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# **Standard Chartered PLC**

## **Pillar 3 Disclosures**

### **31 December 2009**

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Incorporated in England with registered number 966425  
*Registered Office: 1 Aldermanbury Square, London, EC2V 7SB, England*

# Standard Chartered

## Pillar 3 Disclosures

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## Overview

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

- Pillar 1 sets out minimum regulatory capital requirements – the minimum amount of regulatory capital banks must hold against the risks they assume;
- Pillar 2 sets out the key principles for supervisory review of a bank's risk management framework and its capital adequacy. It sets out specific oversight responsibilities for the Board 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 Approach. Basel II also introduces capital requirements for operational risk for the first time.

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

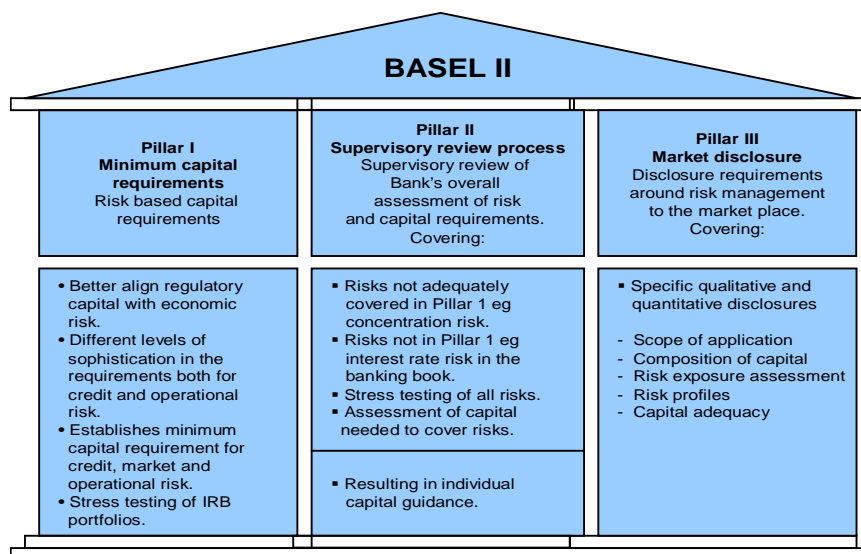
2008. In the UK the CRD is implemented by the FSA through its General Prudential Sourcebook (GENPRU) and its Prudential Sourcebook for Banks, Building Societies and Investment Firms (BIPRU).

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> applies 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 which are less risk sensitive.

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 indefinitely.



Using these approaches the Group has calculated the Risk Weighted Assets (RWA) and the minimum regulatory capital requirement as at 31 December 2009 presented in the table below, comprising 81 per cent credit risk, 10 per cent operational risk and 9 per cent market risk.

|                  | 31.12.09   |                                   | 31.12.08   |                                   |
|------------------|--|-----------------------------------|--|-----------------------------------|
|                  | Regulatory capital requirement <sup>(2)</sup><br>\$million | Risk Weighted Assets<br>\$million | Regulatory capital requirement <sup>(2)</sup><br>\$million | Risk Weighted Assets<br>\$million |
| Credit Risk      | 13,865   | 173,315                           | 12,902   | 161,276                           |
| Operational Risk | 1,656  | 20,696                            | 1,467  | 18,340                            |
| Market Risk      | 1,593  | 19,912                            | 735  | 9,205                             |
| <b>Total</b>     | <b>17,114</b>  | <b>213,923</b>                    | <b>15,104</b>  | <b>188,821</b>                    |

<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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(1) Standard Chartered PLC is headquartered in London where it is regulated by the UK's Financial Services Authority (FSA).

(2) 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.

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

(4) Throughout this document AIRB and IRB are interchangeable terms and refer to internal ratings based models used. The Group does not use the Foundation IRB approach.

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## 1. Scope of Basel II framework

### Pillar 1

Since 2003, the Group has undertaken a broad range of activities under the Basel II Programme. The Programme has overseen a significant investment in risk analytics, now providing Internal Ratings Based (IRB) models for over 80 per cent of the Group's credit RWA. It has built a supporting infrastructure of data warehouses and reporting platforms and delivered major improvements in processes and governance, both for regulatory compliance and to use the new capabilities for business benefit.

The Group's lead supervisor, the FSA, formally approved the Group's use of the AIRB approach for calculating regulatory capital in 2007 and since 1 January 2008, the Group has been using the AIRB approach for the measurement of credit risk capital. Although the FSA's approval covers the Group's global operations, in several jurisdictions the Group is required to apply separately to adopt the AIRB approach for local reporting. Wherever the Group has chosen to do this to date, the application has been successful. The Group continues to work closely with other regulators and anticipates making further AIRB applications to local regulators as and when permitted, and where it is considered appropriate to do so.

The Group applies a Value at Risk (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 Group Asset and Liability Committee (GALCO), through its authority delegated by the Standard Chartered Bank Court (Court), is responsible for the management of capital ratios and the establishment of, and compliance with, policies relating to balance sheet management, including management of our liquidity, capital adequacy and structural foreign exchange rate risk.

The Group Risk Committee (GRC), through its authority delegated by the Court, is responsible for the management of all other risks and for defining the Group's overall risk management framework.

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 The Prudential Sourcebook for Banks, Building Societies and Investment Firms (BIPRU) chapter 11, covering both the qualitative and quantitative items. Further details and disclosure of risk, liquidity and capital management are presented in the Annual Report. 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](http://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.

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.

Appendix 1 lists the entities where regulatory treatment differs from the accounting treatment. The Group's principal subsidiary undertakings are also detailed in Appendix 1.

## **2. Capital management**

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The Group's capital management approach 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 three year horizon and 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 by the Group to support its strategy.

The capital plan takes the following into account:

- regulatory capital requirements;
- forecast demand for capital to support the credit ratings;
- increases in demand for capital due to business growth, market shocks or stresses;
- available supply of capital and capital raising options; and
- internal controls and governance for managing the Group's risk, performance and capital.

The Group uses internal models and other quantitative techniques in its internal risk and capital assessment. 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 a deeper understanding of its risk profile, e.g. by identifying potential concentrations, assessing the impact of portfolio management actions and performing what-if analysis.

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 on the Group and how these could be mitigated. The Group's target capital levels are set taking into account its risk appetite and its risk profile under future expected and stressed economic scenarios.

The Group's assessment of risk appetite is closely integrated with the Group's strategy, business planning and capital assessment processes, and is used to inform senior management's views on the level of capital required to support the Group's business activities.

The Group uses a capital model to assess the capital demand 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.

The capital that the Group is required to hold by the FSA is determined by its balance sheet, off-balance sheet, counterparty and other risk exposures after applying collateral and other mitigants, based on the Group's risk rating methodologies and systems.

The Group operates processes and controls to monitor and manage capital adequacy across the organisation. At a country level, capital is maintained on the basis of the local regulator's requirements. It is overseen by the local Asset and Liability Committee (ALCO), which is responsible for managing the country level balance sheet, capital and liquidity.

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 Group's board. The Audit and Risk Committee (ARC) reviews specific risk areas and the issues discussed at the key capital management committees.

The GALCO sets internal triggers and target ranges for capital management and oversees adherence with these. These ranges are 7 to 9 per cent for the Tier 1 capital ratio and 12 to 14 per cent for the total capital ratio.

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

In light of the uncertain economic environment and evolving regulatory debate on banks' capital structures, we believe it is appropriate to remain strongly capitalised above our target ranges.

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

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

Appropriate policies are also in place governing the transfer of capital within the Group. These ensure that capital is remitted as appropriate, subject to complying with the 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.

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## 2.1. Capital structure

### Group's capital resources

The table below summarises the consolidated capital position of the Group. The consolidated balance sheet of the Group includes capital under the following headings:

- called-up ordinary share capital, preference shares, and eligible reserves (included in share capital and reserves);
- innovative Tier 1 securities and qualifying subordinated liabilities (included in subordinated liabilities); and
- portfolio impairment provision (netted against loans to banks and customers).

### Movement in capital

On a Basel II basis, total capital increased by \$5,823 million during the year. The issue of shares in August 2009 increased ordinary

share capital by \$65 million and the \$5,073 million increase in eligible reserves is primarily on account of retained profits less dividends paid. The Group issued \$1,500 million of Innovative Tier 1 securities in the period and gave notice of redemption of EUR500 million of Preferred Securities in full. Qualifying subordinated liabilities, net of associated amortisations, decreased on account of the redemption of a variety of Upper and Lower Tier 2 securities amounting to approximately \$1,000 million, the impact of which was partially offset by the issuance of TWD10 billion and KRW300 billion Lower Tier 2 subordinated debt.

The Group is well capitalised with a Tier 1 capital ratio of 11.5 per cent (2008: 9.9 per cent) and a total capital ratio of 16.5 per cent (2008: 15.6 per cent).

|   | 31.12.09<br>\$million | 31.12.08 <sup>(1)</sup><br>\$million |
|---|-----------------------|--------------------------------------|
| <b>Core Tier 1 capital</b>                                |                       |                                      |
| Called up ordinary share capital                          | 1,013                 | 948                                  |
| Eligible reserves <sup>(2)</sup>                          | 25,001                | 19,928                               |
| Minority interests  | 256                   | 228                                  |
| Less: excess expected losses <sup>(3)</sup>               | (502)                 | (483)                                |
| Less: securitisations                                     | (97)                  | (85)                                 |
| Goodwill and other intangible assets                      | (6,620)               | (6,361)                              |
| Other regulatory adjustments                              | 51                    | 5                                    |
| <b>Total Core Tier 1 capital</b>                          | <b>19,102</b>         | <b>14,180</b>                        |
| <b>Innovative Tier 1 securities</b>                       | <b>2,860</b>          | <b>1,974</b>                         |
| Preference shares   | 2,694                 | 2,664                                |
| Tax on excess expected losses <sup>(2)</sup>              | 163                   | 130                                  |
| Less: material holdings                                   | (237)                 | (216)                                |
| <b>Total Tier 1 capital</b>                               | <b>24,582</b>         | <b>18,732</b>                        |
| <b>Tier 2 capital</b>                                     |                       |                                      |
| Eligible revaluation reserves                             | 253                   | 107                                  |
| Portfolio impairment provision                            | 242                   | 251                                  |
| Less: excess expected losses <sup>(3)</sup>               | (502)                 | (483)                                |
| Qualifying subordinated liabilities:                      |                       |                                      |
| Perpetual subordinated debt                               | 1,535                 | 1,823                                |
| Other eligible subordinated debt <sup>(4)</sup>           | 9,547                 | 10,520                               |
| Less: amortisation of qualifying subordinated liabilities | -                     | (1,126)                              |
| Less: material holdings and total securitisations         | (335)                 | (301)                                |
| <b>Total Tier 2 capital</b>                               | <b>10,740</b>         | <b>10,791</b>                        |
| <b>Deductions from Tier 1 and Tier 2 capital</b>          | <b>(57)</b>           | <b>(81)</b>                          |
| <b>Total capital base</b>                                 | <b>35,265</b>         | <b>29,442</b>                        |

<sup>(1)</sup> The capital for December 2008 has been re-presented in accordance with the definition of Core Tier 1 capital advised by the FSA on 1 May 2009.

<sup>(2)</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.

<sup>(3)</sup> Excess expected losses are shown gross.

<sup>(4)</sup> Subsequent to the reporting date, notice was given for the redemption of \$500 million from other eligible subordinated debt.

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|                                   | 31.12.09<br>\$million | 31.12.08<br>\$million |
|-----------------------------------|-----------------------|-----------------------|
| <b>Risk weighted assets</b>       |                       |                       |
| Credit risk                       | 173,315               | 161,276               |
| Operational risk                  | 20,696                | 18,340                |
| Market risk                       | 19,912                | 9,205                 |
| <b>Total risk weighted assets</b> | <b>213,923</b>        | <b>188,821</b>        |
| <b>Capital ratios</b>             |                       |                       |
| Core Tier 1 capital               | 8.9%                  | 7.5%                  |
| Tier 1 capital                    | 11.5%                 | 9.9%                  |
| <b>Total capital ratio</b>        | <b>16.5%</b>          | <b>15.6%</b>          |

The following table displays the Group's capital position adjusted for Pillar 3 disclosure requirements. Innovative Tier 1 securities have been deducted from Tier 1 capital and included under Tier 2 capital, the total capital for the Group remains unchanged:

|   | 31.12.09<br>\$million | 31.12.08<br>\$million |
|---|-----------------------|-----------------------|
| Total Tier 1 capital                          | 24,582                | 18,732                |
| Less: Innovative Tier 1 securities            | (2,860)               | (1,974)               |
| Tier 1 capital including Pillar 3 adjustments | 21,722                | 16,758                |
| Total Tier 2 capital                          | 10,740                | 10,791                |
| Add: Innovative Tier 1 securities             | 2,860                 | 1,974                 |
| Tier 2 capital including Pillar 3 adjustments | 13,600                | 12,765                |
| Other deductions                              | (57)                  | (81)                  |
| <b>Total capital base</b>                     | <b>35,265</b>         | <b>29,442</b>         |

#### 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 three main categories, or tiers, depending on the degree of permanency and loss absorbency exhibited. These are Tier 1, Tier 2 and Tier 3 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 minority 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 minority interests represent the equity stakes held by minority 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:

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| Description                                    | Terms     |   | 31.12.09<br>\$million | 31.12.08<br>\$million |
|--|-----------|---|-----------------------|-----------------------|
| £100 million 8.250 per cent Preference shares  | Perpetual | Non-cumulative Irredeemable   | 145                   | 130                   |
| \$750 million 7.014 per cent Preference shares | Perpetual | Non-cumulative Redeemable (callable Jul 2037, step-up 3 month LIBOR plus 1.46 per cent) | 747                   | 747                   |
| \$750 million 6.409 per cent Preference shares | Perpetual | Non-cumulative Redeemable (callable Jan 2017, step-up 3 month LIBOR plus 1.51 per cent) | 747                   | 747                   |
| £100 million 7.375 per cent Preference shares  | Perpetual | Non-cumulative Irredeemable   | 140                   | 125                   |
| \$925 million 8.125 per cent Preference shares | Perpetual | Non-cumulative Redeemable (callable Nov 2013)   | 915                   | 915                   |
|  |           |   | 2,694                 | 2,664                 |

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         |  | 31.12.09<br>\$million | 31.12.08<br>\$million |
|---|---------------|--|-----------------------|-----------------------|
| £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)  | 1,050                 | 952                   |
| \$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) | 323                   | 328                   |
| \$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  | 1,487                 | -                     |
| €500 million 8.16 per cent Preferred securities       | Perpetual     | Non-Cumulative Redeemable, (callable Mar 2010) step up 3 month EURIBOR plus 3.8 per cent, exchangeable March 2045 <sup>(1)</sup>                                       | -                     | 694                   |
|   |               |  | 2,860                 | 1,974                 |

<sup>(1)</sup> On 30 December 2009, the Group announced the intention to redeem in full the Euro 500 million 8.16 per cent non-cumulative trust preferred securities on the first call date of 23 March 2010. In line with the FSA's prudential requirements, on publication of the notice to redeem, the securities ceased to qualify as Tier 1 capital. The securities were redeemed in full on 23 March 2010.

