal Capital Adequacy Assessment Process

ICG Individual Capital Guidance
IIP Individual Impairment Provision

IRB advanced Internal Ratings Based approaches IFRS International Financial Reporting Standards

LGD Loss Given Default

LMC Liquidity Management Committee MAC Model Assessment Committee

MTM Mark-to-Market
NII Net Interest Income
PD Probability of Default

PIP Portfolio Impairment Provision PRR Position Risk Requirement

RMBS Residential Mortgage Backed Securities

RPC Reward Plan Committee
RWA Risk Weighted Assets
SIF Significant Influence Function
SME Small and Medium - sized Enterprise

SPE Special Purpose Entity

SREP Supervisory Review and Evaluation Process

VaR Value at Risk