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## STANDARD CHARTERED PLC

### 渣打集團有限公司

(Incorporated as a public limited company in England and Wales with registered number 966425)  
(Stock Code: 02888)

#### Financial Information announcement

The information within this announcement has been extracted from the 2015 Annual Report. There is no new information in this announcement which is not disclosed in the 2015 Annual Report.

The financial information included within this document does not constitute statutory accounts within the meaning of section 434 of the Companies Act 2006. Statutory accounts for the year ended 31 December 2015 were approved by the Board on 23 February 2016. The 2015 Annual Report was published on the Company's website on 23 February 2016 and will be posted to shareholders on 24 March 2016 after which the statutory accounts will be delivered to the Registrar of Companies in England and Wales. The report of the auditors on these accounts was (i) unqualified, (ii) did not include a reference to any matters to which the auditors drew attention by way of emphasis without qualifying their report, and (iii) did not contain a statement under section 498 of the Companies Act 2006.

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Unless another currency is specified, the word 'dollar' or symbol '\$' in this document means US dollar and the word 'cent' or symbol 'c' means one-hundredth of one US dollar.

Within this document, the Hong Kong Special Administrative Region of the People's Republic of China is referred to as 'Hong Kong'; The Republic of Korea is referred to as Korea or South Korea; Greater China includes Hong Kong, Taiwan, China and Macau; North East (NE) Asia includes Korea, Japan and Mongolia; Middle East, North Africa and Pakistan (MENAP) includes United Arab Emirates (UAE), Bahrain, Qatar, Lebanon, Jordan, Saudi Arabia, Egypt, Oman, Iraq and Pakistan; South Asia includes India, Bangladesh, Nepal and Sri Lanka; and ASEAN includes Singapore, Malaysia, Indonesia, Brunei, Cambodia, Laos, Philippines, Thailand, Vietnam, Myanmar and Australia

## Standard Chartered PLC – Risk review

The Risk and capital review is divided into the following five sections:

- **Risk overview** is an update on the key risk themes of the Group
- **Risk profile** provides an analysis of our risk exposures across all major risk types
- **Principal uncertainties** sets out the key external factors that could impact the Group in the coming year
- **Risk management approach** details how we control and govern risk
- **Capital** provides an analysis of the Group's capital ratios and movements in capital requirements

### Risk overview

The Group is exposed to a range of risks such as credit, country cross-border, market, capital, liquidity, operational, pension, reputational and other risks that are inherent to our strategy, product range and geographic coverage. We manage risk on an enterprise-wide basis, through our risk management framework with the objective of maximising risk-adjusted returns while remaining within the Group's risk tolerance. We maintain a structured and proactive approach to portfolio analysis and stress testing to ensure that on an ongoing basis, we are taking a view of likely economic downside risks which could manifest in the next 12 to 18 months. This enables us to take the necessary actions to ensure our exposure remains within our risk tolerance.

In light of the challenging environment, we have been taking risk mitigating actions such as reducing exposures, increasing diversification, taking additional security and analysing our portfolios for vulnerable accounts. We announced our new strategic plan in November 2015 and at the same time we adjusted our risk tolerances. As a result we identified, for liquidation, a portfolio of around \$20 billion of risk-weighted assets (RWA) that is beyond our current risk tolerances ('liquidation portfolio'). These positions are being assertively managed out and this exercise will result in a portfolio ('ongoing business') that is more diverse and less concentrated, and should be less sensitive to adverse economic and credit cycles.

Loan impairment for 2015, increased to \$4,008 million (2014: \$2,141 million) reflecting ongoing pressure in commodities and in India. In addition, there was a charge of \$968 million taken in the fourth quarter, as a consequence of our decision to manage out exposures in the liquidation portfolio.

Other impairment, including restructuring charge of \$56 million, decreased by \$36 million to \$367 million (2014: \$403 million) and was related to impairments against aircraft and strategic investments.

The Group's total impairment (excluding impairment of goodwill) increased to \$5,343 million (2014: \$2,544 million).

We have performed an in-depth review of the Corporate & Institutional Clients and Commercial Clients portfolio especially on our non-performing loans (NPLs), on accounts flagged for early alert and on other vulnerable portfolios such as commodities and India. While these reviews did not uncover any specific material adverse findings, we identified a small number of accounts that needed to be separately managed by our specialist recovery unit, Group Special Asset Management (GSAM).

The gross NPLs for the ongoing business of Corporate & Institutional Clients and Commercial Clients segments have

increased by 36 per cent to \$4,477 million from \$3,304 million in 2014 albeit net NPLs have remained broadly flat.

Overall gross NPLs have increased to \$12,759 million in 2015 (2014: \$7,492 million), primarily driven by the migration of an interconnected group of exposures in the liquidation portfolio financially booked in Europe from credit grade 12, which has reduced by similar amount. The increase also reflects ongoing pressure in commodities, and in India.

Corporate & Institutional Clients NPL inflows in the ongoing business slowed in the fourth quarter when compared with the previous two quarters with the vast majority of new NPL inflows coming from accounts that have been on early alert for more than 12 months.

The cover ratio excluding collateral for the ongoing business for Corporate & Institutional Clients and Commercial Clients segments has increased to 59 per cent which when considered together with the historically-observed, weighted recovery rate of 50 per cent exceeds the uncovered portion of our portfolio. The cover ratio including collateral is 70 per cent.

Portfolio indicators are broadly stable although some indicators such as the proportion of investment grade exposures and collateral levels for non-investment grade exposures have improved.

The liquidity position of the Group remained strong in 2015 and while Group level VaR for market risk increased year-on-year, the underlying positions remained broadly stable. Total operational losses in 2015 were immaterial.

One of the main risks to the Group arises from extending credit to customers through our lending and trading operations. In the following sections we discuss in further detail how we have managed enterprise-wide risk, our loan impairments for 2015 and provide an overview of our overall credit exposures by client segment and key risk themes.

### Enterprise-wide risk management

We announced a new strategy in November 2015 and at the same time reviewed our risk tolerances. We added more tolerances which now provide the Board with increased granular oversight of our risk exposures.

For Corporate & Institutional Clients, Commercial Clients and Private Banking Clients, the updated tolerances are designed to reduce concentration for single names in aggregate, by industry sector, by credit grade and as a percentage of Tier 1 capital. For Retail, the updated tolerance reduces concentration to total and higher-risk unsecured lending at a country level and at a Group level. In aggregate these changes are expected to reduce the volatility of loan impairment. Changes to the operational risk tolerance aim to control the Group's operational risks to ensure that operational losses do not cause material damage to the Group's franchise.

In line with these changes, the Group has also identified a number of exposures for liquidation that would currently exceed the adjusted tolerance levels. These exposures are being managed by our specialist recovery unit, GSAM, for liquidation. Further information on the Group's risk tolerances is discussed on page 52.

## Standard Chartered PLC – Risk review continued

### Loan impairment

At the Group level, total loan impairment was \$4,976 million. The loan impairment charge excluding impairment taken against the liquidation portfolio, increased to \$2,381 million representing 87 basis points (bps) of average customer loans and advances.

Looking by segment, Retail Client loan impairment has continued to improve and fell 28 per cent to \$677 million representing 70 bps of loss, as a result of deliberate risk mitigating actions taken, notably in Korea, Thailand and Malaysia, and the disposal of our Consumer Finance businesses.

Corporate & Institutional Clients and Commercial Clients loan impairment, for the ongoing business increased significantly to \$1,703 million (2014: \$698 million). We have taken risk mitigating actions, have reviewed the portfolio extensively throughout 2015, and have increased provisioning, largely to reflect continued stress in our commodity markets as well as further deterioration in India.

The fourth quarter charge for the ongoing business increased over the third quarter reflecting:

- An increase in provisioning in the Corporate & Institutional Clients portfolio resulting in an improvement in cover ratio
- An increase in loan impairment in the Commercial Clients portfolio as a result of a small number of losses associated with derivatives transactions in Greater China and an increase in loan impairment in Africa

Looking by sector, of the loan impairment of \$1,703 million mentioned above, the impairment for the ongoing business related to the commodities sector remained at elevated levels in 2015 at \$572 million due to further softening in the prices of certain commodities notably coal, iron ore and oil. Although the persistent low prices of commodities has not highlighted any additional material vulnerability over and above what was identified in 2013 and 2014, the stress intensified on our existing NPLs and accounts that were on our watch list.

In India, loan impairment for the ongoing business for Corporate & Institutional Clients and Commercial Clients increased to \$439 million (2014: \$134 million) due to continued credit deterioration. Corporate earnings continue to be low, interest cover ratio is at five-year lows and the value of stalled projects increased sharply in 2015.

In terms of assets identified for liquidation, the Group incurred loan impairment of \$1,627 million for the full year in addition to a restructuring charge of \$968 million which was a consequence of the decision to liquidate the exposures in this portfolio.

The following table provides more details of the impairment charge for the year.

| Loan impairment                                       | Six months to 30.06.15<br>\$million | Six months to 31.12.15<br>\$million | 12 months to 31.12.15<br>\$million |
|---|-------------------------------------|-------------------------------------|------------------------------------|
| <b>Ongoing business</b>                               |                                     |                                     |                                    |
| Corporate & Institutional and Private Banking Clients | 344                                 | 761                                 | 1,105                              |
| Commercial Clients                                    | 154                                 | 445                                 | 599                                |
| Retail Clients  | 364                                 | 313                                 | 677                                |
| <b>Liquidation portfolio</b>                          |                                     |                                     |                                    |
| Corporate & Institutional and Private Banking Clients | 790                                 | 837                                 | 1,627                              |
| Corporate & Institutional Clients – Restructuring     | 0                                   | 968                                 | 968                                |
| <b>Total loan impairment</b>                          | <b>1,652</b>                        | <b>3,324</b>                        | <b>4,976</b>                       |

### Corporate & Institutional Clients and Commercial Clients<sup>1</sup>

The Corporate & Institutional Clients and Commercial Clients segments have been a key area of focus for the Group in 2015. Despite loan impairment remaining high at a Group level, a number of conscious actions have been taken, which included stress testing, portfolio reviews, exposure reduction and implementing adjusted risk tolerances.

As at 31 December 2015, the net exposure for Corporate & Institutional Clients and Commercial Clients segments fell to \$507 billion (2014: \$572 billion) principally due to a \$32 billion reduction in central bank balances, and a \$41 billion reduction in loans and advances driven in part by the risk-mitigating actions that we have taken.

### Corporate & Institutional Clients and Commercial Clients portfolio

| Corporate & Institutional Clients and Commercial Clients portfolio | Jun 2014<br>\$billion | Dec 2014<br>\$billion | Jun 2015<br>\$billion | Dec 2015<br>\$billion |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| Loans and advances to customers and banks                          | 277                   | 260                   | 252                   | 219                   |
| Net exposure   | 547                   | 572                   | 534                   | 507                   |

<sup>1</sup>Exposures to the Corporate & Institutional Clients and Commercial Clients segments are presented in this section on a net exposure basis (unless stated otherwise), which comprises loans and advances to banks and customers, investment securities, derivative exposures after master netting agreements, cash and balances at central banks, other assets, contingent liabilities and documentary credits

The geographic analysis presented in this section is based on country of credit responsibility. This differs from the financial booking location, which is used in the geographic analysis in the Risk profile section on page 9, in that all global exposures to a client group are reported in the primary country of the parent entity. This is aligned to the Group's credit risk management approach

## Standard Chartered PLC – Risk review continued

### Portfolio indicators

The risk profile of the Corporate & Institutional Clients and Commercial Clients portfolio improved in terms of diversification, collateralisation and tenor profile. The Group's 20 largest exposures to corporate client groups have reduced by 8 per cent or \$2 billion compared to the first half of 2015 and reduced by 20 per cent or \$6 billion compared to December 2014. The exposures total 61 per cent of Tier 1 capital (2014: 83 per cent).

The proportion of Corporate & Institutional Clients and Commercial Clients loans and advances to customers which are short-term remained stable at 67 per cent (2014: 65 per cent).

The collateralisation level for corporate clients and non-bank financial institutions increased by 2 per cent to 42 per cent, and the collateralisation for long-term (greater than one year) sub-investment grade exposures increased by 4 per cent to 59 per cent.

Exposures on early alert have increased due to the transfer of a small number of accounts that need closer management. The majority of the increase relates to either investment grade clients or clients that are just below investment grade with low risk of transfer to GSAM.

The year-on-year increase in gross and net NPL balances was primarily in the liquidation portfolio and mainly driven by the migration of a small number of interconnected exposures from credit grade 12. Although the gross NPLs for the ongoing business have increased reflecting weakness in India and in Commodities, the net NPLs have remained stable. The cover ratio for the ongoing business of Corporate & Institutional Clients and Commercial Clients segments increased to 59 per cent excluding collateral (2014: 49 per cent) and 70 per cent with collateral.

| Corporate & Institutional Clients and Commercial Clients portfolio | 31.12.15<br>\$billion | 30.06.15<br>\$billion | 31.12.14<br>\$billion | 30.06.14<br>\$billion |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| Percentage of net exposure to customers that is investment grade   | 46%                   | 43%                   | 42%                   | 40%                   |
| Percentage of loans and advances to investment grade clients       | 43%                   | 39%                   | 38%                   | 38%                   |
| Early alert (net exposure)   | 12.3                  | 10.0                  | 9.2                   | 9.0                   |
| Credit Grade 12 (excluding past dues)                              | 0.9                   | 4.4                   | 4.7                   | 5.3                   |
| Past due but not impaired  | 2.6                   | 2.8                   | 2.3                   | 3.4                   |
| Performing other renegotiated/forborne loans                       | 1.1                   | 4.6                   | 4.9                   | 5.6                   |
| Gross NPLs   | 11.7                  | 7.7                   | 6.6                   | 6.2                   |
| Gross NPLs (ongoing business)                                      | 4.5                   | 3.6                   | 3.3                   | 3.7                   |
| Net NPLs   | 5.5                   | 3.7                   | 3.5                   | 3.2                   |
| Net NPLs (ongoing business)  | 1.8                   | 1.8                   | 1.7                   | 1.9                   |

In the fourth quarter of 2015, there was a reduction in inflows into NPL in the Corporate & Institutional Clients ongoing business as compared with previous quarters, with the vast majority of NPLs coming from accounts that have been on early alert for more than 12 months.

### Sector

#### Commodities

The Group continues to mitigate the risk in the portfolio, reducing the net exposure to the sector by \$15.4 billion (28 per cent) to \$39.6 billion (2014: \$54.9 billion) over the past 12 months, both in commodity producers (\$5.1 billion) and commodity traders (\$10.3 billion) portfolio. The commodities portfolio represented 8 per cent of the total Corporate & Institutional Clients and Commercial Clients net exposure (2014: 10 per cent).

Commodities credit exposure arises from the pursuit of the Group's strategy in its core markets, where commodities form a very significant proportion of the trade flows within and into the Group's footprint countries. Commodities will continue to be a key component of the Group's strategy and the portfolio. The Group is risk-mitigating parts of the portfolio to reduce targeted exposures, increase diversification and reduce volatility of loan impairment. The cover ratio has increased to 61 per cent without collateral from 38 per cent in 2014.

The tenor profile of the portfolio remains short, with 68 per cent (2014: 74 per cent) having a residual maturity of less than one year. The majority of the decrease was in short-dated exposure for non-investment grade clients who are non-state owned enterprises (SOE) or are non-global major clients. The collateral for long-term (greater than one year) sub-investment grade and non-large SOEs has remained stable at 41 per cent.

Derivative trades in commodities are undertaken in support of client hedging, and commodities-related market risk continues to be very low.

The commodities book consists of two types of business activities, producers and traders, each of which is exposed to different risks.

Producers are more directly exposed to price changes and make up 49 per cent of the commodities portfolio. Producers primarily consist of energy exposure of \$10.9 billion and metals and mining exposure of \$7 billion. Of the energy exposure of \$10.9 billion, oil & gas was \$9.6 billion and this is discussed in more detail under oil and gas producers section below. The majority of metals and mining exposure is related to short-dated trade facilities. The exposure to metals that have seen significant price falls is very small – copper producers make up 0.2 per cent, and iron ore 0.1 per cent respectively of Corporate & Institutional Clients and Commercial Clients net exposure.

The key risk for traders, which are less directly affected by price changes, is lack of liquidity and their risk management practices. The traders portfolio makes up 51 per cent of the commodities portfolio.

## Standard Chartered PLC – Risk review continued

### Commodities credit portfolio

| Corporate & Institutional Clients and Commercial Clients portfolio | 30.06.14<br>\$billion | 31.12.14<br>\$billion | 30.06.15<br>\$billion | 31.12.15<br>\$billion |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| Oil and gas producers  | 12.4                  | 12.9                  | 10.2                  | 9.6                   |
| Non-oil and gas producers  | 15.7                  | 11.4                  | 11.2                  | 9.6                   |
| Traders  | 32.5                  | 30.6                  | 27.4                  | 20.4                  |
|  | 60.7                  | 54.9                  | 48.8                  | 39.6                  |

### Oil and gas and related exposures

As at 31 December 2015, the Group's net exposure to oil & gas and related sectors was \$24 billion (2014: \$28.6 billion) and has been consciously reduced year-on-year. This comprises oil & gas producers (\$9.6 billion, 40 per cent), refineries (\$5.9 billion, 25 per cent), supporting activities (\$7.0 billion, 29 per cent) and other corporate clients with oil & gas related hedges (\$1.5 billion, 6 per cent). Of these exposures, only oil and gas producers are included as part of the commodities portfolio.

*Oil & gas producers:* the exposure to oil & gas producers was \$9.6 billion (2014: \$12.9 billion). 88 per cent, \$8.1 billion of this was to clients who can sustain an oil price of \$30 per barrel for 12 months or to global majors or large SOEs. The breakeven prices have been calculated on a debt service coverage ratio of one. Debt service coverage ratio has been computed based on the amount of cash flow available to meet the annual interest and principal payments on debt, if oil prices remain at the breakeven level for a period of up to 12 months. This analysis is conservative as it does not take into consideration refinancing options available to clients, or their ability to defer capital expenditure to conserve cash.

*Petroleum refineries:* the net exposure to petroleum refineries was \$5.9 billion (2014: \$6.4 billion). The profitability of refineries is driven by gross refining margins and the margins held broadly steady despite the fall in crude oil prices.

*Support activities:* the support activities portfolio consisted of \$3.4 billion (2014: \$4.2 billion) in shipping finance (including operating leases) and \$3.6 billion (2014: \$3.7 billion) related to oilfield equipment manufacturers and other service providers. The net exposures to these sub-sectors are either to investment grade clients or backed by strong balance sheets or high levels of collateralisation in the form of new or young vessels.

*Corporate clients with oil-related hedges:* all clients have continued to meet their trade settlement and collateral obligations as per the Credit Support Annex (CSAs) to the International Swaps and Derivatives Association (ISDA).

### Geographies

#### India

The Group has been actively managing the India Corporate & Institutional Clients and Commercial Clients portfolio in 2015 by reducing exposures to vulnerable accounts while limiting any increase in exposure to select client groups with credit grades stronger than the portfolio average. The net exposures have reduced from \$42 billion in 2012 to \$30 billion in December 2015 (\$35 billion in 2014). This \$30 billion includes the interconnected group of exposures in the liquidation portfolio from a country of credit responsibility perspective. These exposures are, however, booked in Europe with associated NPLs also being reflected in Europe.

The macroeconomic environment has remained challenging in the face of slow economic growth, slow progress in reforms, high indebtedness in some sectors and lower than expected refinancing appetite from local banks.

India exposures attributable to investment grade clients have remained stable at 33 per cent of the India exposures (2014: 34 per cent). A further 39 per cent of the exposure is short-term in nature. The sector mix has remained similar with energy, infrastructure and telecom constituting 29 per cent of the total exposure (2014: 28 per cent).

The loan impairment has increased significantly for the ongoing business to \$439 million from \$134 million in 2014.

#### India credit portfolio

|                        | 30.06.14<br>\$billion | 31.12.14<br>\$billion | 30.06.15<br>\$billion | 31.12.15<br>\$billion |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| India credit portfolio |                       |                       |                       |                       |
| Bank                   | 4.2                   | 2.9                   | 2.8                   | 2.0                   |
| Corporates             | 29.3                  | 27.5                  | 28.0                  | 24.4                  |
| Sovereign              | 4.2                   | 4.3                   | 4.2                   | 3.8                   |
|                        | 37.7                  | 34.7                  | 34.9                  | 30.2                  |

#### China

In 2015, the Group's total net exposure to China has been further reduced to \$50 billion (2014: \$71 billion), of which \$17 billion (2014: \$24 billion) is financially booked in China and \$33 billion (2014: \$47 billion) in other locations.

The Group's growth in China over the past five years has been focused on financial institutions as a result of the internationalisation of the renminbi (RMB). The RMB offshore deposits are invested in short-term inter-bank deposits and trade products. 100 per cent of the Bank exposure is to investment grade clients of which 84 per cent is to top five Chinese banks.

The overall China portfolio is short dated with 84 per cent having tenor of less than one year. 73 per cent of the corporate exposure is short dated with tenor less than one year.

## Standard Chartered PLC – Risk review continued

The China commodity producers portfolio has been reduced by 58 per cent to \$1.7 billion (2014: \$4.1 billion) while commodity traders portfolio has been reduced by 52 per cent to \$2.5 billion (2014: \$5.3 billion).

The Group has negligible exposure to the Chinese stock market which has been volatile during 2015.

### China credit portfolio

| China credit portfolio | 30.06.14<br>\$billion | Dec 2014<br>\$billion | Jun 2015<br>\$billion | Dec 2015<br>\$billion |
|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Bank                   | 44.6                  | 34.5                  | 37.3                  | 23.9                  |
| Corporates             | 31.3                  | 26.5                  | 22.3                  | 16.2                  |
| Sovereign              | 8.7                   | 10.0                  | 6.7                   | 9.9                   |
|                        | 84.6                  | 71.0                  | 66.4                  | 50.0                  |

### Market risk

The Group continues to have low levels of market risk with Group level VaR of \$36.1 million (31 December 2014: \$26.5 million; 30 June 2014: \$37.8 million), which is used to support client activities with typical periods of high utilisation during periods of market volatility. The VaR levels increased during 2015, with the exception of Equities and listed Private Equity where positions were reduced. The increase was driven by heightened market volatility driven by uncertainty about the Chinese economy and the timing of anticipated US interest rate rises.

### Retail Clients

The Retail Clients loans and advances portfolio remains well diversified in terms of geography with mortgages accounting for 67 per cent (2014: 64 per cent) of the total. The average loan-to-value (LTV) ratio on the Group's mortgage portfolio was stable at 49 per cent (2014: 49 per cent).

82 per cent (2014: 80 per cent) of Retail loans are fully secured and 66 per cent of the portfolio has tenor greater than five years (2014: 64 per cent) mainly due to mortgages. The emerging shape of the portfolio will be in line with the new strategy announced in November 2015 which emphasises secured lending and wealth management, targets priority, high value customers and employee banking segments, and customers with low indebtedness for unsecured products.

Retail Clients loan impairment was lower at 70 bps of average loans and advances (2014: 94 bps). This continuing improvement was mainly due to lower losses in Korea, Malaysia, Thailand, Taiwan, Hong Kong and Singapore, and also to the disposal of the Group's Consumer Finance businesses (Korea, Hong Kong and China). Portfolio indicators, such as 30 days past due and 90 days past due amounts, have continued to improve since December 2014.

### Mortgage portfolio and rising interest rates in key markets

The Retail Clients mortgage portfolio is well positioned in the event of a fall in house prices or an increase in interest rates. In assessing prospective borrowers' ability to service debts, the Group assumes stress interest rates well above prevailing rates. The average LTV ratio of the mortgage portfolio was 49 per cent with only 5 per cent (2014: 5 per cent) of the portfolio having an LTV of 80 per cent or greater. The majority of the residential mortgage portfolio is for owner occupation. The mortgage portfolio continues to show resilience to various stress tests conducted by the Group.

### Unsecured portfolio

The overall portfolio reduced in 2015 as a result of risk mitigating actions taken in many markets including Korea to reduce exposure to high-risk segments, partly offset by growth in select segments and geographies. The portfolio performance indicators are monitored on an ongoing basis with losses improving in 2015 at \$573 million (2014: \$737 million), mainly due to improvement in Korea, Malaysia, Thailand and Taiwan.

The unsecured strategy is underpinned by a new decision framework that supports the explicit shaping of the portfolio towards preferred segments such as priority and employee banking, and lower-risk customers.

### Korea Personal Debt Rehabilitation Scheme

Korea has been the biggest source of the Group's elevated Retail Client impairment in the past two years. Although the level of Personal Debt Rehabilitation Scheme (PDRS) applications remains high in the market, the actions taken to tighten underwriting standards since the beginning of 2014 have resulted in considerably lower match rates of the portfolio with PDRS filings. During the past 18 months, after adjusting for seasonally expected reductions, there has been an improvement in the losses relating to impact of the government PDRS on the Group's unsecured portfolio in Korea. The portfolio indicators have shown considerable

## Standard Chartered PLC – Risk review continued

### Risk profile

The balance sheet and income statement information presented within this section is based on the financial booking location of the instrument and not the location of its customer. Accordingly, where income statement information is presented by geographic region, the accounts will differ from the 'Financial review', which is based on customer location. The client segment by geographic region table on page 10 provides a split of loans and advances to customers and banks by both booking and customer location.

### Credit risk

The following pages provide detail of credit exposure, split as follows:

- Overall exposure to credit risk, for on-balance sheet and off-balance sheet financial instruments, before and after taking into account credit risk mitigation (pages 9)
- Loan portfolio overview, which provides analysis of the loan portfolio by client segment, by geographic region, by industry and retail product, and by loan maturity (pages 9 to 14)
- Credit risk mitigation, which provides analysis of collateral held by client segment and collateral type, and details of loan-to-value (LTV) ratios and other forms of credit risk mitigation (pages 14 to 17)
- Credit quality, which provides an analysis of the loan portfolio by credit grade (CG) (pages 17 to 23)
- Problem credit management and provisioning, which provides an analysis of non-performing loans, impaired loans, renegotiated and forborne loans (pages 24 to 28)
- Selected portfolios, which provides further detail on debt securities and treasury bills, asset backed securities and selected European exposures (page 29 to 32)

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

A summary of our current policies and practices regarding credit risk management is provided in the Risk management approach on pages 52 to 56.

Our credit portfolio remains well diversified and predominantly short term, with high levels of collateralisation for longer-term and non-investment grade loans. We have consistently maintained our focus on chosen clients in our core markets and a disciplined approach to risk management.

### Maximum exposure to credit risk

The table on page 9 presents the Group's maximum exposure to credit risk for its on-balance sheet and off-balance sheet financial instruments as at 31 December 2015, before and after taking into account any collateral held or other credit risk mitigation. For on-balance sheet instruments, the maximum exposure to credit risk is the carrying amount reported on the balance sheet. For off-balance sheet instruments, the maximum exposure to credit risk generally represents the contractual notional amounts.

The Group's maximum exposure to credit risk is spread across its markets and is affected by the general economic conditions in the geographies in which it operates. The Group sets limits on the exposure to any counterparty, and credit risk is spread over a variety of different personal, commercial and institutional customers.

The Group's gross maximum exposure to credit risk has decreased by \$88 billion when compared to 2014, mainly due to a reduction in cash and balances held at central banks and loans and advances. Loans and advances to customers and banks have decreased by \$48 billion, reflecting the focus on optimising returns together with risk-mitigating actions to reduce exposures in some markets and sectors. Further details of the loan portfolio are set out on page 9. Off-balance sheet exposures, mainly arising from trade finance, decreased by \$8 billion, reflecting the slowdown in key markets in our footprint.

Investment securities increased by \$5.6 billion as the Group placed its excess liquidity in low risk investment assets. The Group's credit risk exposure before risk mitigation arising from derivatives decreased by \$2.7 billion.

## Standard Chartered PLC – Risk review continued

### Maximum exposure to credit risk continued

|   | 2015                   |                |                           |                | 2014                   |                |                           |                |
|---|------------------------|----------------|---------------------------|----------------|------------------------|----------------|---------------------------|----------------|
|   | Credit risk management |                |                           | Net Exposure   | Credit risk management |                |                           | Net Exposure   |
|   | Maximum exposure       | Collateral     | Master netting agreements |                | Maximum exposure       | Collateral     | Master netting agreements |                |
| \$million   | \$million              | \$million      | \$million                 | \$million      | \$million              | \$million      | \$million                 |                |
| <b>On-balance sheet</b>   |                        |                |                           |                |                        |                |                           |                |
| Cash and balances at central banks  | 65,312                 | -              | -                         | 65,312         | 97,282                 | -              | -                         | 97,282         |
| Total loans and advances to banks and customers <sup>1</sup>                                    |                        |                |                           |                |                        |                |                           |                |
| As per balance sheet  | 321,850                |                |                           |                | 368,585                |                |                           |                |
| Included within fair value through profit and loss  | 6,322                  |                |                           |                | 7,514                  |                |                           |                |
|   | 328,172                | 152,843        | -                         | 175,329        | 376,099                | 159,476        | -                         | 216,623        |
| Investment securities <sup>2</sup>  |                        |                |                           |                |                        |                |                           |                |
| As per balance sheet  | 114,767                | -              | -                         | 114,767        | 104,238                | -              | -                         | 104,238        |
| Included within fair value through profit and loss  | 17,079                 | -              | -                         | 17,079         | 25,109                 | -              | -                         | 25,109         |
| Less: Equity securities   | (4,655)                | -              | -                         | (4,655)        | (7,769)                | -              | -                         | (7,769)        |
|   | 127,191                | -              | -                         | 127,191        | 121,578                | -              | -                         | 121,578        |
| Derivative financial instruments <sup>3</sup>   | 63,143                 | 10,074         | 38,934                    | 14,135         | 65,834                 | 7,005          | 43,735                    | 15,094         |
| Assets Held for sale  | 340                    |                |                           | 340            | 3,112                  |                |                           | 3,112          |
| Other assets  | 10,122                 |                |                           | 10,122         | 10,493                 |                |                           | 10,493         |
| <b>Total balance sheet</b>  | <b>594,280</b>         | <b>162,917</b> | <b>38,934</b>             | <b>392,429</b> | <b>674,398</b>         | <b>166,481</b> | <b>43,735</b>             | <b>464,182</b> |
| <b>Off-balance sheet</b>  |                        |                |                           |                |                        |                |                           |                |
| Contingent liabilities  | 39,055                 | -              | -                         | 39,055         | 42,532                 | -              | -                         | 42,532         |
| Undrawn irrevocable standby facilities, credit lines and other commitments to lend <sup>4</sup> | 59,431                 | -              | -                         | 59,431         | 60,870 <sup>5</sup>    | -              | -                         | 60,870         |
| Documentary credits and short-term trade-related transactions                                   | 4,852                  | -              | -                         | 4,852          | 7,911                  | -              | -                         | 7,911          |
| Forward asset purchases and forward deposits  | 530                    | -              | -                         | 530            | 539 <sup>5</sup>       | -              | -                         | 539            |
| <b>Total off- balance sheet</b>   | <b>103,868</b>         | <b>-</b>       | <b>-</b>                  | <b>103,868</b> | <b>111,852</b>         | <b>-</b>       | <b>-</b>                  | <b>111,852</b> |
| <b>Total</b>  | <b>698,148</b>         | <b>162,917</b> | <b>38,934</b>             | <b>496,297</b> | <b>786,250</b>         | <b>166,481</b> | <b>43,735</b>             | <b>576,034</b> |

1. An analysis of credit quality is set out on page 19. Further details of collateral held by client segment and held for past due and individually impaired loans are set out on page 24

2. Equity shares are excluded as they are not subject to credit risk

3. The Group enters into master netting agreements, which in the event of default results in a single amount owed by or to the counterparty through netting the sum of the positive and negative mark-to-market values of applicable derivative transactions

4. Excludes unconditionally cancellable facilities

5. Balances have been restated

### Loan portfolio

This section provides qualitative and quantitative information on the Group's exposure to credit risk for loans and advances to customers and banks, including the impact of credit risk mitigation and problem credit management. Our credit portfolio remains well diversified and predominantly short term.

The loan portfolio is summarised by client segment and by credit quality (neither past due nor impaired; past due; and impaired) on page 19. The Group manages its loan portfolio between those assets that are performing in line with their contractual terms (whether original or renegotiated) and those that are non-performing. Corporate & Institutional Clients and Commercial Clients exposures are typically managed on an individual basis and consequently credit grade migration is a key component of credit risk management. In Retail Clients, loans are monitored at a portfolio level and delinquency trends are monitored consistently as part of risk management. In all three client segments, credit risk is mitigated to

some degree through collateral, further details of which are set out on pages 14 to 17.

This section covers a summary of the Group's loan portfolio, broadly analysed by business and geography, along with an analysis of the maturity profile, credit quality and provisioning of the loan book.

### Geographic and client segmental analysis

Loans and advances to customers (net of individual impairment provisions (IIPs) and portfolio impairment provisions (PIPs)) decreased by \$27.2 billion since December 2014. This reduction was primarily within the Corporate & Institutional Clients segment (\$17.7 billion) and Commercial Clients segment (\$3.5 billion) as a result of risk mitigation in markets and sectors that were experiencing a prolonged slowdown.

The decrease in loans to banks of \$20.7 billion since December 2014 was primarily across Greater China (\$7.4 billion), Europe (\$5.9 billion) and ASEAN (\$4.6 billion). This is mostly due to the liquidity management activity of the Group. Given the nature o



## Standard Chartered PLC – Risk review continued

### Loan portfolio continued Geographic and client segmental analysis continued

the book, it is predominantly short term and the maturity profile remains consistent period-on-period.

Loans and advances in the overall Retail Clients portfolio were down 3 per cent with the largest reduction in ASEAN.

The slow down in growth is due to regulatory cooling measures, sales channel realignment and risk-mitigating actions in specific markets. This was partially offset by growth in residential mortgages in Hong Kong and Korea.

Overall, the regional split of our loans and advances to customers is very similar to 2014 and our loan portfolio remains well diversified across our footprint countries, with our largest single country representing 21 per cent of loans and advances to customers and banks

### Client segment by geographic region

|  | 2015                       |                              |                         |                    |                    |                     |                       |                     |                    |
|--|----------------------------|------------------------------|-------------------------|--------------------|--------------------|---------------------|-----------------------|---------------------|--------------------|
|  | Greater China<br>\$million | North East Asia<br>\$million | South Asia<br>\$million | ASEAN<br>\$million | MENAP<br>\$million | Africa<br>\$million | Americas<br>\$million | Europe<br>\$million | Total<br>\$million |
| Corporate & Institutional Clients                          | 26,748                     | 7,880                        | 7,002                   | 32,765             | 9,921              | 4,546               | 10,377                | 41,367              | 140,606            |
| Commercial Clients   | 3,800                      | 2,403                        | 1,769                   | 1,712              | 857                | 635                 | -                     | 43                  | 11,219             |
| Private Banking Clients                                    | 3,406                      | -                            | 152                     | 7,615              | 257                | -                   | -                     | 3,640               | 15,070             |
| Retail Clients   | 42,295                     | 18,426                       | 4,292                   | 23,489             | 4,799              | 1,581               | -                     | 283                 | 95,165             |
|  | 76,249                     | 28,709                       | 13,215                  | 65,581             | 15,834             | 6,762               | 10,377                | 45,333              | 262,060            |
| Portfolio impairment provision                             | (169)                      | (69)                         | (50)                    | (158)              | (56)               | (43)                | (8)                   | (104)               | (657)              |
| <b>Total loans and advances to customers<sup>1,2</sup></b> | <b>76,080</b>              | <b>28,640</b>                | <b>13,165</b>           | <b>65,423</b>      | <b>15,778</b>      | <b>6,719</b>        | <b>10,369</b>         | <b>45,229</b>       | <b>261,403</b>     |
| Intra-regional balance <sup>3</sup>                        | 1,595                      | (32)                         | 6,122                   | 1,519              | 3,707              | 4,843               | 1,129                 | (18,883)            | -                  |
| <b>Total loans and advances to customers<sup>1,4</sup></b> | <b>77,675</b>              | <b>28,608</b>                | <b>19,287</b>           | <b>66,942</b>      | <b>19,485</b>      | <b>11,562</b>       | <b>11,498</b>         | <b>26,346</b>       | <b>261,403</b>     |
| <b>Total loans and advances to banks<sup>1</sup></b>       | <b>21,376</b>              | <b>4,596</b>                 | <b>515</b>              | <b>7,777</b>       | <b>2,266</b>       | <b>957</b>          | <b>10,532</b>         | <b>18,750</b>       | <b>66,769</b>      |

|  | 2014                       |                              |                         |                    |                    |                     |                       |                     |                    |
|--|----------------------------|------------------------------|-------------------------|--------------------|--------------------|---------------------|-----------------------|---------------------|--------------------|
|  | Greater China<br>\$million | North East Asia<br>\$million | South Asia<br>\$million | ASEAN<br>\$million | MENAP<br>\$million | Africa<br>\$million | Americas<br>\$million | Europe<br>\$million | Total<br>\$million |
| Corporate & Institutional Clients                          | 37,253                     | 7,882                        | 8,093                   | 37,419             | 12,136             | 5,894               | 10,964                | 38,657              | 158,298            |
| Commercial Clients   | 5,395                      | 3,176                        | 2,036                   | 2,234              | 1,106              | 669                 | -                     | 74                  | 14,690             |
| Private Banking Clients                                    | 3,494                      | -                            | 167                     | 9,732              | 274                | -                   | -                     | 4,391               | 18,058             |
| Retail Clients   | 41,408                     | 18,633                       | 4,272                   | 27,220             | 4,869              | 1,845               | -                     | 2                   | 98,249             |
|  | 87,550                     | 29,691                       | 14,568                  | 76,605             | 18,385             | 8,408               | 10,964                | 43,124              | 289,295            |
| Portfolio impairment provision                             | (98)                       | (75)                         | (56)                    | (201)              | (78)               | (47)                | (9)                   | (132)               | (696)              |
| <b>Total loans and advances to customers<sup>1,2</sup></b> | <b>87,452</b>              | <b>29,616</b>                | <b>14,512</b>           | <b>76,404</b>      | <b>18,307</b>      | <b>8,361</b>        | <b>10,955</b>         | <b>42,992</b>       | <b>288,599</b>     |
| Intra-regional balance <sup>3</sup>                        | 2,194                      | (34)                         | 8,347                   | 2,137              | 4,468              | 4,742               | (3)                   | (21,851)            | -                  |
| <b>Total loans and advances to customers<sup>1,4</sup></b> | <b>89,646</b>              | <b>29,582</b>                | <b>22,859</b>           | <b>78,541</b>      | <b>22,775</b>      | <b>13,103</b>       | <b>10,952</b>         | <b>21,141</b>       | <b>288,599</b>     |
| <b>Total loans and advances to banks<sup>1</sup></b>       | <b>28,758</b>              | <b>5,997</b>                 | <b>488</b>              | <b>12,388</b>      | <b>1,603</b>       | <b>940</b>          | <b>12,661</b>         | <b>24,665</b>       | <b>87,500</b>      |

1. Amounts are net of individual impairment provision and include financial instruments held at fair value through profit or loss

2. Presented on the basis of booking location and not customer location

3. The intra-regional balance represents the attribution of lending from the booking location to the location of the customer

4. The balances are based on the location of the customer

## Standard Chartered PLC – Risk review continued

### Industry and Retail Products analysis by geographic region

In the Corporate & Institutional Clients and Commercial Clients segments, our largest industry exposure changed from energy to financing, insurance and non-banking clients, which constitutes 21 per cent of loans and advances to customers (2014: 15 per cent). Lending to financing, insurance and non-banking clients is mostly to investment grade institutions and is part of the liquidity management of the Group.