#### 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     |  | 31.12.09<br>\$million | 31.12.08<br>\$million |
|--------------------------------------|-----------|--|-----------------------|-----------------------|
| Primary capital floating rate notes: |           |  |                       |                       |
| \$400 million                        | Perpetual | Either 6 month LIBOR plus 0.125 per cent or Residual Period LIBOR plus 0.0625 per cent       | 58                    | 58                    |
| £150 million                         | Perpetual | 3 month LIBOR plus 0.1875 per cent   | 242                   | 217                   |
| \$300 million                        | Perpetual | 6 month LIBOR plus 0.25 per cent   | 82                    | 82                    |
| \$400 million                        | Perpetual | 6 month LIBOR plus 0.275 per cent  | 84                    | 84                    |
| \$200 million                        | Perpetual | 6 month LIBOR plus 0.15 per cent   | 52                    | 52                    |
| Subordinated notes:                  |           |  |                       |                       |
| £675 million                         | Perpetual | Callable Jul 2020, 5.375 per cent coupon with step up 3 month LIBOR plus 1.89 per cent       | 624                   | 968                   |
| £200 million                         | Perpetual | Callable Jan 2022, 7.75 per cent coupon with step-up 5 year benchmark gilt plus 3.8 per cent | 393                   | 362                   |
|                                      |           |  | 1,535                 | 1,823                 |

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. This deduction is shown in the table on page 6 as 'amortisation of qualifying subordinated liabilities' and reduces the amount of capital that is recognised for regulatory purposes. The following table sets out the Lower Tier 2 instruments in issue net of amortisation and their primary terms:

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| Description        | Terms                             |   | 31.12.09<br>\$million | 31.12.08<br>\$million |
|--------------------|-----------------------------------|---|-----------------------|-----------------------|
| £30 million        | Floating rate subordinated notes  | Maturing Mar 2009, coupon 6 month \$ LIBOR plus 1.35 per cent   | -                     | 2                     |
| £300 million       | 6.75 per cent subordinated notes  | Maturing Apr 2009   | -                     | 19                    |
| £300 million       | 6 per cent subordinated notes     | Maturing Jan 2018, callable 2013, step up 3 month LIBOR plus 0.79 per cent  | 483                   | 434                   |
| £700 million       | 7.75 per cent subordinated notes  | Maturing Apr 2018   | 1,126                 | 1,010                 |
| €600 million       | 5.375 per cent subordinated notes | Maturing May 2009   | -                     | 38                    |
| €750 million       | 3.625 per cent subordinated notes | Maturing Feb 2017, callable Feb 2012, step up 3 month EURIBOR plus 0.87 per cent  | 1,072                 | 1,040                 |
| €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                         | 964                   | 936                   |
| €1,100 million     | 5.875 per cent subordinated notes | Maturing Sep 2017   | 1,573                 | 1,529                 |
| \$500 million      | Floating rate subordinated notes  | Maturing Feb 2015, callable Feb 2010, coupon 3 month LIBOR plus 0.30 per cent, step-up 3 month LIBOR plus 0.80 per cent                           | 499                   | 499                   |
| \$700 million      | 8 per cent subordinated notes     | Maturing Mar 2031   | 426                   | 619                   |
| \$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   | 995                   | 995                   |
| \$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                                | 500                   | 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                           | 297                   | 297                   |
| \$350 million      | 4.375 per cent subordinated notes | Maturing Dec 2014, callable Dec 2009, coupon fixed rate 4.375 per cent to Dec 2009, then floating 3 month LIBOR plus 0.86 per cent <sup>(1)</sup> | -                     | 350                   |
| \$22 million       | 9.75 per cent subordinated notes  | Maturing Jun 2021, callable Jun 2016, step up 6 month LIBOR plus 6.6035 per cent  | 24                    | -                     |
| BWP 75 million     | Floating rate subordinated note   | Maturing Nov 2017, callable Nov 2012, 91 day BOBC plus 0.40 per cent, step up 91 day BOBC plus 0.90 per cent                                      | 11                    | 9                     |
| BWP 50 million     | Floating rate subordinated note   | Maturing Dec 2015, callable Dec 2010, coupon 91 day BOBC plus 0.70 per cent, step-up 91 day BOBC plus 1.20 per cent                               | 8                     | 7                     |
| HKD 500 million    | 3.50 per cent subordinated notes  | Maturing Dec 2014, callable Dec 2009, step up HIBOR plus 0.87 per cent <sup>(1)</sup>   | -                     | 64                    |
| HKD 670 million    | Floating rate subordinated note   | Maturing Dec 2014, callable Dec 2009, coupon HIBOR plus 0.37 per cent to Dec 2009, step up to HIBOR plus 0.87 per cent <sup>(1)</sup>             | -                     | 77                    |
| JPY 10,000 million | 3.35 per cent subordinated note   | Maturing Apr 2023, callable Apr 2018, step-up 4.35 per cent.  | 107                   | 110                   |
| KRW 90 billion     | 6.05 per cent subordinated note   | Maturing Mar 2018   | 87                    | 80                    |
| KRW 260 billion    | 6.08 per cent subordinated note   | Maturing Apr 2018, callable Apr 2013  | 236                   | 218                   |
| KRW 300 billion    | 7.05 per cent subordinated note   | Maturing Apr 2019, callable Apr 2014, step up to 7.55 per cent  | 257                   | -                     |
| MYR 500 million    | 4.28 per cent subordinated note   | Maturing Nov 2017, callable Nov 2012, step-up 3 month KLIBOR plus 0.69 per cent   | 146                   | 144                   |
| 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   | 319                   | 311                   |
| TZS 8,000 million  | Floating rates subordinated note  | Maturing Aug 2015, callable Aug 2010, coupon 182 T-bill rate plus 0.40 per cent, step up 182 T-bill rate plus 0.80 per cent                       | 6                     | 6                     |
| TWD 10 billion     | 2.9 per cent subordinated note    | Maturing Oct 2019, callable Oct 2014, step up 3.4 per cent  | 311                   | -                     |
|                    |                                   |   | 9,547                 | 9,394                 |

<sup>(1)</sup> On 4 December 2009, Standard Chartered Bank (Hong Kong) Limited exercised its right to redeem these securities in full.

# Standard Chartered

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#### 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

Investments in 'material holdings' (being investments in excess of 10 per cent of the share capital or subordinated debt 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 First Bank Korea Limited. The capital resources of these subsidiaries are presented in accordance with the regulatory requirements applicable in the countries in which they are incorporated.

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

|  | 31.12.09                |                                  |   | 31.12.08                |                                  |   |
|--|-------------------------|----------------------------------|---|-------------------------|----------------------------------|---|
|  | Standard Chartered Bank | Standard Chartered Bank (HK) Ltd | Standard Chartered First Bank Korea Ltd | Standard Chartered Bank | Standard Chartered Bank (HK) Ltd | Standard Chartered First Bank Korea Ltd |
|  | \$million               | \$million                        | \$million                               | \$million               | \$million                        | \$million                               |
| <b>Core Tier 1 capital</b>                                   |                         |                                  |   |                         |                                  |   |
| Called up ordinary share capital                             | 11,246                  | 13                               | 1,125                                   | 8,746                   | 13                               | 1,043                                   |
| Eligible reserves  | 6,738                   | 4,783                            | 2,308                                   | 5,217                   | 4,080                            | 1,798                                   |
| Minority interests   | -                       | 3                                | -                                       | -                       | 1                                | -                                       |
| Less: excess expected losses                                 | (369)                   | (34)                             | -                                       | (268)                   | (24)                             | -                                       |
| Less: securitisations  | (64)                    | (3)                              | (14)                                    | (44)                    | (3)                              | (36)                                    |
| Goodwill and other intangible assets                         | (1,356)                 | (119)                            | (24)                                    | (1,321)                 | (121)                            | (31)                                    |
| Other regulatory adjustments                                 | 98                      | (189)                            | -                                       | 71                      | (225)                            | -                                       |
| <b>Total Core Tier 1 capital</b>                             | <b>16,293</b>           | <b>4,454</b>                     | <b>3,395</b>                            | <b>12,401</b>           | <b>3,721</b>                     | <b>2,774</b>                            |
| Innovative Tier 1 securities                                 | 2,537                   | -                                | 300                                     | 1,646                   | -                                | 300                                     |
| Preference shares  | 2,424                   | -                                | -                                       | 2,424                   | -                                | -                                       |
| Tax on excess expected losses                                | 140                     | -                                | -                                       | 44                      | -                                | -                                       |
| Less: material holdings                                      | (6,475)                 | (243)                            | -                                       | (6,092)                 | (210)                            | -                                       |
| <b>Total Tier 1 capital</b>                                  | <b>14,919</b>           | <b>4,211</b>                     | <b>3,695</b>                            | <b>10,423</b>           | <b>3,511</b>                     | <b>3,074</b>                            |
| <b>Tier 2 capital</b>  |                         |                                  |   |                         |                                  |   |
| Eligible revaluation reserves                                | 51                      | 10                               | 11                                      | 60                      | 15                               | 43                                      |
| Regulatory Reserve   | -                       | 13                               | 28                                      | -                       | 5                                | -                                       |
| Portfolio impairment provision (applicable to STD portfolio) | 116                     | 11                               | 180                                     | 67                      | 11                               | 378                                     |
| Less: excess expected losses                                 | (369)                   | (34)                             | -                                       | (268)                   | (24)                             | -                                       |
| Qualifying subordinated liabilities:                         |                         |                                  |   |                         |                                  |   |
| Perpetual subordinated debt                                  | 4,360                   | 297                              | -                                       | 2,848                   | 797                              | -                                       |
| Other eligible subordinated debt                             | 8,165                   | -                                | 585                                     | 9,267                   | -                                | 552                                     |
| Less: amortisation of qualifying subordinated liabilities    | -                       | -                                | (17)                                    | (1,127)                 | -                                | (167)                                   |
| Less: material holdings and total securitisations            | (6,539)                 | (247)                            | (14)                                    | (6,136)                 | (214)                            | (36)                                    |
| Less: other regulatory deductions                            | -                       | (50)                             | -                                       | -                       | (190)                            | -                                       |
| <b>Total Tier 2 capital</b>                                  | <b>5,784</b>            | <b>-</b>                         | <b>773</b>                              | <b>4,711</b>            | <b>400</b>                       | <b>770</b>                              |
| Deductions from Tier 1 and Tier 2 capital <sup>(1)</sup>     | (2,126)                 | -                                | (235)                                   | (2,221)                 | -                                | (40)                                    |
| <b>Total capital base</b>                                    | <b>18,577</b>           | <b>4,211</b>                     | <b>4,233</b>                            | <b>12,913</b>           | <b>3,911</b>                     | <b>3,804</b>                            |

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

### 3. Risk management

The management of risk lies at the heart of Standard Chartered'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, market, liquidity, operational, regulatory, pension, reputational and other risks which are inherent to Standard Chartered'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.

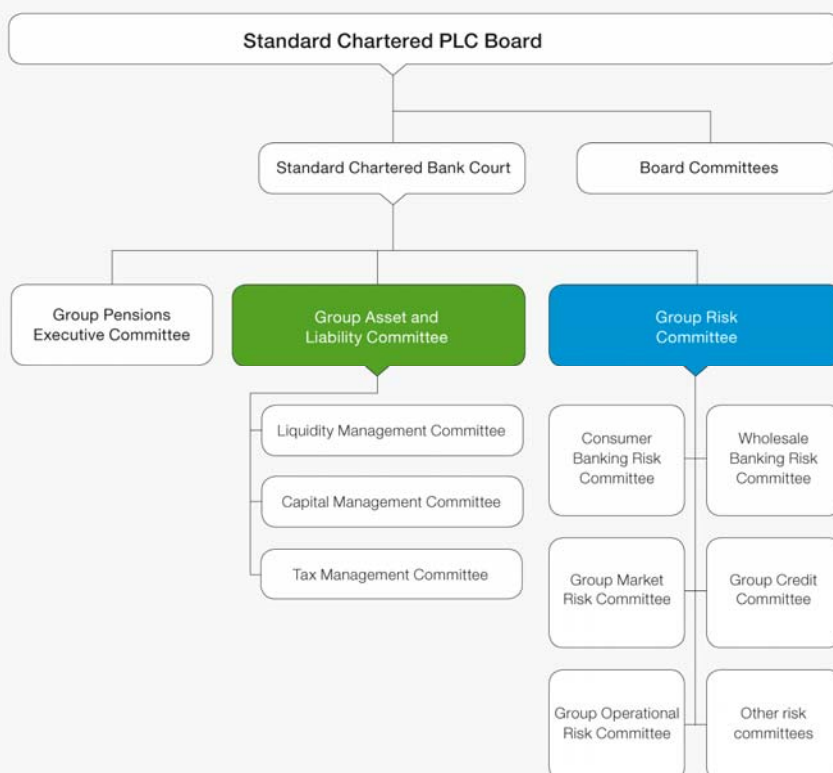
Through the risk management framework Standard Chartered manages enterprise-wide risks, with the objective of maximising risk-adjusted returns while remaining within the Group's risk appetite.

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 reward:** 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, environmental and ethical responsibilities in taking risk to produce a return;
- **Accountability:** risk is taken only within agreed authorities and where there is appropriate infrastructure and resource. All risk-taking must be transparent, controlled and reported;
- **Anticipation:** seek to anticipate future risks and maximise awareness of all risks; and
- **Competitive advantage:** seek competitive advantage through efficient and effective risk management and control.

The following diagram illustrates the high level risk committee structure:

Group risk committee structure



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#### Risk governance

Ultimate responsibility for setting the Group's risk appetite and for the effective management of risk rests with the Board of Standard Chartered PLC (the Board). Executive responsibility for risk management is held by the Standard Chartered Bank Court (the Court) which comprises the Group executive directors and other directors of Standard Chartered Bank.

The Court delegates authority for the management of risk to several committees.

The Group Risk Committee (GRC) is responsible for the management of all risks other than those delegated by the Court to the Group Asset and Liability Committee (GALCO) and the Group Pensions Executive Committee. The GRC is responsible for the establishment of, and compliance with, policies relating to credit risk, country cross-border risk, market risk, operational risk, regulatory risk and reputational risk. The GRC also defines the overall risk management framework.

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

The Group Pensions Executive Committee is responsible for the management of pension risk.

Members of the Court are also members of both the GRC and 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 and market 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.

Acting within an authority delegated by the Board, the Audit and Risk Committee (ARC), whose members are all non-executive directors of the Group, reviews specific risk areas and monitors the activities of the GRC and GALCO. The ARC receives regular reports on risk management, including portfolio trends, policies and standards, adherence with internal controls, regulatory compliance, liquidity and capital adequacy, and is authorised to investigate or seek any information relating to an activity within its terms of reference. As of 4 March 2010, the ARC was split into a Board Risk Committee and a Board Audit Committee.

The committee governance structure ensures that risk-taking authority and risk management policies are cascaded down through the organisation 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 through the country, business and functional committees up to the Group-level committees.

Business governance and functional heads are accountable for risk management in their businesses and functions, and for countries where they have governance responsibilities. This includes:

- implementing across all business activities the policies and standards as agreed by the Group-level risk committees;
- managing risk in line with appetite levels agreed by the Group-level risk committees; and

- developing and maintaining appropriate risk management infrastructure and systems to facilitate compliance with risk policies.

The GCRO directly manages a risk function which 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. Chief Risk Officers for both Wholesale and Consumer Banking have their primary reporting lines into the GCRO. Country Chief Risk Officers take overall responsibility for risk within principal countries.

The Risk function is responsible for upholding the 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.

The Risk function is independent of the origination 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 immediately while losses arising from risk positions only manifest themselves over time.

The Risk function is also responsible for maintaining the Group's Risk Management Framework (RMF), ensuring it remains appropriate to the Group's activities, and is effectively communicated and implemented across the Group. The Risk function also administers Risk-related governance and reporting processes.

The RMF identifies the risk types to which the Group is exposed, each of which is controlled by a designated risk control owner. The major risk types are described individually in the following sections. The risk control owners have responsibility for establishing minimum standards and for implementing governance and assurance processes, under the oversight of the GRC or GALCO and their sub-committees.

Group Internal Audit is a separate Group function that reports to the Chairman of the ARC and to the Group Chief Executive. It provides independent confirmation of compliance with Group and business standards, policies and procedures. Where necessary, it will recommend corrective action to restore or maintain such standards.

#### Risk appetite

Standard Chartered manages 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.

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

The Group's quantitative risk profile is assessed through a 'bottom-up' analytical approach covering all of the major businesses, countries and products. The risk appetite 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 is responsible for ensuring that the risk profile is managed in compliance with the risk appetite set by the Board.

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#### **Stress testing**

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

The Group has a stress testing framework designed to:

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

A stress-testing forum, 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 forum generates and considers pertinent and plausible scenarios that have the potential to adversely affect the Group's business.

In 2009, stress testing activity was intensified at country, business and Group levels, with specific focus on certain asset classes, customer segments and the potential impact of macroeconomic factors. Stress tests have taken into consideration possible future scenarios that could arise as a result of the development of prevailing market conditions.

Stress testing themes such as inflation, US dollar depreciation, declines in asset values, swine flu, or potential border conflicts are co-ordinated by the stress testing forum to ensure consistency of impacts on different risk types or countries. Stress tests for country or risk type are also performed. Examples of market risk stress testing are covered in the section on market risk.

#### **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.

## 4. Credit risk

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

### Credit policies

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

### Risk reporting and measurement

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

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

A number of internal risk management reports are produced on a regular basis, providing information on; individual counterparty, counterparty group, portfolio exposure, credit grade migration, the status of accounts or portfolios showing signs of weakness or financial deterioration, models performance and updates on credit markets. AIRB portfolio metrics are widely used in these reports. Regular portfolio risk reports are made available at senior management committee meetings including ARC, GRC and functional business and country level risk committees.

For AIRB portfolios, 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 AIRB models are validated in detail by a model validation team, which is separate from the teams which develop and maintain the models. Models undergo a detailed annual review. Such reviews are also triggered if the performance of a model deteriorates materially against predetermined thresholds during the ongoing model performance monitoring process.

### Credit approval

Major credit exposures to individual counterparties, groups of connected counterparties and portfolios of retail exposures are reviewed and approved by 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 on their judgement and experience, and a risk-

adjusted scale which takes account of the estimated maximum potential loss from a given customer or portfolio. Credit origination and approval roles are segregated in all 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.

### Concentration risk

Credit concentration risk is managed within concentration caps set by counterparty or groups of connected counterparties, by industry sector and country in Wholesale Banking; and by product 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 which 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; as well as AIRB portfolio metrics including credit grade migration.

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

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

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

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

## **4.1. Internal Ratings Based Approach to credit risk**

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The Group uses the AIRB approach to manage credit risk for the majority of its portfolios. This allows the Group to use its own internal estimates of PD, LGD, 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 must produce an internal estimate of PD for all borrowers in each borrower grade. EAD is the expected amount of exposure to a particular obligor at the point of default. CCF is an internally modeled parameter based on historical experience to determine the amount that is expected to be further drawn down from the undrawn portion in a committed facility. LGD is the percentage of EAD that a lender expects to lose in the event of obligor default.

All assets under the AIRB approach have sophisticated PD, LGD and EAD/CCF models developed to support the credit decision making process. RWA under the AIRB 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 AIRB approach is covered in more detail in section 4.6 Internal Ratings Based models.

Regulation BIPRU 4.2.30 allows AIRB 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; mainly in the Middle East.

For Wholesale Banking, permanent exemptions apply to:

- Alternative investments;
- Private equity;
- Jordan and Lebanon; and
- Purchase receivables.

The Group also applies the standardised approach to portfolios that are currently being transitioned to the AIRB approach in accordance with the Group's 'AIRB Roll Out Plan'. Direct comparability between current and prior year data for certain portfolios may not be possible during this process. Portfolios transitioned from the standardised to the IRB approach through 2009 include:

- SME and secured installment loans in Korea;
- SME mortgage portfolio in Malaysia; and
- Personal loans in Indonesia.

Subject to FSA approval, the following portfolios are due to be incorporated fully into the AIRB coverage within the next 18 months.

- Mortgages and personal loans in Taiwan;
- Credit cards in Indonesia;
- Personal loans in Malaysia;
- A portion of the Permata Bank Wholesale Banking portfolio in Indonesia; and
- A portion of the commercial real estate book in Wholesale Banking.

## **4.2. Standardised Approach to credit risk**

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The standardised approach is applied to portfolios that are classified as permanently exempt from the AIRB approach, and those portfolios that are currently under transition to the AIRB approach in accordance with the Group's 'AIRB Roll Out Plan'. Section 4.1 provides details of such portfolios.

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.

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#### 4.3. Regulatory capital requirements

The below table presents the minimum regulatory credit risk capital requirements as at 31 December 2009, calculated as 8 per cent of RWA based on the approaches described above in sections 4.1 and 4.2.

|  | Regulatory Capital Requirement |                       |
|--|--------------------------------|-----------------------|
|  | 31.12.09<br>\$million          | 31.12.08<br>\$million |
| <b>Credit Risk Capital</b>   |                                |                       |
| AIRB Exposure Class  |                                |                       |
| Central governments or central banks   | 703                            | 404                   |
| Institutions   | 1,394                          | 1,335                 |
| Corporates   | 6,115                          | 5,001                 |
| Retail, of which   | 1,569                          | 1,436                 |
| Secured by real estate collateral  | 519                            | 519                   |
| Qualifying revolving retail  | 422                            | 406                   |
| Retail SME   | 44                             | 68                    |
| Other retail   | 584                            | 443                   |
| Securitisation positions   | 195                            | 198                   |
| Non-credit obligation assets   | -                              | 17                    |
| <b>Total AIRB</b>  | <b>9,976</b>                   | <b>8,391</b>          |
| <b>Standardised Exposure Class</b>   |                                |                       |
| Central governments or central banks   | 38                             | 3                     |
| Institutions   | 61                             | 109                   |
| Corporates   | 499                            | 617                   |
| Retail   | 711                            | 840                   |
| Secured on real estate property  | 487                            | 370                   |
| Past due items   | 86                             | 135                   |
| Items belonging to regulatory high risk categories                           | 29                             | 35                    |
| Other items <sup>(2)</sup>   | 955                            | 1,014                 |
| <b>Total Standardised</b>  | <b>2,866</b>                   | <b>3,123</b>          |
| Counterparty credit risk capital component (credit risk in the trading book) | 1,023                          | 1,388                 |
| Concentration Risk capital component <sup>(1)</sup>                          | -                              | -                     |
| <b>Total</b>   | <b>13,865</b>                  | <b>12,902</b>         |

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

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

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The minimum credit risk capital requirements of the Group's significant subsidiaries are presented below in accordance with the regulatory requirements applicable in the countries in which they are incorporated. For 2008, local regulatory requirements obliged Standard Chartered First Bank Korea to use the standardised approach to credit risk, however under FSA guidelines it was treated under the AIRB approach. For 2009, Standard Chartered First Bank Korea has been granted permission by the Financial Supervisory Service (FSS) to apply the AIRB approach locally to selected Corporate portfolios and the Retail portfolio (excluding SME).

|  | 31.12.09                          |  |   | 31.12.08                          |  |   |
|--|-----------------------------------|--|---|-----------------------------------|--|---|
|  | Standard Chartered Bank \$million | Standard Chartered Bank (HK) Ltd \$million | Standard Chartered First Bank Korea \$million | Standard Chartered Bank \$million | Standard Chartered Bank (HK) Ltd \$million | Standard Chartered First Bank Korea \$million |
| <b>Credit Risk Capital</b>   |                                   |  |   |                                   |  |   |
| <b>AIRB Exposure Class</b>   |                                   |  |   |                                   |  |   |
| Central governments or central banks   | 284                               | 15   | -   | 167                               | 6  | -   |
| Institutions   | 1,247                             | 220  | -   | 1,213                             | 230  | -   |
| Corporates   | 3,672                             | 821  | 778   | 2,712                             | 887  | -   |
| Retail, of which   | 399                               | 336  | 548   | 350                               | 331  | -   |
| Secured by real estate collateral  | 197                               | 109  | 99  | 163                               | 101  | -   |
| Qualifying revolving retail  | 125                               | 150  | 46  | 110                               | 171  | -   |
| Retail SME   | -                                 | -  | -   | -                                 | -  | -   |
| Other retail   | 77                                | 77   | 403   | 77                                | 59   | -   |
| Securitisation positions   | 127                               | 2  | 18  | 223                               | 2  | -   |
| Non-credit obligation assets   | -                                 | -  | -   | -                                 | -  | -   |
| Other <sup>(1)</sup>   | -                                 | 80   | -   | -                                 | 104  | -   |
| <b>Total AIRB</b>  | <b>5,729</b>                      | <b>1,474</b>                               | <b>1,344</b>                                  | <b>4,665</b>                      | <b>1,560</b>                               | <b>-</b>                                      |
| <b>Standardised Exposure Class</b>   |                                   |  |   |                                   |  |   |
| Central governments or central banks   | 16                                | -  | 8   | 2                                 | -  | 1   |
| Institutions   | 9                                 | 11   | 58  | 46                                | 1  | 55  |
| Corporates   | 195                               | 115  | 436   | 294                               | 89   | 856   |
| Retail   | 306                               | 32   | 22  | 313                               | 35   | 460   |
| Secured on real estate property  | 77                                | 36   | -   | 39                                | 32   | 321   |
| Past due items   | 15                                | 29   | -   | 19                                | 29   | -   |
| Items belonging to regulatory high risk categories                           | 2                                 | -  | 95  | 2                                 | -  | 49  |
| Securitisation positions   | -                                 | -  | -   | -                                 | -  | 80  |
| Other items  | 339                               | 20   | 121   | 345                               | 27   | 146   |
| <b>Total Standardised</b>  | <b>959</b>                        | <b>243</b>                                 | <b>740</b>                                    | <b>1,060</b>                      | <b>213</b>                                 | <b>1,968</b>                                  |
| Counterparty credit risk capital component (credit risk in the trading book) | 902                               | 2  | 313   | 981                               | 1  | 422   |
| Concentration Risk capital component <sup>(2)</sup>                          | -                                 | -  | -   | -                                 | -  | -   |
| <b>Total</b>   | <b>7,590</b>                      | <b>1,719</b>                               | <b>2,397</b>                                  | <b>6,706</b>                      | <b>1,774</b>                               | <b>2,390</b>                                  |

<sup>(1)</sup> The AIRB 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 an individual counterparty exceeds 25 per cent of capital resources.

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## 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 dependant on the product type, and for AIRB exposure classes this amount is modelled internally.

### Geographical analysis

The below table 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 region and Americas, UK & Europe. Facilities for global corporate and institutional clients are predominantly booked in the Americas, UK and Europe region. 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 Wholesale Banking portfolio remains well diversified across geography.

|   | 31.12.09            |                     |                 |                              |                 |                            |              |                      |                  |                |
|---|---------------------|---------------------|-----------------|------------------------------|-----------------|----------------------------|--------------|----------------------|------------------|----------------|
|   | Asia Pacific        |                     |                 |                              |                 | Middle East & Other S Asia | Africa       | Americas UK & Europe | Period End Total | Average Total  |
|   | Hong Kong \$million | Singapore \$million | Korea \$million | Other Asia Pacific \$million | India \$million | \$million                  | \$million    | \$million            | \$million        | \$million      |
| <b>AIRB Exposure Class</b>                    |                     |                     |                 |                              |                 |                            |              |                      |                  |                |
| Central governments or central banks          | 12,109              | 5,231               | 6,658           | 18,877                       | 4,108           | 5,990                      | 3,057        | 18,363               | 74,393           | 66,155         |
| Institutions                                  | 30,855              | 13,040              | 7,822           | 12,732                       | 2,923           | 5,999                      | 917          | 42,095               | 116,383          | 117,803        |
| Corporates                                    | 12,820              | 15,330              | 12,854          | 18,160                       | 8,750           | 19,967                     | 4,113        | 34,563               | 126,557          | 122,953        |
| Retail  | 23,200              | 11,286              | 31,585          | 6,971                        | 2,286           | 763                        | -            | -                    | 76,091           | 69,144         |
| Securitisation positions                      | -                   | -                   | -               | -                            | -               | -                          | -            | 17,389               | 17,389           | 17,958         |
| Non-credit obligation assets                  | -                   | -                   | -               | -                            | -               | -                          | -            | -                    | -                | -              |
| <b>Total AIRB</b>                             | <b>78,984</b>       | <b>44,887</b>       | <b>58,919</b>   | <b>56,740</b>                | <b>18,067</b>   | <b>32,719</b>              | <b>8,087</b> | <b>112,410</b>       | <b>410,813</b>   | <b>394,013</b> |
| <b>Standardised Exposure Class</b>            |                     |                     |                 |                              |                 |                            |              |                      |                  |                |
| Central governments or central banks          | 1                   | -                   | 3               | 472                          | -               | 368                        | -            | -                    | 844              | 784            |
| Multilateral development banks                | 300                 | 580                 | -               | 34                           | 23              | 10                         | -            | 61                   | 1,008            | 203            |
| Institutions                                  | 147                 | 61                  | 102             | 72                           | 27              | -                          | -            | 1,491                | 1,900            | 2,466          |
| Corporates                                    | 1,478               | 4,399               | 453             | 2,862                        | 562             | 728                        | 97           | 1,911                | 12,490           | 11,692         |
| Retail  | 1,263               | 1,839               | 72              | 4,818                        | 999             | 2,779                      | 850          | 436                  | 13,056           | 13,871         |
| Secured on real estate                        | 741                 | 1,155               | 6               | 8,912                        | 520             | 423                        | 36           | 174                  | 11,967           | 10,666         |
| Past due items                                | 219                 | 19                  | 101             | 521                          | 67              | 154                        | 26           | 14                   | 1,121            | 1,227          |
| Items belong to regulatory high risk category | 155                 | 18                  | -               | 68                           | 19              | -                          | -            | 14                   | 274              | 594            |
| Other items                                   | 2,539               | 367                 | 2,231           | 1,973                        | 1,034           | 1,561                      | 823          | 3,601                | 14,129           | 13,193         |
| <b>Total Standardised</b>                     | <b>6,843</b>        | <b>8,438</b>        | <b>2,968</b>    | <b>19,732</b>                | <b>3,251</b>    | <b>6,023</b>               | <b>1,832</b> | <b>7,702</b>         | <b>56,789</b>    | <b>54,696</b>  |
| <b>Total</b>                                  | <b>85,827</b>       | <b>53,325</b>       | <b>61,887</b>   | <b>76,472</b>                | <b>21,318</b>   | <b>38,742</b>              | <b>9,919</b> | <b>120,112</b>       | <b>467,602</b>   | <b>448,709</b> |

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|   | Asia Pacific        |                     |                 |                              |                 | Middle East & Other S Asia |                  | Americas UK & Europe | Period End Total | Average Total |
|---|---------------------|---------------------|-----------------|------------------------------|-----------------|----------------------------|------------------|----------------------|------------------|---------------|
|   | Hong Kong \$million | Singapore \$million | Korea \$million | Other Asia Pacific \$million | India \$million | \$million                  | Africa \$million | \$million            | \$million        | \$million     |
| AIRB Exposure Class                           |                     |                     |                 |                              |                 |                            |                  |                      |                  |               |
| Central governments or central banks          | 8,482               | 4,959               | 7,062           | 19,823                       | 3,858           | 3,636                      | 1,936            | 14,875               | 64,631           | 54,573        |
| Institutions                                  | 27,110              | 14,904              | 9,062           | 11,392                       | 3,025           | 5,575                      | 1,187            | 54,212               | 126,467          | 118,592       |
| Corporates                                    | 12,549              | 9,138               | 12,545          | 18,075                       | 8,138           | 17,257                     | 3,398            | 39,014               | 120,114          | 111,542       |
| Retail  | 21,035              | 8,232               | 25,179          | 5,470                        | 2,139           | 856                        | -                | -                    | 62,911           | 64,854        |
| Securitisation positions                      | -                   | -                   | -               | -                            | -               | -                          | -                | 18,533               | 18,533           | 14,248        |
| Non-credit obligation assets                  | -                   | -                   | 25              | -                            | -               | -                          | -                | -                    | 25               | 13            |
| Total AIRB                                    | 69,176              | 37,233              | 53,873          | 54,760                       | 17,160          | 27,324                     | 6,521            | 126,634              | 392,681          | 363,822       |
| Standardised Exposure Class                   |                     |                     |                 |                              |                 |                            |                  |                      |                  |               |
| Central governments or central banks          | -                   | -                   | 1               | -                            | 45              | -                          | -                | 134                  | 180              | 91            |
| Multilateral development banks                | -                   | -                   | -               | -                            | -               | -                          | -                | 7                    | 7                | 4             |
| Institutions                                  | 7                   | 129                 | -               | 7                            | 167             | -                          | -                | 3,305                | 3,615            | 1,809         |
| Corporates                                    | 1,107               | 3,673               | 1,413           | 1,299                        | 410             | 367                        | 18               | 3,976                | 12,263           | 9,404         |
| Retail  | 1,090               | 1,248               | 2,166           | 5,070                        | 978             | 3,257                      | 762              | 553                  | 15,124           | 17,291        |
| Secured on real estate                        | 353                 | 612                 | 616             | 7,104                        | 254             | 41                         | 34               | 130                  | 9,144            | 8,409         |
| Past due items                                | 460                 | 18                  | 130             | 668                          | 53              | 111                        | 27               | 2                    | 1,469            | 1,305         |
| Items belong to regulatory high risk category | 162                 | -                   | -               | 91                           | 21              | -                          | -                | 22                   | 296              | 148           |
| Other items                                   | 2,174               | 574                 | 2,334           | 2,689                        | 1,049           | 1,109                      | 685              | 3,692                | 14,306           | 13,893        |
| Total Standardised                            | 5,353               | 6,254               | 6,660           | 16,928                       | 2,977           | 4,885                      | 1,526            | 11,821               | 56,404           | 52,354        |
| Total   | 74,529              | 43,487              | 60,533          | 71,688                       | 20,137          | 32,209                     | 8,047            | 138,455              | 449,085          | 416,176       |

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#### Industry analysis

The Wholesale Banking portfolio is well diversified across industry, with no significant concentration within the industry classifications of Manufacturing; Financing, insurance and business services; Commerce; or Transport, storage and communication.