Loans and advances to the energy sector have reduced and constitute 13 per cent (2014: 16 per cent) of total loans and advances to Corporate & Institutional Clients and Commercial Clients. The energy sector lending is spread across five sub-sectors and more than 300 clients.

The manufacturing sector makes up 14 per cent of the Corporate & Institutional Clients and Commercial Clients loans and advances (2014: 15 per cent). The manufacturing industry group is spread across a diverse range of industries, including automobiles and components, capital goods, pharmaceuticals, biotech and life sciences, technology hardware and equipment, chemicals, paper products and packaging, with lending spread over 4,700 clients.

The Group provides loans to commercial real estate (CRE) counterparties of \$13 billion (2014: \$16.1 billion), which represents less than 5 per cent of total customer loans and advances and less than 3 per cent of assets. Loans greater than five years are less than 9 per cent of the CRE portfolio.

In total, \$6.1 billion of this lending is to counterparties where the source of repayment is substantially derived from rental or sale of real estate and is secured by real estate collateral. The remaining CRE loans comprise working capital loans to real estate corporates, loans with non-property collateral, unsecured loans and loans to real estate entities of diversified conglomerates.

The CCPL and other unsecured lending of the Retail Products portfolio is down from 18 per cent to 16 per cent of the Retail Products loans and advances and is spread across multiple products in over 29 markets. The decrease in Retail unsecured portfolio was mainly due to market conditions and regulation, sales channel realignment, and risk actions in specific markets. There has otherwise been no significant change in the shape of our Retail Products portfolio.

### Industry and Retail Products analysis by geographic region

|  | 2015                       |                              |                         |                    |                    |                     |                       |                     |                    |
|--|----------------------------|------------------------------|-------------------------|--------------------|--------------------|---------------------|-----------------------|---------------------|--------------------|
|  | Greater China<br>\$million | North East Asia<br>\$million | South Asia<br>\$million | ASEAN<br>\$million | MENAP<br>\$million | Africa<br>\$million | Americas<br>\$million | Europe<br>\$million | Total<br>\$million |
| <b>Industry</b>  |                            |                              |                         |                    |                    |                     |                       |                     |                    |
| Energy   | 1,041                      | 275                          | 83                      | 5,689              | 881                | 508                 | 2,628                 | 8,576               | 19,681             |
| Manufacturing  | 7,490                      | 1,846                        | 2,145                   | 2,589              | 1,851              | 869                 | 1,076                 | 3,023               | 20,889             |
| Financing, insurance and non-banking                     | 4,182                      | 780                          | 700                     | 5,443              | 955                | 267                 | 3,948                 | 15,183              | 31,458             |
| Transport, telecom and utilities                         | 2,804                      | 1,654                        | 919                     | 3,075              | 945                | 713                 | 723                   | 5,646               | 16,479             |
| Food and household products                              | 1,498                      | 232                          | 668                     | 4,716              | 1,399              | 1,083               | 906                   | 1,126               | 11,628             |
| Commercial real estate                                   | 4,680                      | 2,091                        | 1,460                   | 3,200              | 1,037              | 87                  | -                     | 473                 | 13,028             |
| Mining and quarrying                                     | 1,261                      | 408                          | 594                     | 2,364              | 341                | 617                 | 389                   | 2,581               | 8,555              |
| Consumer durables  | 3,905                      | 574                          | 1,160                   | 927                | 1,116              | 319                 | 295                   | 2,563               | 10,859             |
| Construction   | 945                        | 362                          | 653                     | 1,256              | 1,123              | 211                 | 28                    | 724                 | 5,302              |
| Trading companies and distributors                       | 642                        | 235                          | 96                      | 602                | 451                | 277                 | 29                    | 97                  | 2,429              |
| Government   | 1,171                      | 1,247                        | -                       | 3,191              | 131                | 19                  | 128                   | 325                 | 6,212              |
| Other  | 929                        | 579                          | 293                     | 1,425              | 548                | 211                 | 227                   | 1,093               | 5,305              |
| <b>Retail Products</b>                                   |                            |                              |                         |                    |                    |                     |                       |                     |                    |
| Mortgages  | 35,869                     | 13,397                       | 2,345                   | 18,519             | 1,878              | 367                 | -                     | 1,313               | 73,688             |
| CCPL and other unsecured lending                         | 5,902                      | 3,582                        | 995                     | 3,798              | 2,038              | 1,147               | -                     | 90                  | 17,552             |
| Auto   | -                          | -                            | 38                      | 407                | 345                | 6                   | -                     | -                   | 796                |
| Secured wealth products                                  | 3,673                      | 54                           | 31                      | 7,725              | 98                 | -                   | -                     | 2,505               | 14,086             |
| Other  | 257                        | 1,393                        | 1,035                   | 655                | 697                | 61                  | -                     | 15                  | 4,113              |
|  | 76,249                     | 28,709                       | 13,215                  | 65,581             | 15,834             | 6,762               | 10,377                | 45,333              | 262,060            |
| Portfolio impairment provision                           | (169)                      | (69)                         | (50)                    | (158)              | (56)               | (43)                | (8)                   | (104)               | (657)              |
| <b>Total loans and advances to customers<sup>1</sup></b> | <b>76,080</b>              | <b>28,640</b>                | <b>13,165</b>           | <b>65,423</b>      | <b>15,778</b>      | <b>6,719</b>        | <b>10,369</b>         | <b>45,229</b>       | <b>261,403</b>     |
| <b>Total loans and advances to banks</b>                 | <b>21,376</b>              | <b>4,596</b>                 | <b>515</b>              | <b>7,777</b>       | <b>2,266</b>       | <b>957</b>          | <b>10,532</b>         | <b>18,750</b>       | <b>66,769</b>      |

<sup>1</sup> Presented on the basis of booking location and not customer location

## Standard Chartered PLC – Risk review continued

### Industry and Retail products analysis by geographic region continued

|  | 2014                       |                              |                         |                    |                    |                     |                       |                     |                    |
|--|----------------------------|------------------------------|-------------------------|--------------------|--------------------|---------------------|-----------------------|---------------------|--------------------|
|  | Greater China<br>\$million | North East Asia<br>\$million | South Asia<br>\$million | ASEAN<br>\$million | MENAP<br>\$million | Africa<br>\$million | Americas<br>\$million | Europe<br>\$million | Total<br>\$million |
| <b>Industry<sup>1</sup></b>                              |                            |                              |                         |                    |                    |                     |                       |                     |                    |
| Energy   | 1,470                      | 310                          | 123                     | 9,006              | 1,228              | 533                 | 3,206                 | 11,347              | 27,223             |
| Manufacturing  | 9,456                      | 2,419                        | 2,452                   | 4,337              | 2,239              | 1,031               | 1,031                 | 3,838               | 26,803             |
| Financing, insurance and non-banking                     | 5,856                      | 995                          | 431                     | 5,497              | 1,136              | 628                 | 3,507                 | 7,336               | 25,386             |
| Transport, telecom and utilities                         | 3,715                      | 1,602                        | 922                     | 3,706              | 1,210              | 662                 | 612                   | 6,176               | 18,605             |
| Food and household products                              | 2,589                      | 313                          | 929                     | 5,034              | 1,381              | 1,346               | 1,438                 | 1,302               | 14,332             |
| Commercial real estate                                   | 6,876                      | 2,190                        | 1,503                   | 3,798              | 1,133              | 79                  | -                     | 485                 | 16,064             |
| Mining and quarrying                                     | 3,383                      | 649                          | 922                     | 2,186              | 512                | 764                 | 273                   | 4,123               | 12,812             |
| Consumer durables  | 5,076                      | 659                          | 1,291                   | 1,170              | 1,385              | 439                 | 404                   | 1,752               | 12,176             |
| Construction   | 1,169                      | 486                          | 897                     | 1,178              | 1,352              | 252                 | 20                    | 1,095               | 6,449              |
| Trading companies and distributors                       | 1,419                      | 400                          | 232                     | 932                | 719                | 418                 | 56                    | 114                 | 4,290              |
| Government   | 536                        | 368                          | 5                       | 1,206              | 230                | 19                  | 220                   | 165                 | 2,749              |
| Other  | 1,103                      | 667                          | 422                     | 1,603              | 717                | 392                 | 197                   | 998                 | 6,099              |
| <b>Retail Products</b>                                   |                            |                              |                         |                    |                    |                     |                       |                     |                    |
| Mortgages  | 34,381                     | 12,918                       | 2,366                   | 20,724             | 1,853              | 345                 | -                     | 1,320               | 73,907             |
| CCPL and other unsecured lending                         | 6,673                      | 4,407                        | 987                     | 4,850              | 2,096              | 1,425               | -                     | 51                  | 20,489             |
| Auto   | -                          | -                            | 40                      | 631                | 339                | 6                   | -                     | -                   | 1,016              |
| Secured wealth products                                  | 3,466                      | 74                           | 70                      | 9,385              | 805                | -                   | -                     | 1,455               | 15,255             |
| Other  | 382                        | 1,234                        | 976                     | 1,362              | 50                 | 69                  | -                     | 1,567               | 5,640              |
|  | 87,550                     | 29,691                       | 14,568                  | 76,605             | 18,385             | 8,408               | 10,964                | 43,124              | 289,295            |
| Portfolio impairment provision                           | (98)                       | (75)                         | (56)                    | (201)              | (78)               | (47)                | (9)                   | (132)               | (696)              |
| <b>Total loans and advances to customers<sup>1</sup></b> | <b>87,452</b>              | <b>29,616</b>                | <b>14,512</b>           | <b>76,404</b>      | <b>18,307</b>      | <b>8,361</b>        | <b>10,955</b>         | <b>42,992</b>       | <b>288,599</b>     |
| <b>Total loans and advances to banks</b>                 | <b>28,758</b>              | <b>5,997</b>                 | <b>488</b>              | <b>12,388</b>      | <b>1,603</b>       | <b>940</b>          | <b>12,661</b>         | <b>24,665</b>       | <b>87,500</b>      |

<sup>1</sup> Presented on the basis of booking location and not customer location

#### Maturity analysis by client segment

The loans and advances to the Corporate & Institutional Clients and Commercial Clients segments remain predominantly short term, with 67 per cent of loans and advances to customers in the segments maturing under one year, an increase of 2 per cent compared to December 2014. 95 per cent of the loans to banks mature in less than one year. Shorter maturity gives us the flexibility to respond promptly to events and rebalance or reduce our exposure to clients or sectors that are facing increased

pressure or uncertainty. The Private Banking Clients loan book also demonstrates a short-term bias typical for loans that are secured on wealth management assets.

The Retail Clients loan book continues to be longer-term in nature at 66 per cent (2014: 64 per cent) as Mortgages constitute the majority of the Retail Clients loan book. The slight increase in the tenor of retail products overall reflects the reduction in unsecured assets and the corresponding increase in the proportion of mortgages.

#### By client segment

|  | 2015                          |                                |                              | Total<br>\$million |
|--|-------------------------------|--------------------------------|------------------------------|--------------------|
|  | One year or less<br>\$million | One to five years<br>\$million | Over five years<br>\$million |                    |
| Corporate & Institutional Clients                      | 155,907                       | 41,152                         | 10,317                       | 207,376            |
| - Loans to banks                                       | 63,160                        | 3,572                          | 38                           | 66,770             |
| - Loans to customers                                   | 92,747                        | 37,580                         | 10,279                       | 140,606            |
| Commercial Clients                                     | 8,925                         | 1,262                          | 1,032                        | 11,219             |
| Private Banking Clients                                | 13,468                        | 494                            | 1,108                        | 15,070             |
| Retail Clients   | 15,366                        | 17,304                         | 62,495                       | 95,165             |
|  | 193,666                       | 60,212                         | 74,952                       | 328,830            |
| Portfolio impairment provision                         |                               |                                |                              | (658)              |
| <b>Total loans and advances to banks and customers</b> |                               |                                |                              | <b>328,172</b>     |

## Standard Chartered PLC – Risk review continued

### Maturity analysis by client segment continued

|  | 2014                             |                                      |                                 |  | Total<br>\$million |
|--|----------------------------------|--------------------------------------|---------------------------------|--|--------------------|
|  | One year<br>or less<br>\$million | One to<br>five<br>years<br>\$million | Over<br>five years<br>\$million |  |                    |
| Corporate & Institutional Clients                      | 184,880                          | 48,542                               | 12,378                          |  | 245,800            |
| - Loans to banks                                       | 83,845                           | 3,587                                | 70                              |  | 87,502             |
| - Loans to customers                                   | 101,035                          | 44,955                               | 12,308                          |  | 158,298            |
| Commercial Clients                                     | 11,905                           | 1,436                                | 1,349                           |  | 14,690             |
| Private Banking Clients                                | 15,349                           | 1,449                                | 1,260                           |  | 18,058             |
| Retail Clients   | 16,877                           | 18,610                               | 62,762                          |  | 98,249             |
|  | 229,011                          | 70,037                               | 77,749                          |  | 376,797            |
| Portfolio impairment provision                         |                                  |                                      |                                 |  | (698)              |
| <b>Total loans and advances to banks and customers</b> |                                  |                                      |                                 |  | <b>376,099</b>     |

### Maturity analysis by Industry

#### By Industry

The following tables show the contractual maturity of loans and advances to customers by each principal category of borrowers' business or industry:

|  | 2015                             |                                   |                                 |  | Total<br>\$million |
|--|----------------------------------|-----------------------------------|---------------------------------|--|--------------------|
|  | One year<br>or less<br>\$million | One to<br>five years<br>\$million | Over<br>five years<br>\$million |  |                    |
| <b>Industry</b>  |                                  |                                   |                                 |  |                    |
| Energy   | 9,122                            | 8,075                             | 2,484                           |  | 19,681             |
| Manufacturing  | 15,690                           | 4,309                             | 890                             |  | 20,889             |
| Financing, insurance and non-banking                     | 27,048                           | 4,079                             | 331                             |  | 31,458             |
| Transport, telecom and utilities                         | 5,515                            | 5,708                             | 5,256                           |  | 16,479             |
| Food and household products                              | 9,606                            | 1,957                             | 65                              |  | 11,628             |
| Commercial real estate                                   | 6,178                            | 5,730                             | 1,120                           |  | 13,028             |
| Mining and quarrying                                     | 5,745                            | 2,421                             | 389                             |  | 8,555              |
| Consumer durables  | 9,055                            | 1,720                             | 84                              |  | 10,859             |
| Construction   | 3,442                            | 1,779                             | 81                              |  | 5,302              |
| Trading companies and distributors                       | 2,115                            | 296                               | 18                              |  | 2,429              |
| Government   | 5,890                            | 237                               | 85                              |  | 6,212              |
| Other  | 2,266                            | 2,531                             | 508                             |  | 5,305              |
| <b>Retail Products</b>                                   |                                  |                                   |                                 |  |                    |
| Mortgages  | 4,106                            | 9,065                             | 60,517                          |  | 73,688             |
| CCPL and other unsecured lending                         | 9,054                            | 7,116                             | 1,382                           |  | 17,552             |
| Auto   | 132                              | 612                               | 52                              |  | 796                |
| Secured wealth products                                  | 13,644                           | 304                               | 138                             |  | 14,086             |
| Other  | 1,898                            | 701                               | 1,514                           |  | 4,113              |
|  | 130,506                          | 56,640                            | 74,914                          |  | 262,060            |
| Portfolio impairment provision                           |                                  |                                   |                                 |  | (657)              |
| <b>Total loans and advances to customers<sup>1</sup></b> |                                  |                                   |                                 |  | <b>261,403</b>     |

1. The disclosures in the Risk profile section are presented on the basis of booking location and not customer location

## Standard Chartered PLC – Risk review continued

### Maturity analysis by Industry continued

|  | 2014                             |                                      |                                 |  | Total<br>\$million |
|--|----------------------------------|--------------------------------------|---------------------------------|--|--------------------|
|  | One year<br>or less<br>\$million | One to<br>five<br>years<br>\$million | Over<br>five years<br>\$million |  |                    |
| <b>Industry</b>                              |                                  |                                      |                                 |  |                    |
| Energy                                       | 14,894                           | 9,545                                | 2,784                           |  | 27,223             |
| Manufacturing                                | 19,984                           | 5,813                                | 1,006                           |  | 26,803             |
| Financing, insurance and non-banking         | 20,980                           | 4,162                                | 244                             |  | 25,386             |
| Transport, telecom and utilities             | 6,204                            | 6,946                                | 5,455                           |  | 18,605             |
| Food and household products                  | 11,642                           | 2,606                                | 84                              |  | 14,332             |
| Commercial real estate                       | 6,184                            | 8,549                                | 1,331                           |  | 16,064             |
| Mining and quarrying                         | 9,104                            | 2,517                                | 1,191                           |  | 12,812             |
| Consumer durables                            | 10,682                           | 1,346                                | 148                             |  | 12,176             |
| Construction                                 | 3,758                            | 2,060                                | 631                             |  | 6,449              |
| Trading companies and distributors           | 3,969                            | 246                                  | 75                              |  | 4,290              |
| Government                                   | 2,612                            | 56                                   | 81                              |  | 2,749              |
| Other  | 2,927                            | 2,545                                | 627                             |  | 6,099              |
| <b>Retail Products</b>                       |                                  |                                      |                                 |  |                    |
| Mortgages                                    | 4,733                            | 8,786                                | 60,388                          |  | 73,907             |
| CCPL and other unsecured lending             | 10,424                           | 8,533                                | 1,532                           |  | 20,489             |
| Auto   | 199                              | 742                                  | 75                              |  | 1,016              |
| Secured wealth products                      | 14,085                           | 1,074                                | 96                              |  | 15,255             |
| Other  | 2,785                            | 924                                  | 1,931                           |  | 5,640              |
|  | 145,166                          | 66,450                               | 77,679                          |  | 289,295            |
| Portfolio impairment provision               |                                  |                                      |                                 |  | (696)              |
| <b>Total loans and advances to customers</b> |                                  |                                      |                                 |  | <b>288,599</b>     |

#### Credit risk mitigation

Potential credit losses from any given account, customer or portfolio are mitigated using a range of tools such as collateral, netting arrangements, credit insurance, credit derivatives taking into account expected volatility and 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. See page 53 for our overall approach to credit risk mitigation.

#### Collateral

The requirement for collateral is not a substitute for the ability to pay, which is the primary consideration for any lending decision.

As a result of reinforcing our collateralisation requirements, the fair value of collateral held as a percentage of the amount outstanding has increased by 4 per cent since the end of 2014.

The unadjusted market value of collateral, in respect of Corporate & Institutional Clients and Commercial Clients, without adjusting for over-collateralisation, was \$201 billion (2014: \$212 billion).

The collateral values in the table on page 15 are adjusted where appropriate in accordance with our risk mitigation policy and for the effect of over-collateralisation. Exposures for 50 per cent of the clients that have placed collateral with the Group are over-collateralised. The average amount of over-collateralisation is 51 per cent.

We have remained conservative in the way we assess the value of collateral, which is calibrated to a severe downturn and backtested against our prior experience. On average across all types of collateral, the value ascribed is approximately half of its current market value.

The decrease of commodities from 3 per cent to 1 per cent of collateral balances is primarily as a result of our overall reduction in commodity-related exposure. The increase of reverse repurchase (repo) and securities collateral from 36 per cent to 42 per cent represents an increase in the deployment of liquidity by Asset and Liability Management (ALM) to Corporate & Institutional Clients and Commercial Clients.

The average LTV ratio of the CRE portfolio has remained relatively stable at 37.4 per cent, compared with 39.9 per cent in 2014. The proportion of loans with an LTV greater than 80 per cent has remained below 2 per cent during the same period.

In the Retail Clients and Private Banking Clients segments, a secured loan is one where the borrower pledges an asset as collateral of which the Group is able to take possession in the event that the borrower defaults. The collateral levels for Retail Clients have remained stable compared to 2014.

For loans and advances to customers and banks (including those held at fair value through profit or loss), the table on the following page sets out the fair value of collateral held by the Group, adjusted where appropriate in accordance with the risk mitigation policy as outlined on page 53 and for the effect of over-collateralisation.

## Standard Chartered PLC – Risk review continued

### Credit risk mitigation continued

|  | Collateral          |  |                             | Amount Outstanding <sup>1</sup> |  |                             |
|--|---------------------|--|-----------------------------|---------------------------------|--|-----------------------------|
|  | Total               | Of which                                     |                             | Total                           | Of which                                     |                             |
|  |                     | Past due but not individually impaired loans | Individually impaired loans |                                 | Past due but not individually impaired loans | Individually impaired loans |
|  | \$million           | \$million                                    | \$million                   | \$million                       | \$million                                    | \$million                   |
| As at 31 December 2015                         |                     |  |                             |                                 |  |                             |
| Corporate & Institutional Clients <sup>2</sup> | 63,509              | 57   | 1,547                       | 207,376                         | 2,278  | 10,428                      |
| Commercial Clients                             | 5,331               | 191  | 298                         | 11,219                          | 337  | 1,246                       |
| Private Banking Clients                        | 10,561              | 52   | 322                         | 15,070                          | 52   | 325                         |
| Retail Clients                                 | 73,442              | 1,563  | 258                         | 95,165                          | 2,402  | 831                         |
| <b>Total</b>                                   | <b>152,843</b>      | <b>1,863</b>                                 | <b>2,425</b>                | <b>328,830</b>                  | <b>5,069</b>                                 | <b>12,830</b>               |
| As at 31 December 2014                         |                     |  |                             |                                 |  |                             |
| Corporate & Institutional Clients <sup>2</sup> | 64,343              | 228  | 809 <sup>3</sup>            | 245,800                         | 1,847  | 6,094                       |
| Commercial Clients                             | 6,034               | 265 <sup>3</sup>                             | 253                         | 14,690                          | 454  | 1,068                       |
| Private Banking Clients                        | 12,905              | 220  | 40                          | 18,058                          | 140  | 91                          |
| Retail Clients                                 | 76,194 <sup>3</sup> | 2,053  | 360                         | 98,249                          | 2,928  | 846                         |
| <b>Total</b>                                   | <b>159,476</b>      | <b>2,766</b>                                 | <b>1,462</b>                | <b>376,797</b>                  | <b>5,369</b>                                 | <b>8,099</b>                |

<sup>1</sup> Includes loans held at fair value through profit or loss

<sup>2</sup> Includes loans and advances to banks

<sup>3</sup> Balances have been restated

#### Corporate & Institutional Clients and Commercial Clients

Collateral held against Corporate & Institutional Clients and Commercial Clients exposures amounted to \$69 billion (2014: \$70 billion).

Our underwriting standards encourage taking specific charges on assets and we consistently seek high-quality, investment-grade collateral. 30 per cent of collateral held comprises physical assets or is property-based, with the remainder held largely in cash and investment securities. Non-tangible collateral – such as guarantees and letters of credit – may also be held against corporate exposures, although the financial effect of this type of collateral is less significant in terms of recoveries. However, this type of collateral is considered when determining probability of default and other credit-related factors.

Collateral taken for longer-term and non-investment grade loans continues to be high at 59 per cent (55 per cent in 2014). Collateral is also held against off-balance sheet exposures, including undrawn commitments and trade-related instruments.

The proportion of highly rated securities of 31 per cent of collateral increased from 24 per cent compared to December 2014, due to higher levels of reverse repo transactions.

The following table provides an analysis of the types of collateral held against Corporate & Institutional Clients and Commercial Clients loan exposures:

|                                  | 2015          | 2014          |
|----------------------------------|---------------|---------------|
|                                  | \$million     | \$million     |
| Property                         | 17,043        | 16,438        |
| Plant, machinery and other stock | 3,822         | 5,498         |
| Cash                             | 11,060        | 12,594        |
| Reverse repo & Securities        | 28,973        | 25,641        |
| AAA                              | 4             | 4             |
| AA- to AA+                       | 21,679        | 17,188        |
| BBB- to BBB+                     | 3,240         | 3,062         |
| Lower than BBB-                  | 1,150         | 997           |
| Unrated                          | 2,900         | 4,390         |
| Commodities                      | 923           | 2,426         |
| Ships and aircraft               | 7,019         | 7,780         |
| <b>Total value of collateral</b> | <b>68,840</b> | <b>70,377</b> |

## Standard Chartered PLC – Risk review continued

### Credit risk mitigation continued

#### Retail Clients and Private Banking Clients

In Retail Clients and Private Banking Clients, 82 per cent of the portfolio is fully secured. The average LTV is less than 50 per cent on the mortgage book. In Retail Clients and Private Banking Clients segments, the unsecured portfolio is 15 per cent, down from 19 per cent in 2014.

In Retail mortgage loans, the value of property held as security significantly exceeds the value of mortgage loans. LTV ratios measure the ratio of the current mortgage outstanding to the current fair value of the properties on which they are secured.

The overall LTV ratio on our mortgage portfolio is less than 50 per cent – relatively unchanged since the end of 2014. Our major mortgage markets of Hong Kong, Korea and Taiwan have an average LTV of less than 50 per cent. Compared with December 2014, the proportion of the portfolio with LTVs in excess of 100 per cent is primarily within the MENAP region, mainly from the UAE legacy (pre 2009) portfolio.

The following table presents an analysis of loans to individuals by product split between fully secured, partially secured and unsecured:

|                           | 2015 <sup>1</sup>          |                                |                        |                                 | 2014                       |                                |                        |                                 |
|---------------------------|----------------------------|--------------------------------|------------------------|---------------------------------|----------------------------|--------------------------------|------------------------|---------------------------------|
|                           | Fully secured<br>\$million | Partially secured<br>\$million | Unsecured<br>\$million | Total <sup>2</sup><br>\$million | Fully secured<br>\$million | Partially secured<br>\$million | Unsecured<br>\$million | Total <sup>2</sup><br>\$million |
| Loans to individuals      |                            |                                |                        |                                 |                            |                                |                        |                                 |
| Mortgages                 | 72,674                     | 1,014                          | -                      | 73,688                          | 73,907                     | -                              | -                      | 73,907                          |
| CCPL                      | 386                        | 632                            | 16,534                 | 17,552                          | 4                          | -                              | 20,485                 | 20,489                          |
| Auto                      | 792                        | -                              | 4                      | 796                             | 1,016                      | -                              | -                      | 1,016                           |
| Secured wealth products   | 13,689                     | 383                            | 14                     | 14,086                          | 15,255                     | -                              | -                      | 15,255                          |
| Other                     | 2,585                      | 1,208                          | 320                    | 4,113                           | 2,783                      | 1,494                          | 1,363                  | 5,640                           |
|                           | 90,126                     | 3,237                          | 16,872                 | 110,235                         | 92,965                     | 1,494                          | 21,848                 | 116,307                         |
| Percentage of total loans | 82%                        | 3%                             | 15%                    |                                 | 80%                        | 1%                             | 19%                    |                                 |

<sup>1</sup> For 2015 the allocation of products between fully secured, partially secured and unsecured have been refined. 2014 balances have not been re-presented

<sup>2</sup> Amounts net of individual impairment provisions

#### Mortgage loan-to-value ratios by geography

The following table provides an analysis of LTV ratios by geography for the Retail Clients and Private Banking Clients mortgages portfolio:

|   | 2015               |                      |                 |            |            |             |               |             |            |
|---|--------------------|----------------------|-----------------|------------|------------|-------------|---------------|-------------|------------|
|   | Greater China<br>% | North East Asia<br>% | South Asia<br>% | ASEAN<br>% | MENAP<br>% | Africa<br>% | Americas<br>% | Europe<br>% | Total<br>% |
| Less than 50 per cent                           | 62.9               | 47.2                 | 68.8            | 32.5       | 23.7       | 34.3        | -             | 38.5        | 51.4       |
| 50 per cent to 59 per cent                      | 15.1               | 20.8                 | 13.5            | 18.4       | 18.0       | 13.9        | -             | 38.5        | 17.4       |
| 60 per cent to 69 per cent                      | 10.8               | 28.0                 | 12.1            | 19.5       | 22.2       | 19.2        | -             | 18.3        | 16.7       |
| 70 per cent to 79 per cent                      | 6.9                | 2.8                  | 4.6             | 18.9       | 17.9       | 21.1        | -             | 4.3         | 9.1        |
| 80 per cent to 89 per cent                      | 3.7                | 0.7                  | 0.5             | 9.9        | 9.7        | 8.2         | -             | -           | 4.5        |
| 90 per cent to 99 per cent                      | 0.6                | 0.3                  | 0.1             | 0.6        | 3.5        | 2.1         | -             | 0.5         | 0.6        |
| 100 per cent and greater                        | -                  | 0.2                  | 0.3             | 0.2        | 5.0        | 1.1         | -             | -           | 0.3        |
| Average Portfolio loan to value                 | 44.1               | 49.2                 | 38.6            | 57.2       | 64.0       | 58.3        | -             | 44.4        | 48.9       |
| Loans to individuals -<br>Mortgages (\$million) | 35,869             | 13,397               | 2,345           | 18,519     | 1,878      | 367         | -             | 1,313       | 73,688     |

  

|   | 2014               |                      |                 |            |            |             |               |             |            |
|---|--------------------|----------------------|-----------------|------------|------------|-------------|---------------|-------------|------------|
|   | Greater China<br>% | North East Asia<br>% | South Asia<br>% | ASEAN<br>% | MENAP<br>% | Africa<br>% | Americas<br>% | Europe<br>% | Total<br>% |
| Less than 50 per cent                           | 65.6               | 46.3                 | 68.6            | 32.7       | 28.9       | 32.1        | -             | 33.1        | 52.0       |
| 50 per cent to 59 per cent                      | 12.3               | 22.0                 | 13.0            | 21.0       | 18.7       | 13.5        | -             | 40.3        | 17.0       |
| 60 per cent to 69 per cent                      | 10.5               | 24.5                 | 11.3            | 20.1       | 19.8       | 21.7        | -             | 23.2        | 16.2       |
| 70 per cent to 79 per cent                      | 7.1                | 4.7                  | 5.6             | 17.7       | 17.7       | 23.3        | -             | 3.4         | 9.5        |
| 80 per cent to 89 per cent                      | 4.1                | 1.5                  | 1.2             | 7.3        | 7.2        | 8.9         | -             | -           | 4.4        |
| 90 per cent to 99 per cent                      | 0.4                | 0.6                  | 0.1             | 1.0        | 3.6        | 0.2         | -             | -           | 0.6        |
| 100 per cent and greater                        | -                  | 0.4                  | 0.2             | 0.2        | 4.1        | 0.3         | -             | -           | 0.3        |
| Average Portfolio loan to value                 | 44.0               | 50.0                 | 38.7            | 56.4       | 61.4       | 58.2        | -             | 51.5        | 49.3       |
| Loans to individuals -<br>Mortgages (\$million) | 34,381             | 12,918               | 2,366           | 20,724     | 1,853      | 345         | -             | 1,320       | 73,907     |

## Standard Chartered PLC – Risk review continued

### Credit risk mitigation continued

#### Collateral and other credit enhancements possessed or called upon

The Group obtains assets by taking possession of collateral or calling upon other credit enhancements (such as guarantees). Repossessed properties are sold in an orderly fashion. Where the proceeds are in excess of the outstanding loan balance, the excess is returned to the borrower. Certain equity securities acquired may be held by the Group for investment purposes and are classified as available-for-sale, and the related loan written off.

The carrying value of collateral possessed and held by the Group as at 31 December 2015 is \$45 million (2014: \$44 million). Cash increased \$22.5 million as a result of the bank calling on a deposit held as security.

|                             | 2015<br>\$million | 2014<br>\$million |
|-----------------------------|-------------------|-------------------|
| Property, plant & equipment | 11.0              | 20.1              |
| Equity shares               | 2.6               | 18.1              |
| Guarantees                  | 3.6               | 2.3               |
| Cash                        | 26.1              | 3.6               |
| Other                       | 2.0               | –                 |
| <b>Total</b>                | <b>45.3</b>       | <b>44.1</b>       |

#### Other credit risk mitigation

Other forms of credit risk mitigation are set out below.

##### *Securitisation*

The Group has transferred to third parties by way of securitisation the rights to any collection of principal and interest on client loan assets with a face value of \$76 million (2014: \$31 million). The Group continues to recognise these assets in addition to the proceeds and related liability of \$43 million (2014: \$29 million) arising from the securitisations. The Group considers the above client loan assets to be encumbered. Further details of encumbered assets are provided on page 40.

##### *Credit default swaps*

The Group has entered into credit default swaps for portfolio management purposes, referencing loan assets with a notional value of \$23 billion (2014: \$22.3 billion). These credit default swaps are accounted for as guarantees as they meet the accounting requirements set out in International Accounting Standards (IAS) 39. The Group continues to hold the underlying assets referenced in the credit default swaps and it continues to be exposed to related credit and foreign exchange risk on these assets.

##### *Derivatives financial instruments*

The Group enters into master netting agreements, which in the event of default results in a single amount owed by or to the counterparty through netting the sum of the positive and negative mark-to-market values of applicable derivative transactions. The value of exposure under master netting agreements is \$38,934 million (2014: \$43,735 million).

In addition, we enter into credit support annexes (CSAs) with counterparties where collateral is deemed a necessary or desirable mitigant to the exposure. Cash collateral includes collateral called under a variation margin process from counterparties if total uncollateralised mark-to-market exposure exceeds the threshold and minimum transfer amount specified in the CSA. With certain counterparties, the CSA is reciprocal and requires us to post collateral if the overall mark-to-market values of positions are in the counterparty's favour and exceed an agreed threshold. The Group holds \$4,194 million (2014: \$3,484 million) under CSAs.

##### *Off-balance sheet exposures*

For certain types of exposures, such as letters of credit and guarantees, the Group obtains collateral – such as cash – depending on internal credit risk assessments, as well as in the case of letters of credit holding legal title to the underlying assets should a default take place.

### Credit quality analysis

An overall breakdown of the loan portfolio by client segment is set out on page 19, differentiating between the performing and non-performing book.

Within the performing book, there is an analysis:

- By CG, which plays a central role in the quality assessment and monitoring of risk as explained on pages 53 to 55
- Of loans and advances past due but not impaired: a loan is considered past due if payment of principal or interest has not been made on its contractual due date
- Of loans and advances where an impairment provision has been raised: these represent certain forborne accounts which have complied with their revised contractual terms for more than 180 days and on which no loss of principal is expected

Non-performing loans are analysed, net of individual impairment provisions, between what is past due but not impaired and what is impaired. Further analysis of credit quality by geography, together with the related impairment charges and provisions, is set out on pages 22 to 23.

### Credit grade migration

Performing loans that are neither past due nor impaired constitute 96 per cent of customer loans and this is consistent with past periods (2014: 97 per cent). Overall credit quality has also remained stable, with the average CG of the corporate loan portfolio remaining at 8B, unchanged since 2013.

All loans are assigned a CG, which is reviewed periodically and amended in light of changes in the borrower's circumstances or behaviour. CG 1 to 12 are assigned to performing clients or accounts, while CG 13 and 14 are assigned to non-performing or defaulted clients. Further details of our approach to credit rating is set out on page 53.

CG migration trends have also been stable across most countries, although there has been some deterioration in India and commodities, related to the slower economic growth. The decrease in CG 12 balances in 2015 is principally due to the downgrade of an interconnected group of exposures. Excluding this, the CG composition across all client segments is consistent with the prior year. In respect of loans to banks, the credit quality composition is also consistent with prior periods, with most of the growth in this period being in CG 1 to 5.

Retail Clients credit quality composition remained stable over last year. The increase in Private Banking CG 12 balance in 2015 is due to the credit migration of an exposure to a connected group.



## Standard Chartered PLC – Risk review continued

Performing loans and advances ‘past due but not impaired’ are \$0.6 billion lower than in 2014, with decreases across all categories. The past due balances arise substantially in the ‘up to 30 days past due’ category. In the Corporate & Institutional Clients and Commercial Clients segments, across all past due categories, approximately 60 per cent of the amounts past due were regularised by 31 January 2016. Of the \$428 million of Corporate & Institutional Clients exposures past due but not impaired in the 61-90 day bucket, more than 40 per cent had been repaid by the end of January 2016.

### Non-performing loans

Non-performing loans (NPLs) (net of individual impairment provisions) are higher by \$2.4 billion. This increase is primarily in the Corporate & Institutional Clients segment and is driven by an interconnected group of exposures within the liquidation portfolio that are financially booked in Europe. Details and further analysis of gross and net NPLs by client segment and by geography are provided on pages 24 and 25.

An NPL is any loan that is more than 90 days past due or is otherwise individually impaired. This excludes loans renegotiated at or after 90 days past due, but on which there has been no default in interest or principal payments for more than 180 days since renegotiation, and against which no loss of principal is expected. These loans may have a provision reflecting the time value of money, and, if so, are reported as part of forborne loans. The definition and policies in respect of renegotiated and forborne loans are set out on page 55.

### Loan impairment

The Group loan impairment and other credit risk provisions charge for 2015 has increased by \$2.8 billion or 132 per cent, to \$5 billion compared to 2014. This represents 178 basis points (bps) of average customer loans and advances.

In Corporate & Institutional Clients and Commercial Clients, total balance sheet IIPs for NPLs have increased by \$3.1 billion, or 112 per cent, compared to 31 December 2014. This reflects ongoing pressure in commodities and in India in addition to a charge of \$968 million taken in the fourth quarter which relates to a decision to manage out exposures in the liquidation portfolio. Loan impairment for Corporate & Institutional Clients and Commercial Clients represents 253 bps of average customer loans and advances.

In Retail Clients, total IIPs have decreased by \$121 million compared to 2014. Impairments from Korea Personal Debt Rehabilitation Scheme-related losses have decreased along with the improvement in Thailand and Malaysia. Portfolio impairment provisions decreased marginally mainly due to foreign exchange translation. We remain disciplined in our approach to risk management and proactive in our collection efforts to minimise account delinquencies.

Other impairment, excluding goodwill impairment, has decreased by \$36 million to \$367 million, reflecting the lower impairments of debt securities in Europe and associated investments in Asia.

### Portfolio impairment provision

PIPs are held to cover the inherent risk of losses, which, although not identified, are known through experience to be present in any loan portfolio. PIP balances have decreased 6 per cent from 2014. There was a reduction of \$102 million in the Corporate & Institutional Clients segment which is due to improvement in credit quality of the performing book and reduction in exposure. This decrease was partially offset by an increase of \$73 million in the PIP balance for the Commercial Clients segment, due to a market adjustment for the deterioration in the credit environment in some of our footprint markets.

Further details around the policy and rationale underlying the determinant of the PIP are discussed in the Loan impairment section of the Risk management approach on pages 54 to 55.