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|  | Loans to<br>Individuals<br>- Mortgage<br>\$million | Loans to<br>Individuals<br>- Other<br>\$million | SME<br>\$million | Commerce<br>\$million | Manufacturing<br>\$million | Commercial<br>Real Estate<br>\$million | Government<br>\$million | Financing<br>Insurance<br>& Business<br>Services<br>\$million | Transport &<br>Storage &<br>Communication<br>\$million | Other<br>\$million | Total<br>\$million |
|--|--|---|------------------|-----------------------|----------------------------|--|-------------------------|---|--|--------------------|--------------------|
| <b>AIRB Exposure Class</b>                             |  |   |                  |                       |                            |  |                         |   |  |                    |                    |
| Central governments<br>or central banks                | -  | -   | -                | 1,174                 | -                          | 321                                    | 70,702                  | 714   | 27   | 1,455              | 74,393             |
| Institutions   | 2  | 27  | -                | 322                   | -                          | 375                                    | 369                     | 114,429   | 4  | 855                | 116,383            |
| Corporates   | 10   | 174   | 4,585            | 28,779                | 33,788                     | 6,630                                  | 529                     | 13,695  | 11,700   | 26,667             | 126,557            |
| Retail   | 53,177   | 21,896  | 1,018            | -                     | -                          | -                                      | -                       | -   | -  | -                  | 76,091             |
| Securitisation<br>positions                            | -  | -   | -                | 38                    | -                          | -                                      | -                       | 2,641   | -  | 14,710             | 17,389             |
| Non-credit<br>obligation assets                        | -  | -   | -                | -                     | -                          | -                                      | -                       | -   | -  | -                  | -                  |
| <b>Total AIRB</b>                                      | <b>53,189</b>                                      | <b>22,097</b>                                   | <b>5,603</b>     | <b>30,313</b>         | <b>33,788</b>              | <b>7,326</b>                           | <b>71,600</b>           | <b>131,479</b>  | <b>11,731</b>  | <b>43,687</b>      | <b>410,813</b>     |
| <b>Standardised Exposure Class</b>                     |  |   |                  |                       |                            |  |                         |   |  |                    |                    |
| Central governments<br>or central banks                | -  | -   | -                | -                     | -                          | -                                      | 1                       | 3   | -  | 840                | 844                |
| Multilateral<br>development banks                      | -  | -   | -                | -                     | -                          | -                                      | 15                      | 130   | -  | 863                | 1,008              |
| Institutions   | -  | -   | -                | -                     | -                          | -                                      | -                       | 818   | -  | 1,082              | 1,900              |
| Corporates   | -  | -   | 8,185            | 1,228                 | 1,160                      | -                                      | 80                      | 186   | 159  | 1,492              | 12,490             |
| Retail   | -  | 7,896   | 5,160            | -                     | -                          | -                                      | -                       | -   | -  | -                  | 13,056             |
| Secured on real<br>estate                              | 10,065   | -   | 1,887            | -                     | -                          | -                                      | -                       | -   | -  | 15                 | 11,967             |
| Past due items   | 189  | 347   | 443              | 13                    | 41                         | 4                                      | -                       | 38  | -  | 46                 | 1,121              |
| Items belonging to<br>regulatory high risk<br>category | -  | -   | 39               | 3                     | 38                         | 102                                    | -                       | 3   | -  | 89                 | 274                |
| Other items  | 2  | 474   | -                | 180                   | 195                        | 2                                      | -                       | 321   | 62   | 12,893             | 14,129             |
| <b>Total Standardised</b>                              | <b>10,256</b>                                      | <b>8,717</b>                                    | <b>15,714</b>    | <b>1,424</b>          | <b>1,434</b>               | <b>108</b>                             | <b>96</b>               | <b>1,499</b>  | <b>221</b>   | <b>17,320</b>      | <b>56,789</b>      |
| <b>Total</b>   | <b>63,445</b>                                      | <b>30,814</b>                                   | <b>21,317</b>    | <b>31,737</b>         | <b>35,222</b>              | <b>7,434</b>                           | <b>71,696</b>           | <b>132,978</b>  | <b>11,952</b>  | <b>61,007</b>      | <b>467,602</b>     |

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|  | Loans to<br>Individuals<br>- Mortgage<br>\$million | Loans to<br>Individuals<br>- Other<br>\$million | SME<br>\$million | Commerce<br>\$million | Manufacturing<br>\$million | Commercial<br>Real Estate<br>\$million | Government<br>\$million | Financing<br>Insurance<br>& Business<br>Services<br>\$million | Transport &<br>Storage &<br>Communication<br>\$million | Other<br>\$million | Total<br>\$million |
|--|--|---|------------------|-----------------------|----------------------------|--|-------------------------|---|--|--------------------|--------------------|
| <b>AIRB Exposure Class</b>                             |  |   |                  |                       |                            |  |                         |   |  |                    |                    |
| Central governments<br>or central banks                | -  | -   | -                | -                     | -                          | -                                      | 63,766                  | 157   | -  | 708                | 64,631             |
| Institutions   | -  | 4   | -                | 9                     | 5                          | 328                                    | 118                     | 116,505   | 7  | 9,491              | 126,467            |
| Corporates   | 32   | 17  | 1,568            | 26,309                | 34,765                     | 5,954                                  | 594                     | 14,684  | 8,953  | 27,238             | 120,114            |
| Retail   | 42,787   | 19,490  | 634              | -                     | -                          | -                                      | -                       | -   | -  | -                  | 62,911             |
| Securitisation<br>positions                            | -  | -   | -                | -                     | -                          | -                                      | -                       | 448   | -  | 18,085             | 18,533             |
| Non-credit obligation<br>assets                        | -  | -   | -                | -                     | -                          | -                                      | -                       | -   | -  | 25                 | 25                 |
| <b>Total AIRB</b>                                      | <b>42,819</b>                                      | <b>19,511</b>                                   | <b>2,202</b>     | <b>26,318</b>         | <b>34,770</b>              | <b>6,282</b>                           | <b>64,478</b>           | <b>131,794</b>  | <b>8,960</b>   | <b>55,547</b>      | <b>392,681</b>     |
| <b>Standardised Exposure Class</b>                     |  |   |                  |                       |                            |  |                         |   |  |                    |                    |
| Central governments<br>or central banks                | -  | -   | -                | -                     | -                          | -                                      | -                       | -   | -  | 180                | 180                |
| Multilateral<br>development banks                      | -  | -   | -                | -                     | -                          | -                                      | -                       | -   | -  | 7                  | 7                  |
| Institutions   | -  | -   | -                | -                     | -                          | -                                      | -                       | 572   | -  | 3,043              | 3,615              |
| Corporates   | -  | -   | 7,498            | 1,312                 | 1,084                      | -                                      | -                       | 18  | 101  | 2,250              | 12,263             |
| Retail   | -  | 8,609   | 6,515            | -                     | -                          | -                                      | -                       | -   | -  | -                  | 15,124             |
| Secured on real<br>estate                              | 7,618  | -   | 1,523            | -                     | -                          | -                                      | -                       | -   | -  | 3                  | 9,144              |
| Past due items   | 4  | 577   | 800              | 8                     | 30                         | 3                                      | -                       | 1   | -  | 46                 | 1,469              |
| Items belonging to<br>regulatory high risk<br>category | -  | -   | -                | -                     | 41                         | 129                                    | -                       | -   | -  | 126                | 296                |
| Other items  | -  | -   | -                | 279                   | 198                        | -                                      | -                       | 835   | 50   | 12,944             | 14,306             |
| <b>Total Standardised</b>                              | <b>7,622</b>                                       | <b>9,186</b>                                    | <b>16,336</b>    | <b>1,599</b>          | <b>1,353</b>               | <b>132</b>                             | <b>-</b>                | <b>1,426</b>  | <b>151</b>   | <b>18,599</b>      | <b>56,404</b>      |
| <b>Total</b>   | <b>50,441</b>                                      | <b>28,697</b>                                   | <b>18,538</b>    | <b>27,917</b>         | <b>36,123</b>              | <b>6,414</b>                           | <b>64,478</b>           | <b>133,220</b>  | <b>9,111</b>   | <b>74,146</b>      | <b>449,085</b>     |

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#### Maturity analysis

Approximately 64 per cent (2008: 64 per cent) of the Group's exposure to customers is short term, having contractual maturity of one year or less. The Wholesale Banking portfolio is predominantly short term with 73 per cent (2008: 75 per cent) of EAD having a remaining contractual maturity of one year or less. In Consumer Banking the longer maturity profile of the AIRB portfolio is driven by the mortgage book which makes up 70 per cent (2008: 68 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.

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

|  | 31.12.09                         |                                   |                                 |                    |
|--|----------------------------------|-----------------------------------|---------------------------------|--------------------|
|  | One year<br>or less<br>\$million | One to<br>five years<br>\$million | Over<br>five years<br>\$million | Total<br>\$million |
| <b>AIRB Exposure Class</b>                       |                                  |                                   |                                 |                    |
| Central governments or central banks             | 59,117                           | 13,030                            | 2,246                           | 74,393             |
| Institutions                                     | 94,748                           | 19,067                            | 2,568                           | 116,383            |
| Corporates                                       | 88,054                           | 30,632                            | 7,871                           | 126,557            |
| Retail   | 9,885                            | 15,684                            | 50,522                          | 76,091             |
| Securitisation positions                         | 5,413                            | 10,082                            | 1,894                           | 17,389             |
| Non-credit obligation assets                     | -                                | -                                 | -                               | -                  |
| Total AIRB                                       | 257,217                          | 88,495                            | 65,101                          | 410,813            |
| <b>Standardised Exposure Class</b>               |                                  |                                   |                                 |                    |
| Central governments or central banks             | 843                              | 1                                 | -                               | 844                |
| Multilateral development banks                   | 131                              | 843                               | 34                              | 1,008              |
| Institutions                                     | 1,704                            | 196                               | -                               | 1,900              |
| Corporates                                       | 10,190                           | 546                               | 1,754                           | 12,490             |
| Retail   | 5,953                            | 3,257                             | 3,846                           | 13,056             |
| Secured on real estate                           | 6,702                            | 310                               | 4,955                           | 11,967             |
| Past due items                                   | 694                              | 161                               | 266                             | 1,121              |
| Items belonging to regulatory high risk category | 230                              | 34                                | 10                              | 274                |
| Other items                                      | 10,859                           | 25                                | 3,245                           | 14,129             |
| Total Standardised                               | 37,306                           | 5,373                             | 14,110                          | 56,789             |
| <b>Total</b>                                     | 294,523                          | 93,868                            | 79,211                          | 467,602            |

|  | 31.12.08                         |                                   |                                 |                    |
|--|----------------------------------|-----------------------------------|---------------------------------|--------------------|
|  | One year<br>or less<br>\$million | One to<br>five years<br>\$million | Over<br>five years<br>\$million | Total<br>\$million |
| <b>AIRB Exposure Class</b>                       |                                  |                                   |                                 |                    |
| Central governments or central banks             | 56,572                           | 7,556                             | 503                             | 64,631             |
| Institutions                                     | 106,072                          | 17,122                            | 3,273                           | 126,467            |
| Corporates                                       | 83,927                           | 27,640                            | 8,547                           | 120,114            |
| Retail   | 6,898                            | 15,803                            | 40,210                          | 62,911             |
| Securitisation positions                         | 701                              | 15,760                            | 2,072                           | 18,533             |
| Non-credit obligation assets                     | 25                               | –                                 | –                               | 25                 |
| Total AIRB                                       | 254,195                          | 83,881                            | 54,605                          | 392,681            |
| <b>Standardised Exposure Class</b>               |                                  |                                   |                                 |                    |
| Central governments or central banks             | 180                              | -                                 | -                               | 180                |
| Multilateral development banks                   | 7                                | -                                 | -                               | 7                  |
| Institutions                                     | 3,070                            | 524                               | 21                              | 3,615              |
| Corporates                                       | 10,139                           | 275                               | 1,849                           | 12,263             |
| Retail   | 7,244                            | 3,874                             | 4,006                           | 15,124             |
| Secured on real estate                           | 784                              | 290                               | 8,070                           | 9,144              |
| Past due items                                   | 433                              | 173                               | 863                             | 1,469              |
| Items belonging to regulatory high risk category | 154                              | 142                               | -                               | 296                |
| Other items                                      | 10,720                           | -                                 | 3,586                           | 14,306             |
| Total Standardised                               | 32,731                           | 5,278                             | 18,395                          | 56,404             |
| <b>Total</b>                                     | 286,926                          | 89,159                            | 73,000                          | 449,085            |

## 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.

Risk mitigation policies determine the eligibility of collateral types. Collateral types which 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.

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.

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

The Group uses bilateral and multilateral netting to reduce pre-settlement 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 vs Payments or Payment vs Payments systems.

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

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

|                                      | 31.12.09                                    |  | 31.12.08                                    |  |
|--------------------------------------|---|--|---|--|
|                                      | EAD after<br>the effect of CRM<br>\$million | Of which: EAD<br>covered by<br>guarantees/credit<br>derivatives<br>\$million | EAD after<br>the effect of CRM<br>\$million | Of which: EAD<br>covered by<br>guarantees/credit<br>derivatives<br>\$million |
| <b>AIRB Exposure Class</b>           |   |  |   |  |
| Central governments or central banks | 73,605                                      | 90   | 63,753                                      | 26   |
| Institutions                         | 109,698                                     | 1,076  | 116,105                                     | 1,913  |
| Corporates                           | 97,453                                      | 7,109  | 105,764                                     | 3,820  |
| Retail                               | 25,297                                      | -  | 23,368                                      | -  |
| Securitisation positions             | 16,915                                      | 1,670  | 18,152                                      | 2,863  |
| Non-credit obligation assets         | -   | -  | 25  | -  |
| <b>Total AIRB</b>                    | <b>322,968</b>                              | <b>9,945</b>   | <b>327,167</b>                              | <b>8,622</b>   |

### 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.

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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.

#### 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 there must exist an active secondary resale market for the collateral. Documentation must be held to enable Consumer Banking to realise the asset without the cooperation of the asset owner in the event that this is necessary.

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 Standard Chartered 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 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 63 per cent (2008: 65 per cent) of all credit risk mitigants.

|  | 31.12.09                               |  |  |                                       |  |
|--|--|--|--|---------------------------------------|--|
|  | 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 |
| <b>Standardised Exposure Class</b>                 |  |  |  |                                       |  |
| Central governments or central banks               | 843                                    | -  | -  | 843                                   | 4  |
| Multilateral development banks                     | 1,009                                  | -  | -  | 1,009                                 | -  |
| Institutions                                       | 1,899                                  | -  | -  | 1,899                                 | 467  |
| Corporates   | 12,490                                 | 4,478  | -  | 8,012                                 | 1  |
| Retail   | 13,058                                 | 1,164  | -  | 11,894                                | -  |
| Secured on real estate property                    | 11,967                                 | 64   | 10,620   | 1,283                                 | -  |
| Past due items                                     | 1,122                                  | 31   | 192  | 899                                   | -  |
| Items belonging to regulatory high risk categories | 274                                    | 32   | -  | 242                                   | -  |
| Other items  | 14,129                                 | 290  | -  | 13,839                                | -  |
| <b>Total Standardised</b>                          | <b>56,791</b>                          | <b>6,059</b>   | <b>10,812</b>                                      | <b>39,920</b>                         | <b>472</b>   |

|  | 31.12.08                               |  |  |                                       |  |
|--|--|--|--|---------------------------------------|--|
|  | 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 |
| <b>Standardised Exposure Class</b>                 |  |  |  |                                       |  |
| Central governments or central banks               | 180                                    | -  | -  | 180                                   | 1  |
| Multilateral development banks                     | 7                                      | -  | -  | 7                                     | -  |
| Institutions                                       | 3,615                                  | 26   | -  | 3,589                                 | 48   |
| Corporates   | 12,263                                 | 3,212  | -  | 9,051                                 | -  |
| Retail   | 15,124                                 | 1,013  | -  | 14,111                                | 1  |
| Secured on real estate property                    | 9,144                                  | 48   | 8,920  | 176                                   | -  |
| Past due items                                     | 1,469                                  | 47   | 525  | 897                                   | -  |
| Items belonging to regulatory high risk categories | 296                                    | 1  | -  | 295                                   | -  |
| Other items  | 14,306                                 | -  | -  | 14,306                                | -  |
| <b>Total Standardised</b>                          | <b>56,404</b>                          | <b>4,347</b>   | <b>9,445</b>                                       | <b>42,612</b>                         | <b>50</b>  |

## 4.6. Internal Ratings Based models

### Model governance

The AIRB 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 and Group Risk. The model development process is conducted and documented in line with specific criteria setting out the minimum standards for model development. All AIRB 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 ARC 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. The model development teams also conduct annual model reviews, which are informed by regular monitoring, to ascertain whether the model is fit for purpose and performing within acceptable boundaries or whether there are potential improvements in performance.

### 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 is 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 reflect ratings made by established external credit assessment institutions, those agencies having access to large databases of defaults on a variety of credit obligations. These external ratings are customised to develop the Group's own customer rating systems.

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

### LGD model development

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

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

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

### EAD model development

An EAD model is developed for uncertain exposure products such as lines of credit, credit cards, overdrafts and other commitments. Based on the Group's experience (and supplemented by external data), EAD models assess changes to limits and the likely draw-down of committed and uncommitted limits as an exposure approaches default. The factor generated by the model and applied to the undrawn limit is referred to as the 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, AIRB models also support risk-based pricing methodologies and measures used to assess business performance such as Economic Capital, Economic Revenue and Economic Profit.

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

- Each model is governed by a separate policy and procedure which defines the applicability of that model and details the procedure for use;
- The model review policy governs the regular review of models and specifies statistical thresholds and other triggers which determine when models need to be redeveloped;

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- 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 dataset 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.

AIRB PD estimates are computed as of 1 January 2009 and are compared with default observations through 31 December 2009. The historical loss experience for institutions is minimal, so the predicted PD for institutions reflects a particularly low number of defaults. Given the exceptional stress in the banking sector over the past two years, the observed default rate for institutions is therefore, as would be expected, higher than the estimated PD. This recent default data will be reflected in PDs going forward. For central governments or central banks, there were no defaults during 2009. The actual default rate among corporate exposures was maintained below AIRB model predictions.

The calculation of actual versus predicted LGD is affected by the fact that it takes a number of years for the workout process to

complete. The recovery process on defaults in 2009 is too immature to compute meaningful actual versus realised outcomes.

The predicted LGD is therefore based on the model outputs as of 1 January 2009 compared with long run actual realisations of LGD including downturn periods, since 1995. 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 predicted LGD. The effect of increased netting is particularly material in the predicted LGD for institutions. Furthermore, due to the low number of defaults historically in institutions the long run average LGD is not considered to be statistically significant.

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 actual versus predicted CCF is summarised in the ratio of the EAD of defaulted assets, 1 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 regulatory requirement to assign conservatism to the CCF of certain exposure types, as well as the impact of management action to reduce actual EAD prior to default.

|                                      | Predicted PD<br>% | Actual PD<br>% | Predicted LGD<br>% | Actual LGD<br>% | Predicted EAD/<br>actual EAD |
|--------------------------------------|-------------------|----------------|--------------------|-----------------|------------------------------|
| AIRB Exposure Class                  |                   |                |                    |                 |                              |
| Central governments or central banks | 0.13              | 0.00           | 26.3               | 0.0             | 0.0                          |
| Institutions                         | 0.22              | 0.27           | 18.9               | 35.9            | 1.1                          |
| Corporates                           | 1.33              | 1.22           | 45.4               | 48.6            | 1.4                          |

#### Consumer Banking model results

Consumer Banking models have been developed from datasets which capture eight years of performance data for the majority of portfolios. This history includes 'credit bubbles' in various markets such as Taiwan, Hong Kong and Korea, as well as stresses that arose during the avian flu outbreak. This experience is therefore reflected in the calibration of the AIRB models.

Predicted PD was computed as at 1 January 2009 and compared to the actual default observations through 31 December 2009. The observed default rate for asset classes other than QRRE is either in line with, or lower than, the predicted PD. For QRRE, the actual default rate is 52 basis points higher than the predicted PD. At this point in the credit cycle it is in line with expectations that the actual default rate is higher given that the predicted PD is a long run average.

The process to recover losses on a defaulted asset typically spans more than one financial year. The actual LGD shown below is calculated based on recoveries that were realised in 2009. This is compared to the predicted LGD of these assets in

the year of default. Actual LGDs are lower than the predicted values for all asset classes, primarily due to the models using 'downturn' parameter settings to predict LGD. This is most evident in the mortgage portfolios, where the predicted LGDs include a significant assumed reduction in property values along with an in-built conservatism such as stressing the declining property price index. The economic environment in Consumer Banking's main markets was less severe in 2009 than the 'downturn' conditions modelled. For QRRE the quality of the portfolio is better than it has been historically in times of equivalent stress.

The Predicted EAD is shown below as a ratio of the Actual EAD. For asset classes other than QRRE the ratio demonstrates that the prediction was close to the Actual EAD experienced during 2009. The Predicted EAD for QRRE includes regulatory 'downturn' requirements which coupled with management action to reduce limits prior to default result in a higher ratio, showing that Actual EAD was lower than Predicted EAD.

|                                    | Predicted PD<br>% | Actual PD<br>% | Predicted LGD<br>% | Actual LGD<br>% | Predicted EAD/<br>actual EAD |
|------------------------------------|-------------------|----------------|--------------------|-----------------|------------------------------|
| AIRB Exposure Class                |                   |                |                    |                 |                              |
| Secured by real estate collateral  | 0.90              | 0.56           | 20.9               | 8.8             | 1.0                          |
| Qualifying revolving retail (QRRE) | 1.97              | 2.49           | 78.3               | 63.7            | 1.2                          |
| Other retail                       | 3.85              | 3.87           | 80.9               | 62.5            | 1.1                          |
| Retail SME                         | 6.91              | 6.95           | 100.0              | 93.6            | 1.1                          |

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#### Regulatory Expected Loss versus Individual Impairment charges

The table below shows regulatory expected loss as at 31 December 2008 and net individual impairment charges raised during the 2009 financial year for the AIRB 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 narrowed through 2009 as market conditions in certain areas deteriorated.

|                                      | 31.12.08                                 | 31.12.09  | 31.12.07                                 | 31.12.08  |
|--------------------------------------|--|---|--|---|
|                                      | Regulatory<br>expected loss<br>\$million | Net individual<br>impairment<br>charge<br>\$million | Regulatory<br>expected loss<br>\$million | Net individual<br>impairment<br>charge<br>\$million |
| AIRB Exposure Class                  |  |   |  |   |
| Central governments or central banks | 27                                       | -   | 26                                       | -   |
| Institutions                         | 200                                      | 114   | 83                                       | 19  |
| Corporates                           | 1,056                                    | 691   | 915                                      | 286   |
| Retail, of which                     | 788                                      | 537   | 721                                      | 381   |
| Secured by real estate collateral    | 111                                      | 13  | 110                                      | 8   |
| Qualifying revolving retail          | 379                                      | 252   | 317                                      | 204   |
| Retail SME                           | 50                                       | 77  | -  | -   |
| Other retail                         | 248                                      | 195   | 294                                      | 169   |
| Securitisation positions             | -  | -   | -  | -   |
| Non-credit obligation assets         | -  | -   | -  | -   |
| <b>Total AIRB</b>                    | <b>2,071</b>                             | <b>1,342</b>  | <b>1,745</b>                             | <b>686</b>  |

## 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 ratings agencies (ECAIs) are not used in determining internal credit grades. Nonetheless, as the factors used to grade a borrower may be similar, a borrower rated poorly by an ECAI is typically assigned a worse internal credit grade.

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

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

Credit grades for Consumer Banking accounts covered by AIRB 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 AIRB models have not yet been developed, the probability of default is calculated using historical portfolio delinquency flow rates and expert judgement, where applicable.

AIRB 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.

Standard Chartered makes use of internal risk estimates of PD, LGD and EAD in the areas of:

- Credit Approval and Decision – The level of authority required for the sanctioning of credit requests and the decision made is based on a combination of PD, LGD and EAD of the obligor with reference to the nominal exposure;
- Pricing – In Wholesale Banking a pre-deal pricing calculator is used which takes into consideration PD, LGD and EAD in the calculation of expected loss and economic capital for the proposed transactions to ensure appropriate return. In Consumer Banking a scorecard approach is taken to assess the level of risk using PD, LGD and EAD;
- Limit Setting – In Wholesale Banking concentration limits for some portfolios, as counterparty limits are determined by PD, LGD and EAD. The limits operate on a sliding scale to ensure that the Group does not have over concentration of low credit quality assets. This process operates similarly in Consumer Banking;
- 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.

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The following table sets out analysis of EAD within the AIRB portfolios by internal credit grading and Basel II exposure classes. EAD has been calculated after taking into account the impact of credit risk mitigation. 72 per cent (2008: 75 per cent) of exposures are classified as credit grades 1 to 5.

|  | 31.12.09                |                         |                          |                       |                           |                    |
|--|-------------------------|-------------------------|--------------------------|-----------------------|---------------------------|--------------------|
|  | Grades 1-5<br>\$million | Grades 6-8<br>\$million | Grades 9-11<br>\$million | Grade 12<br>\$million | Grades 13-14<br>\$million | Total<br>\$million |
| <b>Total exposure</b>                              |                         |                         |                          |                       |                           |                    |
| Central government and central banks               | 68,475                  | 3,077                   | 2,053                    | -                     | -                         | 73,605             |
| Institutions                                       | 97,397                  | 9,875                   | 1,481                    | 178                   | 767                       | 109,698            |
| Corporates   | 47,320                  | 35,417                  | 11,362                   | 1,454                 | 1,900                     | 97,453             |
| Retail, of which                                   | 11,479                  | 8,148                   | 4,736                    | 463                   | 471                       | 25,297             |
| Retail exposures secured by real estate collateral | 1,396                   | 758                     | 178                      | 10                    | 41                        | 2,383              |
| Qualifying revolving retail                        | 7,489                   | 2,920                   | 2,211                    | 318                   | 248                       | 13,186             |
| Retail SME   | 280                     | 611                     | 74                       | 21                    | 32                        | 1,018              |
| Other retail                                       | 2,314                   | 3,859                   | 2,273                    | 114                   | 150                       | 8,710              |
| Securitisation positions                           | 7,871                   | 919                     | 8,125                    | -                     | -                         | 16,915             |
| Non-credit obligation assets                       | -                       | -                       | -                        | -                     | -                         | -                  |
| <b>Total AIRB</b>                                  | <b>232,542</b>          | <b>57,436</b>           | <b>27,757</b>            | <b>2,095</b>          | <b>3,138</b>              | <b>322,968</b>     |

|  | 31.12.08                |                         |                          |                       |                           |                    |
|--|-------------------------|-------------------------|--------------------------|-----------------------|---------------------------|--------------------|
|  | Grades 1-5<br>\$million | Grades 6-8<br>\$million | Grades 9-11<br>\$million | Grade 12<br>\$million | Grades 13-14<br>\$million | Total<br>\$million |
| <b>Total exposure</b>                              |                         |                         |                          |                       |                           |                    |
| Central government and central banks               | 61,213                  | 1,924                   | 616                      | -                     | -                         | 63,753             |
| Institutions                                       | 103,047                 | 9,967                   | 2,609                    | 65                    | 417                       | 116,105            |
| Corporates   | 59,404                  | 36,206                  | 8,812                    | 647                   | 695                       | 105,764            |
| Retail, of which                                   | 11,391                  | 6,439                   | 4,526                    | 597                   | 415                       | 23,368             |
| Retail exposures secured by real estate collateral | 1,852                   | 1,099                   | 237                      | 12                    | 44                        | 3,244              |
| Qualifying revolving retail                        | 6,871                   | 2,970                   | 2,037                    | 326                   | 224                       | 12,428             |
| Retail SME   | -                       | 464                     | 103                      | 29                    | 38                        | 634                |
| Other retail                                       | 2,668                   | 1,906                   | 2,149                    | 230                   | 109                       | 7,062              |
| Securitisation positions                           | 11,690                  | 15                      | 6,437                    | -                     | 10                        | 18,152             |
| Non-credit obligation assets                       | -                       | -                       | -                        | -                     | 25                        | 25                 |
| <b>Total AIRB</b>                                  | <b>246,745</b>          | <b>54,551</b>           | <b>23,000</b>            | <b>1,309</b>          | <b>1,562</b>              | <b>327,167</b>     |

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

|  | 31.12.09                |                         |                          |                       |                           |                    |
|--|-------------------------|-------------------------|--------------------------|-----------------------|---------------------------|--------------------|
|  | Grades 1-5<br>\$million | Grades 6-8<br>\$million | Grades 9-11<br>\$million | Grade 12<br>\$million | Grades 13-14<br>\$million | Total<br>\$million |
| <b>Undrawn commitments</b>                         |                         |                         |                          |                       |                           |                    |
| Central government and central banks               | 858                     | 14                      | -                        | -                     | -                         | 872                |
| Institutions                                       | 4,009                   | 1,196                   | 85                       | -                     | -                         | 5,290              |
| Corporates   | 22,790                  | 14,336                  | 3,553                    | 30                    | 199                       | 40,908             |
| Retail, of which                                   | 3,445                   | 2,160                   | 617                      | 13                    | 10                        | 6,245              |
| Retail exposures secured by real estate collateral | 2,465                   | 982                     | 461                      | 2                     | 4                         | 3,914              |
| Qualifying revolving retail                        | -                       | -                       | -                        | -                     | -                         | -                  |
| Retail SME   | 9                       | 142                     | -                        | -                     | -                         | 151                |
| Other retail                                       | 971                     | 1,036                   | 156                      | 11                    | 6                         | 2,180              |
| Securitisation positions                           | -                       | -                       | -                        | -                     | -                         | -                  |
| Non-credit obligation assets                       | -                       | -                       | -                        | -                     | -                         | -                  |
| <b>Total AIRB</b>                                  | <b>31,102</b>           | <b>17,706</b>           | <b>4,255</b>             | <b>43</b>             | <b>209</b>                | <b>53,315</b>      |

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|  | Grades 1-5<br>\$million | Grades 6-8<br>\$million | Grades 9-11<br>\$million | Grade 12<br>\$million | Grades 13-14<br>\$million | Total<br>\$million |
|--|-------------------------|-------------------------|--------------------------|-----------------------|---------------------------|--------------------|
| <b>Undrawn commitments</b>                         |                         |                         |                          |                       |                           |                    |
| Central government and central banks               | 47                      | 15                      | -                        | -                     | -                         | 62                 |
| Institutions                                       | 4,977                   | 900                     | 146                      | -                     | -                         | 6,023              |
| Corporates   | 23,365                  | 11,915                  | 2,937                    | 23                    | 160                       | 38,400             |
| Retail, of which                                   | 2,435                   | 1,216                   | 597                      | 15                    | 4                         | 4,267              |
| Retail exposures secured by real estate collateral | 1,478                   | 708                     | 455                      | 2                     | 2                         | 2,645              |
| Qualifying revolving retail                        | -                       | -                       | -                        | -                     | -                         | -                  |
| Retail SME   | -                       | -                       | -                        | -                     | -                         | -                  |
| Other retail                                       | 957                     | 508                     | 142                      | 13                    | 2                         | 1,622              |
| Securitisation positions                           | -                       | -                       | -                        | -                     | -                         | -                  |
| Non-credit obligation assets                       | -                       | -                       | -                        | -                     | -                         | -                  |
| <b>Total AIRB</b>                                  | <b>30,824</b>           | <b>14,046</b>           | <b>3,680</b>             | <b>38</b>             | <b>164</b>                | <b>48,752</b>      |

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 AIRB portfolio is 35.1 per cent (2008: 31.6 per cent).