### Cover ratio

The cover ratio measures the proportion of total impairment provisions to gross NPLs, and is a metric commonly used in considering impairment trends. This metric does not allow for variations in the composition of NPLs and should be used in conjunction with other credit risk information provided, including the level of collateral cover.

The cover ratio before collateral for Retail Clients decreased to 80 per cent (2014: 91 per cent). The cover ratio before collateral for Corporate & Institutional Clients increased to 51 per cent compared to 46 per cent in 2014. The Commercial Clients segment cover ratio before collateral also increased to 68 per cent from 51 per cent in 2014. Private Banking Clients segment remains fully covered taking into account the collateral value held.

The balance of NPLs not covered by IIPs represents the adjusted value of collateral held and the Group’s estimate of the net outcome of any workout or recovery strategy. The cover ratio after taking into account collateral, but excluding PIPs, for Corporate & Institutional Clients is 64 per cent (2014: 55 per cent) and for Commercial Clients is 83 per cent (2014: 71 per cent).

As highlighted on page 14, collateral provides risk mitigation to some degree in all client segments and supports the credit quality and cover ratio assessments post-impairment provisions. Details are provided on page 24.

## Standard Chartered PLC – Risk review continued

### Credit quality analysis continued By Client segment

|   | 2015           |                             |               |                 |                |                |
|---|----------------|-----------------------------|---------------|-----------------|----------------|----------------|
|   | Loans to banks | Loans to Customers          |               |                 |                | Total          |
|   |                | Corporate and Institutional | Commercial    | Private Banking | Retail Clients |                |
|   | \$million      | \$million                   | \$million     | \$million       | \$million      | \$million      |
| <b>Performing Loans</b>   |                |                             |               |                 |                |                |
| <b>Neither past due nor impaired</b>                            |                |                             |               |                 |                |                |
| - Grades 1-5  | 60,197         | 64,230                      | 451           | 2,653           | 65,223         | 132,557        |
| - Grades 6-8  | 4,856          | 50,078                      | 4,231         | 11,770          | 14,944         | 81,023         |
| - Grades 9-11   | 1,327          | 18,257                      | 5,663         | 151             | 11,610         | 35,681         |
| - Grade 12  | 44             | 779                         | 39            | 122             | 492            | 1,432          |
|   | 66,424         | 133,344                     | 10,384        | 14,696          | 92,269         | 250,693        |
| <i>of the above, renegotiated loans</i>                         | 1              | 950                         | -             | -               | 152            | 1,102          |
| <b>Past due but not impaired</b>                                |                |                             |               |                 |                |                |
| - Up to 30 days past due  | 177            | 1,435                       | 255           | 52              | 1,701          | 3,443          |
| - 31 - 60 days past due   | 2              | 110                         | 39            | -               | 335            | 484            |
| - 61 - 90 days past due   | 126            | 428                         | 30            | -               | 152            | 610            |
|   | 305            | 1,973                       | 324           | 52              | 2,188          | 4,537          |
| <i>of the above, renegotiated loans</i>                         | -              | 197                         | 1             | -               | 42             | 240            |
| Impaired forborne loans, net of provisions                      | -              | -                           | -             | -               | 240            | 240            |
| <b>Total performing loans</b>                                   | <b>66,729</b>  | <b>135,317</b>              | <b>10,708</b> | <b>14,748</b>   | <b>94,697</b>  | <b>255,470</b> |
| <b>Non-performing Loans</b>                                     |                |                             |               |                 |                |                |
| <b>Past due but not impaired</b>                                |                |                             |               |                 |                |                |
| - 91 - 120 days past due  | -              | -                           | 9             | -               | 149            | 158            |
| -121 - 150 days past due  | -              | -                           | 4             | -               | 65             | 69             |
|   | -              | -                           | 13            | -               | 214            | 227            |
| <b>Individually impaired loans, net of provisions</b>           |                |                             |               |                 |                |                |
|   | 41             | 5,289                       | 498           | 322             | 254            | 6,363          |
| <i>of the above, forbome loans</i>                              | 1              | 3,023                       | 56            | -               | 214            | 3,293          |
| <b>Total non-performing loans, net of individual impairment</b> | <b>41</b>      | <b>5,289</b>                | <b>511</b>    | <b>322</b>      | <b>468</b>     | <b>6,590</b>   |
| <b>Total loans and advances</b>                                 | <b>66,770</b>  | <b>140,606</b>              | <b>11,219</b> | <b>15,070</b>   | <b>95,165</b>  | <b>262,060</b> |
| Portfolio impairment provision                                  | (1)            | (227)                       | (112)         | (2)             | (316)          | (657)          |
| <b>Total net loans and advances</b>                             | <b>66,769</b>  | <b>140,379</b>              | <b>11,107</b> | <b>15,068</b>   | <b>94,849</b>  | <b>261,403</b> |

The following table sets out loans and advances held at fair value through profit and loss which are included within the table above.

|                                      | 2015           |                             |            |                 |                |           |
|--------------------------------------|----------------|-----------------------------|------------|-----------------|----------------|-----------|
|                                      | Loans to banks | Loans to Customers          |            |                 |                | Total     |
|                                      |                | Corporate and Institutional | Commercial | Private Banking | Retail Clients |           |
|                                      | \$million      | \$million                   | \$million  | \$million       | \$million      | \$million |
| <b>Neither past due nor impaired</b> |                |                             |            |                 |                |           |
| - Grades 1-5                         | 2,134          | 1,796                       | -          | -               | -              | 1,796     |
| - Grades 6-8                         | 141            | 891                         | -          | -               | -              | 891       |
| - Grades 9-11                        | -              | 1,128                       | -          | -               | -              | 1,128     |
| - Grade 12                           | -              | -                           | -          | -               | -              | -         |
|                                      | 2,275          | 3,815                       | -          | -               | -              | 3,815     |
| <b>Past due but not impaired</b>     |                |                             |            |                 |                |           |
| - Up to 30 days past due             | -              | -                           | -          | -               | -              | -         |
| - 31 - 60 days past due              | -              | -                           | -          | -               | -              | -         |
| - 61 - 90 days past due              | -              | 98                          | -          | -               | -              | 98        |
|                                      | -              | 98                          | -          | -               | -              | 98        |
| Individually impaired loans          | -              | 134                         | -          | -               | -              | 134       |

## Standard Chartered PLC – Risk review continued

### Credit quality analysis continued By Client segment

|   | 2014           |                             |               |                 |                |                |
|---|----------------|-----------------------------|---------------|-----------------|----------------|----------------|
|   | Loans to banks | Loans to Customers          |               |                 |                | Total          |
|   |                | Corporate and Institutional | Commercial    | Private Banking | Retail Clients |                |
| \$million   | \$million      | \$million                   | \$million     | \$million       | \$million      |                |
| <b>Performing Loans</b>   |                |                             |               |                 |                |                |
| <b>Neither past due nor impaired</b>                            |                |                             |               |                 |                |                |
| - Grades 1-5  | 79,001         | 65,551                      | 775           | 3,115           | 65,467         | 134,908        |
| - Grades 6-8  | 6,456          | 61,863                      | 5,413         | 14,648          | 14,472         | 96,396         |
| - Grades 9-11   | 1,871          | 20,879                      | 7,377         | 120             | 14,050         | 42,426         |
| - Grade 12  | 28             | 4,545                       | 126           | 3               | 944            | 5,618          |
|   | 87,356         | 152,838                     | 13,691        | 17,886          | 94,933         | 279,348        |
| <i>of the above, renegotiated loans</i>                         | -              | 4,277                       | 17            | -               | 262            | 4,556          |
| <b>Past due but not impaired</b>                                |                |                             |               |                 |                |                |
| - Up to 30 days past due  | 40             | 1,467                       | 344           | 139             | 2,187          | 4,137          |
| - 31 - 60 days past due   | -              | 183                         | 60            | 1               | 400            | 644            |
| - 61 - 90 days past due   | 3              | 154                         | 23            | -               | 179            | 356            |
|   | 43             | 1,804                       | 427           | 140             | 2,766          | 5,137          |
| <i>of the above, renegotiated loans</i>                         | -              | 106                         | 10            | -               | 61             | 177            |
| <b>Impaired forborne loans, net of provisions</b>               |                |                             |               |                 |                |                |
|   | -              | 479                         | -             | -               | 153            | 632            |
| <b>Total performing loans</b>                                   | <b>87,399</b>  | <b>155,121</b>              | <b>14,118</b> | <b>18,026</b>   | <b>97,852</b>  | <b>285,117</b> |
| <b>Non-performing Loans</b>                                     |                |                             |               |                 |                |                |
| <b>Past due but not impaired</b>                                |                |                             |               |                 |                |                |
| - 91 - 120 days past due  | -              | -                           | 2             | -               | 96             | 98             |
| -121 - 150 days past due  | -              | -                           | 25            | -               | 66             | 91             |
|   | -              | -                           | 27            | -               | 162            | 189            |
| <b>Individually impaired loans, net of provisions</b>           |                |                             |               |                 |                |                |
|   | 103            | 3,177                       | 545           | 32              | 235            | 3,989          |
| <i>of the above, forborne loans</i>                             | -              | 1,072                       | 48            | -               | 225            | 1,345          |
| <b>Total non-performing loans, net of individual impairment</b> | <b>103</b>     | <b>3,177</b>                | <b>572</b>    | <b>32</b>       | <b>397</b>     | <b>4,178</b>   |
| <b>Total loans and advances</b>                                 | <b>87,502</b>  | <b>158,298</b>              | <b>14,690</b> | <b>18,058</b>   | <b>98,249</b>  | <b>289,295</b> |
| <b>Portfolio impairment provision</b>                           | <b>(2)</b>     | <b>(328)</b>                | <b>(39)</b>   | <b>(2)</b>      | <b>(327)</b>   | <b>(696)</b>   |
| <b>Total net loans and advances</b>                             | <b>87,500</b>  | <b>157,970</b>              | <b>14,651</b> | <b>18,056</b>   | <b>97,922</b>  | <b>288,599</b> |

The following table sets out loans and advances held at fair value through profit and loss which are included within the table above.

|                                      | 2014           |                             |            |                 |                |       |
|--------------------------------------|----------------|-----------------------------|------------|-----------------|----------------|-------|
|                                      | Loans to banks | Loans to Customers          |            |                 |                | Total |
|                                      |                | Corporate and Institutional | Commercial | Private Banking | Retail Clients |       |
| \$million                            | \$million      | \$million                   | \$million  | \$million       | \$million      |       |
| <b>Neither past due nor impaired</b> |                |                             |            |                 |                |       |
| - Grades 1-5                         | 3,293          | 1,651                       | -          | -               | -              | 1,651 |
| - Grades 6-8                         | 317            | 1,415                       | -          | -               | -              | 1,415 |
| - Grades 9-11                        | -              | 320                         | -          | -               | -              | 320   |
| - Grade 12                           | -              | 100                         | -          | -               | -              | 100   |
|                                      | 3,610          | 3,486                       | -          | -               | -              | 3,486 |
| <b>Past due but not impaired</b>     |                |                             |            |                 |                |       |
| - Up to 30 days past due             | -              | -                           | -          | -               | -              | -     |
| - 31 - 60 days past due              | -              | -                           | -          | -               | -              | -     |
| - 61 - 90 days past due              | -              | -                           | -          | -               | -              | -     |
|                                      | -              | -                           | -          | -               | -              | -     |
| <b>Individually impaired loans</b>   |                |                             |            |                 |                |       |
|                                      | -              | 418                         | -          | -               | -              | 418   |

## Standard Chartered PLC – Risk review continued

### Credit quality analysis continued

#### Renegotiated and forborne loans

The table below shows an analysis of renegotiated and forborne loans by region.

|  | 2015          |                 |            |            |            |            |           |              |              |
|--|---------------|-----------------|------------|------------|------------|------------|-----------|--------------|--------------|
|  | Greater China | North East Asia | South Asia | ASEAN      | MENAP      | Africa     | Americas  | Europe       | Total        |
|  | \$million     | \$million       | \$million  | \$million  | \$million  | \$million  | \$million | \$million    | \$million    |
| Other renegotiated loans                     | 219           | 79              | 11         | 337        | 426        | 153        | -         | 118          | 1,343        |
| Loans subject to forbearance                 | 218           | 117             | 58         | 304        | 196        | 115        | -         | 2,526        | 3,534        |
| <b>Total renegotiated and forborne loans</b> | <b>437</b>    | <b>196</b>      | <b>69</b>  | <b>641</b> | <b>622</b> | <b>268</b> | <b>-</b>  | <b>2,644</b> | <b>4,877</b> |
|  | 2014          |                 |            |            |            |            |           |              |              |
|  | Greater China | North East Asia | South Asia | ASEAN      | MENAP      | Africa     | Americas  | Europe       | Total        |
|  | \$million     | \$million       | \$million  | \$million  | \$million  | \$million  | \$million | \$million    | \$million    |
| Other renegotiated loans                     | 321           | 85              | 18         | 579        | 258        | 42         | -         | 3,430        | 4,733        |
| Loans subject to forbearance                 | 212           | 114             | 75         | 417        | 550        | 75         | -         | 534          | 1,977        |
| <b>Total renegotiated and forborne loans</b> | <b>533</b>    | <b>199</b>      | <b>93</b>  | <b>996</b> | <b>808</b> | <b>117</b> | <b>-</b>  | <b>3,964</b> | <b>6,710</b> |

### Credit quality analysis continued

#### By Industry

|                                       | 2015                                       |  |                       |                                 |                |   |                                 |                                     |  |  |
|---------------------------------------|--|--|-----------------------|---------------------------------|----------------|---|---------------------------------|-------------------------------------|--|--|
|                                       | Neither past due nor individually impaired | Past due but not individually impaired | Individually impaired | Individual impairment provision | Total          | Movements in impairment                               |                                 |                                     |  |  |
|                                       |  |  |                       |                                 |                | Individual impairment provision held as at 1 Jan 2015 | Net impairment charge/(release) | Amounts written off/Other movements | Individual impairment provision held as at 31 Dec 2015 |  |
| \$million                             | \$million                                  | \$million                              | \$million             | \$million                       | \$million      | \$million   | \$million                       | \$million                           | \$million  |  |
| <b>Industry</b>                       |  |  |                       |                                 |                |   |                                 |                                     |  |  |
| Energy                                | 16,750                                     | 264                                    | 3,917                 | (1,250)                         | 19,681         | 141   | 1,276                           | (167)                               | 1,250  |  |
| Manufacturing                         | 19,991                                     | 452                                    | 1,009                 | (563)                           | 20,889         | 306   | 361                             | (104)                               | 563  |  |
| Financing, insurance and non-banking  | 31,100                                     | 57                                     | 724                   | (423)                           | 31,458         | 334   | 115                             | (26)                                | 423  |  |
| Transport, telecom and utilities      | 15,808                                     | 328                                    | 862                   | (519)                           | 16,479         | 266   | 291                             | (38)                                | 519  |  |
| Food and household products           | 11,036                                     | 277                                    | 688                   | (373)                           | 11,628         | 336   | 302                             | (265)                               | 373  |  |
| Commercial real estate                | 12,868                                     | 120                                    | 60                    | (20)                            | 13,028         | 16  | 8                               | (4)                                 | 20   |  |
| Mining and Quarrying                  | 7,777                                      | 184                                    | 1,878                 | (1,284)                         | 8,555          | 572   | 790                             | (78)                                | 1,284  |  |
| Consumer durables                     | 10,473                                     | 146                                    | 666                   | (426)                           | 10,859         | 275   | 202                             | (51)                                | 426  |  |
| Construction                          | 4,709                                      | 68                                     | 857                   | (332)                           | 5,302          | 99  | 296                             | (63)                                | 332  |  |
| Trading companies and distributors    | 1,918                                      | 304                                    | 526                   | (319)                           | 2,429          | 296   | 206                             | (183)                               | 319  |  |
| Government                            | 6,212                                      | -                                      | -                     | -                               | 6,212          | -   | -                               | -                                   | -  |  |
| Other                                 | 5,086                                      | 110                                    | 283                   | (174)                           | 5,305          | 118   | 125                             | (69)                                | 174  |  |
| <b>Retail Products</b>                |  |  |                       |                                 |                |   |                                 |                                     |  |  |
| Mortgage                              | 72,173                                     | 1,367                                  | 272                   | (124)                           | 73,688         | 131   | 20                              | (27)                                | 124  |  |
| CCPL and other unsecured lending      | 16,347                                     | 906                                    | 494                   | (195)                           | 17,552         | 289   | 608                             | (702)                               | 195  |  |
| Auto                                  | 741  | 53                                     | 2                     | -                               | 796            | -   | -                               | -                                   | -  |  |
| Secured Wealth products               | 13,747                                     | 31                                     | 312                   | (4)                             | 14,086         | -   | 96                              | (92)                                | 4  |  |
| Other                                 | 3,957                                      | 97                                     | 76                    | (17)                            | 4,113          | 97  | 34                              | (114)                               | 17   |  |
| Loans and advances to customers       | 250,693                                    | 4,764                                  | 12,626                | (6,023)                         | 262,060        |   |                                 |                                     |  |  |
| Individual impairment provision       |  |  |                       |                                 |                | 3,276   | 4,730                           | (1,983)                             | 6,023  |  |
| <b>Portfolio impairment provision</b> |  |  |                       |                                 | <b>(657)</b>   | <b>696</b>  | <b>(3)</b>                      | <b>(36)</b>                         | <b>657</b>   |  |
| <b>Total</b>                          |  |  |                       |                                 | <b>261,403</b> | <b>3,972</b>  | <b>4,727</b>                    | <b>(2,019)</b>                      | <b>6,680</b>   |  |
| Loans and advances to banks           | 66,424                                     | 305                                    | 204                   | (163)                           | 66,770         | -   | -                               | -                                   | -  |  |
| Individual impairment provision       |  |  |                       |                                 |                | 99  | 90                              | (26)                                | 163  |  |
| Portfolio impairment provision        |  |  |                       |                                 | (1)            | 2   | (1)                             | -                                   | 1  |  |
| <b>Total</b>                          |  |  |                       |                                 | <b>66,769</b>  | <b>101</b>  | <b>89</b>                       | <b>(26)</b>                         | <b>164</b>   |  |

## Standard Chartered PLC – Risk review continued

### Credit quality analysis continued By Industry

|                                      | 2014                                       |  |                       |                                 |                | Movements in impairment                               |                                 |                                     |  |
|--------------------------------------|--|--|-----------------------|---------------------------------|----------------|---|---------------------------------|-------------------------------------|--|
|                                      | Neither past due nor individually impaired | Past due but not individually impaired | Individually impaired | Individual impairment provision | Total          | Individual impairment provision held as at 1 Jan 2014 | Net impairment charge/(release) | Amounts written off/Other movements | Individual impairment provision held as at 31 Dec 2014 |
|                                      | \$million                                  | \$million                              | \$million             | \$million                       | \$million      | \$million   | \$million                       | \$million                           | \$million  |
| <b>Industry</b>                      |  |  |                       |                                 |                |   |                                 |                                     |  |
| Energy                               | 26,568                                     | 293                                    | 503                   | (141)                           | 27,223         | 109   | 43                              | (11)                                | 141  |
| Manufacturing                        | 25,609                                     | 360                                    | 1,140                 | (306)                           | 26,803         | 217   | 243                             | (154)                               | 306  |
| Financing, insurance and non-banking | 24,708                                     | 27                                     | 985                   | (334)                           | 25,386         | 474   | 11                              | (151)                               | 334  |
| Transport, telecom and utilities     | 18,020                                     | 277                                    | 574                   | (266)                           | 18,605         | 333   | 77                              | (144)                               | 266  |
| Food and household products          | 13,860                                     | 263                                    | 545                   | (336)                           | 14,332         | 247   | 124                             | (35)                                | 336  |
| Commercial real estate               | 15,989                                     | 36                                     | 55                    | (16)                            | 16,064         | 39  | 1                               | (24)                                | 16   |
| Mining and Quarrying                 | 11,795                                     | 201                                    | 1,388                 | (572)                           | 12,812         | 139   | 460                             | (27)                                | 572  |
| Consumer durables                    | 11,841                                     | 123                                    | 487                   | (275)                           | 12,176         | 266   | 45                              | (36)                                | 275  |
| Construction                         | 5,769                                      | 270                                    | 509                   | (99)                            | 6,449          | 76  | 35                              | (12)                                | 99   |
| Trading companies and distributors   | 4,055                                      | 54                                     | 477                   | (296)                           | 4,290          | 265   | 43                              | (12)                                | 296  |
| Government                           | 2,749                                      | -                                      | -                     | -                               | 2,749          | -   | -                               | -                                   | -  |
| Other                                | 5,566                                      | 354                                    | 297                   | (118)                           | 6,099          | 84  | 64                              | (30)                                | 118  |
| <b>Retail Products</b>               |  |  |                       |                                 |                |   |                                 |                                     |  |
| Mortgage                             | 72,131                                     | 1,610                                  | 297                   | (131)                           | 73,907         | 123   | 42                              | (34)                                | 131  |
| CCPL and other unsecured lending     | 19,181                                     | 1,106                                  | 491                   | (289)                           | 20,489         | 273   | 869                             | (853)                               | 289  |
| Auto                                 | 935  | 80                                     | 1                     | -                               | 1,016          | 1   | (4)                             | 3                                   | -  |
| Secured Wealth products              | 15,166                                     | 81                                     | 8                     | -                               | 15,255         | -   | -                               | -                                   | -  |
| Other                                | 5,406                                      | 191                                    | 140                   | (97)                            | 5,640          | 103   | 39                              | (45)                                | 97   |
| Loans and advances to customers      | 279,348                                    | 5,326                                  | 7,897                 | (3,276)                         | 289,295        |   |                                 |                                     |  |
| Individual impairment provision      |  |  |                       |                                 |                | 2,749   | 2,092                           | (1,565)                             | 3,276  |
| Portfolio impairment provision       |  |  |                       |                                 | (696)          | 696   | 38                              | (38)                                | 696  |
| <b>Total</b>                         |  |  |                       |                                 | <b>288,599</b> | <b>3,445</b>  | <b>2,130</b>                    | <b>(1,603)</b>                      | <b>3,972</b>   |
| Loans and advances to banks          | 87,356                                     | 43                                     | 202                   | (99)                            | 87,502         | -   | -                               | -                                   | -  |
| Individual impairment provision      |  |  |                       |                                 |                | 100   | 4                               | (5)                                 | 99   |
| Portfolio impairment provision       |  |  |                       |                                 | (2)            | 2   | -                               | -                                   | 2  |
| <b>Total</b>                         |  |  |                       |                                 | <b>87,500</b>  | <b>102</b>  | <b>4</b>                        | <b>(5)</b>                          | <b>101</b>   |

### Credit quality by geographic region

The following tables set out an analysis of the loans to customers and banks between those loans that are neither past due nor impaired, those that are past due but not impaired, those that are impaired, the impairment provision and net impairment charge by geographic region. The tables are based on financial booking location rather than country of credit responsibility.

#### Loans and advances to customers

|                 | 2015                                       |  |                       |                                 |                                |           | Profit and loss                     |  |   |
|-----------------|--|--|-----------------------|---------------------------------|--------------------------------|-----------|-------------------------------------|--|---|
|                 | Balance sheet <sup>1</sup>                 |  |                       |                                 |                                |           | Profit and loss                     |  |   |
|                 | Neither past due nor individually impaired | Past due but not individually impaired | Individually impaired | Individual impairment provision | Portfolio impairment provision | Total     | Net individual impairment provision | Portfolio impairment provision/(release) | Net loan impairment charge <sup>2</sup> |
| \$million       | \$million                                  | \$million                              | \$million             | \$million                       | \$million                      | \$million | \$million                           | \$million                                |   |
| Greater China   | 75,213                                     | 469                                    | 1,000                 | (433)                           | (169)                          | 76,080    | 585                                 | 74                                       | 659                                     |
| North East Asia | 28,174                                     | 443                                    | 380                   | (288)                           | (69)                           | 28,640    | 236                                 | (1)                                      | 235                                     |
| South Asia      | 12,074                                     | 584                                    | 1,589                 | (1,032)                         | (50)                           | 13,165    | 719                                 | (4)                                      | 715                                     |
| ASEAN           | 63,194                                     | 1,267                                  | 1,869                 | (749)                           | (158)                          | 65,423    | 772                                 | (26)                                     | 746                                     |
| MENAP           | 14,543                                     | 577                                    | 2,047                 | (1,333)                         | (56)                           | 15,778    | 505                                 | (22)                                     | 483                                     |
| Africa          | 5,798                                      | 637                                    | 635                   | (308)                           | (43)                           | 6,719     | 243                                 | 3  | 246                                     |
| Americas        | 10,335                                     | 29                                     | 63                    | (50)                            | (8)                            | 10,369    | 49                                  | -  | 49                                      |
| Europe          | 41,362                                     | 758                                    | 5,043                 | (1,830)                         | (104)                          | 45,229    | 1,621                               | (27)                                     | 1,594                                   |
|                 | 250,693                                    | 4,764                                  | 12,626                | (6,023)                         | (657)                          | 261,403   | 4,730                               | (3)                                      | 4,727                                   |

## Standard Chartered PLC – Risk review continued

### Credit quality analysis continued By geographic region

2014

|                 | Balance sheet <sup>1</sup>                 |  |                       |                                 |                                |           | Profit and loss                     |  |   |
|-----------------|--|--|-----------------------|---------------------------------|--------------------------------|-----------|-------------------------------------|--|---|
|                 | Neither past due nor individually impaired | Past due but not individually impaired | Individually impaired | Individual impairment provision | Portfolio impairment provision | Total     | Net individual impairment provision | Portfolio impairment provision/(release) | Net loan impairment charge <sup>2</sup> |
|                 | \$million                                  | \$million                              | \$million             | \$million                       | \$million                      | \$million | \$million                           | \$million                                | \$million                               |
| Greater China   | 86,315                                     | 754                                    | 847                   | (366)                           | (98)                           | 87,452    | 496                                 | (25)                                     | 471                                     |
| North East Asia | 28,989                                     | 562                                    | 428                   | (288)                           | (75)                           | 29,616    | 423                                 | (34)                                     | 389                                     |
| South Asia      | 13,129                                     | 754                                    | 1,135                 | (450)                           | (56)                           | 14,512    | 149                                 | 5  | 154                                     |
| ASEAN           | 74,059                                     | 1,859                                  | 1,137                 | (450)                           | (201)                          | 76,404    | 477                                 | 54                                       | 531                                     |
| MENAP           | 16,683                                     | 544                                    | 2,204                 | (1,046)                         | (78)                           | 18,307    | 96                                  | (7)                                      | 89                                      |
| Africa          | 7,785                                      | 260                                    | 478                   | (115)                           | (47)                           | 8,361     | 74                                  | (15)                                     | 59                                      |
| Americas        | 10,924                                     | 3                                      | 37                    | -                               | (9)                            | 10,955    | (2)                                 | 3  | 1                                       |
| Europe          | 41,464                                     | 590                                    | 1,631                 | (561)                           | (132)                          | 42,992    | 379                                 | 57                                       | 436                                     |
|                 | 279,348                                    | 5,326                                  | 7,897                 | (3,276)                         | (696)                          | 288,599   | 2,092                               | 38                                       | 2,130                                   |

1. Presented on the basis of booking location and not customer location

2. Excludes impairment charges relating to debt securities classified as loans and receivables

### Loans and advances to banks

2015

|                 | Balance sheet <sup>1</sup>                 |  |                       |                                 |                                |           | Profit and loss                     |  |                            |
|-----------------|--|--|-----------------------|---------------------------------|--------------------------------|-----------|-------------------------------------|--|----------------------------|
|                 | Neither past due nor individually impaired | Past due but not individually impaired | Individually impaired | Individual impairment provision | Portfolio impairment provision | Total     | Net individual impairment provision | Portfolio impairment provision/(release) | Net loan impairment charge |
|                 | \$million                                  | \$million                              | \$million             | \$million                       | \$million                      | \$million | \$million                           | \$million                                | \$million                  |
| Greater China   | 21,375                                     | 1                                      | -                     | -                               | -                              | 21,376    | -                                   | -  | -                          |
| North East Asia | 4,596                                      | -                                      | -                     | -                               | -                              | 4,596     | -                                   | -  | -                          |
| South Asia      | 512  | 3                                      | -                     | -                               | -                              | 515       | -                                   | -  | -                          |
| ASEAN           | 7,760                                      | 18                                     | 160                   | (160)                           | (1)                            | 7,777     | 82                                  | (1)                                      | 81                         |
| MENAP           | 2,265                                      | 1                                      | -                     | -                               | -                              | 2,266     | -                                   | -  | -                          |
| Africa          | 859  | 97                                     | 1                     | -                               | -                              | 957       | -                                   | -  | -                          |
| Americas        | 10,528                                     | 4                                      | -                     | -                               | -                              | 10,532    | -                                   | -  | -                          |
| Europe          | 18,529                                     | 181                                    | 43                    | (3)                             | -                              | 18,750    | 8                                   | -  | 8                          |
|                 | 66,424                                     | 305                                    | 204                   | (163)                           | (1)                            | 66,769    | 90                                  | (1)                                      | 89                         |

2014

|                 | Balance sheet <sup>1</sup>                 |  |                       |                                 |                                |           | Profit and loss                     |  |                            |
|-----------------|--|--|-----------------------|---------------------------------|--------------------------------|-----------|-------------------------------------|--|----------------------------|
|                 | Neither past due nor individually impaired | Past due but not individually impaired | Individually impaired | Individual impairment provision | Portfolio impairment provision | Total     | Net individual impairment provision | Portfolio impairment provision/(release) | Net loan impairment charge |
|                 | \$million                                  | \$million                              | \$million             | \$million                       | \$million                      | \$million | \$million                           | \$million                                | \$million                  |
| Greater China   | 28,757                                     | 1                                      | -                     | -                               | -                              | 28,758    | 3                                   | -  | 3                          |
| North East Asia | 5,997                                      | -                                      | -                     | -                               | -                              | 5,997     | -                                   | -  | -                          |
| South Asia      | 485  | 3                                      | -                     | -                               | -                              | 488       | -                                   | -  | -                          |
| ASEAN           | 12,297                                     | 5                                      | 165                   | (78)                            | (1)                            | 12,388    | -                                   | -  | -                          |
| MENAP           | 1,604                                      | -                                      | -                     | -                               | (1)                            | 1,603     | -                                   | -  | -                          |
| Africa          | 930  | 10                                     | -                     | -                               | -                              | 940       | -                                   | -  | -                          |
| Americas        | 12,641                                     | 20                                     | -                     | -                               | -                              | 12,661    | -                                   | -  | -                          |
| Europe          | 24,645                                     | 4                                      | 37                    | (21)                            | -                              | 24,665    | 1                                   | -  | 1                          |
|                 | 87,356                                     | 43                                     | 202                   | (99)                            | (2)                            | 87,500    | 4                                   | -  | 4                          |

1. Presented on the basis of booking location and not customer location

## Standard Chartered PLC – Risk review continued

### Problem credit management and provisioning

#### Non-performing loans by client segment

The table below presents a movement of the gross NPLs to banks and customers, together with the provisions held, for all segments and the respective cover ratios.

|   | 2015                              |                    |                         |                |                |
|---|-----------------------------------|--------------------|-------------------------|----------------|----------------|
|   | Corporate & Institutional Clients | Commercial Clients | Private Banking Clients | Retail Clients | Total          |
|   | \$million                         | \$million          | \$million               | \$million      | \$million      |
| Gross non-performing loans at 1 January                 | 5,510                             | 1,095              | 90                      | 797            | 7,492          |
| Exchange translation differences                        | (244)                             | (48)               | (2)                     | (55)           | (349)          |
| Classified as non-performing during the year            | 6,128                             | 601                | 394                     | 561            | 7,684          |
| Recoveries on loans and advances previously written off | -                                 | -                  | -                       | 5              | 5              |
| <b>Additions</b>  | <b>6,128</b>                      | <b>601</b>         | <b>394</b>              | <b>566</b>     | <b>7,689</b>   |
| Transferred to assets held for sale                     | -                                 | -                  | -                       | -              | -              |
| Transferred to performing during the year               | (32)                              | (7)                | (6)                     | (59)           | (104)          |
| Net repayments  | (456)                             | (131)              | -                       | (144)          | (731)          |
| Amounts written off                                     | (477)                             | (228)              | (93)                    | (305)          | (1,103)        |
| Disposals of loans                                      | (1)                               | (23)               | (58)                    | (53)           | (135)          |
| <b>Reductions</b>                                       | <b>(966)</b>                      | <b>(389)</b>       | <b>(157)</b>            | <b>(561)</b>   | <b>(2,073)</b> |
| <b>Gross non-performing loans at 31 December</b>        | <b>10,428</b>                     | <b>1,259</b>       | <b>325</b>              | <b>747</b>     | <b>12,759</b>  |
| <b>Individual impairment provisions<sup>1</sup></b>     | <b>(5,098)</b>                    | <b>(748)</b>       | <b>(3)</b>              | <b>(279)</b>   | <b>(6,128)</b> |
| <b>Net non-performing loans</b>                         | <b>5,330</b>                      | <b>511</b>         | <b>322</b>              | <b>468</b>     | <b>6,631</b>   |
| <b>Portfolio impairment provision</b>                   | <b>(228)</b>                      | <b>(112)</b>       | <b>(2)</b>              | <b>(316)</b>   | <b>(658)</b>   |
| <b>Total</b>  | <b>5,102</b>                      | <b>399</b>         | <b>320</b>              | <b>152</b>     | <b>5,973</b>   |
| Cover ratio   | 51%                               | 68%                | 2%                      | 80%            | 53%            |
| Collateral (\$million)                                  | 1,547                             | 298                | 322                     | 258            | 2,425          |
| Cover ratio (after collateral, excluding PIP)           | 64%                               | 83%                | 100%                    | 72%            | 67%            |
| <b>Of the above, included in liquidation portfolio</b>  |                                   |                    |                         |                |                |
| Gross non-performing loans at 31 December               | 7,210                             | -                  | 302                     | -              | 7,512          |
| Individual impairment provisions                        | (3,544)                           | -                  | -                       | -              | (3,544)        |
| Net non-performing loans                                | 3,666                             | -                  | 302                     | -              | 3,968          |
| Portfolio impairment provision                          | -                                 | -                  | -                       | -              | -              |
| <b>Total</b>  | <b>3,666</b>                      | <b>-</b>           | <b>302</b>              | <b>-</b>       | <b>3,968</b>   |
| Cover ratio   | 49%                               | -                  | -                       | -              | 47%            |
| Collateral (\$million)                                  | 992                               | -                  | 302                     | -              | 1,294          |
| Cover ratio (after collateral, excluding PIP)           | 63%                               | -                  | 100%                    | -              | 64%            |

<sup>1</sup> The difference to total individual impairment provision reflects provisions against performing forborne loans that are not included within non-performing loans as they have been performing for 180 days

## Standard Chartered PLC – Risk review continued

### Problem credit management and provisioning continued

|   | 2014   |                                    |   |                                | Total<br>\$million |
|---|--|------------------------------------|---|--------------------------------|--------------------|
|   | Corporate and<br>Institutional<br>Clients<br>\$million | Commercial<br>Clients<br>\$million | Private Banking<br>Clients<br>\$million | Retail<br>Clients<br>\$million |                    |
| Gross non-performing loans at 1 January                 | 4,541  | 959                                | 94                                      | 885                            | 6,479              |
| Exchange translation differences                        | (73)   | (35)                               | (9)                                     | (33)                           | (150)              |
| Classified as non-performing during the year            | 1,981  | 469                                | 28                                      | 606                            | 3,084              |
| Recoveries on loans and advances previously written off | 32   | -                                  | -                                       | 2                              | 34                 |
| <b>Additions</b>  | <b>2,013</b>   | <b>469</b>                         | <b>28</b>                               | <b>608</b>                     | <b>3,118</b>       |
| Transferred to assets held for sale                     | (6)  | (2)                                | -                                       | (15)                           | (23)               |
| Transferred to performing during the year               | (232)  | (30)                               | (17)                                    | (142)                          | (421)              |
| Net repayments  | (230)  | (155)                              | -                                       | (124)                          | (509)              |
| Amounts written off                                     | (369)  | (53)                               | -                                       | (349)                          | (771)              |
| Disposals of loans                                      | (134)  | (58)                               | (6)                                     | (33)                           | (231)              |
| <b>Reductions</b>                                       | <b>(971)</b>   | <b>(298)</b>                       | <b>(23)</b>                             | <b>(663)</b>                   | <b>(1,955)</b>     |
| Gross non-performing loans at 31 December               | 5,510  | 1,095                              | 90                                      | 797                            | 7,492              |
| Individual impairment provisions <sup>1</sup>           | (2,230)  | (523)                              | (58)                                    | (400)                          | (3,211)            |
| Net non-performing loans                                | 3,280  | 572                                | 32                                      | 397                            | 4,281              |
| Portfolio impairment provision                          | (330)  | (39)                               | (2)                                     | (327)                          | (698)              |
| <b>Total</b>  | <b>2,950</b>   | <b>533</b>                         | <b>30</b>                               | <b>70</b>                      | <b>3,583</b>       |
| Cover ratio   | 46%  | 51%                                | 67%                                     | 91%                            | 52%                |
| Collateral (\$million)                                  | 809  | 253                                | 40                                      | 360                            | 1,462              |
| Cover ratio (after collateral excluding PIP)            | 55%  | 71%                                | nm <sup>2</sup>                         | 95%                            | 62%                |

<sup>1</sup> The difference to total individual impairment provision reflects provisions against performing forborne loans that are not included within non-performing loans as they have been performing for 180 days

<sup>2</sup> Not meaningful

### Non-performing loans by geographic region

Gross NPLs increased by \$5,267 million, or 70 per cent, since 2014. These increases were primarily driven by a large exposure financially booked in Europe and is part of the liquidation portfolio. The following tables set out the total NPLs to banks and customers on the basis of the geographic regions:

|  | 2015                          |                                 |                            |                    |                    |                     |                       |                     |                    |
|--|-------------------------------|---------------------------------|----------------------------|--------------------|--------------------|---------------------|-----------------------|---------------------|--------------------|
|  | Greater<br>China<br>\$million | North<br>East Asia<br>\$million | South<br>Asia<br>\$million | ASEAN<br>\$million | MENAP<br>\$million | Africa<br>\$million | Americas<br>\$million | Europe<br>\$million | Total<br>\$million |
| Loans and advances   |                               |                                 |                            |                    |                    |                     |                       |                     |                    |
| Gross non-performing <sup>1</sup>                              | 872                           | 412                             | 1,613                      | 1,994              | 2,077              | 642                 | 63                    | 5,086               | 12,759             |
| Individual impairment provision <sup>2</sup>                   | (394)                         | (288)                           | (1,032)                    | (890)              | (1,333)            | (308)               | (50)                  | (1,833)             | (6,128)            |
| Non-performing loans net of individual<br>impairment provision | 478                           | 124                             | 581                        | 1,104              | 744                | 334                 | 13                    | 3,253               | 6,631              |
| Portfolio impairment provision                                 | (169)                         | (69)                            | (50)                       | (159)              | (56)               | (43)                | (8)                   | (104)               | (658)              |
| Net non-performing loans and advances                          | 309                           | 55                              | 531                        | 945                | 688                | 291                 | 5                     | 3,149               | 5,973              |
| Cover ratio  | 65%                           | 87%                             | 67%                        | 53%                | 67%                | 55%                 | 92%                   | 38%                 | 53%                |

|  | 2014                          |                                 |                         |                    |                    |                     |                       |                     |                    |
|--|-------------------------------|---------------------------------|-------------------------|--------------------|--------------------|---------------------|-----------------------|---------------------|--------------------|
|  | Greater<br>China<br>\$million | North East<br>Asia<br>\$million | South Asia<br>\$million | ASEAN<br>\$million | MENAP<br>\$million | Africa<br>\$million | Americas<br>\$million | Europe<br>\$million | Total<br>\$million |
| Loans and advances   |                               |                                 |                         |                    |                    |                     |                       |                     |                    |
| Gross non-performing <sup>1</sup>                              | 668                           | 448                             | 1,159                   | 1,396              | 1,643              | 478                 | 37                    | 1,663               | 7,492              |
| Individual impairment provision <sup>2</sup>                   | (321)                         | (288)                           | (450)                   | (519)              | (936)              | (115)               | -                     | (582)               | (3,211)            |
| Non-performing loans net of individual<br>impairment provision | 347                           | 160                             | 709                     | 877                | 707                | 363                 | 37                    | 1,081               | 4,281              |
| Portfolio impairment provision                                 | (98)                          | (75)                            | (56)                    | (202)              | (79)               | (47)                | (9)                   | (132)               | (698)              |
| Net non-performing loans and advances                          | 249                           | 85                              | 653                     | 675                | 628                | 316                 | 28                    | 949                 | 3,583              |
| Cover ratio  | 63%                           | 81%                             | 44%                     | 52%                | 62%                | 34%                 | 24%                   | 43%                 | 52%                |

1. The disclosures in the Risk profile section are presented on the basis of booking location and not customer location

2. The difference to total individual impairment provision reflects provisions against restructured loans that are not included within non-performing loans as they have been performing for 180 days



## Standard Chartered PLC – Risk review continued

### Problem credit management and provisioning continued

#### Individual and portfolio impairment provisions

The present value of estimated future cash flows, discounted at the asset's original effective interest rate is used to determine the amount of

any impairment. In the case of restructured loans, the effect and timing of the disposal strategy is included in the estimate of future cash flows. The movement in IIPs is discussed below. PIPs charge decreased by \$42 million, largely in relation to Corporate & Institutional Clients.

|   | 2015  |  |                    | 2014  |  |                    |
|---|---|--|--------------------|---|--|--------------------|
|   | Individual impairment provisions<br>\$million | Portfolio impairment provisions<br>\$million | Total<br>\$million | Individual impairment provisions<br>\$million | Portfolio impairment provisions<br>\$million | Total<br>\$million |
| Provisions held at 1 January                    | 3,375   | 698  | 4,073              | 2,849   | 698  | 3,547              |
| Exchange translation differences                | (214)   | (36)   | (250)              | (61)  | (21)   | (82)               |
| Amounts written off                             | (1,889)                                       | -  | (1,889)            | (1,517)                                       | -  | (1,517)            |
| Releases of acquisition fair values             | (1)   | -  | (1)                | (5)   | -  | (5)                |
| Recoveries of amounts previously written off    | 181   | -  | 181                | 217   | -  | 217                |
| Discount unwind                                 | (107)   | -  | (107)              | (100)   | -  | (100)              |
| Transferred to assets held for sale             | -   | -  | -                  | (104)   | (17)   | (121)              |
| Disposal of business units                      | (14)  | -  | (14)               | -   | -  | -                  |
| New provisions - restructuring                  | 968   | -  | 968                | -   | -  | -                  |
| New provisions - excluding restructuring        | 4,174   | 229  | 4,403              | -   | -  | -                  |
| <b>New provisions</b>                           | <b>5,142</b>                                  | <b>229</b>                                   | <b>5,371</b>       | <b>2,483</b>                                  | <b>202</b>                                   | <b>2,685</b>       |
| Recoveries/provisions no longer required        | (322)   | (233)  | (555)              | (387)   | (164)  | (551)              |
| Net impairment charge/(releases) against profit | 4,820   | (4)  | 4,816              | 2,096   | 38   | 2,134              |
| Other movements <sup>1</sup>                    | 35  | -  | 35                 | -   | -  | -                  |
| <b>Provisions held at 31 December</b>           | <b>6,186</b>                                  | <b>658</b>                                   | <b>6,844</b>       | <b>3,375</b>                                  | <b>698</b>                                   | <b>4,073</b>       |

<sup>1</sup> Provision previously reported under Other Impairment

#### By geographic region

The table below sets out the movement in total impairment provisions by geography.

|  | 2015                       |                              |                         |                    |                    |                     |                       |                     |                    |
|--|----------------------------|------------------------------|-------------------------|--------------------|--------------------|---------------------|-----------------------|---------------------|--------------------|
|  | Greater China<br>\$million | North East Asia<br>\$million | South Asia<br>\$million | ASEAN<br>\$million | MENAP<br>\$million | Africa<br>\$million | Americas<br>\$million | Europe<br>\$million | Total<br>\$million |
| Provisions held at 1 January                 | 464                        | 363                          | 506                     | 730                | 1,125              | 162                 | 9                     | 714                 | 4,073              |
| Exchange translation differences             | (18)                       | (23)                         | (41)                    | (67)               | (11)               | (32)                | -                     | (58)                | (250)              |
| Amounts written off                          | (520)                      | (214)                        | (82)                    | (484)              | (208)              | (32)                | (1)                   | (348)               | (1,889)            |
| Releases of acquisition fair values          | -                          | -                            | -                       | -                  | (1)                | -                   | -                     | -                   | (1)                |
| Recoveries of amounts previously written off | 48                         | 7                            | 18                      | 78                 | 19                 | 9                   | 1                     | 1                   | 181                |
| Discount unwind                              | (17)                       | (6)                          | (34)                    | (16)               | (18)               | (2)                 | -                     | (14)                | (107)              |
| Transferred to assets held for sale          | -                          | -                            | -                       | -                  | -                  | -                   | -                     | -                   | -                  |
| Disposal of business units                   | (14)                       | -                            | -                       | -                  | -                  | -                   | -                     | -                   | (14)               |
| New provisions - restructuring               | -                          | -                            | 33                      | 32                 | 19                 | -                   | -                     | 884                 | 968                |
| New provisions - excluding restructuring     | 648                        | 270                          | 715                     | 935                | 535                | 261                 | 50                    | 760                 | 4,174              |
| Individual impairment provision              | 648                        | 270                          | 748                     | 967                | 554                | 261                 | 50                    | 1,644               | 5,142              |
| Portfolio impairment provision               | 100                        | 13                           | 8                       | 43                 | 6                  | 9                   | -                     | 50                  | 229                |
| <b>New provisions</b>                        | <b>748</b>                 | <b>283</b>                   | <b>756</b>              | <b>1,010</b>       | <b>560</b>         | <b>270</b>          | <b>50</b>             | <b>1,694</b>        | <b>5,371</b>       |
| Recoveries/provisions no longer required     | (89)                       | (48)                         | (41)                    | (183)              | (77)               | (24)                | (1)                   | (92)                | (555)              |
| Net impairment charge against profit         | 659                        | 235                          | 715                     | 827                | 483                | 246                 | 49                    | 1,602               | 4,816              |
| Other movements <sup>1</sup>                 | -                          | (5)                          | -                       | -                  | -                  | -                   | -                     | 40                  | 35                 |
| <b>Provisions held at 31 December</b>        | <b>602</b>                 | <b>357</b>                   | <b>1,082</b>            | <b>1,068</b>       | <b>1,389</b>       | <b>351</b>          | <b>58</b>             | <b>1,937</b>        | <b>6,844</b>       |

## Standard Chartered PLC – Risk review continued

### Problem credit management and provisioning continued

#### Individual and portfolio impairment provisions by geographic region continued

The table below sets out the movement in total impairment provisions by geography

|  | 2014                       |                              |                         |                    |                    |                     |                       |                     |                    |
|--|----------------------------|------------------------------|-------------------------|--------------------|--------------------|---------------------|-----------------------|---------------------|--------------------|
|  | Greater China<br>\$million | North East Asia<br>\$million | South Asia<br>\$million | ASEAN<br>\$million | MENAP<br>\$million | Africa<br>\$million | Americas<br>\$million | Europe<br>\$million | Total<br>\$million |
| Provisions held at 1 January                 | 341                        | 429                          | 440                     | 593                | 1,205              | 158                 | 11                    | 370                 | 3,547              |
| Exchange translation differences             | (6)                        | (13)                         | (10)                    | (11)               | 4                  | (15)                | -                     | (31)                | (82)               |
| Amounts written off                          | (362)                      | (370)                        | (64)                    | (448)              | (165)              | (45)                | (5)                   | (58)                | (1,517)            |
| Releases of acquisition fair values          | (4)                        | -                            | -                       | -                  | (1)                | -                   | -                     | -                   | (5)                |
| Recoveries of amounts previously written off | 59                         | 26                           | 17                      | 80                 | 26                 | 7                   | 2                     | -                   | 217                |
| Discount unwind                              | (15)                       | (9)                          | (31)                    | (15)               | (24)               | (2)                 | -                     | (4)                 | (100)              |
| Transferred to assets held for sale          | (23)                       | (89)                         | -                       | -                  | (9)                | -                   | -                     | -                   | (121)              |
| New provisions                               | 593                        | 512                          | 198                     | 691                | 155                | 90                  | 3                     | 443                 | 2,685              |
| Individual impairment provision              | 572                        | 509                          | 182                     | 599                | 149                | 88                  | -                     | 384                 | 2,483              |
| Portfolio impairment provision               | 21                         | 3                            | 16                      | 92                 | 6                  | 2                   | 3                     | 59                  | 202                |
| Recoveries/provisions no longer required     | (119)                      | (123)                        | (44)                    | (160)              | (66)               | (31)                | (2)                   | (6)                 | (551)              |
| <b>Net impairment charge against profit</b>  | <b>474</b>                 | <b>389</b>                   | <b>154</b>              | <b>531</b>         | <b>89</b>          | <b>59</b>           | <b>1</b>              | <b>437</b>          | <b>2,134</b>       |
| Provisions held at 31 December               | 464                        | 363                          | 506                     | 730                | 1,125              | 162                 | 9                     | 714                 | 4,073              |

#### Individually impaired loans by client segment

Gross impaired loans remains stable in Retail Clients compared to 2014, at \$0.8 billion. Corporate & Institutional Clients gross individually impaired loans increased by \$4.3 billion, or 71 per cent since 2014 primarily in Europe as a result of the migration of an interconnected group of exposures within the liquidation portfolio from CG12.

The amounts written off primarily relate to Retail Clients, which generate a higher level of write-offs as unsecured lending balances are written off once they are more than 150 days past due.

The following table shows movement in individually impaired loans and provisions for each client segment:

|  | 2015   |                                 |                                      |                             |                    |
|--|--|---------------------------------|--------------------------------------|-----------------------------|--------------------|
|  | Corporate & Institutional Clients<br>\$million | Commercial Clients<br>\$million | Private Banking Clients<br>\$million | Retail Clients<br>\$million | Total<br>\$million |
| Gross impaired loans at 1 January                    | 6,094  | 1,068                           | 91                                   | 846                         | 8,099              |
| Exchange translation differences                     | (243)  | (42)                            | (2)                                  | (40)                        | (327)              |
| Transfer to assets held for sale                     | -  | -                               | -                                    | -                           | -                  |
| Classified as individually impaired during the year  | 5,899  | 589                             | 394                                  | 382                         | 7,264              |
| Transferred to not impaired during the year          | (391)  | (6)                             | (6)                                  | (43)                        | (446)              |
| Other movements <sup>1</sup>                         | (931)  | (363)                           | (152)                                | (314)                       | (1,760)            |
| Gross impaired loans at 31 December                  | 10,428   | 1,246                           | 325                                  | 831                         | 12,830             |
| Provisions held at 1 January                         | 2,335  | 523                             | 59                                   | 458                         | 3,375              |
| Exchange translation differences                     | (85)   | (79)                            | (3)                                  | (47)                        | (214)              |
| Amounts written off                                  | (670)  | (198)                           | (146)                                | (875)                       | (1,889)            |
| Releases of acquisition fair values                  | (1)  | -                               | -                                    | -                           | (1)                |
| Recoveries of amounts previously written off         | 5  | 1                               | -                                    | 175                         | 181                |
| Discount unwind                                      | (64)   | (18)                            | -                                    | (25)                        | (107)              |
| Disposal of business units                           | -  | -                               | -                                    | (14)                        | (14)               |
| New provisions                                       | 3,591  | 544                             | 93                                   | 914                         | 5,142              |
| Recoveries/provisions no longer required             | (48)   | (25)                            | -                                    | (249)                       | (322)              |
| Net individual impairment charge against profit      | 3,543  | 519                             | 93                                   | 665                         | 4,820              |
| Other movements <sup>2</sup>                         | 35   | -                               | -                                    | -                           | 35                 |
| Individual impairment provisions held at 31 December | 5,098  | 748                             | 3                                    | 337                         | 6,186              |
| <b>Net individually impaired loans</b>               | <b>5,330</b>                                   | <b>498</b>                      | <b>322</b>                           | <b>494</b>                  | <b>6,644</b>       |

<sup>1</sup> Other movement in gross impaired loans includes repayments, amounts written off and disposals of loans

<sup>2</sup> Other movement in provision previously reported under other impairment

## Standard Chartered PLC – Risk review continued

### Problem credit management and provisioning continued

#### Individually impaired loans by client segment continued

|   | 2014                                    |                       |                            |                   |              |
|---|---|-----------------------|----------------------------|-------------------|--------------|
|   | Corporate &<br>Institutional<br>Clients | Commercial<br>Clients | Private Banking<br>Clients | Retail<br>Clients | Total        |
|   | \$million                               | \$million             | \$million                  | \$million         | \$million    |
| Gross impaired loans at 1 January                           | 5,018                                   | 963                   | 93                         | 898               | 6,972        |
| Exchange translation differences                            | (63)                                    | (41)                  | (8)                        | (40)              | (152)        |
| Transfer to assets held for sale                            | (6)                                     | (2)                   | -                          | (15)              | (23)         |
| Classified as individually impaired during the year         | 2,215                                   | 469                   | 28                         | 656               | 3,368        |
| Transferred to not impaired during the year                 | (234)                                   | (30)                  | (17)                       | (133)             | (414)        |
| Other movements <sup>1</sup>                                | (836)                                   | (291)                 | (5)                        | (520)             | (1,652)      |
| <b>Gross impaired loans at 31 December</b>                  | <b>6,094</b>                            | <b>1,068</b>          | <b>91</b>                  | <b>846</b>        | <b>8,099</b> |
| Provisions held at 1 January                                | 1,927                                   | 422                   | 52                         | 448               | 2,849        |
| Exchange translation differences                            | (44)                                    | (5)                   | -                          | (12)              | (61)         |
| Amounts written off   | (417)                                   | (97)                  | 7                          | (1,010)           | (1,517)      |
| Releases of acquisition fair values                         | (4)                                     | (1)                   | -                          | -                 | (5)          |
| Recoveries of amounts previously written off                | -                                       | 2                     | -                          | 215               | 217          |
| Discount unwind   | (58)                                    | (16)                  | -                          | (26)              | (100)        |
| Transferred to assets held for sale                         | (1)                                     | -                     | -                          | (103)             | (104)        |
| New provisions  | 955                                     | 251                   | -                          | 1,277             | 2,483        |
| Recoveries/provisions no longer required                    | (23)                                    | (33)                  | -                          | (331)             | (387)        |
| <b>Net individual impairment charge against profit</b>      | <b>932</b>                              | <b>218</b>            | <b>-</b>                   | <b>946</b>        | <b>2,096</b> |
| <b>Individual impairment provisions held at 31 December</b> | <b>2,335</b>                            | <b>523</b>            | <b>59</b>                  | <b>458</b>        | <b>3,375</b> |
| <b>Net individually impaired loans</b>                      | <b>3,759</b>                            | <b>545</b>            | <b>32</b>                  | <b>388</b>        | <b>4,724</b> |

<sup>1</sup> Other movement includes repayments, amounts written off and disposals of loans

## Standard Chartered PLC – Risk review continued

### Selected portfolios

#### Debt securities and treasury bills

Debt securities and treasury bills are analysed as follows:

|   | 2015                         |                             |                    | 2014                         |                             |                    |
|---|------------------------------|-----------------------------|--------------------|------------------------------|-----------------------------|--------------------|
|   | Debt securities<br>\$million | Treasury bills<br>\$million | Total<br>\$million | Debt securities<br>\$million | Treasury bills<br>\$million | Total<br>\$million |
| Net impaired securities:                  |                              |                             |                    |                              |                             |                    |
| Impaired securities                       | 395                          | -                           | 395                | 409 <sup>1</sup>             | -                           | 409                |
| Impairment                                | (283)                        | -                           | (283)              | (314)                        | -                           | (314)              |
|   | 112                          | -                           | 112                | 95                           | -                           | 95                 |
| Securities neither past due nor impaired: |                              |                             |                    |                              |                             |                    |
| AAA                                       | 28,996                       | 15,778                      | 44,774             | 31,549                       | 5,569                       | 37,118             |
| AA- to AA+                                | 30,688                       | 12,930                      | 43,618             | 23,131                       | 13,621                      | 36,752             |
| A- to A+                                  | 10,590                       | 451                         | 11,041             | 19,489                       | 640                         | 20,129             |
| BBB- to BBB+                              | 9,389                        | 1,962                       | 11,351             | 10,158 <sup>1</sup>          | 3,393                       | 13,551             |
| Lower than BBB-                           | 3,106                        | 1,578                       | 4,684              | 3,423                        | 2,097                       | 5,520              |
| Unrated                                   | 10,998                       | 613                         | 11,611             | 7,832 <sup>1</sup>           | 581                         | 8,413              |
|   | 93,767                       | 33,312                      | 127,079            | 95,582                       | 25,901                      | 121,483            |
|   | 93,879                       | 33,312                      | 127,191            | 95,677                       | 25,901                      | 121,578            |
| Of which:                                 |                              |                             |                    |                              |                             |                    |
| Assets at fair value                      |                              |                             |                    |                              |                             |                    |
| Trading                                   | 12,896                       | 859                         | 13,755             | 17,735                       | 1,720                       | 19,455             |
| Designated at fair value                  | 389                          | -                           | 389                | -                            | 92                          | 92                 |
| Available-for-sale                        | 77,684                       | 32,453                      | 110,137            | 74,937                       | 24,073                      | 99,010             |
|   | 90,969                       | 33,312                      | 124,281            | 92,672                       | 25,885                      | 118,557            |
| Assets at amortised cost                  |                              |                             |                    |                              |                             |                    |
| Loans and receivables                     | 2,700                        | -                           | 2,700              | 2,883                        | -                           | 2,883              |
| Held-to-maturity                          | 210                          | -                           | 210                | 122                          | 16                          | 138                |
|   | 2,910                        | -                           | 2,910              | 3,005                        | 16                          | 3,021              |
|   | 93,879                       | 33,312                      | 127,191            | 95,677                       | 25,901                      | 121,578            |

1. Balances have been restated

The above table analyses debt securities and treasury bills that are neither past due nor impaired by external credit rating. The standard credit ratings used by the Group are those used by Standard & Poor's or its equivalent. Debt securities held that have a short-term rating are reported against the long-term rating of the issuer. For securities that are unrated, the Group applies an internal credit rating, as described under credit rating and measurement on page 53.

Net impaired debt securities decreased during the year, primarily due to debt securities disposal in Europe and a decrease of a corporate bond exposure in India.

Debt securities in the AA- to AA+ rating category increased by \$7.6 billion to \$30.7 billion in December 2015, mainly driven by a switch from cash into high-yield, high-quality liquid assets in Europe.

Unrated securities primarily relate to corporate issuers.

Using internal credit ratings, \$9,629 million (2014: \$7,908 million) of these securities is considered to be equivalent to investment grade.

## Standard Chartered PLC – Risk review continued

### Asset backed securities (unaudited)

#### Total exposures to asset backed securities

|  | 2015                                      |                    |                          |                                   | 2014                                      |                    |                          |                                   |
|--|---|--------------------|--------------------------|-----------------------------------|---|--------------------|--------------------------|-----------------------------------|
|  | Percentage of national value of portfolio | Notional \$million | Carrying value \$million | Fair value \$million <sup>1</sup> | Percentage of national value of portfolio | Notional \$million | Carrying value \$million | Fair value \$million <sup>1</sup> |
| Residential mortgage backed securities                     | 39%                                       | 2,988              | 2,983                    | 2,980                             | 39%                                       | 4,002              | 4,007                    | 4,004                             |
| Collateralised debt obligations                            | 0%  | 35                 | 15                       | 13                                | 1%  | 82                 | 54                       | 54                                |
| Commercial mortgage backed securities                      | 1%  | 75                 | 37                       | 36                                | 4%  | 390                | 325                      | 318                               |
| Other asset backed securities <sup>2</sup>                 | 60%                                       | 4,710              | 4,698                    | 4,698                             | 56%                                       | 5,796              | 5,795                    | 5,795                             |
|  | 100%                                      | 7,808              | 7,733                    | 7,727                             | 100%                                      | 10,270             | 10,181                   | 10,171                            |
| Of which included within:                                  |   |                    |                          |                                   |   |                    |                          |                                   |
| Financial assets held at fair value through profit or loss | 1%  | 96                 | 97                       | 97                                | 3%  | 286                | 282                      | 282                               |
| Investment securities - available-for-sale                 | 84%                                       | 6,551              | 6,480                    | 6,480                             | 84%                                       | 8,624              | 8,548                    | 8,548                             |
| Investment securities - loans and receivables              | 15%                                       | 1,161              | 1,156                    | 1,150                             | 13%                                       | 1,360              | 1,351                    | 1,341                             |
|  | 100%                                      | 7,808              | 7,733                    | 7,727                             | 100%                                      | 10,270             | 10,181                   | 10,171                            |

<sup>1</sup> Fair value reflects the value of the entire portfolio, including assets redesignated to loans and receivables

<sup>2</sup> Other assets backed securities include auto loans, credit cards, student loans, future flows and trade receivables

The carrying value of asset backed securities (ABS) represents 1 per cent (2014: 1 per cent) of our total assets.

The Group has extended its investment to a limited amount of trading in ABS and ramped up a portfolio of high quality ABS for liquidity reasons. This is classified as available-for-sale and primarily related to prime residential mortgage backed security and consumer ABS (auto loans and credit cards) with an average credit grade of AAA.

The Group also has an existing portfolio of ABS which it reclassified from trading and available-for-sale to loans and receivables with effect from 1 July 2008. No assets have been reclassified since 2008. This portfolio has been gradually managed down since 2010. The carrying value and fair value for this part of the portfolio were \$100 million and \$99 million respectively as at 31 December 2015 (31 December 2014: \$316 million and \$334 million respectively).

The credit quality of the ABS portfolio remains strong, with 98 per cent of the overall portfolio rated A- or better, and over 91 per cent of the overall portfolio is rated as AAA. The portfolio is broadly diversified across asset classes and geographies, with an average credit grade of AA+.

#### Financial statement impact of asset backed securities

|                                       | Available-for-sale \$million | Loan and Receivables \$million | Total \$million |
|---------------------------------------|------------------------------|--------------------------------|-----------------|
| 2015                                  |                              |                                |                 |
| Credit to available-for-sale reserves | (19)                         | -                              | (19)            |
| Credit to the profit and loss account | 17                           | 5                              | 22              |
| 2014                                  |                              |                                |                 |
| Charge to available-for-sale reserves | 22                           | -                              | 22              |
| Credit to the profit and loss account | -                            | -                              | -               |

## Standard Chartered PLC – Risk review continued

### Selected European country exposures

The following tables summarise the Group's direct exposure (both on- and off-balance sheet) to certain specific countries within the eurozone that have been identified on the basis of their higher bond yields, higher sovereign debt to GDP ratio and external credit ratings compared with the rest of the eurozone.

Total gross exposure represents the amount outstanding on the balance sheet (including any accrued interest, but before provisions) and positive mark-to-market amounts on derivatives before netting. To the extent gross exposure does not represent the maximum exposure to loss, this is disclosed separately. Exposures are assigned to a country based on the country of incorporation of the counterparty as at 31 December 2015.

The Group has no direct sovereign exposure (as defined by the European Banking Authority) to the eurozone countries of Greece, Ireland, Italy, Portugal and Spain (GIIPS) and only \$1.7 billion direct sovereign exposure to other eurozone countries. The Group's non-sovereign exposure to GIIPS is \$3.4 billion (\$1.5 billion after collateral and netting) and \$41 billion (\$24.2 billion after collateral and netting) to the remainder of the eurozone. This exposure primarily consists

of balances with banks. The substantial majority of the Group's total gross GIIPS exposure has a tenor of less than five years, with approximately 80 per cent having a tenor of less than one year. The Group has no direct sovereign exposure and \$91 million (2014: \$120 million) of non-sovereign exposure (after collateral and netting) to Cyprus.

The exit of one or more countries from the eurozone, or ultimately its dissolution, could potentially lead to significant market dislocation, the extent of which is difficult to predict. Any such exit or dissolution, and the redenomination of formerly euro-denominated rights and obligations in replacement national currencies, would cause significant uncertainty in any exiting country, whether sovereign or otherwise. Such events are also likely to be accompanied by the imposition of capital, exchange and similar controls. We monitor the situation closely and have prepared contingency plans to respond to a range of potential scenarios, including the possibility of currency redenomination. Local assets and liability positions are carefully monitored by in-country asset and liability and risk committees with appropriate oversight at the Group level by the Group Asset and Liability Committee and the Group Risk Committee.

| Country  | Greece<br>\$million | Ireland<br>\$million | Italy<br>\$million | Portugal<br>\$million | Spain<br>\$million | Total<br>\$million |
|--|---------------------|----------------------|--------------------|-----------------------|--------------------|--------------------|
| <b>As at 31 December 2015</b>                    |                     |                      |                    |                       |                    |                    |
| Direct sovereign exposure                        | -                   | -                    | -                  | -                     | -                  | -                  |
| Banks  | -                   | -                    | 460                | -                     | 329                | 789                |
| Other financial institutions                     | -                   | 1,895                | 2                  | -                     | 15                 | 1,912              |
| Other corporate                                  | 6                   | 304                  | 272                | -                     | 128                | 710                |
| <b>Total gross exposure</b>                      | <b>6</b>            | <b>2,199</b>         | <b>734</b>         | <b>-</b>              | <b>472</b>         | <b>3,411</b>       |
| Direct sovereign exposure                        | -                   | -                    | -                  | -                     | -                  | -                  |
| Banks  | -                   | -                    | (31)               | -                     | (290)              | (321)              |
| Other financial institutions                     | -                   | (1,434)              | -                  | -                     | -                  | (1,434)            |
| Other corporate                                  | -                   | (54)                 | (13)               | -                     | (102)              | (169)              |
| <b>Total collateral/netting</b>                  | <b>-</b>            | <b>(1,488)</b>       | <b>(44)</b>        | <b>-</b>              | <b>(392)</b>       | <b>(1,924)</b>     |
| Direct sovereign exposure                        | -                   | -                    | -                  | -                     | -                  | -                  |
| Banks  | -                   | -                    | 429                | -                     | 39                 | 468                |
| Other financial institutions                     | -                   | 461                  | 2                  | -                     | 15                 | 478                |
| Other corporate                                  | 6                   | 250                  | 259                | -                     | 26                 | 541                |
| <b>Total net exposure as at 31 December 2015</b> | <b>6</b>            | <b>711</b>           | <b>690</b>         | <b>-</b>              | <b>80</b>          | <b>1,487</b>       |
| <b>Total net exposure as at 31 December 2014</b> | <b>6</b>            | <b>262</b>           | <b>446</b>         | <b>-</b>              | <b>327</b>         | <b>1,041</b>       |

## Standard Chartered PLC – Risk review continued

### Selected European country exposures continued

The Group's exposure to GIIPS at 31 December 2015 is analysed by financial asset as follows:

| As at 31 December 2015   | 2015                |                      |                    |                       |                    | Total<br>\$million |
|--|---------------------|----------------------|--------------------|-----------------------|--------------------|--------------------|
|  | Greece<br>\$million | Ireland<br>\$million | Italy<br>\$million | Portugal<br>\$million | Spain<br>\$million |                    |
| Loans and advances   |                     |                      |                    |                       |                    |                    |
| Loans and receivables  | -                   | 1,670                | 284                | -                     | 142                | 2,096              |
| Held at fair value through profit or loss                        | -                   | -                    | -                  | -                     | -                  | -                  |
| <b>Total gross loans and advances</b>                            | -                   | 1,670                | 284                | -                     | 142                | 2,096              |
| Collateral held against loans and advances                       | -                   | (1,266)              | (2)                | -                     | (123)              | (1,391)            |
| <b>Total net loans and advances</b>                              | -                   | 404                  | 282                | -                     | 19                 | 705                |
| Debt securities  |                     |                      |                    |                       |                    |                    |
| Trading  | -                   | -                    | -                  | -                     | -                  | -                  |
| Designated at fair value   | -                   | -                    | -                  | -                     | 15                 | 15                 |
| Available-for-sale   | -                   | 55                   | -                  | -                     | -                  | 55                 |
| Loans and receivables  | -                   | -                    | -                  | -                     | -                  | -                  |
| <b>Total gross debt securities</b>                               | -                   | 55                   | -                  | -                     | 15                 | 70                 |
| Collateral held against debt securities                          | -                   | -                    | -                  | -                     | -                  | -                  |
| <b>Total net debt securities</b>                                 | -                   | 55                   | -                  | -                     | 15                 | 70                 |
| Derivatives  |                     |                      |                    |                       |                    |                    |
| Gross exposure   | -                   | 473                  | 30                 | -                     | 278                | 781                |
| Collateral/netting <sup>1</sup>                                  | -                   | (221)                | (28)               | -                     | (268)              | (517)              |
| <b>Total derivatives</b>   | -                   | 252                  | 2                  | -                     | 10                 | 264                |
| Contingent liabilities and commitments                           | 6                   | -                    | 406                | -                     | 36                 | 448                |
| <b>Total net exposure (on and off balance sheet)<sup>1</sup></b> | 6                   | 711                  | 690                | -                     | 80                 | 1,487              |
| <b>Total balance sheet exposure</b>                              | -                   | 2,198                | 314                | -                     | 435                | 2,947              |
| <b>As at 31 December 2014</b>                                    |                     |                      |                    |                       |                    |                    |
| Net loans and advances   | -                   | 159                  | 26                 | -                     | 85                 | 270                |
| Net debt securities  | -                   | 100                  | -                  | -                     | 37                 | 137                |
| Net derivatives  | -                   | 3                    | 10                 | -                     | -                  | 13                 |
| Contingent liabilities and commitments                           | 6                   | -                    | 410                | -                     | 205                | 621                |
| <b>Total net exposure (on and off balance sheet)<sup>1</sup></b> | 6                   | 262                  | 446                | -                     | 327                | 1,041              |

<sup>1</sup> Based on International Swaps and Derivatives Association netting

### Other selected eurozone countries

A summary analysis of the Group's exposure to France, Germany, the Netherlands and Luxembourg is also provided, as these countries are considered to have significant sovereign debt exposure to GIIPS.

|  | France<br>\$million | Germany<br>\$million | Netherlands<br>\$million | Luxembourg<br>\$million | Total<br>\$million |
|--|---------------------|----------------------|--------------------------|-------------------------|--------------------|
| Direct sovereign exposure                        | 188                 | 994                  | -                        | -                       | 1,182              |
| Banks  | 2,461               | 9,644                | 2,012                    | 508                     | 14,625             |
| Other financial institutions                     | 180                 | 542                  | 1,343                    | 1,016                   | 3,081              |
| Other corporate                                  | 631                 | 303                  | 355                      | 2,953                   | 4,242              |
| <b>Total net exposure as at 31 December 2015</b> | 3,460               | 11,483               | 3,710                    | 4,477                   | 23,130             |
| <b>Total net exposure as at 31 December 2014</b> | 3,572               | 5,096                | 5,852                    | 3,157                   | 17,677             |

The Group's lending to these selected eurozone countries primarily takes the form of repurchase agreements, interbank loans and bonds. The substantial majority of the Group's total gross exposures to these selected countries have a tenor of less than three years, with over 64 per cent having a tenor of less than one year.

The Group's exposure in Germany is primarily with the Central Bank. Other than all these specifically identified countries, the Group's residual net exposure to the eurozone is \$2.7 billion, which primarily comprises bonds and export-structured financing to banks and corporates.

## Standard Chartered PLC – Risk review continued

### Country cross-border risk (unaudited)

Country cross-border risk is the risk that we will be unable to obtain payment from our customers or third parties on their contractual obligations as a result of certain actions taken by foreign governments, chiefly relating to convertibility and transferability of foreign currency. See further details of our approach to managing country cross-border risk on page 56.

The profile of our country cross-border exposures as at 31 December 2015 remained consistent with our strategic focus on core franchise countries, and with the scale of the larger markets in which we operate. Changes in the pace of economic activity, weaker commodity prices, and portfolio management activity had an impact on the growth of cross-border exposure for certain territories.

Cross-border exposure to China remains predominantly short term (71 per cent of such exposure had a tenor of less than 12 months), with exposure declining throughout 2015 in response to actions taken to ensure the most efficient use of the Group's approved risk appetite and the moderation in economic conditions in China. Efforts to diversify the deployment of excess liquidity within the region also contributed to the decrease in short-term cross-border exposure to China.

Country cross-border risk exposure to Hong Kong and Singapore declined during 2015. Factors contributing to the decrease in exposure to these countries included a slowing in trade finance flows across the Group's core markets, the impact of softer commodity prices on both the utilisation of limits and demand for facilities by customers with a dependence on commodities, and the moderation in economic activity across Greater China and the ASEAN region.

The overall size of cross-border exposure to India reflects the size of the Group's franchise in the country, and the facilitation of overseas investment and trade flows supported by parent companies in India. Short-term cross-border exposure to India declined during 2015 in response to the slowing in global trade finance flows. Portfolio management action, and a slowing in the origination of new business due to underlying economic conditions, contributed to the decline in medium-term

(tenor greater than 12 months) cross-border exposure to India throughout 2015.

Increased interbank placements of foreign currency drove a rise in short-term cross-border exposure to Korea during the second half of 2015.

Cross-border exposure to the UAE declined during 2015 due to slowing trade finance flows and business activity across the Middle East, given the prolonged weakness in oil prices. Portfolio management activity to reduce exposure to specific customer segments and clients also contributed to the reported decline in cross-border exposure to the UAE.

Cross-border exposure to Indonesia decreased during 2015, reflecting soft commodity prices and weaker economic growth rates in Indonesia. The country cross-border exposure to Indonesia arising from Permata, a joint venture in which the Group holds 44.56 per cent, is counted at the value of the Group's equity in the joint venture.

The reported decrease in overall cross-border exposure to Nigeria reflected the prolonged weakness in commodity prices, and a deterioration in economic conditions. Cross-border exposure arising from short-dated commitments declined during 2015, with the depreciation in the naira resulting in customers increasingly replacing facilities denominated in foreign currency with facilities denominated in naira. The exposure to Nigeria arising from commitments with a tenor greater than 12 months declined as a result of a strategic focus on shorter-dated transactions, and the successful syndication and distribution of term facilities.

Cross-border exposure to developed countries in which we do not have a major presence predominantly relates to short-dated money market treasury activities, which can change significantly from period to period. Exposure also represents global corporate business for customers with interests in our footprint. This is a key factor explaining the significant cross-border exposure to the US and Japan.

The table below, which is based on our internal cross-border country risk reporting requirements, shows cross-border exposures that exceed 1 per cent of total assets.

|                      | 2015               |                    |           | 2014               |                    |           |
|----------------------|--------------------|--------------------|-----------|--------------------|--------------------|-----------|
|                      | Less than one year | More than one year | Total     | Less than one year | More than one year | Total     |
|                      | \$million          | \$million          | \$million | \$million          | \$million          | \$million |
| China                | 25,999             | 10,626             | 36,625    | 42,098             | 14,790             | 56,888    |
| US                   | 18,091             | 14,378             | 32,469    | 26,406             | 10,672             | 37,078    |
| Hong Kong            | 15,767             | 7,340              | 23,107    | 22,104             | 8,684              | 30,788    |
| Singapore            | 16,805             | 4,379              | 21,184    | 21,422             | 5,930              | 27,352    |
| India                | 6,711              | 12,747             | 19,458    | 8,551              | 15,015             | 23,566    |
| Korea                | 10,933             | 7,684              | 18,617    | 9,581              | 8,216              | 17,797    |
| United Arab Emirates | 5,756              | 8,562              | 14,318    | 6,955              | 8,752              | 15,707    |
| Indonesia            | 2,843              | 4,001              | 6,844     | 4,172              | 4,058              | 8,230     |
| Nigeria              | 3,625              | 3,215              | 6,840     | 4,543              | 3,301              | 7,844     |
| Japan                | 1,746              | 5,265              | 7,011     | 2,602              | 3,566              | 6,168     |



## Standard Chartered PLC – Risk review continued

### Market risk

Market risk is the potential for loss of earnings or economic value due to adverse changes in financial market rates or prices. The Group's exposure to market risk arises predominantly from providing clients access to financial markets, facilitation of which entails the Group taking moderate market risk positions. All trading teams support client activity; there are no proprietary trading teams. Hence, income earned from market risk-related activities is primarily driven by the volume of client activity rather than risk-taking. Market risk also arises in the non-trading book from the requirement to hold a large liquid assets buffer of high-quality liquid debt securities and from the translation of non-US dollar denominated assets, liabilities and earnings. A summary of our current policies and practices regarding market risk management is provided in Risk management approach on pages 56 and 57.

The primary categories of market risk for the Group 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

- Equity price risk: arising from changes in the prices of equities, equity indices, equity baskets and implied volatilities on related options

### Market risk changes

#### Market risk value at risk changes

The average level of value at risk (VaR) in 2015 was slightly lower than in 2014, by 4 per cent. This decline was due to reductions in both average Equity VaR by 23 per cent as listed Private Equity positions were reduced, and average trading book interest rate VaR by 25 per cent as positions declined. Otherwise, for the other risk classes, average VaR levels rose in 2015 with heightened market volatility due to uncertainty about the Chinese economy and the timing of anticipated US interest rate rises.

The actual levels of total VaR as at 31 December were 36 per cent higher in 2015 than in 2014, reflecting increased levels of VaR in all categories except Equities. The main driver for the rise was non-trading book interest rate risk which rose by 68 per cent due to increased market volatility in 2015. Equities VaR was lower by 33 per cent due to reduced positions in both listed Private Equity and on the trading book. As of 1 January 2016, a desk has been mandated to actively hedge the market and credit exposures arising from the recognition of CVA. Having made the change at the year end, CVA and related hedging will be included in VaR in 2016.