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|  | Grades 1-5<br>% | Grades 6-8<br>% | Grades 9-11<br>% | Grade 12<br>% | Grades 13-14<br>% | Total<br>%  |
|--|-----------------|-----------------|------------------|---------------|-------------------|-------------|
| <b>Exposure weighted average LGD</b>               |                 |                 |                  |               |                   |             |
| Central government and central banks               | 27.2            | 38.5            | 41.5             | -             | -                 | 28.1        |
| Institutions                                       | 28.3            | 36.3            | 36.9             | 39.9          | 39.3              | 29.3        |
| Corporates   | 44.8            | 40.6            | 27.7             | 51.5          | 56.3              | 40.5        |
| Retail, of which                                   | 28.6            | 42.8            | 60.0             | 68.7          | 52.5              | 35.3        |
| Retail exposures secured by real estate collateral | 15.9            | 19.1            | 17.3             | 19.2          | 21.1              | 16.7        |
| Qualifying revolving retail                        | 83.8            | 81.7            | 81.1             | 81.6          | 77.5              | 82.7        |
| Retail SME   | 21.2            | 49.3            | 75.6             | 73.5          | 77.8              | 44.8        |
| Other retail                                       | 68.4            | 77.2            | 80.8             | 85.6          | 81.9              | 76.0        |
| Securitisation positions                           | 100.0           | 93.1            | 100.0            | -             | -                 | 91.0        |
| Non-credit obligation assets                       | -               | -               | -                | -             | -                 | -           |
| <b>Total AIRB</b>                                  | <b>31.4</b>     | <b>41.2</b>     | <b>44.3</b>      | <b>54.5</b>   | <b>51.8</b>       | <b>35.1</b> |

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|  | Grades 1-5<br>% | Grades 6-8<br>% | Grades 9-11<br>% | Grade 12<br>% | Grades 13-14<br>% | Total<br>%  |
|--|-----------------|-----------------|------------------|---------------|-------------------|-------------|
| <b>Exposure weighted average LGD</b>               |                 |                 |                  |               |                   |             |
| Central government and central banks               | 25.8            | 39.5            | 40.0             | -             | -                 | 26.3        |
| Institutions                                       | 25.8            | 39.3            | 28.1             | 34.7          | 26.6              | 26.8        |
| Corporates   | 48.2            | 44.8            | 35.2             | 49.0          | 50.1              | 46.0        |
| Retail, of which                                   | 34.7            | 38.5            | 60.8             | 71.9          | 54.4              | 38.8        |
| Retail exposures secured by real estate collateral | 18.4            | 17.5            | 19.9             | 21.6          | 23.0              | 17.8        |
| Qualifying revolving retail                        | 86.5            | 82.9            | 84.2             | 87.2          | 83.4              | 85.3        |
| Retail SME   | -               | 100.0           | 100.0            | 100.0         | 100.0             | 100.0       |
| Other retail                                       | 78.2            | 79.5            | 79.3             | 78.6          | 79.5              | 78.9        |
| Securitisation positions                           | 97.2            | 95.5            | 99.0             | -             | 95.5              | 95.3        |
| Non-credit obligation assets                       | -               | -               | -                | -             | 70.0              | 70.0        |
| <b>Total AIRB</b>                                  | <b>36.5</b>     | <b>50.6</b>     | <b>58.2</b>      | <b>63.8</b>   | <b>47.4</b>       | <b>31.6</b> |

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| 31.12.09   |                 |                 |                  |               |                   |             |
|--|-----------------|-----------------|------------------|---------------|-------------------|-------------|
|  | Grades 1-5<br>% | Grades 6-8<br>% | Grades 9-11<br>% | Grade 12<br>% | Grades 13-14<br>% | Total<br>%  |
| <b>Exposure weighted average risk weight</b>       |                 |                 |                  |               |                   |             |
| Central government and central banks               | 6.0             | 74.2            | 110.9            | -             | -                 | 11.9        |
| Institutions                                       | 11.1            | 58.3            | 116.2            | 218.4         | 147.0             | 18.5        |
| Corporates   | 34.1            | 75.4            | 85.9             | 295.6         | 320.6             | 66.9        |
| Retail, of which                                   | 6.4             | 40.8            | 101.1            | 205.7         | 134.9             | 25.8        |
| Retail exposures secured by real estate collateral | 4.8             | 25.3            | 59.6             | 114.2         | 116.9             | 12.2        |
| Qualifying revolving retail                        | 7.0             | 35.6            | 116.6            | 239.0         | 149.7             | 40.0        |
| Retail SME   | 7.9             | 56.6            | 123.0            | 185.7         | 181.6             | 54.6        |
| Other retail                                       | 30.5            | 84.6            | 126.2            | 215.4         | 144.0             | 83.8        |
| Securitisation positions                           | 8.5             | 28.9            | 12.8             | -             | -                 | 13.7        |
| Non-credit obligation assets                       | -               | -               | -                | -             | -                 | -           |
| <b>Total AIRB</b>                                  | <b>13.6</b>     | <b>64.8</b>     | <b>81.7</b>      | <b>270.8</b>  | <b>242.8</b>      | <b>34.6</b> |

| 31.12.08   |                 |                 |                  |               |                   |             |
|--|-----------------|-----------------|------------------|---------------|-------------------|-------------|
|  | Grades 1-5<br>% | Grades 6-8<br>% | Grades 9-11<br>% | Grade 12<br>% | Grades 13-14<br>% | Total<br>%  |
| <b>Exposure weighted average risk weight</b>       |                 |                 |                  |               |                   |             |
| Central government and central banks               | 4.7             | 80.6            | 120.2            | -             | -                 | 8.1         |
| Institutions                                       | 10.1            | 60.9            | 83.4             | 207.9         | 185.9             | 17.1        |
| Corporates   | 35.7            | 80.8            | 104.6            | 269.7         | 201.1             | 59.4        |
| Retail, of which                                   | 7.9             | 36.0            | 106.0            | 213.9         | 110.5             | 28.5        |
| Retail exposures secured by real estate collateral | 6.9             | 23.6            | 69.5             | 129.4         | 110.6             | 15.2        |
| Qualifying revolving retail                        | 7.1             | 35.7            | 120.0            | 256.6         | 108.1             | 40.8        |
| Retail SME   | -               | 120.0           | 160.5            | 251.6         | 155.8             | 134.7       |
| Other retail                                       | 22.2            | 86.7            | 127.0            | 202.6         | 90.4              | 78.4        |
| Securitisation positions                           | 11.6            | 315.8           | 19.3             | -             | 597.4             | 18.9        |
| Non-credit obligation assets                       | -               | -               | -                | -             | 849.5             | 849.5       |
| <b>Total AIRB</b>                                  | <b>13.4</b>     | <b>67.4</b>     | <b>81.9</b>      | <b>240.4</b>  | <b>178.0</b>      | <b>31.3</b> |

## 4.8. Problem credit management and provisioning

### Consumer Banking

In Consumer Banking, where there are large numbers of small value loans, a primary indicator of potential impairment is delinquency. However, not all delinquent loans (particularly those in the early stage of delinquency) will be impaired. Within Consumer Banking an account is considered to be delinquent when payment is not received on the due date. For delinquency reporting purposes the Group follows industry standards, 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 enterprises among SME customers and Private Banking customers) consist of a large number of comparatively small exposures. As a result, much of the provisioning is initially done at an account level for each product and a portfolio impairment provision (PIP) is raised on a portfolio basis. PIP is set using expected loss rates, based on past experience 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 PIP methodology provides for accounts for which an individual impairment provision has not been raised.

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 similarly written off at 90 days past due. For secured loans (other than those secured by automobiles) individual impairment provisions (IIP) are generally raised at either 150 days (mortgages) or 90 days (other) past due.

The provisions are based on the estimated present values of future cashflows, 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 IIP are broadly driven by past experience, which shows that once an account reaches the relevant number of days past due, the probability of recovery (other than by realising security where appropriate) is low. For all products there are certain situations where the individual impairment provisioning or write off process is accelerated, such as in cases involving bankruptcy, fraud and death. Write off and IIP is accelerated for all restructured accounts to 90 days past due (unsecured and automobile finance) and 120 days past due (secured) respectively.

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

The following table shows impaired loans and advances, and the movement in impairment provisions by each principal category of borrowers' business or industry for Consumer Banking. This section follows International Financial Reporting Standards (IFRS) definitions used in the Annual Report and Accounts.

|                              | Impaired loans and advances<br>as at 31.12.09<br>\$million | Individual impairment<br>provision held<br>as at 01.01.09<br>\$million | Net individual<br>impairment charge<br>2009<br>\$million | Amounts written<br>off/other movements<br>2009<br>\$million | Individual impairment<br>provision held<br>as at 31.12.09<br>\$million |
|------------------------------|--|--|--|---|--|
| Loans to individuals         |  |  |  |   |  |
| Mortgages                    | 334  | 88   | 51   | (32)  | 107  |
| Other                        | 198  | 192  | 744  | (735)   | 201  |
| Small and medium enterprises | 498  | 263  | 203  | (236)   | 230  |
| <b>Consumer Banking</b>      | <b>1,030</b>   | <b>543</b>   | <b>998</b>   | <b>(1,003)</b>  | <b>538</b>   |

|                              | Impaired loans and advances<br>as at 31.12.08<br>\$million | Individual impairment<br>provision held<br>as at 01.01.08<br>\$million | Net individual<br>impairment charge<br>2008<br>\$million | Amounts written<br>off/other movements<br>2008<br>\$million | Individual impairment<br>provision held<br>as at 31.12.08<br>\$million |
|------------------------------|--|--|--|---|--|
| Loans to individuals         |  |  |  |   |  |
| Mortgages                    | 302  | 99   | 23   | (34)  | 88   |
| Other                        | 175  | 200  | 705  | (713)   | 192  |
| Small and medium enterprises | 585  | 356  | 170  | (263)   | 263  |
| <b>Consumer Banking</b>      | <b>1,062</b>   | <b>655</b>   | <b>898</b>   | <b>(1,010)</b>  | <b>543</b>   |

### Wholesale Banking

Loans are classified as impaired and considered non-performing 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 the Group's specialist recovery unit, Group Special Assets Management (GSAM), which is separate from the 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, Standard Chartered 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.

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As with Consumer Banking, a portfolio impairment provision (PIP) to cover the inherent risk of losses which although not identified, are known to be present in any 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<br>31 December 2009<br>\$million | Individual impairment provision<br>1 January 2009<br>\$million | Net individual impairment charge/(release)<br>\$million | Amounts written off/other movements<br>\$million | Individual impairment provision<br>31 December 2009<br>\$million |
|--|--|--|---|--|--|
| Agriculture, forestry and fishing          | 105  | 39   | 5   | 15   | 59   |
| Banks                                      | 286  | 17   | 114   | 1  | 132  |
| Construction                               | 94   | 18   | -   | 18   | 36   |
| Commerce                                   | 686  | 134  | 238   | 53   | 425  |
| Electricity, gas and water                 | 11   | 28   | -   | (21)   | 7  |
| Financing, insurance and business services | 464  | 31   | 254   | (155)  | 130  |
| Mining and quarrying                       | -  | -  | -   | 6  | 6  |
| Manufacturing                              | 974  | 458  | 181   | (49)   | 590  |
| Commercial real estate                     | 58   | 21   | 2   | (10)   | 13   |
| Transport, storage and communication       | 55   | 24   | 1   | (1)  | 24   |
| Other                                      | 27   | 11   | 11  | 3  | 25   |
| <b>Wholesale Banking</b>                   | <b>2,760</b>   | <b>781</b>   | <b>806</b>  | <b>(140)</b>                                     | <b>1,447</b>   |

|  | Impaired loans and advances<br>31 December 2008<br>\$million | Individual impairment provision<br>1 January 2008<br>\$million | Net individual impairment charge/(release)<br>\$million | Amounts written off/other movements<br>\$million | Individual impairment provision<br>31 December 2008<br>\$million |
|--|--|--|---|--|--|
| Agriculture, forestry and fishing          | 158  | 33   | 20  | (14)   | 39   |
| Banks                                      | 35   | 2  | 15  | -  | 17   |
| Construction                               | 47   | 10   | 3   | 5  | 18   |
| Commerce                                   | 229  | 152  | 15  | (33)   | 134  |
| Electricity, gas and water                 | 6  | 25   | (5)   | 8  | 28   |
| Financing, insurance and business services | 286  | 27   | 2   | 2  | 31   |
| Mining and quarrying                       | -  | 12   | -   | (12)   | -  |
| Manufacturing                              | 756  | 290  | 231   | (63)   | 458  |
| Commercial real estate                     | 40   | 23   | 2   | (4)  | 21   |
| Transport, storage and communication       | 22   | 22   | 15  | (13)   | 24   |
| Other                                      | 32   | 22   | 7   | (18)   | 11   |
| <b>Wholesale Banking</b>                   | <b>1,611</b>   | <b>618</b>   | <b>305</b>  | <b>(142)</b>                                     | <b>781</b>   |

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#### 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 \$3,929 million (2008: \$5,235 million), of which over 70 per cent (2008: 70 per cent) are 30 days or less past due.

|   | 31.12.09               |                        |                    |                                    |                    |   |                     |   |                    |
|---|------------------------|------------------------|--------------------|------------------------------------|--------------------|---|---------------------|---|--------------------|
|   | Asia Pacific           |                        |                    |                                    |                    |   |                     |   |                    |
|   | Hong Kong<br>\$million | Singapore<br>\$million | Korea<br>\$million | Other Asia<br>Pacific<br>\$million | India<br>\$million | Middle East<br>& Other<br>S Asia<br>\$million | Africa<br>\$million | Americas<br>UK &<br>Europe<br>\$million | Total<br>\$million |
| Gross Impaired Loans  | 276                    | 49                     | 492                | 1,200                              | 246                | 1,060   | 184                 | 283                                     | 3,790              |
| Individual impairment provision   | (181)                  | (27)                   | (267)              | (620)                              | (91)               | (560)   | (63)                | (176)                                   | (1,985)            |
| Net Impaired Loans  | 95                     | 22                     | 225                | 580                                | 155                | 500   | 121                 | 107                                     | 1,805              |
| Total past due but not individually impaired                            | 314                    | 324                    | 684                | 1,110                              | 310                | 857   | 294                 | 36                                      | 3,929              |
| Total past due & impaired loans net of individual impairment provisions | 409                    | 346                    | 909                | 1,690                              | 465                | 1,357   | 415                 | 143                                     | 5,734              |

|  | 31.12.08               |                        |                    |                                    |                    |   |                     |   |                    |
|--|------------------------|------------------------|--------------------|------------------------------------|--------------------|---|---------------------|---|--------------------|
|  | Asia Pacific           |                        |                    |                                    |                    |   |                     |   |                    |
|  | Hong Kong<br>\$million | Singapore<br>\$million | Korea<br>\$million | Other Asia<br>Pacific<br>\$million | India<br>\$million | Middle East<br>& Other<br>S Asia<br>\$million | Africa<br>\$million | Americas<br>UK &<br>Europe<br>\$million | Total<br>\$million |
| Gross Impaired Loans   | 272                    | 54                     | 357                | 1,055                              | 85                 | 368   | 102                 | 380                                     | 2,673              |
| Individual impairment provision  | (164)                  | (20)                   | (154)              | (605)                              | (44)               | (170)   | (54)                | (113)                                   | (1,324)            |
| Net Impaired Loans   | 108                    | 34                     | 203                | 450                                | 41                 | 198   | 48                  | 267                                     | 1,349              |
| Total past due but not individually impaired                           | 386                    | 476                    | 1,075              | 1,399                              | 392                | 1,257   | 193                 | 57                                      | 5,235              |
| Total past due &impaired loans net of individual impairment provisions | 494                    | 510                    | 1,278              | 1,849                              | 433                | 1,455   | 241                 | 324                                     | 6,584              |