### Daily value at risk (value at risk at 97.5%, one day)

|                                 | 2015                 |                                |                               |                                  | 2014                 |                                |                               |                                  |
|---------------------------------|----------------------|--------------------------------|-------------------------------|----------------------------------|----------------------|--------------------------------|-------------------------------|----------------------------------|
|                                 | Average<br>\$million | High <sup>1</sup><br>\$million | Low <sup>1</sup><br>\$million | Actual <sup>2</sup><br>\$million | Average<br>\$million | High <sup>1</sup><br>\$million | Low <sup>1</sup><br>\$million | Actual <sup>2</sup><br>\$million |
| <b>Trading and non-trading</b>  |                      |                                |                               |                                  |                      |                                |                               |                                  |
| Interest rate risk <sup>3</sup> | 26.9                 | 35.5                           | 18.9                          | 30.7                             | 25.8                 | 36.8                           | 19.0                          | 22.0                             |
| Foreign exchange risk           | 4.9                  | 9.0                            | 2.3                           | 4.8                              | 3.6                  | 6.7                            | 2.2                           | 4.7                              |
| Commodity risk                  | 1.6                  | 2.6                            | 0.7                           | 1.6                              | 1.4                  | 2.9                            | 0.7                           | 0.7                              |
| Equity risk                     | 13.7                 | 18.2                           | 9.7                           | 11.0                             | 17.9                 | 20.0                           | 15.1                          | 16.4                             |
| <b>Total<sup>4</sup></b>        | <b>32.9</b>          | <b>45.9</b>                    | <b>24.4</b>                   | <b>36.1</b>                      | <b>34.4</b>          | <b>47.4</b>                    | <b>25.2</b>                   | <b>26.5</b>                      |

|                                 | 2015                 |                                |                               |                                  | 2014                 |                                |                               |                                  |
|---------------------------------|----------------------|--------------------------------|-------------------------------|----------------------------------|----------------------|--------------------------------|-------------------------------|----------------------------------|
|                                 | Average<br>\$million | High <sup>1</sup><br>\$million | Low <sup>1</sup><br>\$million | Actual <sup>2</sup><br>\$million | Average<br>\$million | High <sup>1</sup><br>\$million | Low <sup>1</sup><br>\$million | Actual <sup>2</sup><br>\$million |
| <b>Trading<sup>5</sup></b>      |                      |                                |                               |                                  |                      |                                |                               |                                  |
| Interest rate risk <sup>3</sup> | 7.0                  | 8.8                            | 5.3                           | 6.4                              | 9.3                  | 21.3                           | 5.7                           | 5.7                              |
| Foreign exchange risk           | 4.9                  | 9.0                            | 2.3                           | 4.8                              | 3.6                  | 6.7                            | 2.2                           | 4.7                              |
| Commodity risk                  | 1.6                  | 2.6                            | 0.7                           | 1.6                              | 1.4                  | 2.9                            | 0.7                           | 0.7                              |
| Equity risk                     | 1.7                  | 2.8                            | 0.7                           | 0.8                              | 1.6                  | 2.4                            | 1.3                           | 2.0                              |
| <b>Total<sup>4</sup></b>        | <b>9.9</b>           | <b>13.2</b>                    | <b>6.8</b>                    | <b>9.7</b>                       | <b>10.6</b>          | <b>20.8</b>                    | <b>7.1</b>                    | <b>7.6</b>                       |

|                                 | 2015                 |                                |                               |                                  | 2014                 |                                |                               |                                  |
|---------------------------------|----------------------|--------------------------------|-------------------------------|----------------------------------|----------------------|--------------------------------|-------------------------------|----------------------------------|
|                                 | Average<br>\$million | High <sup>1</sup><br>\$million | Low <sup>1</sup><br>\$million | Actual <sup>2</sup><br>\$million | Average<br>\$million | High <sup>1</sup><br>\$million | Low <sup>1</sup><br>\$million | Actual <sup>2</sup><br>\$million |
| <b>Non-trading</b>              |                      |                                |                               |                                  |                      |                                |                               |                                  |
| Interest rate risk <sup>3</sup> | 24.1                 | 34.6                           | 15.6                          | 30.3                             | 20.9                 | 27.4                           | 14.6                          | 18.0                             |
| Equity risk                     | 12.9                 | 17.9                           | 9.2                           | 10.4                             | 17.2                 | 19.1                           | 15.5                          | 16.1                             |
| <b>Total<sup>3</sup></b>        | <b>29.6</b>          | <b>37.8</b>                    | <b>23.2</b>                   | <b>31.4</b>                      | <b>30.1</b>          | <b>39.0</b>                    | <b>17.3</b>                   | <b>25.1</b>                      |

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

<sup>2</sup> Actual one-day VaR at year end date

<sup>3</sup> Interest rate risk VaR includes credit spread risk arising from securities held for trading or available-for-sale

<sup>4</sup> The total VaR shown in the tables above is not a sum of the component risks due to offsets between them

<sup>5</sup> Trading book for market risk is defined in accordance with the EU Capital Requirements Regulation (CRDIV/CRR) Part 3 Title I Chapter 3 which restricts the positions permitted in the trading book. This regulatory definition is narrower than the accounting definition of the trading book within IAS39 'Financial Instruments: Recognition and Measurement'

## Standard Chartered PLC – Risk review continued

### Market risk continued

The following table sets out how trading and non-trading VaR is distributed across the Group's products:

|  | 2015                 |                                |                               |                                  | 2014                 |                                |                               |                                  |
|--|----------------------|--------------------------------|-------------------------------|----------------------------------|----------------------|--------------------------------|-------------------------------|----------------------------------|
|  | Average<br>\$million | High <sup>1</sup><br>\$million | Low <sup>1</sup><br>\$million | Actual <sup>2</sup><br>\$million | Average<br>\$million | High <sup>1</sup><br>\$million | Low <sup>1</sup><br>\$million | Actual <sup>2</sup><br>\$million |
| <b>Trading and non-trading</b>           | <b>32.9</b>          | <b>45.9</b>                    | <b>24.4</b>                   | <b>36.1</b>                      | <b>34.4</b>          | <b>47.4</b>                    | <b>25.2</b>                   | <b>26.5</b>                      |
| <b>Trading<sup>3</sup></b>               |                      |                                |                               |                                  |                      |                                |                               |                                  |
| Rates                                    | 5.5                  | 7.0                            | 3.5                           | 5.1                              | 6.3                  | 13.7                           | 3.7                           | 3.9                              |
| Global Foreign Exchange                  | 4.9                  | 9.0                            | 2.3                           | 4.8                              | 3.6                  | 6.7                            | 2.2                           | 4.7                              |
| Credit Trading & Capital Markets         | 2.7                  | 4.3                            | 1.9                           | 2.4                              | 3.9                  | 8.2                            | 2.8                           | 2.8                              |
| Commodities                              | 1.6                  | 2.6                            | 0.7                           | 1.6                              | 1.4                  | 2.9                            | 0.7                           | 0.7                              |
| Equities                                 | 1.7                  | 2.8                            | 0.7                           | 0.8                              | 1.6                  | 2.4                            | 1.3                           | 2.0                              |
| <b>Total<sup>4</sup></b>                 | <b>9.9</b>           | <b>13.2</b>                    | <b>6.8</b>                    | <b>9.7</b>                       | <b>10.6</b>          | <b>20.8</b>                    | <b>7.1</b>                    | <b>7.6</b>                       |
| <b>Non-trading</b>                       |                      |                                |                               |                                  |                      |                                |                               |                                  |
| Asset & Liability Management             | 24.1                 | 34.6                           | 15.6                          | 30.3                             | 20.6                 | 26.6                           | 14.5                          | 17.7                             |
| Other Financial Markets non-trading book | 0.6                  | 2.2                            | 0.1                           | 0.3                              | 1.2                  | 1.5                            | 0.9                           | 1.3                              |
| Listed private equity                    | 12.9                 | 17.9                           | 9.2                           | 10.4                             | 17.2                 | 19.1                           | 15.5                          | 16.1                             |
| <b>Total<sup>4</sup></b>                 | <b>29.6</b>          | <b>37.8</b>                    | <b>23.2</b>                   | <b>31.4</b>                      | <b>30.1</b>          | <b>39.0</b>                    | <b>17.3</b>                   | <b>25.1</b>                      |

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

<sup>2</sup> Actual one day VaR at year-end date

<sup>3</sup> Trading book for market risk is defined in accordance with the EU Capital Requirements Regulation (CRDIV/CRR) Part 3 Title I Chapter 3 which restricts the positions permitted in the trading book. This regulatory definition is narrower than the accounting definition of the trading book within IAS39 'Financial Instruments: Recognition and Measurement'

<sup>4</sup> The total VaR shown in the tables above is not a sum of the component risks due to offsets between them

### Risks not in value at risk (unaudited)

The main market risk that is not reflected in VaR is the currency risk where the exchange rate is currently pegged or managed. The VaR historical one-year observation period does not reflect the future possibility of a change in the currency regime such as sudden depegging. Additional capital is set aside to cover this 'risk not in VaR'. For further details on market risk capital see the Standard Chartered PLC Pillar 3 Disclosures 2015 section on market risk.

### Backtesting (unaudited)

Regulatory backtesting is applied at both Group and Solo levels. In 2015, negative exceptions due to exceptional market volatility occurred on two days: two at Group level (one in 2014) and one at Solo level (three in 2014).

These occasions were due to market reaction or anticipation of central bank action in China and the US:

- 31 August: the People's Bank of China fixed the renminbi sharply stronger and Premier Li Keqiang signalled support for the renminbi
- 17 September: Uncertainty in Asian markets ahead of the US Federal Open Market Committee meeting

Two exceptions in a year due to market events are within the 'green zone' applied internationally to internal models by bank supervisors (Basel Committee on Banking Supervision: 'Supervisory framework for the use of 'backtesting' in conjunction with the internal models approach to market risk capital requirements', January 1996).

## Standard Chartered PLC – Risk review continued

### Market risk continued

#### Financial Markets loss days

|   | 2015 | 2014 |
|---|------|------|
| Number of loss days reported for Financial Markets trading book total product income <sup>1</sup> | 5    | 2    |

1. Reflects total product income for Financial Markets excluding Asset and Liability Management business (non-trading) and periodic valuation changes for Capital Markets, expected loss provisions and overnight index swap discounting

#### Average daily income earned from market-risk related activities<sup>1</sup>

|                       | 2015<br>\$million | 2014<br>\$million |
|-----------------------|-------------------|-------------------|
| <b>Trading</b>        |                   |                   |
| Interest rate risk    | 1.8               | 3.9               |
| Foreign exchange risk | 5.2               | 5.1               |
| Commodity risk        | 1.0               | 1.4               |
| Equity risk           | 0.3               | 0.6               |
| <b>Total</b>          | <b>8.3</b>        | <b>11.0</b>       |
| <b>Non-Trading</b>    |                   |                   |
| Interest rate risk    | 2.1               | 3.2               |
| Equity risk           | 0.4               | 0.1               |
| <b>Total</b>          | <b>2.5</b>        | <b>3.3</b>        |

1. Reflects total product income which is the sum of client income and own account income. Includes elements of trading income, interest income and other income which are generated from market risk-related activities

#### Mapping of market risk items to the balance sheet (unaudited)

Market risk contributes only 5.9 per cent of the Group's regulatory capital risk-weighted asset (RWA) requirement (see RWA table on page 65). As highlighted in the VaR disclosure, the majority of market risk is managed within Financial Markets which spans both trading book and non-trading book.

The non-trading equity market risk is generated by listed Private Equity holdings within Principal Finance. Group Treasury manages the market risk associated with debt and equity capital issuance.

|                                   | Amounts as per<br>financial statements<br>\$million | Exposure to<br>trading risk<br>\$million | Exposure to non-<br>trading risk<br>\$million | Market risk type   |
|-----------------------------------|---|--|---|--|
| <b>Financial assets</b>           |   |  |   |  |
| Derivative financial instruments  | 63,143  | 60,816                                   | 2,327   | Interest rate, foreign exchange, commodity or equity risk        |
| Loans and advances to banks       | 66,769  | 14,475                                   | 52,294  | Interest rate or foreign exchange risk                           |
| Loans and advances to customers   | 261,403   | 18,080                                   | 243,323                                       | Interest rate or foreign exchange risk                           |
| Debt securities                   | 93,879  | 13,248                                   | 80,631  | Interest rate mainly, but also foreign exchange or equity risk   |
| Treasury bills                    | 33,312  | 858                                      | 32,454  | Interest rate or foreign exchange risk                           |
| Equities                          | 4,655   | 2,236                                    | 2,419   | Equities risk mainly, but also interest or foreign exchange risk |
| Other Assets                      | 34,601  | 4,109                                    | 30,492  | Interest rate, foreign exchange, commodity or equity risk        |
| <b>Total</b>                      | <b>557,762</b>                                      | <b>113,822</b>                           | <b>443,940</b>                                |  |
| <b>Financial liabilities</b>      |   |  |   |  |
| Deposits by banks                 | 38,248  | -  | 38,248  | Interest rate or foreign exchange risk                           |
| Customer accounts                 | 359,127   | -  | 359,127                                       | Interest rate or foreign exchange risk                           |
| Debt securities in issue          | 68,797  | -  | 68,797  | Interest rate mainly, but also foreign exchange or equity risk   |
| Derivatives financial instruments | 61,939  | 60,941                                   | 998   | Interest rate, foreign exchange, commodity or equity risk        |
| Short positions                   | 2,824   | 2,813                                    | 11  | Interest rate, foreign exchange, commodity or equity risk        |
| <b>Total</b>                      | <b>530,935</b>                                      | <b>63,754</b>                            | <b>467,181</b>                                |  |

## Standard Chartered PLC – Risk review continued

### Group Treasury market risk

Group Treasury raises debt and equity capital and the proceeds are invested within the Group as capital or placed with ALM. Interest rate risk arises due to the investment of equity and reserves into rate-sensitive

assets, as well as some tenor mismatches between debt issuance and placements. This risk is measured as the impact on net interest income (NII) of an unexpected and instantaneous adverse parallel shift in rates and is monitored over a rolling one-year time horizon (see table below).

### Group Treasury net interest income sensitivity to parallel shifts in yield curves

|                  | 2015      | 2015      | 2014      | 2014      |
|------------------|-----------|-----------|-----------|-----------|
|                  | \$million | \$million | \$million | \$million |
| By currency      | +25bp     | -25bp     | +25bp     | -25bp     |
| Hong Kong dollar | 11.4      | -11.4     | 10.4      | -10.4     |
| Singapore dollar | 2.0       | -2.0      | 1.5       | -1.5      |
| Indian rupee     | 4.4       | -4.4      | 3.4       | -3.4      |
| US dollar        | 9.9       | -9.9      | 2.1       | -2.1      |
| Other currencies | 19.0      | -19.0     | 21.5      | -21.5     |
| Total            | 46.7      | -46.7     | 38.9      | -38.9     |

NII sensitivity has increased following the Group's rights issue in December 2015 which has increased free funds.

### Structural foreign exchange exposures

The table below sets out the principal structural foreign exchange exposures (net of investment hedges) of the Group.

|                   | 2015      | 2014                |
|-------------------|-----------|---------------------|
|                   | \$million | \$million           |
| Hong Kong dollar  | 6,973     | 7,708 <sup>1</sup>  |
| Korean won        | 2,448     | 4,782               |
| Indian rupee      | 4,434     | 4,425               |
| Taiwanese dollar  | 2,143     | 2,755               |
| Renminbi          | 3,577     | 3,586               |
| Singapore dollar  | 2,654     | 2,768               |
| Thai baht         | 1,332     | 1,608               |
| UAE dirham        | 1,647     | 1,757               |
| Malaysian ringgit | 1,291     | 1,578               |
| Indonesian rupiah | 994       | 1,185               |
| Pakistani rupee   | 588       | 594                 |
| Other             | 3,535     | 3,948               |
|                   | 31,616    | 36,694 <sup>1</sup> |

1. Balances have been restated

As at 31 December 2015, the Group had taken net investment hedges (using a combination of derivative and non-derivative financial investments) of \$1,339 million (2014: \$1,097 million) to partly cover its exposure to the Korean won. An analysis has been performed on these exposures to assess the impact of a 1 per cent fall in the dollar exchange rates, adjusted to incorporate the impacts of correlations of these currencies to the dollar. The impact on the positions above would be an increase of \$228 million (2014: \$265 million). Changes in the valuation of these positions are taken to reserves.

### Derivatives

Derivatives are contracts with characteristics and value derived from underlying financial instruments, interest and exchange rates or indices. They include futures, forwards, swaps and options transactions. See further details in Risk management approach on page 57.

### Hedging

The notional value of interest rate swaps for the purpose of fair value hedging increased by \$4.4 billion as at 31 December 2015, compared to 31 December 2014. Fair value hedges largely hedge the interest rate risk on our sub-debt and debt securities in the UK, which form part of the

Group's liquidity buffers and are used to manage fixed-rate securities and loan portfolios in our key markets. Currency and interest rate swaps used for cash flow hedging have decreased by \$4.6 billion as at 31 December 2015, compared to 31 December 2014. The decrease of cash flow hedges is attributable to floating rate loans, bonds and deposits, mainly in Korea and Singapore.

### Liquidity risk

Liquidity risk is the risk that the Group does not have enough financial resources to meet its obligations as they fall due without incurring excessive cost. The Group's liquidity framework requires each country to operate on a standalone basis without implicit reliance on Group support or recourse to extraordinary central bank support. Further details on liquidity risk management are set out on pages 57 and 58.

In order to achieve this, the Group applies a series of metrics with the objective of ensuring it can withstand a severe liquidity stress. In order to ensure the framework remains current and adapts to changing markets, business models or regulation, it is constantly re-evaluated.

## Standard Chartered PLC – Risk review continued

In 2015, the Group updated its liquidity stress testing framework by requiring the Group to maintain a positive stressed net cash inflow after 60 days under a prescribed Group stress scenario.

The European adoption of the Basel Committee framework metric known as the liquidity coverage ratio (LCR) under the Capital Requirements Regulation and Directive (CRD IV) became a prudential requirement on 1 October 2015. This also constituted a material change to our previous prudential liquidity framework under the Prudential Regulation Authority (PRA), which previously applied the Individual Liquidity Adequacy Standards under the PRA's Prudential Sourcebook for Banks, Building Societies and Investment Firms 12.

Due to these changes to our liquidity framework, the Group looked to improve its overall funding profile and optimised its position throughout 2015 by actively pricing away deposits with low liquidity value under the new LCR regime.

The Group continued to maintain good access to wholesale markets. Conditions in the bank wholesale debt markets were generally positive in 2015. In 2015, the Group issued \$7.4 billion of term debt securities, of which \$5.4 billion of senior debt and \$2 billion of Additional Tier 1 (AT1) securities (2014: \$11.2<sup>1</sup> billion, of which \$6.51 billion was senior debt and \$4.7 billion was Tier 2 subordinated debt).

1. Balances have been restated

### Group's composition of liabilities 31 December 2015

| Deposits by bank | Derivative financial instruments | Debt securities in issue | Other liabilities | Subordinate liabilities and other borrowed funds | Total equity | Customer accounts | Total  |
|------------------|----------------------------------|--------------------------|-------------------|--|--------------|-------------------|--------|
| 6.0              | 9.7                              | 10.7                     | 6.5               | 3.4  | 7.6          | 56.1              | 100.0% |

### Geographic distribution of customer accounts 31 December 2015

| Greater China | North East Asia | South Asia | ASEAN | MENAP | Africa | Americas | Europe | Total  |
|---------------|-----------------|------------|-------|-------|--------|----------|--------|--------|
| 36.6          | 8.7             | 4.0        | 20.6  | 6.1   | 3.0    | 5.0      | 16.0   | 100.0% |

### Liquidity metrics

We monitor key liquidity metrics on a regular basis, both on a country basis and in aggregate across the Group. In addition to the metrics listed here, we also monitor other risk metrics, which are covered in Risk management approach on pages 57 and 58.

#### Stressed coverage ratios

The Group intends to maintain a prudent and sustainable funding and liquidity position, in all presence countries and currencies, such that it can withstand severe liquidity stress:

- Across major presence countries, the Group intends to be able to meet its payment and collateral obligations for at least 60 days in a combined name-specific and market-wide liquidity stress, without recourse to extraordinary central bank support

### Primary sources of funding

A substantial portion of our assets are funded by customer deposits. Wholesale funding is diversified by type and maturity and represents a stable source of funds for the Group.

We maintain access to wholesale funding markets in all major financial centres and countries in which we operate. This seeks to ensure that we have market intelligence, maintain stable funding lines and can obtain optimal pricing when we perform our interest rate risk management activities.

Debt refinancing levels are low. In the next 12 months approximately \$6.9 billion of the Group's senior debt securities are falling due for repayment either contractually or callable by the Group.

The table below shows the composition of liabilities in which customer deposits make up 56 per cent of total liabilities as at 31 December 2015, the majority of which are current accounts, savings accounts and Time Deposits. Our largest customer deposit base by geography is Greater China (in particular Hong Kong), which holds 37 per cent of Group customer accounts.

- In smaller presence countries, each operating entity should be able to meet its payment and collateral obligations for at least 60 days in the event of a systemic market-wide stress in that country, without implicit reliance on Group support, or recourse to extraordinary central bank support

The market-wide liquidity stress scenario applied to each smaller presence country assumes differentiated mitigating management actions for countries with local systemic importance versus other countries.

#### Liquidity coverage ratio (unaudited)

The Group monitors and reports its liquidity position against the CRD IV LCR and has actively looked to continue to strengthen its liquidity position above the regulatory requirement. As at 31 December 2015, the Group LCR was well above 100 per cent. The net stable funding ratio is still evolving regulation and is not a prudential requirement until 2018.

## Standard Chartered PLC – Risk review continued

### Advances-to-deposits ratio

This is defined as the ratio of total loans and advances to customers relative to total customer deposits. A low advances-to-deposits ratio demonstrates that customer deposits exceed customer loans as a result of the emphasis placed on

generating a high level of funding from customers. Customer deposits tend to be more stable than wholesale funding and a core portion of these deposits is likely to remain with the bank for the medium term.

|                                 | 2015<br>\$million | 2014<br>\$million |
|---------------------------------|-------------------|-------------------|
| Loans and advances to customers | 261,403           | 288,599           |
| Customer accounts               | 359,127           | 414,189           |
| Advances to deposits ratio      | 72.8%             | 69.7%             |

### Liquid asset ratio

The liquid asset ratio (LAR) is a monitoring tool that looks at the proportion of the Group's total assets held in liquid assets, on a consolidated currency basis.

Liquid assets are the total cash (less restricted balances), treasury bills, loans and advances to banks (less deposits by banks) and debt securities (less illiquid securities). Illiquid securities are debt securities that cannot be sold or exchanged easily for cash

without substantial loss in value amounting to \$1,210 million (2014: \$492 million).

The Group keeps sufficient liquid assets to survive a number of severe stress scenarios, both internal and regulatory.

The Group LAR (30.9 per cent) decreased from the previous year (32.2 per cent), reflecting a decrease in liquid assets held mainly in the Americas, ASEAN and Europe

The following table sets an analysis of the Group's liquid assets by geographic region:

|   | 2015                           |                                  |                          |                     |                     |                      |                        |                      |                    |
|---|--------------------------------|----------------------------------|--------------------------|---------------------|---------------------|----------------------|------------------------|----------------------|--------------------|
|   | Greater<br>China<br>\$ million | North<br>East Asia<br>\$ million | South Asia<br>\$ million | ASEAN<br>\$ million | MENAP<br>\$ million | Africa<br>\$ million | Americas<br>\$ million | Europe<br>\$ million | Total<br>\$million |
| Cash and balances at central banks                        | 9,239                          | 8,333                            | 781                      | 3,759               | 2,026               | 2,045                | 18,970                 | 20,159               | 65,312             |
| Restricted balances                                       | (2,417)                        | (1,691)                          | (458)                    | (2,053)             | (1,271)             | (823)                | (359)                  | (40)                 | (9,112)            |
| Loans and advances to banks - net of non-performing loans | 21,376                         | 4,596                            | 515                      | 7,777               | 2,266               | 956                  | 10,532                 | 18,710               | 66,728             |
| Deposits by banks   | (4,635)                        | (3,678)                          | (351)                    | (4,892)             | (2,342)             | (387)                | (10,967)               | (10,996)             | (38,248)           |
| Treasury bills  | 8,693                          | 4,210                            | 1,184                    | 4,703               | 1,125               | 2,183                | 4,595                  | 6,619                | 33,312             |
| Debt securities   | 31,686                         | 3,863                            | 4,754                    | 12,289              | 5,605               | 2,049                | 4,336                  | 29,297               | 93,879             |
| of which :  |                                |                                  |                          |                     |                     |                      |                        |                      |                    |
| Issued by governments                                     | 17,235                         | 2,318                            | 4,253                    | 4,803               | 4,400               | 932                  | 52                     | 9,343                | 43,336             |
| Issued by banks   | 8,775                          | 167                              | 49                       | 3,955               | 601                 | 129                  | 2,016                  | 11,923               | 27,615             |
| Issued by corporate and other entities                    | 5,676                          | 1,378                            | 452                      | 3,531               | 604                 | 988                  | 2,268                  | 8,031                | 22,928             |
| Illiquid securities and Other Assets                      | (599)                          | (61)                             | (274)                    | (40)                | -                   | -                    | (4,063)                | (9,180)              | (14,217)           |
| <b>Liquid assets</b>                                      | <b>63,343</b>                  | <b>15,572</b>                    | <b>6,151</b>             | <b>21,543</b>       | <b>7,409</b>        | <b>6,023</b>         | <b>23,044</b>          | <b>54,569</b>        | <b>197,654</b>     |
| <b>Total assets</b>                                       | <b>181,102</b>                 | <b>58,881</b>                    | <b>24,547</b>            | <b>121,442</b>      | <b>34,345</b>       | <b>18,079</b>        | <b>62,770</b>          | <b>139,317</b>       | <b>640,483</b>     |
| <b>Liquid assets to total asset ratio (%)</b>             | <b>35.0%</b>                   | <b>26.4%</b>                     | <b>25.1%</b>             | <b>17.7%</b>        | <b>21.6%</b>        | <b>33.3%</b>         | <b>36.7%</b>           | <b>39.2%</b>         | <b>30.9%</b>       |

|   | 2014                           |                                  |                          |                     |                     |                      |                        |                      |                    |
|---|--------------------------------|----------------------------------|--------------------------|---------------------|---------------------|----------------------|------------------------|----------------------|--------------------|
|   | Greater<br>China<br>\$ million | North<br>East Asia<br>\$ million | South Asia<br>\$ million | ASEAN<br>\$ million | MENAP<br>\$ million | Africa<br>\$ million | Americas<br>\$ million | Europe<br>\$ million | Total<br>\$million |
| Cash and balances at central banks                        | 9,017                          | 5,278                            | 808                      | 4,182               | 2,239               | 1,682                | 42,257                 | 31,819               | 97,282             |
| Restricted balances                                       | (3,339)                        | (919)                            | (486)                    | (2,098)             | (1,602)             | (710)                | (877)                  | (42)                 | (10,073)           |
| Loans and advances to banks - net of non-performing loans | 28,758                         | 5,997                            | 488                      | 12,301              | 1,603               | 940                  | 12,661                 | 24,649               | 87,397             |
| Deposits by banks   | (5,200)                        | (4,202)                          | (338)                    | (7,283)             | (2,374)             | (687)                | (16,496)               | (18,743)             | (55,323)           |
| Treasury bills  | 7,689                          | 5,320                            | 1,864                    | 4,540               | 954                 | 2,723                | 2,059                  | 752                  | 25,901             |
| Debt securities   | 30,928                         | 5,357                            | 4,292                    | 16,280              | 5,024               | 2,539                | 5,124                  | 26,133               | 95,677             |
| of which :  |                                |                                  |                          |                     |                     |                      |                        |                      |                    |
| Issued by governments                                     | 13,992                         | 4,412                            | 3,651                    | 6,859               | 4,315               | 1,001                | 367                    | 3,438                | 38,035             |
| Issued by banks   | 10,495                         | 185                              | 163                      | 4,088               | 272                 | 430                  | 3,823                  | 14,149               | 33,605             |
| Issued by corporate and other entities                    | 6,441                          | 760                              | 478                      | 5,333               | 437                 | 1,108                | 934                    | 8,546                | 24,037             |
| Illiquid securities and Other Assets                      | (127)                          | (18)                             | (747)                    | (453)               | (5)                 | -                    | (1,689)                | (3,777)              | (6,816)            |
| <b>Liquid assets</b>                                      | <b>67,726</b>                  | <b>16,813</b>                    | <b>5,881</b>             | <b>27,469</b>       | <b>5,839</b>        | <b>6,487</b>         | <b>43,039</b>          | <b>60,791</b>        | <b>234,045</b>     |
| <b>Total assets</b>                                       | <b>210,351</b>                 | <b>69,746</b>                    | <b>26,968</b>            | <b>160,958</b>      | <b>38,272</b>       | <b>20,076</b>        | <b>85,427</b>          | <b>114,116</b>       | <b>725,914</b>     |
| <b>Liquid assets to total asset ratio (%)</b>             | <b>32.2%</b>                   | <b>24.1%</b>                     | <b>21.8%</b>             | <b>17.1%</b>        | <b>15.3%</b>        | <b>32.3%</b>         | <b>50.4%</b>           | <b>53.3%</b>         | <b>32.2%</b>       |

## Standard Chartered PLC – Risk review continued

### Encumbered assets (unaudited)

Encumbered assets represent those on-balance sheet assets pledged or used as collateral in respect of certain of the Group's liabilities. Hong Kong government certificates of indebtedness, which secure the equivalent amount of Hong Kong currency notes

in circulation, and cash collateral pledged against derivatives are included within other assets.

The following table provides a reconciliation of the Group's encumbered assets to total assets.

|  | 2015   |               |               |   |                                   |   |                      |                |
|--|--|---------------|---------------|---|-----------------------------------|---|----------------------|----------------|
|  | Assets encumbered as a result of transactions with counterparties other than banks |               |               | Other assets (comprising assets encumbered at the central bank and unencumbered assets) |                                   |   |                      |                |
|  | As a result of securitisations   | Other         | Total         | Assets not positioned at the central bank   |                                   |   |                      | Total          |
|  |  |               |               | Assets positioned at the central bank (ie pre-positioned plus encumbered)               | Readily available for encumbrance | Other assets that are capable of being encumbered | Cannot be encumbered |                |
| \$million                                    | \$million  | \$million     | \$million     | \$million   | \$million                         | \$million   | \$million            |                |
| Cash and balances at central banks           | -  | -             | -             | 9,112   | 56,200                            | -   | -                    | 65,312         |
| Derivative financial instruments             | -  | -             | -             | -   | -                                 | -   | 63,143               | 63,143         |
| Loans and advances to banks <sup>1</sup>     | -  | -             | -             | -   | 31,121                            | -   | 35,648               | 66,769         |
| Loans and advances to customers <sup>1</sup> | 76   | -             | 76            | -   | -                                 | -   | 261,327              | 261,327        |
| Investment securities <sup>1</sup>           | -  | 2,147         | 2,147         | 230   | 95,539                            | 22,425  | 11,505               | 129,699        |
| Other assets                                 | -  | 18,337        | 18,337        | -   | -                                 | -   | 16,264               | 16,264         |
| Current tax assets                           | -  | -             | -             | -   | -                                 | -   | 388                  | 388            |
| Prepayments and accrued income               | -  | -             | -             | -   | -                                 | -   | 2,174                | 2,174          |
| Interests in associates and joint ventures   | -  | -             | -             | -   | -                                 | -   | 1,937                | 1,937          |
| Goodwill and intangible assets               | -  | -             | -             | -   | -                                 | -   | 4,642                | 4,642          |
| Property, plant and equipment                | -  | -             | -             | -   | -                                 | -   | 7,209                | 7,209          |
| Deferred tax assets                          | -  | -             | -             | -   | -                                 | -   | 1,059                | 1,059          |
| <b>Total</b>                                 | <b>76</b>  | <b>20,484</b> | <b>20,560</b> | <b>9,342</b>  | <b>182,860</b>                    | <b>22,425</b>                                     | <b>405,296</b>       | <b>619,923</b> |

  

|  | 2014   |               |               |   |                                   |   |                      |                |
|--|--|---------------|---------------|---|-----------------------------------|---|----------------------|----------------|
|  | Assets encumbered as a result of transactions with counterparties other than banks |               |               | Other assets (comprising assets encumbered at the central bank and unencumbered assets) |                                   |   |                      |                |
|  | As a result of securitisations   | Other         | Total         | Assets not positioned at the central bank   |                                   |   |                      | Total          |
|  |  |               |               | Assets positioned at the central bank (ie pre-positioned plus encumbered)               | Readily available for encumbrance | Other assets that are capable of being encumbered | Cannot be encumbered |                |
| \$million                                    | \$million  | \$million     | \$million     | \$million   | \$million                         | \$million   | \$million            |                |
| Cash and balances at central banks           | -  | -             | -             | 10,073  | 87,209                            | -   | -                    | 97,282         |
| Derivative financial instruments             | -  | -             | -             | -   | -                                 | -   | 65,834               | 65,834         |
| Loans and advances to banks <sup>1</sup>     | -  | -             | -             | -   | 38,111                            | -   | 49,389               | 87,500         |
| Loans and advances to customers <sup>1</sup> | 27 <sup>2</sup>  | -             | 27            | -   | -                                 | -   | 288,572 <sup>2</sup> | 288,572        |
| Investment securities <sup>1</sup>           | -  | 4,323         | 4,323         | 1,142   | 82,119 <sup>2</sup>               | 24,278  | 17,485 <sup>2</sup>  | 125,024        |
| Other assets                                 | -  | 15,049        | 15,049        | -   | -                                 | -   | 23,640               | 23,640         |
| Current tax assets                           | -  | -             | -             | -   | -                                 | -   | 362                  | 362            |
| Prepayments and accrued income               | -  | -             | -             | -   | -                                 | -   | 2,647                | 2,647          |
| Interests in associates and joint ventures   | -  | -             | -             | -   | -                                 | -   | 1,962                | 1,962          |
| Goodwill and intangible assets               | -  | -             | -             | -   | -                                 | -   | 5,190                | 5,190          |
| Property, plant and equipment                | -  | -             | -             | -   | -                                 | -   | 7,984                | 7,984          |
| Deferred tax assets                          | -  | -             | -             | -   | -                                 | -   | 518                  | 518            |
| <b>Total</b>                                 | <b>27</b>  | <b>19,372</b> | <b>19,399</b> | <b>11,215</b>   | <b>207,439</b>                    | <b>24,278</b>                                     | <b>463,583</b>       | <b>706,515</b> |

<sup>1</sup> Includes assets held at fair value through profit or loss.

<sup>2</sup> Balance have been restated

In addition to the above, the Group received \$52,841 million (2014: \$27,910 million) as collateral under reverse repo agreements that was eligible for replying; of this the Group

sold or repledged \$22,185 million (2014: \$14,841 million) under repo agreements.

## Standard Chartered PLC – Risk review continued

### Readily available for encumbrance (unaudited)

Readily available for encumbrance includes unencumbered assets that can be sold outright or under repo within a few days, in line with regulatory definitions. The Group's readily available assets comprise cash and balances at central banks, loans and advances to banks, and investment securities.

Assets classified as not readily available for encumbrance include:

- Assets that have no restrictions for funding and collateral purposes, such as loans and advances to customers, which are not acquired or originated with the intent of generating liquidity value
- Assets that cannot be encumbered, such as derivatives, goodwill and intangible and deferred tax assets

### Liquidity analysis of the Group's balance sheet Contractual maturity of assets and liabilities

This table analyses assets and liabilities into relevant maturity groupings based on the remaining period to the contractual maturity date as at the balance sheet date on a discounted basis. Contractual maturities do not necessarily reflect actual repayments or cash flow.

Within the tables below, cash and balances with central banks, interbank placements, treasury bills and investment securities that are available-for-sale are used by the Group principally for liquidity management purposes.

### Contractual maturity

|   | 2015                           |   |  |   |   |   |   |   | Total<br>\$million |
|---|--------------------------------|---|--|---|---|---|---|---|--------------------|
|   | One month or less<br>\$million | Between one month and three months<br>\$million | Between three months and six months<br>\$million | Between six months and nine months<br>\$million | Between nine months and one year<br>\$million | Between one year and two years<br>\$million | Between two years and five years<br>\$million | More than five years and undated<br>\$million |                    |
| <b>Assets</b>                                     |                                |   |  |   |   |   |   |   |                    |
| Cash and balances at central banks                | 56,200                         | -   | -  | -   | -   | -   | -   | 9,112   | 65,312             |
| Derivative financial instruments                  | 6,654                          | 7,957   | 6,926  | 5,413   | 4,152   | 9,136                                       | 14,181  | 8,724   | 63,143             |
| Loans and advances to banks <sup>1</sup>          | 31,208                         | 16,629  | 9,180  | 3,648   | 2,494   | 1,982                                       | 1,590   | 38  | 66,769             |
| Loans and advances to customers <sup>1</sup>      | 70,254                         | 23,863  | 16,642   | 10,046  | 9,044   | 18,492                                      | 38,148  | 74,914  | 261,403            |
| Investment securities                             | 7,226                          | 14,706  | 15,925   | 10,078  | 7,095   | 19,359                                      | 40,959  | 16,498  | 131,846            |
| Other assets                                      | 21,263                         | 5,198   | 2,456  | 82  | 216   | 105   | 236   | 22,454  | 52,010             |
| <b>Total assets</b>                               | <b>192,805</b>                 | <b>68,353</b>                                   | <b>51,129</b>                                    | <b>29,267</b>                                   | <b>23,001</b>                                 | <b>49,074</b>                               | <b>95,114</b>                                 | <b>131,740</b>                                | <b>640,483</b>     |
| <b>Liabilities</b>                                |                                |   |  |   |   |   |   |   |                    |
| Deposits by banks <sup>1</sup>                    | 32,008                         | 2,606   | 1,623  | 867   | 155   | 414   | 369   | 206   | 38,248             |
| Customer accounts <sup>1</sup>                    | 283,048                        | 33,939  | 20,768   | 8,539   | 7,974   | 1,960                                       | 1,187   | 1,712   | 359,127            |
| Derivative financial instruments                  | 6,830                          | 7,510   | 6,878  | 5,137   | 4,324   | 8,552                                       | 14,304  | 8,404   | 61,939             |
| Senior debt                                       | 1,706                          | 170   | 3,484  | 153   | 1,431   | 2,699                                       | 7,578   | 4,017   | 21,238             |
| Other debt securities in issue <sup>1</sup>       | 9,430                          | 15,641  | 9,104  | 1,345   | 976   | 3,453                                       | 776   | 6,834   | 47,559             |
| Other liabilities                                 | 17,475                         | 5,947   | 3,390  | 553   | 563   | 797   | 854   | 12,429  | 42,008             |
| Subordinated liabilities and other borrowed funds | -                              | -   | -  | -   | -   | 3,591                                       | 4,061   | 14,200  | 21,852             |
| <b>Total liabilities</b>                          | <b>350,497</b>                 | <b>65,813</b>                                   | <b>45,247</b>                                    | <b>16,594</b>                                   | <b>15,423</b>                                 | <b>21,466</b>                               | <b>29,129</b>                                 | <b>47,802</b>                                 | <b>591,971</b>     |
| <b>Net liquidity gap</b>                          | <b>(157,692)</b>               | <b>2,540</b>                                    | <b>5,882</b>                                     | <b>12,673</b>                                   | <b>7,578</b>                                  | <b>27,608</b>                               | <b>65,985</b>                                 | <b>83,938</b>                                 | <b>48,512</b>      |

<sup>1</sup> Amounts include financial instruments held at fair value through profit or loss



## Standard Chartered PLC – Risk review continued

### Contractual maturity continued

|   | 2014                           |   |  |   |   |   |   |   | Total<br>\$million |
|---|--------------------------------|---|--|---|---|---|---|---|--------------------|
|   | One month or less<br>\$million | Between one month and three months<br>\$million | Between three months and six months<br>\$million | Between six months and nine months<br>\$million | Between nine months and one year<br>\$million | Between one year and two years<br>\$million | Between two years and five years<br>\$million | More than five years and undated<br>\$million |                    |
| <b>Assets</b>                                     |                                |   |  |   |   |   |   |   |                    |
| Cash and balances at central banks                | 87,209                         | -   | -  | -   | -   | -   | -   | 10,073  | 97,282             |
| Derivative financial instruments                  | 7,345                          | 8,987   | 7,753  | 5,796   | 4,072   | 9,549                                       | 12,327  | 10,005  | 65,834             |
| Loans and advances to banks <sup>1</sup>          | 38,111                         | 18,421  | 15,388   | 6,260   | 5,663   | 1,774                                       | 1,813   | 70  | 87,500             |
| Loans and advances to customers <sup>1</sup>      | 77,288                         | 26,106  | 19,147   | 10,801  | 11,128  | 22,701                                      | 43,749  | 77,679  | 288,599            |
| Investment securities <sup>1</sup>                | 9,951                          | 13,065  | 11,245   | 8,202   | 8,446   | 20,881                                      | 36,917  | 20,640  | 129,347            |
| Other assets                                      | 20,163                         | 7,488   | 3,007  | 366   | 456   | 331   | 705   | 24,836  | 57,352             |
| <b>Total assets</b>                               | <b>240,067</b>                 | <b>74,067</b>                                   | <b>56,540</b>                                    | <b>31,425</b>                                   | <b>29,765</b>                                 | <b>55,236</b>                               | <b>95,511</b>                                 | <b>143,303</b>                                | <b>725,914</b>     |
| <b>Liabilities</b>                                |                                |   |  |   |   |   |   |   |                    |
| Deposits by banks <sup>1</sup>                    | 49,903                         | 2,776   | 784  | 168   | 349   | 118   | 681   | 544   | 55,323             |
| Customer accounts <sup>1</sup>                    | 308,310                        | 49,482  | 24,117   | 10,342  | 10,847  | 6,194                                       | 1,899   | 2,998   | 414,189            |
| Derivative financial instruments                  | 7,832                          | 8,844   | 7,605  | 5,478   | 3,737   | 8,714                                       | 12,449  | 8,654   | 63,313             |
| Senior debt                                       | 215                            | 191   | 2,607  | 904   | 2,663   | 5,303                                       | 8,938   | 3,323   | 24,144             |
| Other debt securities in issue <sup>1</sup>       | 12,078                         | 16,217  | 14,818   | 3,767   | 1,169   | 695   | 1,133   | 6,767   | 56,644             |
| Other liabilities                                 | 16,780                         | 7,692   | 4,731  | 808   | 336   | 426   | 915   | 10,928  | 42,616             |
| Subordinated liabilities and other borrowed funds | -                              | -   | -  | 6   | -   | 1,013                                       | 5,114   | 16,814  | 22,947             |
| <b>Total liabilities</b>                          | <b>395,118</b>                 | <b>85,202</b>                                   | <b>54,662</b>                                    | <b>21,473</b>                                   | <b>19,101</b>                                 | <b>22,463</b>                               | <b>31,129</b>                                 | <b>50,028</b>                                 | <b>679,176</b>     |
| <b>Net liquidity gap</b>                          | <b>(155,051)</b>               | <b>(11,135)</b>                                 | <b>1,878</b>                                     | <b>9,952</b>                                    | <b>10,664</b>                                 | <b>32,773</b>                               | <b>64,382</b>                                 | <b>93,275</b>                                 | <b>46,738</b>      |

<sup>1</sup> Amounts include financial instruments held at fair value through profit or loss

#### Behavioural maturity of financial assets and liabilities

The cash flows reflect the cash flows that will be contractually payable over the residual maturity of the instruments. However, contractual maturities do not necessarily reflect the timing of actual repayments or cash flow. In practice, certain asset and liability instruments behave differently from their contractual terms and, especially for short-term customer

accounts, credit card balances and overdrafts, which extend to a longer period than their contractual maturity. On the other hand, mortgage balances tend to have a shorter repayment period than their contractual maturity date. Such behavioural adjustments are identified and managed in each country through analysis of the historical behaviour of balances. The Group's expectation of when assets and liabilities are likely to become due is provided in the table below.

#### Behavioural maturity

|  | 2015                           |   |  |   |   |   |   |   | Total<br>\$million |
|--|--------------------------------|---|--|---|---|---|---|---|--------------------|
|  | One month or less<br>\$million | Between one month and three months<br>\$million | Between three months and six months<br>\$million | Between six months and nine months<br>\$million | Between nine months and one year<br>\$million | Between one year and two years<br>\$million | Between two years and five years<br>\$million | More than five years and undated<br>\$million |                    |
| <b>Assets</b>                                |                                |   |  |   |   |   |   |   |                    |
| Loans and advances to banks <sup>1</sup>     | 31,091                         | 16,647  | 9,053  | 3,549   | 2,779   | 1,965                                       | 1,647   | 38  | 66,769             |
| Loans and advances to customers <sup>1</sup> | 54,687                         | 22,171  | 13,262   | 8,045   | 13,269  | 18,084                                      | 79,150  | 52,735  | 261,403            |
| <b>Total loans and advances</b>              | <b>85,778</b>                  | <b>38,818</b>                                   | <b>22,315</b>                                    | <b>11,594</b>                                   | <b>16,048</b>                                 | <b>20,049</b>                               | <b>80,797</b>                                 | <b>52,773</b>                                 | <b>328,172</b>     |
| <b>Liabilities</b>                           |                                |   |  |   |   |   |   |   |                    |
| Deposits by banks <sup>1</sup>               | 21,861                         | 2,705   | 1,744  | 985   | 278   | 9,758                                       | 711   | 206   | 38,248             |
| Customer accounts <sup>1</sup>               | 115,514                        | 21,641  | 13,423   | 8,821   | 17,582  | 65,241                                      | 114,913                                       | 1,992   | 359,127            |
| <b>Total deposits</b>                        | <b>137,375</b>                 | <b>24,346</b>                                   | <b>15,167</b>                                    | <b>9,806</b>                                    | <b>17,860</b>                                 | <b>74,999</b>                               | <b>115,624</b>                                | <b>2,198</b>                                  | <b>397,375</b>     |
| <b>Net gap</b>                               | <b>(51,597)</b>                | <b>14,472</b>                                   | <b>7,148</b>                                     | <b>1,788</b>                                    | <b>(1,812)</b>                                | <b>(54,950)</b>                             | <b>(34,827)</b>                               | <b>50,575</b>                                 | <b>(69,203)</b>    |

<sup>1</sup> Amounts include financial instruments held at fair value through profit or loss

## Standard Chartered PLC – Risk review continued

### Behavioural maturity continued

2014

|  | One month<br>or less | Between<br>one month<br>and<br>three months | Between<br>three months<br>and<br>six months | Between<br>six months<br>and<br>nine months | Between<br>nine months<br>and<br>one year | Between<br>one year<br>and<br>two years | Between<br>two years<br>and<br>five years | More than<br>five years<br>and undated | Total           |
|--|----------------------|---|--|---|---|---|---|--|-----------------|
|  | \$million            | \$million                                   | \$million                                    | \$million                                   | \$million                                 | \$million                               | \$million                                 | \$million                              | \$million       |
| <b>Assets</b>                                |                      |   |  |   |   |   |   |  |                 |
| Loans and advances to banks <sup>1</sup>     | 38,958               | 17,946                                      | 14,935                                       | 6,237                                       | 5,320                                     | 1,734                                   | 2,285                                     | 85                                     | 87,500          |
| Loans and advances to customers <sup>1</sup> | 56,456               | 22,008                                      | 14,780                                       | 9,023                                       | 15,786                                    | 22,079                                  | 90,032                                    | 58,435                                 | 288,599         |
| <b>Total loans and advances</b>              | <b>95,414</b>        | <b>39,954</b>                               | <b>29,715</b>                                | <b>15,260</b>                               | <b>21,106</b>                             | <b>23,813</b>                           | <b>92,317</b>                             | <b>58,520</b>                          | <b>376,099</b>  |
| <b>Liabilities</b>                           |                      |   |  |   |   |   |   |  |                 |
| Deposits by banks <sup>1</sup>               | 37,983               | 2,854                                       | 841  | 224   | 421                                       | 11,719                                  | 737                                       | 544                                    | 55,323          |
| Customer accounts <sup>1</sup>               | 144,144              | 29,151                                      | 15,898                                       | 11,151                                      | 22,720                                    | 79,491                                  | 107,446                                   | 4,188                                  | 414,189         |
| <b>Total deposits</b>                        | <b>182,127</b>       | <b>32,005</b>                               | <b>16,739</b>                                | <b>11,375</b>                               | <b>23,141</b>                             | <b>91,210</b>                           | <b>108,183</b>                            | <b>4,732</b>                           | <b>469,512</b>  |
| <b>Net gap</b>                               | <b>(86,713)</b>      | <b>7,949</b>                                | <b>12,976</b>                                | <b>3,885</b>                                | <b>(2,035)</b>                            | <b>(67,397)</b>                         | <b>(15,866)</b>                           | <b>53,788</b>                          | <b>(93,413)</b> |

<sup>1</sup> Amounts include financial instruments held at fair value through profit or loss

### Maturity of financial liabilities (excluding derivative financial instruments) on an undiscounted basis

The following table analyses the contractual cash flows payable for the Group's financial liabilities by remaining contractual maturities on an undiscounted basis. The financial liability balances in the table below will not agree to the balances reported in the consolidated balance sheet as the table incorporates all contractual cash flows, on an undiscounted basis, relating to both principal and interest payments.

Within the 'More than five years and undated' maturity band are undated financial liabilities, all of which relate to subordinated debt, on which interest payments are not included as this information would not be meaningful given the instruments are undated. Interest payments on these instruments are included within the relevant maturities up to five years.

2015

|  | One month<br>or less | Between<br>one month<br>and<br>three months | Between<br>three months<br>and<br>six months | Between<br>six months<br>and<br>nine months | Between<br>nine months<br>and<br>one year | Between<br>one year<br>and<br>two years | Between<br>two years<br>and<br>five years | More than<br>five years<br>and undated | Total          |
|--|----------------------|---|--|---|---|---|---|--|----------------|
|  | \$million            | \$million                                   | \$million                                    | \$million                                   | \$million                                 | \$million                               | \$million                                 | \$million                              | \$million      |
| Deposits by banks                                    | 31,677               | 2,615                                       | 1,629  | 875   | 161                                       | 495                                     | 625                                       | 254                                    | 38,331         |
| Customer accounts                                    | 265,502              | 34,133                                      | 21,019                                       | 8,794                                       | 8,060                                     | 7,045                                   | 14,146                                    | 2,514                                  | 361,213        |
| Debt securities in issue                             | 11,216               | 15,855                                      | 12,739                                       | 1,566                                       | 2,597                                     | 6,592                                   | 9,280                                     | 13,302                                 | 73,147         |
| Subordinated liabilities and other<br>borrowed funds | 174                  | 92  | 1,200  | 344   | 147                                       | 4,571                                   | 6,415                                     | 20,13641                               | 33,079         |
| Other liabilities                                    | 17,568               | 6,616                                       | 3,437  | 487   | 585                                       | 796                                     | 810                                       | 12,843                                 | 43,142         |
| <b>Total liabilities</b>                             | <b>326,137</b>       | <b>59,311</b>                               | <b>40,024</b>                                | <b>12,066</b>                               | <b>11,550</b>                             | <b>19,499</b>                           | <b>31,276</b>                             | <b>49,049</b>                          | <b>548,912</b> |

2014

|  | One month<br>or less | Between<br>one month<br>and<br>three months | Between<br>three months<br>and<br>six months | Between<br>six months<br>and<br>nine months | Between<br>nine months<br>and<br>one year | Between<br>one year<br>and<br>two years | Between<br>two years<br>and<br>five years | More than<br>five years<br>and undated | Total          |
|--|----------------------|---|--|---|---|---|---|--|----------------|
|  | \$million            | \$million                                   | \$million                                    | \$million                                   | \$million                                 | \$million                               | \$million                                 | \$million                              | \$million      |
| Deposits by banks                                    | 49,597               | 2,862                                       | 811  | 177   | 352                                       | 193                                     | 1,025                                     | 690                                    | 55,707         |
| Customer accounts                                    | 297,368              | 49,629                                      | 24,341                                       | 10,453                                      | 10,978                                    | 10,419                                  | 14,410                                    | 4,108                                  | 421,706        |
| Debt securities in issue                             | 12,381               | 16,469                                      | 17,570                                       | 4,760                                       | 4,129                                     | 6,474                                   | 10,835                                    | 20,679                                 | 93,297         |
| Subordinated liabilities and other<br>borrowed funds | 176                  | 104   | 298  | 361   | 158                                       | 2,113                                   | 7,729                                     | 23,331                                 | 34,270         |
| Other liabilities                                    | 16,505               | 7,751                                       | 4,742  | 812   | 338                                       | 427                                     | 904                                       | 11,140                                 | 42,619         |
| <b>Total liabilities</b>                             | <b>376,027</b>       | <b>76,815</b>                               | <b>47,762</b>                                | <b>16,563</b>                               | <b>15,955</b>                             | <b>19,626</b>                           | <b>34,903</b>                             | <b>59,948</b>                          | <b>647,599</b> |

## Standard Chartered PLC – Risk review continued

Maturity of derivative financial instruments on an undiscounted (notional) basis

Derivative financial instruments include those net settled derivative contracts in a net liability position, together with

the pay leg of gross settled contracts regardless of whether the overall contract is in an asset or liability position. The receiving leg is not shown in this table and as a result the derivative amounts in this table are increased by their exclusion.

|                                  | 2015                 |   |  |   |   |   |   |  | Total<br>\$million |
|----------------------------------|----------------------|---|--|---|---|---|---|--|--------------------|
|                                  | One month<br>or less | Between<br>one month<br>and<br>three months | Between<br>three months<br>and<br>six months | Between<br>six months<br>and<br>nine months | Between<br>nine months<br>and<br>one year | Between<br>one year<br>and<br>two years | Between<br>two years<br>and<br>five years | More than<br>five years<br>and undated |                    |
|                                  | \$million            | \$million                                   | \$million                                    | \$million                                   | \$million                                 | \$million                               | \$million                                 | \$million                              |                    |
| Derivative financial instruments | 435,036              | 375,963                                     | 179,355                                      | 132,034                                     | 87,710                                    | 105,856                                 | 137,942                                   | 83,673                                 | 1,537,569          |

|                                  | 2014                 |   |  |   |   |   |   |  | Total<br>\$million |
|----------------------------------|----------------------|---|--|---|---|---|---|--|--------------------|
|                                  | One month<br>or less | Between<br>one month<br>and<br>three months | Between<br>three months<br>and<br>six months | Between<br>six months<br>and<br>nine months | Between<br>nine months<br>and<br>one year | Between<br>one year<br>and<br>two years | Between<br>two years<br>and<br>five years | More than<br>five years<br>and undated |                    |
|                                  | \$million            | \$million                                   | \$million                                    | \$million                                   | \$million                                 | \$million                               | \$million                                 | \$million                              |                    |
| Derivative financial instruments | 289,423              | 260,266                                     | 196,477                                      | 125,491                                     | 95,975                                    | 149,660                                 | 160,721                                   | 102,694                                | 1,380,707          |

### Operational risk (unaudited)

We define operational risk as the potential for loss resulting from inadequate or failed internal processes, people and systems or from the impact of external events, including legal risks.

As operational risk arises from all activities carried out within the Group, the potential for operational risk events occurring across a large and complex international organisation is a constant challenge. To address this we aim to achieve 'industrial strength' process and control design standards for all activities and benchmark practices against peers, other industries and regulatory requirements. A summary of our current policies and practices regarding operational risk management is provided in Risk management approach on pages 58 to 60.

### Operational risk profile

The operational risk profile is the Group's overall exposure to operational risk, at a given point in time, covering all applicable operational risk types. The operational risk profile comprises both operational risk events and losses that have already occurred and the current exposures to operational risks which, at an aggregate level, includes the consideration of top risks and emerging risks.

### Operational risk events and losses

The most significant losses reviewed by Group committees during the year were:

- The Group has recorded an operational risk event of \$93.3 million relating to a credit impairment in its Private Banking Business (classified under the 'Retail Banking' Basel Business Line category) in Hong Kong. This was the highest operational risk loss recorded by the Group in 2015. A root cause analysis has been conducted and actions to enhance controls are underway
- The second-highest operational risk loss is \$20.4 million recorded in relation to a legal claim against the Group for mis-selling of a derivative product in Indonesia. The Group commenced legal action to recover from the client in 2009 upon the client's default on contractual obligations. The client counterclaimed alleging a case of mis-selling. Final judgement was received in October 2015 in favour of the client. The Group's procedures were reviewed and revised in 2009 and continue to be enhanced to ensure products are appropriate and suitable for our clients

The Group's profile of operational loss events in 2015 and 2014 is summarised in the table below. It shows, by Basel business line, the percentage distribution of gross operational losses.

| Distribution of Operational Losses by Basel Business Line | % Loss |                   |
|---|--------|-------------------|
|   | 2015   | 2014 <sup>3</sup> |
| Agency services   | 0.70%  | 0.1%              |
| Commercial banking  | 21.7%  | 6.3%              |
| Corporate finance   | -      | 1.2%              |
| Corporate items   | 4.0%   | 41.3%             |
| Payment and settlements                                   | 7.3%   | 17.7%             |
| Retail banking <sup>1</sup>                               | 49.4%  | 4.5%              |
| Retail brokerage  | 1.5%   | 0.2%              |
| Trading and sales <sup>2</sup>                            | 15.4%  | 28.7%             |

1. Includes the operational risk event in Private Banking in Hong Kong

2. Includes the settlement for the mis-selling claim in Indonesia

3. 2014 losses are restated to ensure alignment with the revised classification of certain losses. This restatement does not impact the financial statement

## Standard Chartered PLC – Risk review continued

### Operational risk events and losses continued

| Distribution of Operational Losses by Basel Event Type | % Loss |                    |
|--|--------|--------------------|
|  | 2015   | 2014 <sup>3</sup>  |
| Business disruption and system failures                | 0.4%   | 0.1%               |
| Clients products and business practices <sup>2</sup>   | 16.1%  | 57.5%              |
| Employment practices and workplace safety              | -      | -                  |
| Execution delivery and process management              | 17.5%  | 11.6% <sup>1</sup> |
| External fraud   | 24.7%  | 29.0% <sup>2</sup> |
| Internal fraud <sup>1</sup>                            | 41.4%  | 1.8%               |

1. Includes the fraud event in Hong Kong

2. Includes the settlement for the mis-selling claim in Indonesia

3. 2014 losses are restated to ensure alignment with the revised classification of certain losses. This restatement does not impact the financial statement in 2014

The Group's profile of operational loss events in 2015 and 2014 is also summarised in the table above. It shows the percentage distribution of gross operational losses by Basel event type.

Operational losses are one indicator of the effectiveness and robustness of the operational risk control environment. In addition, lessons learned reviews and root cause analyses from external and internal loss events, including near misses, are used to improve processes and controls.

#### Top risks and emerging risks

A top risk is a risk exposure, or a group of highly correlated risk exposures, that has the highest potential to breach the Group's risk capacity. The objective is to identify those risks that can materially impact the Group's risk capacity, and to calibrate metrics as early warning indicators against undesirable

outcomes and performance under stress. Top risk candidates are identified through a top-down assessment of concentration of exposures or aggregation of risks and may also be a gross risk, triggering any one of a set of filtering criteria.

Emerging risks are also considered, both internally from the Group's internal operational risk profile and from external events. Where relevant, an emerging risk may be categorised and prioritised as a top risk for specific monitoring.

Given their significance, top risks attract closer scrutiny from top levels of management and governance committees. Top risks are expected to change over time based on top-down assessments by senior management.

The Group's operational top risks as at 31 December 2015 are shown in the table below.

#### Top risk

##### Macro-prudential, regulatory and external risks

- Regulatory non-compliance
- Anti-money laundering and terrorist financing
- International sanctions
- External fraud
- Information and cyber security
- Critical third-party vendors
- Additional conduct
- Anti-bribery and corruption

##### Internal processes, systems and change risks

- Change management
- Data management
- Major systems failure
- Significant business interruption
- Rogue trading
- Internal fraud
- Market misconduct
- Mis-selling
- Product management
- Collateral management

## Standard Chartered PLC – Risk review continued

### Other risks (unaudited)

#### Reputational risk

A summary of our current practices regarding reputational risk management is provided in the Risk management approach on pages 60 and 61, and our areas of focus during 2015 are included in the update of the Brand, Values and Conduct Committee.

#### Environmental and social risk

Details of our approach to managing environmental and social risk are provided on page 60. In 2015, our Environmental and Social Risk Management (ESRM) team reviewed over 480 client relationships and transactions across a range of Position Statement sectors. For all risks identified, we seek to develop effective mitigating measures. Where this is not possible, transactions have been and will continue to be turned down.

In 2015, we trained more than 1,700 staff on our requirements and processes.

We were pleased to join the Banking Environment Initiative in 2015 and continued our work as a member of the Equator Principles Steering Committee.

#### Pension risk

Pension risk is the potential for loss due to having to meet an actuarially assessed shortfall in the Group's pension schemes. See further pension disclosure in the Risk management approach on page 61.

#### Strategic risk

Strategic risk is the potential for opportunity loss from failure to optimise the earnings potential of the Group's franchise. Please refer to the Risk management approach on page 61 for further disclosures on strategic risk.

## Standard Chartered PLC – Risk review continued

### Principal uncertainties

An overview of our risk profile is set out in pages 8 to 46 and our approach to risk management is set out in pages 50 to 61.

The key uncertainties and material risks we face in the current year are set out below. This should not be regarded as a complete and comprehensive statement of all potential risks and uncertainties that we may experience.

#### Deteriorating macroeconomic conditions in footprint countries

Macroeconomic conditions have an impact on personal expenditure and consumption, demand for business products and services, the debt-service burden of consumers and businesses, the general availability of credit for retail and corporate borrowers, and the availability of capital and liquidity for our business. All these factors may impact our performance.

The world economy is in a difficult period and although the rate of economic growth in some countries is increasing, other countries are facing difficult economic conditions. Further increases in US interest rates could lead to increased volatility in financial markets and capital flight from emerging markets which may lower the growth rates of some vulnerable economies in which the Group operates. Slowing economic growth rates in China may further depress prices and trade in a number of commodity sectors such as the energy, metals and mining sectors, and a prolonged slowdown could have wider economic repercussions. In particular, further weakness in energy prices could have a significant negative effect on energy producing countries via reduced government revenues and foreign exchange earnings with energy and related service industries vulnerable to reduced prices and lower levels of investment.

The sovereign crisis in the eurozone is not fully resolved and, although acute risks have been addressed by ongoing policy initiatives and the prospects for many of the European economies have improved, there is still a need for substantial structural reform (see additional information on the risk of redenomination on page 31). The proposed UK referendum on continued membership of the European Union (EU) would bring further economic and political uncertainty.

Although the Group has no direct sovereign exposure to affected European economies, including Greece, Ireland, Italy, Portugal and Spain, we remain alert to the risk of secondary impacts from events on financial institutions, other counterparties and global economic growth.

Inflation and property prices appear to be under control in most of the countries in which we operate, though some central banks continue to employ macroprudential tools to temper property price increases. Changes in monetary policy could lead to significant increases in interest rates from their currently low historical levels, with resulting impacts on the wider economy and on property values.

We balance risk and return, taking account of changing conditions through the economic cycle, and monitor economic trends in our markets very closely. We conduct stress tests to assess the effects of extreme but plausible trading conditions on our portfolio and also continuously review the suitability of our risk policies and controls. We manage credit exposures following the principle of diversification across products, geographies and client segments. This provides strong resilience against economic shocks in one or more of our portfolios.

#### Financial markets dislocation

A sudden financial markets dislocation could affect our performance, directly through its impact on the valuations of assets in our available-for-sale and trading portfolios or indirectly through the availability of

capital or liquidity. Financial markets instability may also increase the likelihood of default by our counterparties and may increase the likelihood of client disputes.

We stress test our market risk exposures to highlight the potential impact of extreme market events on those exposures and to confirm that they are within authorised stress loss triggers. Stress scenarios are regularly updated to reflect changes in risk profile and economic events. Where necessary, overall reductions in market risk exposure are enforced.

We carefully assess the performance of all of our counterparties in stress scenarios and adjust our limits accordingly.

We maintain robust processes to assess the suitability and appropriateness of the products and services we provide to our clients.

#### Geo-political events

We operate in a large number of markets around the world, and our performance is in part reliant on the openness of cross-border trade and capital flows. We face a risk that geo-political tensions or conflicts in our footprint could impact trade flows, our customers' ability to pay, and our ability to manage capital or operations across borders.

We actively monitor the political situation in all our principal markets. We also monitor the development of broader geo-political events such as those in Ukraine, the Middle East and territorial disputes in North East Asia. We conduct stress tests on the impact of extreme but plausible geo-political events on our performance, and the potential for such events to jeopardise our ability to operate within our stated risk appetite. Further details on stress testing are given on page 52.

#### Risk of fraud and other criminal acts

The banking industry has long been a target for third parties seeking to defraud and disrupt legitimate economic activity, or facilitate other illegal activities. Concerns about cyber crime have risen significantly, driven in part by geo-political events. Cyber crime risks include fraud, vandalism and disruption to critical infrastructure.

While the internet and networked technologies have provided major opportunities for digitising business, they have also given rise to significant risks as well-equipped and motivated attackers become more sophisticated. The incidence of cyber crime is rising, becoming more globally coordinated, and is a challenge for all organisations.

We seek to be vigilant to the risk of internal and external crime in our management of people, processes and systems and in our dealings with clients and other stakeholders. The Group has implemented a range of cyber crime defences to protect from hacking, misuse, malware, errors, social engineering and physical threats. Controls are embedded in our policies and procedures across a wide range of the Group's activities, such as origination, recruitment and physical and information security. We perform regular reviews of our control environment, perform external benchmarking against government and international cyber standards and frameworks and conduct tests of our defences against cyber and other attacks.

In a heavily regulated environment with an increasing threat of cyber crime, the Group continues to monitor and respond to cyber risks vigilantly by building on current capabilities, reinforcing policy frameworks and strengthening monitoring and internal controls.

We use third-party security providers where appropriate to further protect, validate and strengthen our defences and we actively collaborate with our peers, regulators, law enforcement bodies and other expert bodies as part of our response to this risk.

## Standard Chartered PLC – Risk review continued

### Exchange rate movements

Changes in exchange rates affect, among other things, the value of our assets and liabilities denominated in foreign currencies, as well as the earnings reported by our non-US dollar denominated branches and subsidiaries. Sharp currency movements can also affect trade flows, the ability of countries and clients to service debt and the wealth of clients, any of which could have an impact on our performance.

We monitor exchange rate movements closely and adjust our exposures accordingly. Under certain circumstances, we may take the decision to hedge our foreign exchange exposures in order to protect our capital ratios from the effects of changes in exchange rates. The effect of exchange rate movements on the capital adequacy ratio is mitigated to the extent there are proportionate movements in risk-weighted assets.

The following table sets out the period-end and average currency exchange rates versus the dollar for Indian rupee, Korean won, Malaysian ringgit, renminbi and Singapore dollar for the years ended 31 December 2015 and 31 December 2014. These are the markets for which currency exchange rate movements have had the greatest translation impact on the Group's results in 2015.

|                   | 2015     | 2014     |
|-------------------|----------|----------|
| Indian rupee      |          |          |
| Average           | 64.11    | 60.98    |
| Period end        | 66.13    | 62.96    |
| Korean won        |          |          |
| Average           | 1,131.23 | 1,052.25 |
| Period end        | 1,172.29 | 1,098.85 |
| Malaysian ringgit |          |          |
| Average           | 3.9059   | 3.2702   |
| Period end        | 4.2921   | 3.4947   |
| Renminbi          |          |          |
| Average           | 6.2283   | 6.1431   |
| Period end        | 6.4915   | 6.1255   |
| Singapore dollar  |          |          |
| Average           | 1.3748   | 1.2667   |
| Period end        | 1.4172   | 1.3253   |

### Regulatory changes

Our business as an international bank will continue to be subject to an evolving and complex regulatory framework comprising legislation, regulation, action by regulators and codes of practice, in each of the countries in which we operate. A key uncertainty relates to the way in which governments and regulators adjust laws, regulations and economic policies in response to macroeconomic and other systemic conditions. The nature and impact of such future changes are not always predictable and could adversely affect our strategic interests. Some of these changes that could have a significant impact to the Group are discussed below.

The European Commission has published a legislative proposal for a regulation on structural measures improving the resilience of EU credit institutions, including a prohibition on proprietary trading and separation powers for supervisors relating to banks' trading activities. The proposed regulation is under discussion between the European Commission, the European Parliament and Council of the EU. It is currently uncertain when the regulation will be finalised, although it is expected it will be adopted during 2016 with a view to the prohibition on proprietary trading taking effect on 1 January 2017 and the separation powers for supervisors on 1 July 2018.

Uncertainty remains regarding the final calibration and implementation of (i) certain liquidity requirements (in particular, the net stable funding ratio) and the leverage ratio under the EU's Capital Requirements Directive and Regulation (CRD IV) (although the Prudential Regulation Authority has required large UK banks, including Standard Chartered, to meet a

minimum 3 per cent leverage ratio requirement from 1 January 2016 and supplementary leverage ratio buffers ahead of final calibration by the European Union) and (ii) OTC derivative reforms across our markets, which could potentially have a material impact on the Group and its business model. Furthermore, proposals for regulatory changes may have unintended consequences either for individual banks or, in terms of aggregate impact, on the financial system. Depending on the final calibration and implementation of these measures, they could adversely affect economic growth, the volatility and liquidity of the financial markets and, consequently, the way we conduct business, structure our global operating model and manage capital and liquidity. These effects may directly or indirectly impact our financial performance.

### Regulatory compliance, reviews, requests for information and investigations (audited)

While the Group seeks to comply with the letter and spirit of all applicable laws and regulations at all times, it has been, and may continue to be, subject to regulatory actions, reviews, requests for information (including subpoenas and requests for documents) and investigations across our markets, the outcomes of which are generally difficult to predict and can be material to the Group.

Regulatory and enforcement authorities have broad discretion to pursue prosecutions and impose a wide range of penalties for non-compliance with laws and regulations. Penalties imposed by authorities have included substantial monetary penalties, additional compliance and remediation requirements and additional business restrictions. In recent years, such authorities have exercised their discretion to impose increasingly severe penalties on financial institutions that have been determined to have violated laws and regulations, and there can be no assurance that future penalties will not be of a different type or increased severity.

In 2012, the Group reached settlements with the US authorities regarding US sanctions compliance in the period 2001 to 2007, involving a Consent Order by the New York Department of Financial Services (NYDFS), a Cease and Desist Order by the Board of Governors of the Federal Reserve System (FED), Deferred Prosecution Agreements (DPAs) with each of the Department of Justice (DOJ) and the New York County District Attorney's Office (DANY) and a Settlement Agreement with the Office of Foreign Assets Control (together, the 'Settlements'). In addition to the civil penalties totalling \$667 million, the terms of these Settlements include a number of conditions and ongoing obligations with regard to improving sanctions, Anti-Money Laundering (AML) and Bank Secrecy Act (BSA) controls such as remediation programmes, reporting requirements, compliance reviews and programmes, banking transparency requirements, training measures, audit programmes, disclosure obligations and, in connection with the NYDFS Consent Order, the appointment of an independent monitor (the 'Monitor'). These obligations are managed under a programme of work referred to as the US Supervisory Remediation Program (SAP). The SAP comprises work streams designed to ensure compliance with the remediation requirements contained in all of the Settlements. In 2013, the Group also established a Financial Crime Risk Mitigation Programme (FCAMP), which is a comprehensive, multi-year programme designed to review and enhance many aspects of the Group's existing approach to money laundering prevention and to combating terrorism finance and the approach to sanctions compliance and the prevention of bribery and corruption. Many of the deliverables under the SAP are reliant on, or led by, individuals or functions outside the US, and in some cases represent the US implementation of Group-wide remediation or upgrade activity managed under the FCAMP. Consequently, there is a close working relationship between the SAP and FCAMP for the purpose of project coordination and delivery. As part of the FCAMP, the Group or its advisors may identify new issues, potential breaches or matters requiring further review or further process improvements that could impact the scope or duration of the FCAMP.

## Standard Chartered PLC – Risk review continued

The Group is engaged with all relevant authorities to implement these programmes and meet the obligations under the Settlements.

On 19 August 2014, the Group announced that it had reached a final settlement with the NYDFS regarding deficiencies in the AML transaction surveillance system in its New York branch (the 'Branch'). The system, which is separate from the sanctions screening process, is one part of the Group's overall financial crime controls and is designed to alert the Branch to unusual transaction patterns that require further investigation on a post-transaction basis.

The Settlement provisions are summarised as follows:

- (i) A civil monetary penalty of \$300 million
- (ii) Enhancements to the transaction surveillance system at the Branch
- (iii) A two-year extension to the term of the Monitor
- (iv) The following set of temporary remediation measures, which will remain in place until the transaction surveillance system's detection scenarios are operating to a standard approved by the Monitor:
  - (a) The Branch will not, without prior approval of the NYDFS in consultation with the Monitor, open a dollar demand deposit account for any client that does not already have such an account with the Branch
  - (b) Requirements for inclusion of identifying information for originators and beneficiaries of some affiliate and third-party payment messages cleared through the Branch
  - (c) A restriction on dollar-clearing services for certain Hong Kong retail business clients
  - (d) Enhanced monitoring of certain small and medium-sized enterprise clients in the UAE. The Group decided to exit this business as part of its broader efforts to sharpen its strategic focus, withdrawing from or realigning non-strategic businesses, including those where increased regulatory costs undermine their economic viability. The exit process is largely complete and, in accordance with the settlement agreement, dollar clearance restrictions were implemented effective 17 November 2014.

The remit of the SAP has been expanded to cover the management of these obligations.

On 9 December 2014, the Group announced that the DOJ, DANY and the Group had agreed to a three-year extension of the DPAs until 10 December 2017, and to the retention of a monitor to evaluate and make recommendations regarding the Group's sanctions compliance programme. The DOJ agreement acknowledges that the Group has taken a number of steps to comply with the requirements of the original DPAs and to enhance and optimise its sanctions compliance, including the implementation of more rigorous US sanctions policies and procedures, certified staff training, hiring of senior legal and financial crime compliance staff, and recently implementing additional measures to block payment instructions for countries subject to US sanctions laws and regulations. The Group will work

closely with the authorities to make additional substantial improvements to its US sanctions programme to reach the standard required by the DPAs.

The Group is cooperating with an investigation by the US authorities and the New York State Attorney General relating to possible historical violations of US sanctions laws and regulations. In contrast to the 2012 settlements, which focused on the period before the Group's 2007 decision to stop doing new business with known Iranian parties, the ongoing investigation is focused on examining the extent to which conduct and control failures permitted clients with Iranian interests to conduct transactions through Standard Chartered Bank after 2007 and the extent to which any such failures were shared with relevant US authorities in 2012.

The Group recognises that its compliance with historical, current and future sanctions, as well as AML and BSA requirements, and customer due diligence practices, not just in the US but throughout its footprint, are and will remain a focus of the relevant authorities.

The Financial Conduct Authority (FCA) is investigating Standard Chartered Bank's financial crime controls, looking at the effectiveness and governance of those controls within the correspondent banking business carried out by Standard Chartered Bank's London branch, particularly in relation to the business carried on with respondent banks from outside the European Economic Area, and the effectiveness and governance of those controls in one of Standard Chartered Bank's overseas branches and the oversight exercised at Group level over those controls.

As part of their remit to oversee market conduct, regulators and other agencies in certain markets are conducting investigations or requesting reviews into a number of areas of regulatory compliance and market conduct, including sales and trading, involving a range of financial products, and submissions made to set various market interest rates and other financial benchmarks, such as foreign exchange. At relevant times, certain of the Group's branches and/or subsidiaries were (and are) participants in some of those markets, in some cases submitting data to bodies that set such rates and other financial benchmarks. The Group is contributing to industry proposals to strengthen financial benchmarks processes in certain markets and continues to review its practices and processes in the light of the investigations, reviews and the industry proposals.

The Group is cooperating with all relevant ongoing reviews, requests for information and investigations. The outcome of these reviews, requests for information and investigations is uncertain and could result in further actions, penalties or fines, but it is not possible to predict the extent of any liabilities or other consequences that may arise.

In meeting regulatory expectations and demonstrating active risk management, the Group also takes steps to restrict or restructure or otherwise mitigate higher-risk business activities, which could include divesting or closing businesses that exist beyond risk tolerances.

As a result of our normal business operations, Standard Chartered is exposed to a broader range of risk than those principal uncertainties mentioned above and our approach to managing risk is detailed on the following pages.



## Standard Chartered PLC – Risk review continued

### Risk Management Framework

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

Through our Risk Management Framework we manage enterprise-wide risks, with the objective of maximising risk-adjusted returns while remaining within our risk tolerance.

Credit, country cross-border, market, liquidity, operational, reputational, pension and strategic risk are covered in pages 52 to 61 and the approach to capital risk on pages 62 to 69.

As part of this framework, the Board has approved a set of principles that describe the risk management culture we wish to sustain:

#### Balancing risk and return

- We manage our risks to build a sustainable franchise, in the interests of all our stakeholders
- We only take risk within our risk tolerances and risk appetite, and where consistent with our approved strategy
- We manage our risk profile so as to maintain a low probability of an unexpected loss event that would materially undermine the confidence of our investors

#### Conduct of business

- We demonstrate we are Here for good through our conduct, and are mindful of the reputational consequences of inappropriate conduct
- We seek to achieve good outcomes for clients, investors and the markets in which we operate, while abiding by the spirit and letter of laws and regulations
- We treat our colleagues fairly and with respect
- Responsibility and accountability
- We take individual responsibility to ensure risk-taking is disciplined and focused, particularly within our area of authority
- We make sure risk-taking is transparent, controlled and reported in line with the Risk Management Framework, within risk appetite and risk tolerance boundaries and only where there is appropriate infrastructure and resource
- Our approach is to work with clients who are committed to managing their impacts on communities and the environment in a sustainable manner

#### Anticipation

- We seek to anticipate material future risks, learn lessons from events that have produced adverse outcomes and ensure awareness of known risks

#### Competitive advantage

- We seek to achieve competitive advantage through efficient and effective risk management and control

### Risk governance

Ultimate responsibility for setting our risk tolerance boundaries and for the effective management of risk rests with the Board.