#### 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.

|  | 2009<br>\$million | 2008<br>\$million |
|--|-------------------|-------------------|
| At 1 January                                 | 1,981             | 1,809             |
| Exchange translation differences             | 70                | (179)             |
| Acquisitions                                 | -                 | 109               |
| Amounts written off                          | (1,332)           | (1,119)           |
| Recoveries of acquisition fair values        | (39)              | (78)              |
| Recoveries of amounts previously written off | 191               | 180               |
| Discount unwind                              | (58)              | (40)              |
| Other  | 53                | 13                |
| New provisions                               | 2,613             | 1,796             |
| Recoveries/provisions no longer required     | (618)             | (510)             |
| Net charge against profit                    | 1,995             | 1,286             |
| <b>Provisions held at 31 December</b>        | <b>2,861</b>      | <b>1,981</b>      |
| Of which:                                    |                   |                   |
| Individual Impairment Provision              | 1,985             | 1,324             |
| Portfolio Impairment Provision               | 876               | 657               |

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#### 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. Past due but not individually impaired loans total \$3,929 million (2008: \$5,235 million), of which over 70 per cent are 30 days or less past due.

|  | 31.12.09<br>\$million | 31.12.08<br>\$million |
|--|-----------------------|-----------------------|
| Loans to individuals                       |                       |                       |
| Mortgages                                  | 1,976                 | 2,301                 |
| Other                                      | 1,463                 | 1,945                 |
| Small and medium enterprises               | 982                   | 1,207                 |
| Consumer Banking                           | 4,421                 | 5,453                 |
| Agriculture, forestry and fishing          | 111                   | 195                   |
| Banks                                      | 286                   | 88                    |
| Construction                               | 133                   | 80                    |
| Commerce                                   | 803                   | 315                   |
| Electricity, gas and water                 | 97                    | 6                     |
| Financing, insurance and business services | 482                   | 542                   |
| Mining and quarrying                       | 1                     | 11                    |
| Manufacturing                              | 1,206                 | 1,048                 |
| Commercial real estate                     | 77                    | 43                    |
| Transport, storage and communication       | 59                    | 95                    |
| Other                                      | 43                    | 32                    |
| Wholesale Banking                          | 3,298                 | 2,455                 |
| <b>Total</b>                               | <b>7,719</b>          | <b>7,908</b>          |

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

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

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

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

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

### **Exposure value calculation**

Exposure values for regulatory capital purposes on over the counter traded products are calculated according to the CCR MTM method. This is calculated as a sum of the current replacement cost and the potential future credit exposure. The current replacement cost is the 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.

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

|                                   | 31.12.09  |                               |   |                              |  |
|-----------------------------------|---|-------------------------------|---|------------------------------|--|
|                                   | Gross positive fair value of contracts<br>\$million | Netting benefits<br>\$million | Netted current credit exposure<br>\$million | Collateral held<br>\$million | Net derivatives credit exposure<br>\$million |
| Derivative contracts              | 61,859  | 33,706                        | 28,153                                      | 1,846                        | 26,307                                       |
| Repo style transactions           | 2,737   | -                             | 2,737                                       | 2,056                        | 681  |
| Credit derivatives <sup>(1)</sup> | 2,336   | 296                           | 2,040                                       | 26                           | 2,014  |
| <b>Total</b>                      | <b>66,932</b>                                       | <b>34,002</b>                 | <b>32,930</b>                               | <b>3,928</b>                 | <b>29,002</b>                                |

<sup>(1)</sup> Of the \$2,040 million netted current credit exposure, \$1,633 million of protection has been purchased, and \$407 million of protection has been sold.

|                                   | 31.12.08  |                               |   |                              |  |
|-----------------------------------|---|-------------------------------|---|------------------------------|--|
|                                   | Gross positive fair value of contracts<br>\$million | Netting benefits<br>\$million | Netted current credit exposure<br>\$million | Collateral held<br>\$million | Net derivatives credit exposure<br>\$million |
| Derivative contracts              | 89,463  | 50,998                        | 38,465                                      | 1,545                        | 36,920                                       |
| Repo style transactions           | 9,429   | -                             | 9,429                                       | 7,199                        | 2,230  |
| Credit derivatives <sup>(2)</sup> | 1,820   | 1,020                         | 800   | -                            | 800  |
| <b>Total</b>                      | <b>100,712</b>                                      | <b>52,018</b>                 | <b>48,694</b>                               | <b>8,744</b>                 | <b>39,950</b>                                |

<sup>(2)</sup> Of the \$800 million netted current credit exposure, \$791 million of protection has been purchased and \$9 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.

|                                | 31.12.09                    |  |   |
|--------------------------------|-----------------------------|--|---|
|                                | Notional value<br>\$million | Netted current credit exposures<br>\$million | Regulatory capital requirement<br>\$million |
| Derivative contracts:          |                             |  |   |
| Interest rate contracts        | 1,696,826                   | 6,215  | 241   |
| Foreign exchange contracts     | 1,150,891                   | 19,185                                       | 628   |
| Equity and stock index options | 3,208                       | 697  | 9   |
| Commodity contracts            | 19,066                      | 2,056  | 107   |
| Credit derivatives:            |                             |  |   |
| Credit default swaps           | 34,928                      | 2,017  | 32  |
| Total return swaps             | 205                         | 23   | -   |
| <b>Total derivatives</b>       | <b>2,905,124</b>            | <b>30,193</b>                                | <b>1,017</b>                                |
| Repo style transactions:       |                             |  |   |
| Repo                           |                             | 1,259  | 4   |
| Reverse repo                   |                             | 1,478  | 2   |
| <b>Total</b>                   |                             | <b>32,930</b>                                | <b>1,023</b>                                |

|                                | 31.12.08                    |  |   |
|--------------------------------|-----------------------------|--|---|
|                                | Notional value<br>\$million | Netted current credit exposures<br>\$million | Regulatory capital requirement<br>\$million |
| Derivative contracts:          |                             |  |   |
| Interest rate contracts        | 1,502,801                   | 8,602  | 372   |
| Foreign exchange contracts     | 1,361,872                   | 28,118                                       | 861   |
| Equity and stock index options | 1,075                       | -  | -   |
| Commodity contracts            | 16,200                      | 1,745  | 108   |
| Credit derivatives:            |                             |  |   |
| Credit default swaps           | 28,944                      | 787  | 17  |
| Total return swaps             | 89                          | 13   | -   |
| <b>Total derivatives</b>       | <b>2,910,981</b>            | <b>39,265</b>                                | <b>1,358</b>                                |
| Repo style transactions:       |                             |  |   |
| Repo                           |                             | 5,086  | 12  |
| Reverse repo                   |                             | 4,343  | 18  |
| <b>Total</b>                   |                             | <b>48,694</b>                                | <b>1,388</b>                                |

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#### 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 \$17.4 billion (2008: \$18.5 billion) of EAD classified as securitisation positions, as detailed 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 originated Residential Mortgage Backed Securities (RMBS) with a face value of \$3.6 billion (2008: \$4.2 billion), which do not qualify as securitisation positions under the FSA framework and are not detailed within this section. The Group's securitisation positions are rated by Moody's, Standard & Poor's and Fitch.

##### 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 \$3.4 billion (2008: \$4.5 billion), the carrying value of which represents 0.9 per cent of the Group's total assets.

The credit quality of the ABS exposures remains strong. With the exception of those securities which have been subject to an impairment charge, 80 per cent of the overall portfolio is rated A, or better, and 39 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 AA-, unchanged from 31 December 2008.

26 per cent of the overall portfolio is invested in Residential Mortgage Backed Securities (RMBS), with a weighted average credit rating of AA (AA+ in 2008). 45 per cent of the RMBS exposures were originated in 2005 or earlier.

23 per cent of the overall portfolio is in Commercial Mortgage Backed Securities (CMBS), of which \$139 million is in respect of US CMBS with a weighted average credit grade of AAA. The weighted average credit rating of the remaining CMBS exposure is A-.

12 per cent of the overall portfolio is in Collateralised Debt Obligations (CDOs). This includes \$77 million of exposures to CDOs of ABS (Mezzanine and High Grade), of which \$56 million have been impaired. The remainder of the other CDOs amounting to \$353 million has a weighted average credit rating of BBB (AA+ in 2008).

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

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.

|   | 31.12.09  |   |   |                                    |
|---|---|---|---|------------------------------------|
|   | Notional amount                                     |   |   | Recognised net gain/(loss) on sale |
|   | Carrying value of asset backed securities \$million | Traditional securitisation programmes \$million | Synthetic securitisation programmes \$million |                                    |
| Residential mortgages (RMBS)                            | 809   | 894   | -   | -                                  |
| Commercial mortgages (CMBS)                             | 602   | 769   | 34  | -                                  |
| CDOs of ABS – RMBS                                      | 13  | 77  | -   | (2)                                |
| CDOs Other: Leveraged loans/Trust preferred/Real Estate | 285   | 342   | 11  | -                                  |
| Other ABS:  |   |   |   |                                    |
| Credit card receivables                                 | 114   | 116   | -   | -                                  |
| Loans to corporates or Corporate SMEs                   | 252   | 52  | 219   | -                                  |
| Student loans   | 212   | 230   | -   | -                                  |
| Auto loans  | 391   | 400   | -   | -                                  |
| Diversified payment types                               | 107   | 120   | -   | -                                  |
| Other assets  | 151   | 178   | -   | -                                  |
| <b>Total</b>  | <b>2,936</b>  | <b>3,178</b>                                    | <b>264</b>                                    | <b>(2)</b>                         |

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|   | 31.12.08  |   |   |  |
|---|---|---|---|--|
|   | Notional amount                                     |   |   | Recognised net gain/(loss) on sale \$million |
|   | Carrying value of asset backed securities \$million | Traditional securitisation programmes \$million | Synthetic securitisation programmes \$million |  |
| Residential mortgages (RMBS)                            | 1,027   | 1,110   | -   | (1)  |
| Commercial mortgages (CMBS)                             | 654   | 786   | 32  | (5)  |
| CDOs of ABS – RMBS                                      | 32  | 209   | -   | (28)   |
| CDOs Other: Leveraged loans/Trust preferred/Real Estate | 306   | 367   | 11  | -  |
| Other ABS:  |   |   |   |  |
| Credit card receivables                                 | 343   | 356   | -   | (1)  |
| Loans to corporates or Corporate SMEs                   | 169   | 52  | 139   | (1)  |
| Student loans   | 237   | 263   | -   | (1)  |
| Auto loans  | 391   | 400   | -   | -  |
| Diversified payment types                               | 442   | 515   | -   | (2)  |
| Other assets  | 158   | 210   | -   | -  |
| <b>Total</b>  | <b>3,759</b>  | <b>4,268</b>                                    | <b>182</b>                                    | <b>(39)</b>                                  |

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 2009, \$73 million of mezzanine CMBS, US RMBS and CDOs (of RMBS/CMBS and Trust Preferred) 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.

#### 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 unit (ALM), performs a different role, and acts 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.

Wholesale Banking has eight securitisation transactions listed in the following table, with an aggregate hedge capacity of \$15.3 billion (2008: \$15.6 billion). Of the eight transactions, three are private deals with bilateral investors and five are public deals distributed to a broad spectrum of investors and rated by Moody's, Standard & Poor's and Fitch. The Group did not originate any synthetic securitisation programmes in 2009.

At December 2009 \$65 million (2008: \$44 million) of securitised exposures were classified as impaired and past due.

All eight 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.

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

|              | Underlying facilities hedged | Public/private | Start date | Scheduled maturity | 31.12.09                  |  |   |
|--------------|------------------------------|----------------|------------|--------------------|---------------------------|--|---|
|              |                              |                |            |                    | Max notional<br>\$million | Outstanding<br>exposures <sup>(1)</sup><br>\$million | Retained<br>exposures <sup>(2)</sup><br>\$million |
| START III    | Commercial Loan              | Public         | Dec 2006   | June 2010          | 1,230                     | 629  | 949   |
| START IV     | Commercial Loan              | Public         | June 2007  | Dec 2010           | 1,500                     | 1,307  | 1,219   |
| TF5          | Trade Finance                | Private        | May 2008   | Dec 2010           | 2,999                     | 2,673  | 2,851   |
| SEALANE      | Trade Finance                | Public         | Nov 2007   | May 2011           | 2,993                     | 2,757  | 2,701   |
| START II     | Commercial Loan              | Public         | June 2006  | June 2011          | 1,600                     | 1,273  | 1,370   |
| START V      | Commercial Loan              | Public         | July 2008  | Jan 2012           | 1,000                     | 943  | 928   |
| SHANGREN     | Trade Finance                | Private        | Aug 2008   | Feb 2012           | 2,495                     | 2,271  | 2,230   |
| ASIAMEA      | Commercial Loan              | Private        | Dec 2007   | Dec 2012           | 1,500                     | 1,441  | 1,399   |
| <b>Total</b> |                              |                |            |                    | <b>15,317</b>             | <b>13,294</b>  | <b>13,647</b>                                     |

|              | Underlying facilities hedged | Public/private | Start date | Scheduled maturity | 31.12.08                  |  |   |
|--------------|------------------------------|----------------|------------|--------------------|---------------------------|--|---|
|              |                              |                |            |                    | Max notional<br>\$million | Outstanding<br>exposures <sup>(1)</sup><br>\$million | Retained<br>exposures <sup>(2)</sup><br>\$million |
| START III    | Commercial Loan              | Public         | Dec 2006   | June 2010          | 1,500                     | 1,401  | 18  |
| START IV     | Commercial Loan              | Public         | June 2007  | Dec 2010           | 1,500                     | 1,366  | 1,219   |
| TF5          | Trade Finance                | Private        | May 2008   | Dec 2010           | 3,000                     | 2,563  | 2,864   |
| SEALANE      | Trade Finance                | Public         | Nov 2007   | May 2011           | 3,000                     | 2,651  | 2,708   |
| START II     | Commercial Loan              | Public         | June 2006  | June 2011          | 1,600                     | 1,469  | 1,370   |
| START V      | Commercial Loan              | Public         | July 2008  | Jan 2012           | 1,000                     | 924  | 928   |
| SHANGREN     | Trade Finance                | Private        | Aug 2008   | Feb 2012           | 2,500                     | 2,247  | 2,231   |
| ASIAMEA      | Commercial Loan              | Private        | Dec 2007   | Dec 2012           | 1,500                     | 1,438  | 1,399   |
| <b>Total</b> |                              |                |            |                    | <b>15,600</b>             | <b>14,059</b>  | <b>12,737</b>                                     |

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

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

The maximum notional amount for certain transactions has reduced between December 2008 and December 2009. This is due to the START III transaction being in a no replenishment period and impairment provisions totalling \$13 million reducing capacity in TF5, SEALANE and SHANGREN transactions.

#### Accounting policy

Financial assets included in a traditional securitisation transaction will be fully or partially derecognised in the consolidated balance sheet when rights to receive cash flows from the financial assets have expired or where the Group has transferred substantially all risks and rewards of ownership. The Group engages in structures that achieve the transfer of risks, but through the issuance of notes by a non-consolidated Special Purpose Entity (SPE). The Group deems these to be securitisation transactions as securities are issued on the assets held by the Group. These securitisation transactions are outlined in the table above. For all transactions except TF5, notes were issued by non-consolidated SPEs. For TF5 transactions, notes were issued directly by Standard Chartered Bank.

The Group transfers credit risk associated with specific financial assets to an SPE via the use of synthetic credit derivative structures. The SPE issues various tranches of notes or credit linked notes which offer exposure to the referenced assets held by the Group, but without holding those assets. The investors claim is to the proceeds of the sale of the notes, the yield on the proceeds and the fee received from the Group for the credit protection sold by the SPE via a waterfall structure.

Through the use of synthetic securitisation, the Group buys protection without actual transference of any assets to an SPE.