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

The Board Risk Committee receives regular reports on risk management, including our portfolio trends, policies and standards, stress testing, liquidity and capital adequacy, and is authorised to investigate or seek any information relating to an activity within its terms of reference. The Board Risk Committee also conducts 'deep dive' reviews on a rolling basis of different sections of a consolidated risk information report that is provided at each scheduled committee meeting.

The Brand, Values and Conduct Committee oversees the brand, values and good reputation of the Group, ensuring that reputational risk is consistent with the Risk Tolerance Statement approved by the Board and the creation of long-term shareholder value.

The Board Financial Crime Risk Committee oversees the Group's effective compliance with financial crime regulations.

The Audit Committee reviews the Group's internal financial controls to identify, assess, manage and monitor financial risks.

Further details on the role of the Board and its committees in matters of risk governance are covered in the Directors' report

Executive responsibility for risk management is delegated to the Standard Chartered Bank Court (the 'Court'), which comprises the Group executive directors and other directors of Standard Chartered Bank.

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

The Group Risk Committee is responsible for the management of all risks other than those delegated by the Court to the Group Asset and Liability Committee.

The Group Risk Committee is responsible for the establishment of, and compliance with, policies relating to credit risk, country cross-border risk, market risk, operational risk, pension risk and reputational risk. The Group Risk Committee also defines our overall Risk Management Framework.

The Group Asset and Liability Committee is responsible for the management of capital and the establishment of, and compliance with, policies relating to balance sheet management, including management of our liquidity, capital adequacy and structural foreign exchange and interest rate exposure and tax exposure.

## Standard Chartered PLC – Risk review continued

The Group Risk Committee and the Group Asset and Liability Committee are essentially unchanged following the reorganisation of our business, although the committee structures below them have changed in some areas. Further simplification of the committee structure will be carried out in 2016 and some of these changes are discussed in the Capital review on page 69.

Members of the Group Risk Committee and the Group Asset and Liability Committee are drawn principally from the Court. The Group Risk Committee is chaired by the Group Chief Risk Officer. The Group Asset and Liability Committee is chaired by the Group Chief Financial Officer. Risk limits and risk exposure approval authority frameworks are set by the Group Risk Committee in respect of credit risk, country cross-border risk, market risk and operational risk. The Group Asset and Liability Committee sets the approval authority frameworks in respect of capital and liquidity risks. Risk approval authorities may be exercised by risk committees or authorised individuals.

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

The sources of authorities and risk committees are currently under review in light of the adoption of individual accountability principles under the Senior Managers Regime.

The Group Risk Committee and Group Asset and Liability Committee request for and receive information to fulfil their governance mandates relating to the risks to which the Group is exposed, and alerts senior management when risk reports do not meet their requirements. Similar to the Board Risk Committee, the Group Risk Committee and Group Asset and Liability Committee receives reports that include information on risk measures, risk tolerances, risk concentrations, forward-looking assessments, updates on specific risk situations or actions agreed by these committees to reduce or manage risk.

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

- First line of defence: all employees are required to ensure the effective management of risks within the scope of their direct organisational responsibilities. Business unit, function and geographic heads are accountable for risk management in their respective businesses and functions, and for countries where they have governance responsibilities
- Second line of defence: this comprises the risk control owners, supported by their respective control functions. Risk control owners are responsible for ensuring that the residual risks within the scope of their responsibilities remain within risk tolerance and risk appetite boundaries. The scope of a risk control owner's responsibilities is defined by a given risk type and the risk management processes that relate to that risk type. These responsibilities cut across the Group and are not constrained by functional,

business and geographic boundaries. The major risk types are described individually in the following sections

- Third line of defence: the independent assurance provided by the Group Internal Audit function. Its role is defined and overseen by the Audit Committee of the Board

Group Internal Audit provides independent assurance of the effectiveness of management's control of its own business activities (the first line) and of the processes maintained by the risk control functions (the second line). As a result, Group Internal Audit provides assurance that the overall system of control effectiveness is working as required within the Risk Management Framework.

### The Risk function

The Group Chief Risk Officer directly manages a Risk function that is separate and independent from the origination, trading and sales functions of the businesses.

The role of the Risk function is:

- To maintain the Risk Management Framework, ensuring it remains appropriate to the Group's activities, is effectively communicated and implemented across the Group, and to administer related governance and reporting processes
- To uphold the overall integrity of the Group's risk/return decisions, and in particular ensure that risks are properly assessed, that risk/return decisions are made transparently on the basis of this proper assessment, and controlled in accordance with the Group's standards and risk tolerance
- To exercise direct risk control ownership for credit, market, country cross-border, short-term liquidity and operational risk types

## Standard Chartered PLC – Risk review continued

The independence of the Risk function is to ensure that the necessary balance in risk/return decisions is not compromised by short-term pressures to generate revenues. This is particularly important given that revenues are recognised from the point of sale, while losses arising from risk positions typically manifest themselves over time.

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

### Risk tolerance and appetite

We recognise three sets of constraints which determine the risks that we are willing to take in pursuit of our strategy and the development of a sustainable business:

- **Risk capacity** defines externally imposed constraints within which the Group must operate. It is the maximum level of risk the Group can assume, given its current capabilities and resources, before breaching constraints determined by regulatory capital and liquidity requirements, or otherwise failing to meet the expectations of regulators and law enforcement agencies
- **Risk tolerance** is the boundary defined by the Board that determines the maximum level of risk the Group is ordinarily willing to take in pursuit of its strategy, in accordance with its risk principles. Risk tolerance must constrain risk to the levels where the potential for any financial or reputational damage is consistent with the sustained pursuit of strategy and in line with the reasonable expectations of stakeholders. Risk tolerance cannot exceed risk capacity
- **Risk appetite** is the amount of risk that the Group regards as optimal in order to generate returns, taking account of current and reasonably foreseeable external market conditions. Risk appetite cannot exceed risk tolerance

The Group's risk profile is our overall exposure to risk, at a given point in time, covering all applicable risk types. Risk control tools such as exposure limits, underwriting standards, scorecard cut-offs and policies and other operational control parameters are used to keep the Group's risk profile within risk appetite (and therefore also risk tolerance and risk capacity).

The Board has approved a Risk Tolerance Statement, which is underpinned by a set of financial and operational control parameters, known as risk tolerances. These risk tolerances directly constrain the aggregate risk exposures that can be taken across the Group. The number of risk tolerances has been increased in 2015 to include further credit and liquidity risk tolerances. In addition, a pension risk tolerance statement and risk tolerances have been introduced for the first time.

The Group's Risk Tolerance Statement, and the related risk tolerance categories approved by the Board, are as follows:

- **General:** the Group will not compromise adherence to its risk tolerances in order to pursue revenue growth or higher returns
- **Credit and country cross-border risk:** the Group manages its credit and country cross-border exposures following the principle of diversification across products, geographies, client segments and industry sectors. Specific risk tolerances are set for individual and top 20 single-name credit concentrations, industry credit concentrations, portfolio tenor, retail unsecured credit risk concentrations, high risk retail unsecured credit risk concentrations, mortgage high loan-to-value concentrations and country cross-border credit risk concentrations
- **Capital and earnings volatility:** under stressed conditions, of a severity experienced on average once in 25 years, the Group's prudential capital ratios on a transitional basis should exceed minimum regulatory capital requirements (being the level at which the Group can operate without additional regulatory restrictions on its activities), without recourse to external sources. Specific tolerances are set for minimum Common Equity Tier 1 capital and leverage ratios under 1-in-25 year stress conditions

- **Market risk:** the Group should control its trading portfolio and activities to ensure that market risk losses (financial or reputational) do not cause material damage to the Group's franchise. Specific tolerances are set for resilience to market stress and to profit and loss volatility in Financial Markets
- **Liquidity risk:** the Group should be able to meet its payment and collateral obligations under extreme but plausible liquidity stress scenarios without recourse to extraordinary central bank support. Specific tolerances are set for liquidity stress survival horizons, short-term wholesale borrowing, minimum advances to deposits and liquidity coverage ratios
- **Operational risk:** the Group aims to control operational risks to ensure that operational losses (financial or reputational), including any related to conduct of business matters, do not cause material damage to the Group's franchise. This statement is underpinned by risk tolerances for each operational top risk. See page 45 for the list of the Group's current operational top risks
- **Reputational risk:** the Group will protect its reputation to ensure that there is no material damage to the Group's franchise
- **Pension risk:** the Group will manage its pension plans such that:
  - There is no material unexpected deterioration in their funding requirements or other financial metrics
  - Members' benefits will continue in their current form although management actions such as a removal of discretionary benefits are allowable in the case of a market stress event

The Group Risk Committee and the Group Asset and Liability Committee are responsible for ensuring that our risk profile is managed in compliance with the risk tolerances set by the Board. The Board Risk Committee advises the Board on the Risk Tolerance Statement and monitors that the Group remains in compliance with it.

### Stress testing

Stress testing and scenario analysis are used to assess the ability of Standard Chartered to continue operating effectively under extreme but plausible macrofinancial conditions.

Our approach to stress testing is designed to:

- Contribute to the setting and monitoring of Board-level risk tolerance limits
- Contribute to the setting and monitoring of executive-level risk appetite and risk management more generally
- Identify key risks to our capital and liquidity positions, strategy, franchise and reputation
- Support the development of strategic management actions and contingency plans, including business continuity, to ensure the Group can recover from extreme but plausible conditions
- Meet regulatory requirements

Stress tests are performed at Group, country and business level. Bespoke scenarios are applied to our market and liquidity positions as described in the section on market risk on page 56 and liquidity risk on page 58. In addition to these, our stress tests also focus on the potential impact of macrofinancial, geo-political and physical events on relevant geographies, client segments and risk types including among others credit risk which is discussed in more detail below.

### Credit risk

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

## Standard Chartered PLC – Risk review continued

Credit risk is managed through a framework that sets out policies and procedures covering the measurement and management of credit risk. There is a clear segregation of duties between transaction originators in the businesses and approvers in the Risk function. All credit exposure limits are approved within a defined credit approval authority framework. The Group manages its credit exposures following the principle of diversification across products, geographies, industries, collateral types and client segments.

### Credit Risk Committee

The Credit Risk Committee, which receives its ultimate authority from the Group Risk Committee, is the primary senior management committee to ensure the effective management of credit risk throughout the Group in line with risk appetite and in support of Group strategy. The Credit Risk Committee regularly meets to monitor all material credit risk exposures, key internal developments and external trends, and ensure that appropriate action is taken. It is chaired by the Group Chief Credit Officer.

### Credit policies

Group-wide credit policies and standards are considered and approved by the Group Risk Committee, which also oversees the delegation of credit approval and loan impairment provisioning authorities. These policies set key control standards on credit origination and credit risk assessment, concentration risk and large exposures, credit risk mitigation, credit monitoring, collection and recovery management. In addition, there are other Group-wide policies integral to credit risk management such as those relating to stress testing, risk measurement and impairment provisioning.

Policies and procedures specific to each client or product segment are established by authorised bodies. These are consistent with our Group-wide credit policies, but are more detailed and adapted to reflect the different risk characteristics across client and product segments. Policies are regularly reviewed and monitored to ensure these remain effective and consistent with the risk environment and risk appetite.

### Credit rating and measurement

Risk measurement plays a central role, along with judgement and experience, in informing risk-taking and portfolio management decisions.

Since 1 January 2008, Standard Chartered has used the advanced internal ratings-based (AIRB) approach under the Basel II regulatory framework to calculate credit risk capital requirements.

A standard alphanumeric credit risk grade (CG) system for Corporate & Institutional Clients and Commercial Clients is used. The numeric grades run from 1 to 14 and some of the grades are further sub-classified. Lower credit grades are indicative of a lower likelihood of default. CG 1 to 12 are assigned to performing customers or accounts, while CG 13 and 14 are assigned to non-performing or defaulted customers. An analysis by CG of those loans that are neither past due nor impaired is set out on pages 19 and 20.

Retail Clients IRB portfolios use application and behaviour credit scores that are calibrated to generate a probability of default and then mapped to the standard alphanumeric credit risk grade system. We refer to external ratings from credit bureaus (where these are available), however, we do not rely solely on these to determine Retail Clients' CGs.

AIRB models cover a substantial majority of our exposures and are used in assessing risks at a customer and portfolio level, setting strategy and optimising our risk return decisions. Material IRB risk measurement models are approved by the Credit Risk Committee, on the recommendation of the Credit Model Assessment Committee. The Credit Model Assessment Committee approves all other IRB risk measurement models, with all decisions noted to the Credit Risk Committee. The Credit Model Assessment Committee supports the Credit Risk Committee 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 Credit Model

Assessment Committee, all IRB models are validated in detail by a model validation team, which is separate from the teams that develop and maintain the models. Models undergo annual periodic review. Reviews are also triggered if the performance of a model deteriorates materially against predetermined thresholds during the ongoing model performance monitoring process.

### Credit approval and credit risk assessment

Major credit exposures to individual counterparties, groups of connected counterparties and portfolios of retail exposures are reviewed and approved by the Credit Approval Committee. The Credit Approval Committee is appointed by the Credit Risk Committee and derives its credit approving authority from the Group Risk Committee.

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

All credit proposals are subject to a robust credit risk assessment. It includes a comprehensive evaluation of the client's credit quality, including willingness, ability and capacity to repay. The primary lending consideration is usually based on the client's credit quality and the repayment capacity from operating cash flows for counterparties; and personal income or wealth for individual borrowers. The risk assessment gives due consideration to the client's liquidity and leverage position. Where applicable, the assessment includes a detailed analysis of the credit risk mitigation arrangements to determine the level of reliance on such arrangements as the secondary source of repayment in the event of a significant deterioration in a client's credit quality leading to default. Lending activities that are considered as higher risk or non-standard are subjected to stricter minimum requirements and require escalation to a senior credit officer or authorised bodies. An analysis of the loan portfolio is set out on pages 9 to 14.

### Credit concentration risk

Credit concentration risk may arise from a single large exposure to a counterparty or a group of connected counterparties, or from multiple exposures across the portfolio that are closely correlated.

Large exposure concentration risk is managed through concentration limits set by counterparty or group of connected counterparties.

At the portfolio level, credit concentration thresholds are set and monitored to control concentrations, where appropriate, by country, industry, product, tenor, collateral type, collateralisation level and credit risk profile.

For concentrations that are material at a Group level, thresholds are set and monitored by the Credit Risk Committee and reported to the Group Risk and Board Risk Committees.

### Credit risk mitigation

Potential credit losses from any given account, client or portfolio are mitigated using a range of tools such as collateral, netting agreements, credit insurance, credit derivatives taking into account expected volatility and 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.

The Group credit risk mitigation policy determines the key considerations for eligibility, enforceability and effectiveness of credit risk mitigation arrangements.

The Group has policies and procedures in place setting out the criteria for collateral to be recognised as a credit risk mitigant, including requirements concerning legal certainty, priority, concentration, correlation, liquidity and valuation parameters such as frequency of review and independence.

## Standard Chartered PLC – Risk review continued

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

In order to be recognised as security and for the loan to be classified as secured, all items pledged must be valued independently and an active secondary resale market for the collateral must exist. Documentation must be held to enable the Group to realise the asset without the cooperation of the asset owner in the event that this is necessary. The Group also seeks to diversify its collateral holdings across asset classes and markets.

For certain types of lending, typically mortgages or asset financing where a first charge over the risk mitigant must be attained, the right to take charge over physical assets is significant in terms of determining appropriate pricing and recoverability in the event of default. The requirement for collateral is, however, not a substitute for the ability to pay, which is the primary consideration for any lending decisions.

Regular valuation of collateral is required in accordance with the Group's credit risk mitigation policy, which prescribes both the process of valuation and the frequency of valuation for different collateral types. The collateral must be independently valued prior to drawdown and regularly thereafter. The valuation frequency is typically annually and more frequent valuations are driven by the level of price volatility of each type of collateral and the nature of the underlying product or risk exposure. Risk mitigation benefits may be removed where the collateral value is not supported by a recent independent valuation.

For financial collateral to be eligible for recognition, the risk mitigant relied upon must be sufficiently liquid and its value over time sufficiently stable to provide appropriate certainty as to the credit protection achieved. 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 against risk of physical loss or damage; insurance for other risks is kept under review.

Collateral values are, where appropriate, adjusted to reflect current market conditions, the probability of recovery and the period of time to realise the collateral in the event of possession.

Where guarantees or credit derivatives are used as credit risk mitigation, 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 banks, insurance companies, parent companies, shareholders and export credit agencies.

### Traded products

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

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

The Group uses bilateral and multilateral netting to reduce pre-settlement and settlement counterparty risk. Pre-settlement risk exposures are normally netted using bilateral netting documentation in legally approved jurisdictions. Settlement exposures are generally netted using Delivery versus Payments or Payment versus Payments systems. Master netting agreements are generally enforced only in the event of default. In line with International Accounting Standards (IAS) 32, derivative exposures are presented on a net basis in the financial statements only if there is a legal right to offset and there is intent to settle on a net basis or realise the assets and liabilities simultaneously.

In addition, we enter into credit support annexes (CSAs) with counterparties where collateral is deemed a necessary or desirable mitigant to the exposure. Further details on CSAs are set out on page 17.

### Securities

The portfolio limits and parameters for the underwriting and purchase of all predefined securities assets to be held for sale are approved by the Underwriting Committee. The Underwriting Committee is established under the authority of the Credit Risk Committee. The business operates within set limits, which include country, single issuer, holding period and credit grade limits.

Day-to-day credit risk management activities for traded securities are carried out by a specialist team within the Risk function whose activities include oversight and approval within the levels delegated by the Underwriting Committee. Issuer credit risk, including settlement and pre-settlement risk, and price risk are controlled by the Risk function.

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

### Credit monitoring

We regularly monitor credit exposures, portfolio performance, and external trends that may impact risk management outcomes.

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

Credit risk committees meet regularly to assess the impact of external events and trends on the Group's credit risk portfolios and to define and implement our response in terms of appropriate changes to portfolio shape, portfolio and underwriting standards, risk policy and procedures.

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

Such accounts and portfolios are subjected to a dedicated process overseen by Credit Issues Committees in countries. Client account plans and credit grades are re-evaluated. In addition, remedial actions are agreed and monitored. Remedial actions include, but are not limited to, exposure reduction, security enhancement, exiting the account or immediate movement of the account into the control of Group Special Assets Management (GSAM), our specialist recovery unit.

Typically, all Corporate & Institutional Clients, Commercial Clients and Private Banking Clients past due accounts are managed by GSAM.

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

### Loan impairment

A loan is impaired when we believe that we will not recover a portion of the contractual cash flows. Specific definitions of when a loan is deemed as impaired are discussed in the following sections for Retail Clients as well as Corporate & Institutional, Commercial and Private Banking Clients.

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

Estimating the amount and timing of future recoveries involves significant judgement, and considers the level of arrears as well as the assessment of matters such as future economic conditions and the value of collateral, for which there may not be a readily accessible market.

## Standard Chartered PLC – Risk review continued

Loan losses that have been incurred but have not been separately identified at the balance sheet date are determined by taking into account past loss experience as a result of uncertainties arising from the economic environment, and defaults based on portfolio trends. Actual losses identified could differ significantly from the impairment provisions reported, for example, as a result of uncertainties arising from the economic environment.

The total amount of the Group's impairment provision is inherently uncertain, being sensitive to changes in economic and credit conditions across the geographies in which the Group operates. Economic and credit conditions are interdependent within each geography and as a result there is no single factor to which the Group's loan impairment allowances as a whole are sensitive. It is possible that actual events over the next year differ from the assumptions built into our model, resulting in material adjustments to the carrying amount of loans and advances.

### Retail Clients

For Retail Clients' portfolios, an account is considered 'impaired' when it meets certain defined threshold conditions in terms of overdue payments ('contractual impairment') or meets other objective conditions such as bankruptcy, debt restructuring, fraud or death. A loan is considered delinquent (or 'past due'), when the customer has failed to make a principal or interest payment in accordance with the loan contract. These threshold conditions are defined in policy and are set at the point where empirical evidence suggests that the client is unlikely to meet their contractual obligations or a loss of principal is expected.

Portfolio impairment provisions (PIP) cover the inherent losses in the portfolio that exist at the balance sheet date but have not been individually identified. Considerations applied in determining the appropriate level of portfolio provisions include historic loss experience, loss emergence periods, risk indicators such as delinquency rates, and the potential impact of existing external conditions. Some of these factors require judgemental overlays. PIPs take into account the fact that, while delinquency is an indication of impairment, not all delinquent loans (particularly those in the early stages of delinquency) will in fact be impaired. This will only become apparent with the passage of time and as we investigate the causes of delinquency on a case-by-case basis.

It is on this basis that Retail Client accounts are considered impaired when a credit obligation is at 150 days past due. There are, however, exceptions to this rule for portfolios where empirical evidence suggests that they should be set more conservatively.

The core components of the IIP calculation are the value of gross charge off and recoveries. Gross charge off and/or provisions are recognised when it is established that the account is unlikely to pay, either through past due or any other specific condition. Recovery of unsecured debt post-impairment is recognised based on actual cash collected, either directly from clients or through the sale of defaulted loans to third-party institutions. Provision release of secured loans post-impairment is recognised if the loan outstanding is paid in full (release of full provision), or the provision is higher than the loan outstanding (release of the excess provision), or the loan is paid to current and remains in current for more than 180 days (release of full provision).

For further details on Retail Clients see page 19 to 28.

### Corporate & Institutional, Commercial and Private Banking Clients

Loans are classified as impaired where analysis and review indicate 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 our specialist recovery unit, GSAM, which is separate from our main businesses. Where any amount is considered irrecoverable, an IIP is raised. This provision is the difference between the loan-carrying amount and the present value of estimated future cash flows.

The individual circumstances of each client are taken into account when GSAM estimates future cash flows. 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, we attempt to balance economic conditions, local knowledge and experience, and the results of independent asset reviews.

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

As with Retail Clients, a PIP is held to cover the inherent risk of losses which, although not identified, are known through experience to be present in any loan portfolio. This is set with reference to historical 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 IIP has not been raised.

For further details on Corporate & Institutional, Commercial and Private Banking Clients see page 19 and page 28.

### Renegotiated and forborne loans

In certain circumstances, the Group may renegotiate client loans.

Loans that are renegotiated for commercial reasons, such as when a client had a credit rating upgrade, are not included as part of renegotiated and forborne loans because they are not indicative of any credit stress.

Loans that are renegotiated primarily to grant extended tenor to a client who is facing some difficulties but who we do not believe is impaired are reported as 'Other renegotiated loans'. Loans that are renegotiated on terms that are not consistent with those readily available in the market and/or where we have granted a concession compared to the original terms of the loans, are considered to be subject to forbearance strategies and are disclosed as 'Loans subject to forbearance', which is a sub set of impaired loans.

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

Once a loan is subject to forbearance or is renegotiated, the loan continues to be reported as such, until the loan matures or is otherwise derecognised.

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

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

Loans classified as subject to forbearance are managed by GSAM and are kept under close review to assess the client's ability to adhere to the restructured repayment strategy and to identify any events that could result in a deterioration in the client's ability to repay.

If the terms of the renegotiation are such that, where the present value of the new cash flows is lower than the present value of the original cash flows, the loan would be considered to be impaired and, at a minimum, a discount provision would be raised and shown under loans subject to forbearance. These accounts are monitored as described on page 54.

## Standard Chartered PLC – Risk review continued

Renegotiated and forbore loans are disclosed by client segments on page 19.

### Country cross-border risk (unaudited)

Country cross-border risk is the risk that we will be unable to obtain payment from our customers or third parties on their contractual obligations as a result of certain actions taken by foreign governments, chiefly relating to convertibility and transferability of foreign currency.

The Group Risk Committee is responsible for our country cross-border risk limits and delegates the setting and management of those limits to the Group Country Risk function. The business heads and country chief executive officers manage exposures within these limits and policies. Countries designated as higher risk are subject to increased central monitoring.

Assets that generate country cross-border exposure are those where the main source of repayment or security is derived from a country other than the country in which the asset is booked. These cover a wide range of products, including loans and advances, interest-bearing deposits with other banks, trade and other bills, acceptances, amounts receivable under finance leases, derivatives, certificates of deposit and other negotiable paper, investment securities and formal commitments. Cross-border assets also include exposures to local residents denominated in currencies other than the local currency and local-currency assets funded by intra-group funding. Cross-border exposure also includes the value of commodity, aircraft and shipping assets owned by the Group that are held in a given country.

### Market risk

Market risk is the potential for loss of earnings or economic value due to adverse changes in financial market rates or prices. The Group's exposure to market risk arises predominantly from providing clients access to financial markets, facilitation of which entails the Group taking moderate market risk positions. All trading teams support client activity; there are no proprietary trading teams. Hence, income earned from market risk-related activities is primarily driven by the volume of client activity rather than risk-taking. Market risk also arises in the non-trading book from the requirement to hold a large liquid assets buffer of high-quality liquid debt securities and from the translation of non-US dollar denominated assets, liabilities and earnings.

The primary categories of market risk for the Group 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 rate options
- Commodity price risk: arising from changes in commodity prices and commodity option implied volatilities; covering energy, precious metals, base metals and agriculture
- 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 Board approves the Group's risk tolerances for market risk. Subject to the risk tolerances set for market risk, the Group Risk Committee sets Group-level market risk limits and stress loss triggers.

The Market and Traded Credit Risk Committee, under authority ultimately delegated by the Group Risk Committee is responsible for setting business and desk-level value at risk (VaR) and stress loss triggers for market risk within the levels set by the Group Risk Committee. The Market and Traded Credit Risk Committee is also responsible for policies and standards for the control of market risk and overseeing their ongoing effectiveness. These policies cover both trading and non-trading books of the Group.

The Market and Traded Credit Risk function 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 option's value.

### VaR

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

VaR is calculated for expected movements over a minimum of one business day and to a confidence level of 97.5 per cent.

This confidence level suggests that potential daily losses, in excess of the VaR measure, are likely to be experienced six times per year.

We apply two VaR methodologies:

- Historical simulation: involves the revaluation of all existing positions to reflect the effect of historically observed changes in market risk factors on the valuation of the current portfolio. This approach is applied for general market risk factors and the majority of specific (credit spread) risk VaR
- Monte Carlo simulation: this methodology is similar to historical simulation but with considerably more input risk factor observations. These are generated by random sampling techniques, but the results retain the essential variability and correlations of historically observed risk factor changes. This approach is applied for some of the specific (credit spread) risk VaR in relation to idiosyncratic exposures in credit markets

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

VaR is calculated as our exposure as at the close of business, generally UK time. Intra-day risk levels may vary from those reported at the end of the day.

A small proportion of market risk generated by trading positions is not included in VaR or cannot be appropriately captured by VaR. This is recognised through a Risks-not-in-VaR (RNIV) framework, which estimates these risks and applies capital add-ons.

To assess their predictive power, VaR models are backtested against actual results

See an analysis of VaR and backtesting results in 2015 on pages 34 to 35.

### Stress testing

Losses beyond the 97.5 per cent confidence interval are not captured by a VaR calculation, which therefore gives no indication of the size of unexpected losses in these situations.

Market and Traded Credit Risk complements the VaR measurement by weekly stress testing of market risk exposures to highlight the potential risk that may arise from extreme market events that are rare but plausible.

Stress testing is an integral part of the market Risk Management Framework and considers both historical market events and forward-looking scenarios. A consistent stress-testing methodology is applied to trading and non-trading books. The stress-testing methodology assumes that scope for management action would be limited during a stress event, reflecting the decrease in market liquidity that often occurs.

Stress scenarios are regularly updated to reflect changes in risk profile and economic events. The Market and Traded Credit Risk function reviews stress exposures and, where necessary, enforces reductions in overall

## Standard Chartered PLC – Risk review continued

market risk exposure. The Group Risk Committee considers the results of stress tests as part of its supervision of risk tolerance.

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 banking and trading books.

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

### Market risk VaR coverage

Interest rate risk from 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. ALM deals 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 these non-trading book exposures (except Group Treasury, see below) in the same way as for the trading book, including 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 for on an amortised cost basis, so market price movements have limited effect on either profit and loss or reserves.

Structural foreign exchange risks are managed by Group Treasury, as described below, and are not included within Group VaR. Otherwise, the non-trading book does not run open foreign exchange positions.

Equity risk relating to non-listed private equity and strategic investments is not included within VaR. It is separately managed through delegated limits for both investment and divestment, and is also subject to regular review by an investment committee.

### Group Treasury market risk

Group Treasury raises debt and equity capital and the proceeds are placed with ALM. Interest rate risk arises due to the investment of equity and reserves into rate-sensitive assets, as well as some tenor mismatches between debt issuance and placements. This risk is measured as the impact on net interest income (NII) of an unexpected and instantaneous adverse parallel shift in rates and is monitored over a rolling one-year time horizon. Further details are disclosed on page 37 of the Risk profile section.

These risks are monitored and controlled by the Group's Capital Management Committee.

Group Treasury also manages the structural foreign exchange risk that arises from non-US dollar currency net investments in branches and subsidiaries. The impact of foreign exchange movements is taken to reserves which form part of the capital base. The effect of exchange rate movements on the capital ratio is partially mitigated by the fact that both the value of these investments and the risk-weighted assets in those currencies follow broadly the same exchange rate movements. With the approval of the Capital Management Committee, Group Treasury may hedge the net investments if it is anticipated that the capital ratio will be materially affected by exchange rate movements. Changes in the valuation of these positions are taken to reserves. Further details are disclosed on page 37 of the Risk profile section.

### Derivatives

Derivatives are contracts with characteristics and value derived from underlying financial instruments, interest and exchange rates or indices. They include futures, forwards, swaps and options transactions. Derivatives are an important risk management tool for banks and their clients because they can be used to manage market price risk. The market risk of derivatives is managed in essentially the same way as other traded products.

Our derivative transactions are principally in instruments where the mark-to-market values are readily determinable by reference to independent prices and valuation quotes.

We enter into derivative contracts in the normal course of business to meet client requirements and to manage our exposure to fluctuations in market price movements.

Derivatives are carried at fair value and shown in the balance sheet as separate totals of assets and liabilities when there is no legal right to offset and no intent to settle on a net basis or realise the assets and liabilities simultaneously. Recognition of fair value gains and losses depends on whether the derivatives are classified as trading or held for hedging purposes.

The credit risk arising from all financial derivatives is managed as part of the overall lending limits to financial institutions and corporate clients. This is covered in more detail in the Credit risk section on pages 52 to 54.

### Hedging

The Group use futures, forwards, swaps and options primarily to mitigate interest and foreign exchange risk arising from in-country exposures. See details of the Group's derivatives held for hedging in note 17 to the Financial statements.

In accounting terms under IAS 39, hedges are classified into three types: fair value hedges, predominantly where fixed rates of interest or foreign exchange are exchanged for floating rates; cash flow hedges, predominantly where variable rates of interest or foreign exchange are exchanged for fixed rates; and hedges of net investments in overseas operations translated to the parent company's functional currency, dollars.

We may also, under certain individually approved circumstances, enter into economic hedges that do not qualify for IAS 39 hedge accounting treatment, and which are accordingly marked-to-market through the profit and loss account, thereby creating an accounting asymmetry. These are entered into primarily to ensure that residual interest rate and foreign exchange risks are being effectively managed. Current economic hedge relationships include hedging the foreign exchange risk on certain debt issuances and on other monetary instruments held in currencies other than dollars.

### Liquidity risk

Liquidity risk is the risk that we either do not have sufficient financial resources available to meet our obligations as they fall due, or can only access these financial resources at excessive cost.

It is our policy to maintain adequate liquidity and funding at all times, in all geographic locations and for all currencies, and hence to be in a position to meet obligations as they fall due. We manage liquidity risk both on a short term and structural basis. In the short term, our focus is on ensuring that the cash flow demands can be met when required. In the medium to long term, the focus is on ensuring that the balance sheet remains structurally sound and is aligned to our funding strategy.

The Board establishes tolerances for liquidity risk, which are cascaded to the business for day-to-day management. The Group Asset and Liability Committee approves liquidity risk policies and is responsible for setting or delegating authority to set liquidity limits, within the Board's tolerance. The Liquidity Management Committee currently receives authority from the Group Asset and Liability Committee and is responsible for proposing liquidity risk policies. Liquidity in each country is managed by the country Asset and Liability Committee, supported by the ALM function. Countries operate within predefined liquidity limits and in compliance with Group liquidity policies and practices, as well as local regulatory requirements. Market and Traded Credit Risk and Group Treasury propose and oversee the implementation of policies and other controls relating to liquidity risks.



## Standard Chartered PLC – Risk review continued

We seek to manage our liquidity prudently in all geographical locations and for all currencies. Exceptional market events could impact us adversely, thereby potentially affecting our ability to fulfil our obligations as they fall due. The principal uncertainties for liquidity risk are that customers withdraw their deposits at a substantially faster rate than expected, or that asset repayments are not received on the expected maturity date. To mitigate these uncertainties, we seek to maintain a diverse and largely customer-driven funding base, while our customer loans are mostly of short tenor. In addition, we have contingency funding plans including a portfolio of liquid assets that can be realised if a liquidity stress occurs, as well as ready access to wholesale funds under normal market conditions.

Customer assets are, as far as possible, funded in the same currency. Where mismatches arise, they are controlled by limits in each country on the amount of foreign currency that can be swapped to local currency and vice versa. Such limits control the risk that obligations could not be met in the required currency in the event that access to foreign exchange markets becomes restricted. In sizing the limits we consider a range of factors including the size and depth of local foreign exchange markets and the local regulatory environment.

### Liquidity risk framework

The Board sets liquidity risk tolerance levels for liquidity stress survival horizons, short-term wholesale borrowing, minimum advances-to-deposits and liquidity coverage ratios. The Group Asset and Liability Committee may set risk appetite levels such that the Group operates within the Board's tolerance.

For stress survival horizons, the Board's tolerance reflects the Group's specific structure, which comprises a number of large presence countries that are systemically important, both to the Group and the global economy, as well as a large number of smaller presence countries whose liquidity is less material to the Group but which may be primarily at risk in a local systemic stress. The Group intends to maintain a prudent and sustainable funding and liquidity position, in all presence countries and currencies, such that it can withstand severe liquidity stress:

- Across major presence countries, the Group intends to be able to meet its payment and collateral obligations for at least 60 days in a combined name-specific and market-wide liquidity stress, without recourse to extraordinary central bank support
- In smaller presence countries, each operating entity should be able to meet its payment and collateral obligations for at least 60 days in the event of a systemic market-wide stress in that country, without implicit reliance on Group support

In accordance with Group Asset and Liability Committee policies, there are further limits set for each country on:

- The local and foreign currency cash flow gaps
- The level of borrowing from other countries within the Group, to contain the risk of contagion from one country to another
- Commitments, to ensure there are sufficient funds available in the event of drawdown
- The amount of assets that may be funded from other currencies
- The amount of medium-term assets that have to be funded by medium-term funding

All limits are reviewed at least annually, and more frequently if required, to ensure that they remain relevant given market conditions and business strategy. Compliance with limits is monitored independently on a regular basis by Market and Traded Credit Risk and Group Treasury. Limit excesses are escalated and approved under a delegated authority structure and reported to the country Asset and Liability Committee. Excesses are also reported monthly to the Liquidity Management Committee and if necessary to the Group Asset and Liability Committee and the Board Risk Committee.

We have significant levels of marketable securities, including government securities that can be monetised or pledged as collateral in the event of a liquidity stress. In addition, a Funding Crisis Response and Recovery Plan (FCRRP), reviewed and approved annually, is maintained by Group Treasury. The FCRRP also includes a broad set of Early Warning Indicators (EWIs), an escalation framework and a set of management actions that could be effectively implemented by the appropriate level of senior management in the event of a liquidity stress.

A similar plan is maintained within each major country.

### Stress testing

In addition to monitoring the Board's stress survival horizon metrics described above, the Group conducts a range of liquidity-related stress analyses, both for internal and regulatory purposes.

Internally, at country level a more granular analysis of survival horizons considers potential currency mismatches between stress outflows and inflows. Particular focus is paid to mismatches in less liquid currencies and those that are not freely convertible. This is overseen by country Asset and Liability Committees. Group-wide stress tests also consider the portability of liquidity surpluses between major presence countries, taking account of regulatory restrictions on cross-border movement of funds and intra-group exposures. A severe eight-day name-specific stress is also run routinely, as well as a 30-day stress that is run in major presence countries to test resilience to market-wide disruption, such as in interbank money or foreign exchange markets. Liquidity risks are also considered as part of the Group's wider periodic scenario analysis, including reverse stress testing. The Group also runs a range of stress tests to meet regulatory requirements, as defined by the PRA and local regulators.

Country stress testing considers potential currency mismatches between outflows and inflows. Particular focus is paid to mismatches in less liquid currencies and those that are not freely convertible. Mismatches are controlled by management action triggers set by Market and Traded Credit Risk. Group-wide stress tests also consider the portability of liquidity surpluses between Group entities, taking account of regulatory restrictions on large and intra-group exposures.

Standard Chartered Bank's credit ratings as at December 2015 were A+ with negative outlook (Fitch), A+ (S&P) and Aa2 (under review: possible downgrade) (Moody's). A downgrade in credit rating would increase derivative collateral requirements and outflows due to rating-linked liabilities. One possible outcome of a two-notch downgrade could be an estimated outflow of \$1.7 billion (unaudited).

### Operational risk (unaudited)

We define operational risk as the potential for loss resulting from inadequate or failed internal processes, people and systems or from the impact of external events, including legal risks.

As operational risk arises from all activities carried out within the Group, the potential for operational risk events occurring across a large and complex international organisation is a constant challenge. To address this we aim to achieve 'industrial strength' process and control design standards for all activities, and benchmark practices against peers, other industries and regulatory requirements.

### Operational risk governance

The Group Risk Committee provides oversight of operational risk management across the Group. It is supported by the Global Business Risk Committee, the Group Functions Operational Risk Committee, the Group Financial Crime Risk Committee and the Group Information Management Governance Committee, which oversee operational risk arising from the global businesses and Group functions, financial crime compliance and information management respectively. These risk committees receive regular reports on the Group's operational risk profile.

## Standard Chartered PLC – Risk review continued

### Internal organisation – Three Lines of Defence

To implement the operational risk management approach in the Group, the Group applies the Three Lines of Defence, as set out in the Risk Management Framework and explained on page 51.

The first line of defence has responsibility for identifying and managing all risks within first line processes as an integral part of first line responsibilities.

Group Operational Risk as second line of defence is responsible for setting and maintaining the standards for the operational risk management approach. In addition, the second line of defence comprises both second line risk control owners of each operational risk sub-type and second line Group policy owners.