These exposures are transferred to the note holders by the SPE through the issue of credit linked notes. As a result, the Group remains the owner of the assets but has transferred a substantial part of the credit risk to the SPE. Third party investors in securities issued by the SPE have recourse only to the assets of the SPE and not to the Group.

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 Capital Management Committee (CMC), that 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 advises on the regulatory treatment, Group Tax provides an opinion on taxation and Group Regulatory Reporting facilitates communication with the regulator.

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#### 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 certain senior securitisation positions; and
- Standardised Approach for all other securitisation positions.

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 notional value of ABS purchased or arranged by the Group, analysed by risk weight band. The majority of the exposures are rated AAA.

|                   | 31.12.09  |                                 |                    |
|-------------------|---|---------------------------------|--------------------|
| Risk weight bands | Securitisation programmes <sup>(1)</sup><br>\$million | ABS <sup>(2)</sup><br>\$million | Total<br>\$million |
| 0% – 20%          | 13,334  | 2,510                           | 15,844             |
| 20% – 40%         | -   | 383                             | 383                |
| 40% – 60%         | -   | 111                             | 111                |
| 60% – 80%         | 75  | 74                              | 149                |
| 80% – 100%        | 1   | 69                              | 70                 |
| 100% and above    | 75  | 104                             | 179                |
| 1250% or Deducted | 162   | 191                             | 353                |
| <b>Total</b>      | <b>13,647</b>   | <b>3,442</b>                    | <b>17,089</b>      |

|                   | 31.12.08  |                                 |                    |
|-------------------|---|---------------------------------|--------------------|
| Risk weight bands | Securitisation programmes <sup>(1)</sup><br>\$million | ABS <sup>(2)</sup><br>\$million | Total<br>\$million |
| 0% – 20%          | 12,268  | 3,233                           | 15,501             |
| 20% – 40%         | 135   | 440                             | 575                |
| 40% – 60%         | -   | 419                             | 419                |
| 60% – 80%         | 75  | 58                              | 133                |
| 80% – 100%        | 14  | 107                             | 121                |
| 100% and above    | 75  | 72                              | 147                |
| 1250% or Deducted | 170   | 121                             | 291                |
| <b>Total</b>      | <b>12,737</b>   | <b>4,450</b>                    | <b>17,187</b>      |

<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.

## **5. Market risk**

Standard Chartered recognises market risk as the risk of loss resulting from changes in market prices and rates. 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 Group Risk Committee (GRC) approves the Group's market risk appetite taking account of market volatility, the range of traded products and asset classes, the business volumes and transaction sizes. Market risk appetite has remained broadly stable in 2009.

The Group Market Risk Committee (GMRC) is responsible, under authority delegated by the GRC, for setting Value at Risk (VaR) limits at a business level and recommends Group level VaR and stress loss limits for market risk. 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 non-trading books of the Group. The trading book is defined as per the FSA Handbook's Prudential Sourcebook for Banks, Building Societies and Investment Firms (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 which applies recent historic market conditions to estimate the potential future loss in market value that will not be exceeded in a set time period at a set statistical confidence level. VaR provides a consistent measure that can be applied across trading businesses and products over time and can be set against actual daily trading profit and loss outcome.

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

The Group applies two VaR methodologies:

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

In both methods an 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 2009 there has been only one exception in the regulatory back testing, compared with three in 2008. This is well 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 market risk exposures to highlight potential risk that may arise from extreme market events that are rare but plausible.

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

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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 stress testing results as part of its supervision of risk appetite. The stress testing methodology assumes that scope for management action would be limited during a stress event, reflecting the decrease in liquidity that often occurs.

Regular stress test scenarios are applied to interest rates, credit spreads, 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 rose in 2009 against 2008. This stemmed mainly from the non-trading book VaR, and reflected sharp increases in the volatility of credit spreads that followed the collapse of Lehman Brothers in September 2008. The one year historic data window applied as an input to the VaR model continued to reflect this period of particularly high credit spread volatility throughout most of 2009. Average trading book VaR rose slightly in 2009, with Commodities and Equities VaR increasing as these businesses continue to expand their activities.

Securities classed as loans and receivables or held to maturity were removed from VaR in June 2009. These non-traded securities are accounted for on an amortised cost basis, so market price movements have no effect on either profit and loss or reserves. This alignment of VaR with accounting treatment resulted in an \$8.6million reduction in total VaR at the time of implementation. The inclusion of the listed part of the Private Equity portfolio in non-trading VaR from October 2009 resulted in a \$3 million increase in total VaR.

#### Market risk regulatory capital

At Group and Solo Consolidated levels, 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 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. Positions outside the CAD2 scope are assessed according to standard FSA rules.

At 31 December 2009 the Group's market risk regulatory capital requirement was \$1,590 million (31 December 2008: \$735 million). The increase occurred despite a reduction in trading book market risk as reflected below in internal VaR. It arises primarily due to energy derivative positions that are subject to FSA standard rules and for which application has been made to the FSA for CAD2 approval.

#### 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 Group Internal Audit on an ongoing basis. It is Group policy that all assets and liabilities held are to be recorded in the financial accounts on a fair-value basis that is consistent with IFRS.

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

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

|  | 31.12.09                                 |                                | 31.12.08                                 |                                |
|--|--|--------------------------------|--|--------------------------------|
|  | Regulatory capital requirement \$million | Risk Weighted Assets \$million | Regulatory capital requirement \$million | Risk Weighted Assets \$million |
| <b>Market Risk Capital Requirements for Trading Book</b> |  |                                |  |                                |
| Interest rate <sup>(1)</sup>                             | 516                                      | 6,448                          | 257                                      | 3,217                          |
| Equity   | 32                                       | 400                            | 28                                       | 350                            |
| Options  | 416                                      | 5,200                          | 143                                      | 1,792                          |
| Collective investment schemes                            | -  | -                              | 1  | 13                             |
| Commodity <sup>(2)</sup>                                 | 252                                      | 3,151                          | 45                                       | 563                            |
| Foreign exchange <sup>(1),(2)</sup>                      | 137                                      | 1,713                          | 59                                       | 739                            |
| Internal Models Approach                                 | 240                                      | 3,000                          | 202                                      | 2,531                          |
| <b>Total</b>   | <b>1,593</b>                             | <b>19,912</b>                  | <b>735</b>                               | <b>9,205</b>                   |

<sup>(1)</sup> Interest rate and foreign currency capital requirements for positions which are not within the scope of permission to use a VaR model granted by the FSA.

<sup>(2)</sup> Commodity and foreign currency covers all business activities across trading and non-trading books.

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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.

|  | 31.12.09                          |  |   |
|--|-----------------------------------|--|---|
|  | Standard Chartered Bank \$million | Standard Chartered Bank (HK) Ltd \$million | Standard Chartered First Bank Korea Ltd \$million |
| <b>Market Risk Capital Requirements for Trading Book</b> |                                   |  |   |
| Interest rate <sup>(1)</sup>                             | 428                               | 53   | -   |
| Equity   | 31                                | -  | -   |
| Options  | 413                               | -  | -   |
| Collective investment schemes                            | -                                 | -  | -   |
| Commodity <sup>(2)</sup>                                 | 252                               | -  | -   |
| Foreign exchange <sup>(1),(2)</sup>                      | 135                               | 5  | -   |
| Internal Models Approach                                 | 237                               | 8  | 60  |
| <b>Total</b>   | <b>1,496</b>                      | <b>66</b>                                  | <b>60</b>   |
| <b>Market Risk – RWA</b>                                 | <b>18,759</b>                     | <b>845</b>                                 | <b>750</b>  |

<sup>(1)</sup> Interest rate and foreign currency capital requirements for positions which are not within the scope of permission to use a VaR model granted by the FSA.

<sup>(2)</sup> Commodity and foreign currency covers all business activities across trading and non-trading books.

The tables below show the average, high and low trading and non-trading VAR over the year 2009, and the actual position on 31 December 2009. The highest and lowest VaR are independent and could have occurred on different days.

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

|                                   | 2009              |                               |                              |                                 | 2008              |                               |                              |                                 |
|-----------------------------------|-------------------|-------------------------------|------------------------------|---------------------------------|-------------------|-------------------------------|------------------------------|---------------------------------|
|                                   | Average \$million | High <sup>(3)</sup> \$million | Low <sup>(3)</sup> \$million | Actual <sup>(4)</sup> \$million | Average \$million | High <sup>(3)</sup> \$million | Low <sup>(3)</sup> \$million | Actual <sup>(4)</sup> \$million |
| <b>Trading and Non-trading</b>    |                   |                               |                              |                                 |                   |                               |                              |                                 |
| Interest rate risk <sup>(1)</sup> | 37.3              | 46.7                          | 24.7                         | 25.5                            | 25.1              | 37.6                          | 14.2                         | 36.7                            |
| Foreign exchange risk             | 7.8               | 16.1                          | 3.5                          | 5.0                             | 6.0               | 8.7                           | 3.3                          | 4.8                             |
| Commodity risk                    | 3.0               | 5.5                           | 1.3                          | 3.7                             | 1.3               | 2.4                           | 0.6                          | 2.1                             |
| Equity risk                       | 4.3               | 11.1                          | 1.1                          | 10.8                            | 1.4               | 2.4                           | 0.5                          | 0.8                             |
| <b>Total<sup>(2)</sup></b>        | <b>38.9</b>       | <b>47.9</b>                   | <b>27.6</b>                  | <b>31.8</b>                     | <b>31.5</b>       | <b>42.5</b>                   | <b>17.8</b>                  | <b>41.7</b>                     |
| <b>Trading</b>                    |                   |                               |                              |                                 |                   |                               |                              |                                 |
| Interest rate risk <sup>(1)</sup> | 11.7              | 17.8                          | 8.7                          | 10.5                            | 12.0              | 16.0                          | 8.5                          | 9.3                             |
| Foreign exchange risk             | 7.8               | 16.1                          | 3.5                          | 5.0                             | 6.0               | 8.7                           | 3.3                          | 4.8                             |
| Commodity risk                    | 3.0               | 5.5                           | 1.3                          | 3.7                             | 1.3               | 2.4                           | 0.6                          | 2.1                             |
| Equity risk                       | 2.7               | 3.6                           | 1.0                          | 2.5                             | 1.4               | 2.4                           | 0.5                          | 0.8                             |
| <b>Total<sup>(2)</sup></b>        | <b>14.5</b>       | <b>19.3</b>                   | <b>9.9</b>                   | <b>13.2</b>                     | <b>14.2</b>       | <b>20.6</b>                   | <b>9.2</b>                   | <b>9.8</b>                      |
| <b>Non-trading</b>                |                   |                               |                              |                                 |                   |                               |                              |                                 |
| Interest rate risk <sup>(1)</sup> | 32.4              | 41.0                          | 20.8                         | 22.2                            | 19.8              | 39.6                          | 10.6                         | 38.8                            |
| Equity risk <sup>(5)</sup>        | 1.8               | 9.9                           | -                            | 9.1                             | -                 | -                             | -                            | -                               |
| <b>Total<sup>(2)</sup></b>        | <b>32.7</b>       | <b>41.0</b>                   | <b>22.6</b>                  | <b>23.5</b>                     | <b>19.8</b>       | <b>39.6</b>                   | <b>10.6</b>                  | <b>38.8</b>                     |

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

<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.

<sup>(5)</sup> Non-trading equity risk VaR was included only from October 2009. For the period October to December 2009, non-trading VaR average as \$9.1 million, with a low of \$8.7 million.

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#### **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 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.

Basis risk, or the risk arising from hedging exposure to one interest rate with exposure to a rate which reprices under slightly different conditions, is also analysed.

## 6. Operational risk

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

### Objective

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

### Governance Structure

Governance over operational risk management is achieved through a defined structure of committees at the group, business, function and country level. At each level operational risk governance committees integrate into the Group's overall risk governance structure. The Group Operational Risk Committee (GORC), a subcommittee of the GRC, supervises the management of operational risks across all businesses and functions. Escalation rules, linked to risk tolerance limits, are in place to ensure that operational risk decisions are taken at the right level within the governance structure.

### Roles and Responsibilities

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

### Risk Management Approach

The Group's operational risk management procedures and processes are integral components of the broader Risk

Management Framework. Operational risks are managed through an end to end process of identification, assessment, control and monitoring. This four step management process is performed at all levels across the Group and is the foundation of the management approach. Once identified, risks are assessed against standard criteria to determine their significance and the degree of risk mitigation effort required to reduce the exposure to acceptable levels. Risk mitigation plans are overseen by the appropriate governance committee.

### Assurance

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

### Measurement

Standard Chartered uses The Standardised Approach to assess its regulatory and internal capital requirements for Operational Risk. The Standardised Approach for operational risk capital calculation applies a beta to the average income that was achieved in the previous three years by the Group. Following BIPRU 6, the average income is categorised into FSA business lines in accordance with the Group policy.

The table below details the operational risk capital requirement for the Group.

|                   | 31.12.09                                       | 31.12.08                                       |
|-------------------|--|--|
|                   | Operational risk capital requirement \$million | Operational risk capital requirement \$million |
| Consumer Banking  | 667  | 670  |
| Wholesale Banking | 989  | 797  |
| <b>Total</b>      | <b>1,656</b>                                   | <b>1,467</b>                                   |

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.

|   | 31.12.09                                       | 31.12.08                                       |
|---|--|--|
|   | Operational risk capital requirement \$million | Operational risk capital requirement \$million |
| Standard Chartered Bank                 | 665  | 491  |
| Standard Chartered Bank (HK) Ltd        | 303  | 279  |
| Standard Chartered First Bank Korea Ltd | 219  | 184  |

## **7. Immaterial portfolios**

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

For the purposes of BIPRU requirements 11.5.15 & 11.5.11 the holdings of non-trading book equities and the specialised lending portfolio are considered immaterial. At 31 December 2009, non-trading book equity holdings amount to \$2.0 billion and specialised lending exposure total \$1.6 billion, which together total less than 1 per cent of the Group's total exposure.

## **8. Forward looking statements**

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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 which 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.

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## 9. Acronyms

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|        |   |
|--------|---|
| ABS    | Asset Backed Security   |
| AIRB   | Advanced Internal Ratings Based   |
| ALCO   | Asset and Liability Committee   |
| ALM    | Asset and Liability Management  |
| ARC    | Audit and Risk Committee  |
| ARROW  | Advanced Risk Response Operating Framework  |
| BIPRU  | Prudential Sourcebook for Banks, Building Societies and Investment Firms                    |
| 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  |
| CSA    | Credit Support Annexes  |
| EAD    | Exposure at Default   |
| ECAI   | External Credit Assessment Institutions   |
| FSA    | Financial Services Authority (UK)   |
| FSS    | Financial Supervisory Service (Korea)   |
| 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 |
| GMR    | Group Market Risk   |
| GMRC   | Group Market Risk Committee   |
| GORC   | Group Operational Risk Committee  |
| GRC    | Group Risk 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    | Internal Ratings Based  |
| IFRS   | International Financial Reporting Standards   |
| LGD    | Loss Given Default  |
| LMC    | Liquidity Management Committee  |
| MAC    | Model Assessment Committee  |
| MTM    | Mark-to-Market  |
| PD     | Probability of Default  |
| PIP    | Portfolio Impairment Provision  |
| RMBS   | Residential Mortgage Backed Securities  |
| RMF    | Risk Management Framework   |
| RTO    | Risk Type Owner   |
| RWA    | Risk Weighted Assets  |
| SME    | Small and Medium Enterprises  |
| SPE    | Special Purpose Entity  |
| SREP   | Supervisory Review and Evaluation Process   |
| VaR    | Value at Risk   |

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## Appendix 1 – Group entities

At 31 December 2009, 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 % |
|---|--|--|
| Standard Chartered Bank, England and Wales                      | United Kingdom, Middle East, South Asia, Asia Pacific, Americas and, through Group companies, Africa | 100.00                                     |
| Standard Chartered First 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  | 74.30                                      |
| Standard Chartered Private Equity Limited, Hong Kong            | Hong Kong  | 100.00                                     |

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

| 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                   | 19.90                                      |
| Fleming Family & Partners  | Proportionally consolidated     | Asia                    | 20.00                                      |
| MCashback Limited          | Proportionally consolidated     | UK                      | 30.00                                      |
| Merchant Solutions Limited | Proportionally consolidated     | Hong Kong               | 44.00                                      |