The third line of defence is the independent assurance provided by the Group Internal Audit function.

### Risk tolerance approach

Operational risk is managed within tolerances aligned to achieve the Risk Tolerance Statement approved by the Board. The Group aims to control operational risks to ensure that operational losses (financial or reputational), including any related to conduct of business matters, do not cause material damage to the Group's franchise.

In order to comply with this statement, the operational risk management approach includes the following requirements:

- The Group will systematically identify top risks and emerging risks with the involvement of senior management and the Board, and define the appropriate treatment which may include business restrictions
- All processes will be mapped and owned with appropriate key control standards defined to mitigate risks
- The Group will not miss any opportunity to learn lessons from internal or external events and will implement relevant mitigation actions
- The Group will systematically test internal capital adequacy through scenario analysis and stress testing

### Risk classification

Operational risk sub-types are the different ways that we may be operationally exposed to loss. Each risk sub-type is a grouping of potential losses that are material, and which may arise in different activities or areas of the Group.

The Group uses operational risk sub-types principally as an aid to ensure comprehensive and consistent identification of operational risks, wherever they may arise. Operational risk sub-types are listed in the table on the following page.

### Operational risk sub-types

|                                   |  |
|-----------------------------------|--|
| External rules and regulations    | Potential for actual or opportunity loss due to failure to comply with laws or regulations, or as a result of changes in laws or regulations or in their interpretation or application   |
| Liability                         | Potential for loss or sanction due to a legal claim against any part of the Group or individuals within the Group  |
| Legal enforceability              | Potential for loss due to failure to protect legally the Group's interests or from difficulty in enforcing the Group's rights  |
| Damage or loss of physical assets | Potential for loss or damage or denial of use of property or other physical assets   |
| Safety and security               | Potential for loss or damage relating to health and safety or physical security  |
| Internal fraud or dishonesty      | Potential for loss due to action by staff that is intended to defraud, or to circumvent the law or company policy  |
| External fraud                    | Potential for loss due to criminal acts by external parties such as fraud or theft of financial assets   |
| Information security              | Potential for loss due to unauthorised access, use, disclosure, disruption, modification or destruction of information   |
| Processing failure                | Potential for loss due to failure of an established process or a process design weakness   |
| Model                             | <p>Potential for loss due to a significant discrepancy between the output of credit and market risk measurement models and actual experience</p> <p>Potential for regulatory breach due to a significant discrepancy between the output of financial crime client risk scoring and financial crime transaction monitoring models and actual experience</p> |

### Operational risk management approach

The Group defines and maintains a complete process universe for all client segments, products and functions processes.

The process universe is the complete list of end-to-end processes that collectively describe the activities of the Group and is the reference for the application of the operational risk management approach.

This represents all Group activities, the owners of these activities, and the risk and control standards that are defined by risk and process owners. It also serves as the foundation for policy delivery, as well as risk identification, measurement, management and reporting. The operational risk management approach requires:

- Industrial strength process design standards are applied to critical processes

- Control tolerance standards are set for each control for quantity, materiality and timeliness of detection and rectification of defects
- All processes are standardised except for regulatory or legitimate system exceptions
- Gross and residual risk assessments by first line and approved by second line
- Risk and control monitoring
- Prompt execution of risk treatment actions to closure

The operational risk management approach has been installed for prioritised risks across all countries as part of the Operational Risk Framework Implementation Programme.

## Standard Chartered PLC – Risk review continued

### Stress testing

As part of our operational risk management approach, we conduct stress testing by scenario analysis for the Group.

In 2015, we participated in the Bank of England stress test and the annual Internal Capital Adequacy Assessment Process. The exercises included judgemental overlays for the potential risk of low-frequency, high-severity events occurring during stress conditions.

In addition to macroeconomic scenarios, the Operational risk scenario analysis programme reviews concentration of risks across the Group's processes and prioritises low-frequency high-severity scenarios to assess the potential impact that may exceed the Group's risk tolerances. During 2015, the scenario analysis programme conducted 11 scenarios. These scenarios included anti-money laundering, sanctions, information and cyber security and change management.

### Conduct

Conduct of business, or conduct, is a term that is used in a broad number of ways across the financial services industry. At its broadest, good conduct is the creation of an appropriate business strategy aligned to our stated risk tolerance and the execution of business in accordance with both. More narrowly, it refers to specific regulations designed to achieve fair outcomes for customers and the effective operation of markets.

Good conduct is evidenced through disciplined adherence to our overall framework of systems and controls outlined in the Risk Management Framework and the standards of individual behaviour set out in the Code of Conduct (the 'Code').

Specifically for operational risk:

- External rules and regulations classifications defined in the Operational Risk Framework include specific categories of regulation designed to achieve fair outcomes for clients (client conduct) and the effective operation of markets (market conduct). This ensures that each category of regulation is properly classified and aligned to the Group's systems and control structures. Risk control owners and Group policy owners are responsible for defining the Group's minimum standards and controls in respect of each category. The Group's policies and standards may frequently exceed the minimum requirements or expectations of regulators
- Conduct is considered in the Group's top risks (see Risk profile on page 45). The Group aims to prevent the risks of failure to deliver the conduct of business standards expected by the Group's clients, investors and markets in which we operate. Many of the top risks can be driven by poor conduct so the Group is focused on its control standards around these risks

### Reputational risk (unaudited)

Reputational risk is the potential for damage to the Group's franchise, resulting in loss of earnings or adverse impact on market capitalisation as a result of stakeholders taking a negative view of the Group or its actions. Failures in behaviours or systems may affect stakeholders' perceptions of the Group's commitment to its Here for good brand promise.

Reputational risk could arise from the failure of the Group to effectively mitigate the risks in its businesses, including one or more of country, credit, liquidity, market, regulatory, legal, strategic or other operational risk. Damage to the Group's reputation could cause existing clients to reduce or cease to do business with the Group and prospective clients to be reluctant to do business with the Group. All employees are responsible for day-to-day identification and management of reputational risk. These responsibilities form part of the Code and are further embedded through values-based performance assessments. Risk control owners must identify material reputational risks arising from any business activity or transaction that they control and ensure

that these are escalated and controlled in accordance with the Group's Reputational Risk Policy and applicable procedures.

Our reputational risk framework covers two areas. Reputational risk management refers to proactively avoiding or mitigating the potential damage that might result from a future reputational risk event (ex ante). Reputational issues management and crisis communication refers to measures to limit damage from a reputational risk event that has already occurred (ex post).

Reputational risk may also arise from a failure to comply with environmental and social standards in our relationship with clients and in our financing decisions. Environmental risk is the potential for material harm or degradation to the natural environment, while social risk is the potential to cause material harm to individuals or communities. Environmental and social risks associated with clients are a key area of risk for the Group and we have continued to develop and enhance our approach to managing such risks since 1997.

Reflecting the differing regulatory and legislative frameworks applicable to clients in the Group's markets, we have global sector-specific environmental and social (E&S) standards as set out in our 17 sectoral and three thematic position statements. We apply these in the provision of financial services to clients who operate in sectors presenting specific risks, and for key issues. These are underpinned by the Equator Principles and the IFC Performance Standards.

The Group recognises that stakeholder expectations of our environmental and social risk management will change over time. As such we seek to explain our approach and standards via our position statements, and to ensure they remain appropriate through active monitoring.

We take our position statement commitments seriously. To ensure we deliver our commitments, we embed these requirements through our core banking processes. We have mechanisms in our origination and credit processes to identify and assess environmental and social risks in accordance with our standards. We have a dedicated Environmental and Social Risk Management (ESRM) team that reviews clients and proposed transactions that present specific risks.

For more information on our environmental and social risk assessment please refer to [on.sc.com/eandsrisk](http://on.sc.com/eandsrisk)

In 2015, the ESRM team reviewed over 480 client relationships and transactions across a range of Position Statement sectors. For all risks identified, we seek to develop effective mitigating measures. Where this is not possible, transactions have been, and will continue to be, turned down. In 2015, we trained more than 1,700 staff on our requirements and processes.

We believe in working collaboratively to achieve sustainability goals. This includes working with clients, other financial institutions and industry bodies to promote, develop and encourage leading E&S standards. In 2015, we were pleased to join the Banking Environment Initiative and continued our work as a member of the Equator Principles Steering Committee.

The Group Risk Committee provides Group-wide oversight on reputational risk, sets policy and monitors material risks. The Group Head of Corporate Affairs is the overall risk control owner for reputational risk. The Brand, Values and Conduct and Board Risk Committees provide additional oversight of reputational risk on behalf of the Board. At the business level, the Business Responsibility and Reputational Risk Committee has responsibility for managing reputational risk.

At country level, the Country Head of Corporate Affairs is the risk control owner of reputational risk. It is his or her responsibility to protect our reputation in that market with the support of the Country Management Group. The Head of Corporate Affairs and Country Chief Executive Officer must actively:

- Promote awareness and application of our policies and procedures regarding reputational risk

## Standard Chartered PLC – Risk review continued

- Encourage business and functions to take account of our reputation in all decision-making, including dealings with customers and suppliers
- Implement effective in-country reporting systems to ensure they are aware of all potential issues in tandem with respective business committees
- Promote effective, proactive stakeholder management through ongoing engagement

### Pension risk (unaudited)

Pension risk is the potential for loss due to having to meet an actuarially assessed shortfall in the Group's pension schemes. Standard Chartered offers defined contribution pension plans for new hires in most locations, and only maintains defined benefit plans where required by law, contract or for closed groups of long-serving employees. The Group monitors and manages both the pension financial risks stemming from its legacy defined benefit schemes and the operational and reputational risks of all its pension arrangements. In doing this the Group has primary regard to its capital position, and the relative costs and benefits of reducing or removing its risk exposure.

The Group's primary pension risk measures are updates, at least quarterly, of the accounting balance sheet position, the 1-in-200 year stress test required annually by the PRA, and the funding position of the UK Fund (over 60 per cent of the Group's pension liabilities). The Group mitigates pension risk via a Group Pension Risk Policy which requires all new plans to be defined contribution where possible, and mandates standards around investments, benefit changes, funding, documentation, actuarial valuations, accounts and auditing. Adherence to these standards is assured by an annual governance review.

The Group Pension Risk Committee is the body responsible for governance of pension risk and it receives its authority from the Group Risk Committee. From 2016, the risk control owner of pension risk will assume these responsibilities directly.

### Strategic risk (unaudited)

Strategic risk is the potential for opportunity loss from failure to optimise the earnings potential of the Group's franchise. Opportunity losses could arise because a business decision does not deliver the expected profit and returns, or because a decision is not taken, which leads to lost opportunities.

Strategic risk can give rise to differences in the Group's earnings as compared with market expectations and competitor performance. This can significantly impact the Group's share price. If strategic risks materialise, we have the ability to take mitigating actions by adapting execution of the strategy and/or managing the Group's capital position.

As the ultimate governance body for the Group, the Board challenges the Group's strategy and highlights potential underlying risks. The Global Head of Strategy is the risk control owner for strategic risk. Given that strategic risk primarily arises from the failure to make well made and timely decisions, strategic risk is managed where decisions are made. The Regional, Country and Segment CEOs and the Heads of Functions are responsible for the identification of strategic risks.

Group level strategic risks are systematically reviewed during the Group's annual strategy review process and follow-up 'deep dives' throughout the year on topics agreed with the Board. A major Group level strategic review was undertaken in 2015. Execution of the strategic plan is managed through the Group's performance management process.

# Standard Chartered PLC - Capital

## Capital review

The Prudential Regulation Authority (PRA) is continuing to implement CRD IV. Some areas of CRD IV remain subject to further consultation or await promulgation of the relevant European Banking Authority Technical Standards and final UK implementing rules. Accordingly, the position presented here is based on the Group's current understanding of the rules which may be subject to change.

## Capital summary

Our approach to capital management is focused on maintaining the Group's capital and leverage position in support of our clients, the business strategy and to meet regulatory requirements including stress testing and future loss absorption requirements. The Group balance sheet is strong, highly liquid and with low leverage.

| Capital, leverage and RWA   | 2015<br>% | 2014<br>% |
|-----------------------------|-----------|-----------|
| CET1 end point <sup>1</sup> | 12.6      | 10.7      |
| Total capital               | 19.5      | 16.7      |
| Leverage                    | 5.5       | 4.5       |
| RWA (\$million)             | 302,925   | 341,648   |

1. On 1 January 2015 the transitional arrangements for excluding available-for-sale gains from regulatory capital ended. Therefore, as at 1 January 2015, the Common Equity Tier 1 ratio increased from 10.5 to 10.7 per cent

The Group's Common Equity Tier 1 (CET1) ratio increased from 10.7 per cent to 12.6 per cent (on an end-point basis) at the end of December 2015, as a result of the \$5 billion rights issue completed in December 2015 and a series of management actions taken in 2015, including the more efficient management of risk-weighted assets (RWA), de-risking and disposals. In addition, the Group announced in November 2015 that it would not be paying a final dividend for 2015. The combination of these actions put the Group's CET1 ratio within the Group's revised CET1 target range of 12-13 per cent, announced as part of its Strategic Review.

The Group's CET1 position is well ahead of the current expected minimum for 2019 of 9.1 per cent, including the Pillar 1 and 2A minimum requirements and capital buffers. The Group will continue to manage its capital position in the context of current and evolving CET1 requirements as they apply to the Group.

In April 2015, the Group issued \$2 billion of Additional Tier 1 (AT1) capital, which improved the Group's leverage ratio and total capital position.

The Strategic Review highlighted over \$100 billion – approximately one-third – of RWA for restructuring. Over the course of 2015, RWA reduced by around \$39 billion, or 11 per cent, mainly due to management actions including more selective origination, de-risking, disposals and efficiencies.

The Group's total capital position was improved by the \$5 billion rights issue and issuance of AT1 securities. The Group continued its established programme of term senior unsecured issuance from its holding company which, on its current understanding of the rules, positions the Group well for the introduction of the minimum requirement for own funds and eligible liabilities (MREL). As at December 2015, the Group had an estimated 24 per cent of RWA in MREL eligible instruments.

## Capital movements

The main movements in capital between 1 January 2015 and 31 December 2015 were:

- The CET1 capital ratio increased by around 190 basis points (bps) to 12.6 per cent, due to an increase in CET1 capital as described below and a decrease in RWA from asset reductions, business disposals and RWA efficiencies
- CET1 capital increased mainly due to the rights issue proceeds and a reduction in excess expected loss. This was offset by the loss for the period, foreign currency translation and an increase in the prudential valuation adjustment
- AT1 capital increased due to the issuance of \$2 billion of AT1 securities in April 2015
- Tier 2 capital decreased mainly due to the regulatory amortisation of Tier 2 capital, foreign currency translation and the phasing of the derecognition of Tier 2 minority interest

Reflecting the above movements, the Group's total capital ratio increased to 19.5 per cent as at 31 December 2015.

## Standard Chartered PLC – Capital continued

### Capital ratios

|                | 2015  | 2014 <sup>1</sup> |
|----------------|-------|-------------------|
| CET1           | 12.6% | 10.5%             |
| Tier 1 capital | 14.1% | 11.4%             |
| Total capital  | 19.5% | 16.7%             |

### CRD IV Capital base

|  | 2015           | 2014           |
|--|----------------|----------------|
|  | \$million      | \$million      |
| <b>CET1 instruments and reserves</b>   |                |                |
| Capital instruments and the related share premium accounts   | 5,596          | 5,225          |
| Of which: share premium accounts   | 3,957          | 3,989          |
| Retained earnings <sup>1</sup>   | 29,128         | 27,394         |
| Accumulated other comprehensive income (and other reserves)  | 12,180         | 9,690          |
| Non-controlling interests (amount allowed in consolidated CET1)  | 582            | 583            |
| Independently reviewed interim and year-end (losses)/profits <sup>2</sup>                                    | (2,194)        | 2,640          |
| Foreseeable dividends net of scrip   | (115)          | (1,160)        |
| <b>CET1 capital before regulatory adjustments</b>  | <b>45,177</b>  | <b>44,372</b>  |
| <b>CET1 regulatory adjustments</b>   |                |                |
| Additional value adjustments (prudential valuation adjustments)  | (564)          | (196)          |
| Intangible assets (net of related tax liability)   | (4,820)        | (5,449)        |
| Deferred tax assets that rely on future profitability (excludes those arising from temporary differences)    | (212)          | (180)          |
| Fair value reserves related to gains or losses on cash flow hedges   | 38             | 55             |
| Deduction of amounts resulting from the calculation of excess expected loss                                  | (569)          | (1,719)        |
| Gains or losses on liabilities at fair value resulting from changes in own credit risk                       | (630)          | (167)          |
| Fair value gains and losses arising from the institution's own credit risk related to derivative liabilities | (34)           | (9)            |
| Defined-benefit pension fund assets  | (4)            | (13)           |
| Exposure amounts which could qualify for risk weighting of 1250%   | (200)          | (199)          |
| Of which: securitisation positions   | (168)          | (177)          |
| Of which: free deliveries  | (32)           | (22)           |
| Regulatory adjustments relating to unrealised gains  | -              | (481)          |
| Other  | -              | (1)            |
| <b>Total regulatory adjustments to CET1</b>  | <b>(6,995)</b> | <b>(8,359)</b> |
| <b>CET1 capital</b>  | <b>38,182</b>  | <b>36,013</b>  |
| <b>Additional Tier 1 capital (AT1) instruments</b>   | <b>4,611</b>   | <b>2,786</b>   |
| <b>AT1 regulatory adjustments</b>  | <b>(20)</b>    | <b>-</b>       |
| <b>Tier 1 capital</b>  | <b>42,773</b>  | <b>38,799</b>  |
| <b>Tier 2 capital instruments</b>  | <b>16,278</b>  | <b>18,304</b>  |
| <b>Tier 2 regulatory adjustments</b>   | <b>(30)</b>    | <b>(4)</b>     |
| <b>Tier 2 capital</b>  | <b>16,248</b>  | <b>18,300</b>  |
| <b>Total capital</b>   | <b>59,021</b>  | <b>57,099</b>  |
| <b>Total risk-weighted assets<sup>3</sup></b>  | <b>302,925</b> | <b>341,648</b> |

1. Retained earnings include the effect of regulatory consolidation adjustments

2. Independently reviewed year-end (losses)/profits for CRD IV are in accordance with the regulatory consolidation

3. The risk-weighted assets are not audited

## Standard Chartered PLC – Capital continued

### Movement in total capital

|   | 2015          | 2014          |
|---|---------------|---------------|
|   | \$million     | \$million     |
| CET1 as at 1 January  | 36,013        | 35,961        |
| Ordinary shares issued in the year  | 5,053         | 11            |
| (Loss)/profit for the year  | (2,194)       | 2,640         |
| Foreseeable dividends net of scrip deducted from CET1   | (115)         | (1,160)       |
| Dividend net of scrip <sup>1</sup>  | 240           | (1,451)       |
| Goodwill and other intangible assets  | 629           | 724           |
| Foreign currency translation  | (1,878)       | (1,042)       |
| Unrealised gains on available for sale assets   | 481           | 65            |
| Eligible other comprehensive income   | (298)         | 245           |
| Deferred tax assets that rely on future profitability (excludes those arising from temporary differences) | (32)          | 93            |
| Excess expected loss  | 1,150         | 19            |
| Additional value adjustments (prudential valuation adjustments)   | (368)         | (16)          |
| Own credit gains  | (463)         | (82)          |
| Other   | (36)          | (3)           |
| <b>CET1 as at 31 December</b>   | <b>38,182</b> | <b>36,013</b> |
| AT1 at 1 January  | 2,786         | 4,458         |
| Issuances net of redemptions  | 1,987         | (1,800)       |
| Other   | (182)         | 128           |
| <b>AT1 as at 31 December</b>  | <b>4,591</b>  | <b>2,786</b>  |
| Tier 2 capital as at 1 January  | 18,300        | 15,950        |
| Regulatory amortisation   | (683)         | (701)         |
| Issuances   | -             | 3,867         |
| Foreign currency translation  | (764)         | (701)         |
| Tier 2 ineligible minority interest   | (592)         | 114           |
| Other   | (13)          | (229)         |
| <b>Tier 2 capital as at 31 December</b>   | <b>16,248</b> | <b>18,300</b> |
| <b>Total capital as at 31 December</b>  | <b>59,021</b> | <b>57,099</b> |

1. This represents the difference between expected cash distribution from dividend and actual cash distribution

#### Movements in risk-weighted assets

RWA decreased by \$38.7 billion, or 11.3 per cent, from 31 December 2014. This was mainly due to a \$40.8 billion decrease in credit risk RWA, which was partially offset by an increase in market risk RWA of \$1.6 billion and operational risk RWA of \$0.5 billion.

#### Corporate & Institutional and Commercial Clients

Credit risk decreased by \$35.3 billion as a result of the following:

- \$9.0 billion reduction due to lower volumes mainly in Transaction Banking, Lending and Principal Finance assets
- \$5.3 billion reduction due to increased provisions, partly offset by credit migration and fair value adjustments for GSAM clients, primarily in the Europe and South Asia regions
- \$17.4 billion of RWA efficiencies mainly due to \$4.1 billion of Financial Market RWA saves achieved through trade compression actions and increased Credit Support Annex (CSA) coverage and an \$8.8 billion reduction due to loan sales and exiting of low-return relationships
- \$1.1 billion reduction as a result of Principal Finance disposals
- \$5.8 billion reduction from foreign currency translation due to depreciation of currencies in key markets, including Indonesia, Europe, India and China

This was partly offset by an increase of \$3.4 billion from model, methodology and policy changes, mainly driven by the inclusion of non-European Union (EU) institutions in the calculation of risk-weighted assets arising from asset value correlation.

#### Retail Clients

Credit RWA decreased by \$6.1 billion mainly as a result of the following:

- \$1.6 billion reduction from the business/portfolio exits such as the Consumer Finance business in Korea, Hong Kong, China, Lebanon and UAE Business Clients
- \$0.9 billion decrease in credit RWA as a result of the lagged impact of de-risking and reshaping the portfolio, with a reduction in unsecured lending offset by secured lending growth
- \$2.8 billion reduction from foreign currency translation due to depreciation of currencies in key markets including Malaysia, Korea, Singapore, China, Taiwan and India

#### Private Banking Clients

Private Banking RWA increased by \$0.6 billion, primarily due to the impact of collateral eligibility policy changes, methodology and portfolio composition.

## Standard Chartered PLC – Capital continued

### Market risk

Market risk RWA increased by \$1.6 billion, or 8.0 per cent, to \$21.9 billion from 31 December 2014, due mainly to a change in the treatment of Standard Chartered Bank (China) Limited, where market risk capital requirements are now calculated on a standalone basis, adding \$1.3 billion to Group RWA

### Operational risk

RWA increased by \$0.5 billion to \$35.6 billion, due to the change in income over a rolling three-year time horizon with 2014 income replacing 2011. The \$1 billion decrease in Commercial Clients and corresponding increase in Retail Clients since December 2014 is due to a rebasing of the analysis of income across the segments.

### Risk-weighted assets by business

|                                   | 2015                     |                               |                          |                         |
|-----------------------------------|--------------------------|-------------------------------|--------------------------|-------------------------|
|                                   | Credit risk<br>\$million | Operational risk<br>\$million | Market risk<br>\$million | Total risk<br>\$million |
| Corporate & Institutional Clients | 169,979                  | 22,586                        | 21,913                   | 214,478                 |
| Commercial Clients                | 18,553                   | 1,759                         | -                        | 20,312                  |
| Private Banking Clients           | 7,101                    | 1,015                         | -                        | 8,116                   |
| Retail Clients                    | 49,769                   | 10,250                        | -                        | 60,019                  |
| <b>Total risk-weighted assets</b> | <b>245,402</b>           | <b>35,610</b>                 | <b>21,913</b>            | <b>302,925</b>          |

  

|                                   | 2014                     |                               |                          |                         |
|-----------------------------------|--------------------------|-------------------------------|--------------------------|-------------------------|
|                                   | Credit risk<br>\$million | Operational risk<br>\$million | Market risk<br>\$million | Total risk<br>\$million |
| Corporate & Institutional Clients | 201,978                  | 22,322                        | 20,295                   | 244,595                 |
| Commercial Clients                | 21,874                   | 2,778                         | -                        | 24,652                  |
| Private Banking Clients           | 6,507                    | 902                           | -                        | 7,409                   |
| Retail Clients                    | 55,887                   | 9,105                         | -                        | 64,992                  |
| <b>Total risk-weighted assets</b> | <b>286,246</b>           | <b>35,107</b>                 | <b>20,295</b>            | <b>341,648</b>          |

### Risk weighted assets by geographic region

|                                   | 2015           | 2014           |
|-----------------------------------|----------------|----------------|
|                                   | \$million      | \$million      |
| Greater China                     | 57,536         | 66,585         |
| North East Asia                   | 19,752         | 23,990         |
| South Asia                        | 23,384         | 26,522         |
| ASEAN                             | 70,406         | 82,603         |
| MENAP                             | 27,022         | 29,775         |
| Africa                            | 19,156         | 20,289         |
| Americas                          | 12,784         | 13,692         |
| Europe                            | 82,921         | 89,592         |
|                                   | 312,961        | 353,048        |
| Netting balances <sup>1</sup>     | (10,036)       | (11,400)       |
| <b>Total risk weighted assets</b> | <b>302,925</b> | <b>341,648</b> |



## Standard Chartered PLC – Capital continued

### Movement in risk weighted assets

|  | Credit risk                       |                    |                         |                |           |                  |             |            |
|--|-----------------------------------|--------------------|-------------------------|----------------|-----------|------------------|-------------|------------|
|  | Corporate & Institutional Clients | Commercial Clients | Private Banking Clients | Retail Clients | Total     | Operational risk | Market risk | Total risk |
|  | \$million                         | \$million          | \$million               | \$million      | \$million | \$million        | \$million   | \$million  |
| As at 1 January 2014                     | 193,968                           | 22,162             | 4,829                   | 60,297         | 281,256   | 33,289           | 16,751      | 331,296    |
| Assets growth/(decline)                  | 2,614                             | (596)              | 379                     | (929)          | 1,468     | -                | -           | 1,468      |
| Credit migration                         | 6,780                             | 1,491              | (25)                    | (1,846)        | 6,400     | -                | -           | 6,400      |
| Risk-weighted assets efficiencies        | (10,393)                          | (1,656)            | 479                     | (596)          | (12,166)  | -                | -           | (12,166)   |
| Model, methodology and policy changes    | 12,574                            | 863                | 956                     | 502            | 14,895    | -                | -           | 14,895     |
| Acquisitions and disposals               | -                                 | -                  | -                       | 331            | 331       | -                | -           | 331        |
| Foreign currency translation differences | (3,565)                           | (390)              | (111)                   | (1,872)        | (5,938)   | -                | -           | (5,938)    |
| Non credit risk movements                | -                                 | -                  | -                       | -              | -         | 1,818            | 3,544       | 5,362      |
| As at 31 December 2014                   | 201,978                           | 21,874             | 6,507                   | 55,887         | 286,246   | 35,107           | 20,295      | 341,648    |
| Assets (decline)/growth                  | (7,527)                           | (1,508)            | 383                     | (904)          | (9,556)   | -                | -           | (9,556)    |
| Credit migration                         | (4,332)                           | (1,005)            | -                       | 22             | (5,315)   | -                | -           | (5,315)    |
| Risk-weighted assets efficiencies        | (17,429)                          | -                  | 138                     | -              | (17,291)  | -                | -           | (17,291)   |
| Model, methodology and policy changes    | 3,533                             | (133)              | 266                     | (843)          | 2,823     | -                | 1,300       | 4,123      |
| Acquisitions and disposals               | (1,108)                           | -                  | -                       | (1,615)        | (2,723)   | -                | -           | (2,723)    |
| Foreign currency translation differences | (5,136)                           | (675)              | (193)                   | (2,778)        | (8,782)   | -                | -           | (8,782)    |
| Non credit risk movements                | -                                 | -                  | -                       | -              | -         | 503              | 318         | 821        |
| As at 31 December 2015                   | 169,979                           | 18,553             | 7,101                   | 49,769         | 245,402   | 35,610           | 21,913      | 302,925    |

### Leverage ratio

Final adjustments to the definition and calibration of the leverage ratio in the EU will be made during the first half of 2017, with a view to migrating the leverage ratio to a binding Pillar 1 requirement by 1 January 2018.

In the UK, the Financial Policy Committee (FPC) has finalised the UK leverage ratio framework. Based on this, UK banks are subject to a minimum leverage ratio of 3 per cent, together with supplementary leverage ratio buffers set at 35 per cent of the corresponding global systemically important institutions (G-SIIs) and countercyclical buffers, as those buffers are applicable to individual banks and as phased in. As a result, the Group's current expected leverage ratio requirement for 2019 will be 3.37 per cent, which comprises: (i) the minimum 3 per cent; (ii) a 0.35 per cent G-SII leverage ratio buffer; and (iii) a 0.02 per cent countercyclical leverage ratio buffer, assuming existing countercyclical capital buffer rates and a constant proportion of exposures to the relevant jurisdictions.

The basis of calculating the leverage ratio uses the end-point Capital Requirements Regulation (CRR) definition of Tier 1 for the numerator and the CRR definition of leverage exposure as the denominator.

The Group's current leverage ratio of 5.5 per cent is above the current minimum requirement. The increase of 1 percentage point in the leverage ratio since December 2014 is the result of the increase in Tier 1 capital from the 2015 rights issue and AT1 issuance, and the decrease in the exposure measure.

|  | 2015<br>\$million | 2014<br>\$million |
|--|-------------------|-------------------|
| Tier 1 capital (transitional)                        | 42,773            | 38,799            |
| Additional Tier 1 capital subject to phase out       | (2,624)           | (2,786)           |
| Regulatory adjustments relating to unrealised gains  | -                 | 481               |
| <b>Tier 1 capital (end point)</b>                    | <b>40,149</b>     | <b>36,494</b>     |
| Derivative financial instruments                     | 63,143            | 65,834            |
| Derivative cash collateral                           | 13,430            | 10,311            |
| Securities financing transactions                    | 36,765            | 29,856            |
| Loans and advances and other assets                  | 527,145           | 619,913           |
| <b>Total on-balance sheet assets</b>                 | <b>640,483</b>    | <b>725,914</b>    |
| Regulatory consolidation adjustments                 | 12,826            | 15,008            |
| <b>Derivatives adjustments</b>                       |                   |                   |
| Derivatives netting                                  | (38,766)          | (43,735)          |
| Adjustments to cash collateral                       | (23,252)          | (17,316)          |
| Net written credit protection                        | 8,922             | 7,885             |
| Potential future exposure on derivatives             | 58,379            | 46,254            |
| <b>Total derivatives adjustments</b>                 | <b>5,283</b>      | <b>(6,912)</b>    |
| Counterparty risk leverage exposure measure for SFTs | 11,299            | 9,963             |
| Regulatory deductions and other adjustments          | (6,331)           | (7,701)           |
| Off-balance sheet items                              | 65,660            | 67,042            |
| <b>Total leverage exposure (end point)</b>           | <b>729,220</b>    | <b>803,314</b>    |
| <b>Leverage ratio (end point)</b>                    | <b>5.5%</b>       | <b>4.5%</b>       |

## Standard Chartered PLC – Capital continued

### Advanced internal ratings-based models

Since 1 January 2008, the Group has been using the internal ratings-based (IRB) approach for the calculation of credit risk capital requirements with the approval of our relevant regulators. For a market risk Internal Model Approach (IMA), where IMA permission has been granted by our relevant regulators, we use value at risk (VaR) for the calculation of our market risk capital requirements. Where our market risk exposures are not included in a regulatory IMA permission we apply the standardised approach as specified by the relevant regulator. We apply the standardised approach for determining the capital requirements for operational risk.

The PRA has proposed changes to the treatment of certain exposures where the country-specific default experience is not deemed sufficient for modelling purposes, including the application of various loss given default (LGD) floors based on the foundation IRB (FIRB) approach. Such changes are likely to result in an increase in the RWA for these exposures, with the ultimate impact dependent on PRA approval of the revisions to the relevant models.

In December 2014, the Basel Committee on Banking Supervision (BCBS) released two consultative documents (CD306 and CD307) on: (i) the design of a capital floor framework based on standardised approaches for credit, market and operational risk; and (ii) revisions to the standardised approach for credit risk. In December 2015, the BCBS released a second consultation on the revisions to the standardised approaches for credit risk, significantly modifying the initial proposal following industry feedback. This consultation will be complemented by a Quantitative Impact Study in the first half of 2016.

The proposed capital floor framework will be based on the finalised versions of the standardised approaches, and is expected to replace the existing transitional capital floor based on the Basel I framework. The calibration of the floor is expected to be completed in the second half of 2016 alongside the BCBS's work on finalising the revised standardised approaches to credit risk, market risk and operational risk. Such changes could result in an increase in the RWA calculated by such approaches, but the eventual impact will depend on the final outcome of the consultation process and the calibration of the capital floor. Regulators have expressed the expectation that the changes would not significantly add to system-wide capital requirements.

The Group actively participates in the consultation process. The BCBS intends to publish the final standards, including its calibration and implementation arrangements, at the end of 2016. The extent to which the EU and/or the PRA will adopt the BCBS proposals is unknown.

### CET1 requirements

The Group's capital requirement may be subject to change over time. Based on the Group's understanding of the rules, its current expected CET1 requirement for 2019 is 9.1 per cent, comprising:

- A minimum CET1 requirement of 4.5 per cent from 1 January 2015
- A Pillar 2A CET1 requirement of around 1 per cent (subject to ongoing PRA review)
- A capital conservation buffer of 2.5 per cent by 1 January 2019
- A G-SII buffer of 1 per cent by 1 January 2019
- A countercyclical buffer of around 0.1 per cent by January 2016

Any countercyclical capital buffer applied to the Group would increase the Group's minimum CET1 requirement. The Group's countercyclical capital buffer requirement will be determined by applying various country-specific countercyclical buffer rates to the Group's qualifying credit exposures in the relevant country (based on the jurisdiction of the obligor) on a weighted average basis.

The Hong Kong Monetary Authority (HKMA) announced a Hong Kong countercyclical capital buffer rate of 0.625 per cent applied from January 2016. In the UK, the FPC noted that the PRA would reciprocate the HKMA's countercyclical buffer rate of 0.625 per cent on Hong Kong exposures. This results in an estimated 7 bps countercyclical capital buffer from January 2016, assuming no change in the countercyclical capital buffer rate in Hong Kong and a constant proportion of Hong Kong exposures in the Group.

The Group also expects to continue to operate with a prudent management buffer above the minimum capital requirement. The UK authorities have yet to finalise the rules relating to systemic risk buffers, the PRA buffer assessment and additional sectoral capital requirements.

### Pillar 2

Pillar 2A captures risks not addressed adequately by Pillar 1 capital requirements. These risks include (but are not limited to): pension obligation risk, interest rate risk in the non-trading book, credit concentration risk and operational risk. From 1 January 2015, UK banks were required to hold at least 56 per cent of their Pillar 2A buffers in CET1 and at least 75 per cent in Tier 1.

## Standard Chartered PLC – Capital continued

The Group's current Pillar 2A guidance is equivalent to 172 bps of RWA, as at 31 December 2015, of which at least 97 bps must be held in CET1. The Group's Pillar 2A guidance is expected to vary over time.

Pillar 2B currently comprises the capital planning buffer (CPB), which ensures the Group remains well-capitalised during periods of stress. From 2016, the CPB will transition to a PRA buffer. When setting the PRA buffer, the Group understands the PRA will consider results from the Bank of England (BoE) stress test, the biennial exploratory scenario, and any bank-specific scenarios undertaken as part of the Internal Capital Adequacy Assessment Processes (ICAAPs) together, as well as other relevant information. The PRA buffer is in addition to existing CRD IV buffer requirements to the extent that the PRA does not consider they adequately address the Group's risk profile. The PRA buffer is not expected to be disclosed.

### Global Systemically Important Institutions

The Group has been designated a G-SII by the Financial Stability Board (FSB) since November 2012. The Group has been categorised with a 1 per cent G-SII CET1 requirement, which will be phased in over the period from 1 January 2016 to 1 January 2019 at a rate of 0.25 per cent per year.

The Group's latest G-SII disclosure 'Standard Chartered's G-SII indicators' can be found at [investors.sc.com/en/showresults.cfm?CategoryID=360](http://investors.sc.com/en/showresults.cfm?CategoryID=360)

### Loss Absorbing Capacity

The FSB published its final Total Loss Absorbing Capacity (TLAC) standard in November 2015, setting out principles on the loss absorbing and recapitalisation capacity of G-SIIs in resolution and a term sheet for an international standard on the characteristics and levels of TLAC for G-SIIs.

The Group will also be set a minimum MREL requirement under the EU Bank Recovery and Resolution Directive. In December 2015, the BoE published a consultation paper on its approach to setting MREL, which confirmed that the BoE intends to use its power to set MREL to implement the FSB's TLAC standard. MREL will comprise a loss absorption amount and a recapitalisation amount. For UK G-SIIs, the loss absorption amount is expected to be the firm's minimum regulatory capital requirements (Pillar 1 plus Pillar 2A, or the leverage ratio or Basel I floor if higher); the BoE intends to exclude capital buffers from its calibration of the loss absorption amount. The recapitalisation amount is expected to be the same as the loss absorption amount, but can be adjusted. The final draft EBA technical standards on MREL were published on 3 July 2015, but have not yet been adopted by the European Commission.

The PRA also published a consultation paper on the relationship between MREL and regulatory buffers. Based on this consultation, CET1 used to meet minimum MREL requirements cannot be used to meet the combined buffer.

Based on the Group's understanding, on the basis set out above, the Group's MREL requirement would be around 19.4 per cent and 23.0 per cent when including the capital conservation buffer, the G-SII buffer and the currently known countercyclical buffer.

The Group estimates that, as at 31 December 2015, it has MREL eligible instruments of approximately 24 per cent of RWA and around 10 per cent of leverage exposure. This estimate includes:

- Total regulatory capital (excluding non-equity capital issued by foreign subsidiaries)
- Senior liabilities issued by Standard Chartered PLC with at least one year remaining to maturity
- That part of subordinated debt (issued by Standard Chartered PLC or Standard Chartered Bank) with at least one year remaining to maturity, which is outside the scope of regulatory capital recognition due to: (i) amortisation over the last five years of the relevant instrument's duration; or (ii) other regulatory de-recognition

### Bank of England stress tests

In 2015, the PRA completed its second concurrent stress test of the UK banking system. The focus of the 2015 BoE stress tests was external risks to the UK and, accordingly, the stress parameters were more focused on emerging markets than the UK-based test applied in 2014. Consequently, the stress parameters including GDP levels, asset price and currency movements applicable to some of the Group's markets such as China and Korea were more severe than in the 2014 stress test. The 2015 stress test was based on the balance sheet as at 31 December 2014. The BoE released results of the 2015 stress tests in December 2015. The Group's capital position remained above the threshold CET1 ratio of 4.5 per cent and met the threshold leverage ratio of 3.0 per cent in the hypothetical stress scenario with a CET1 ratio of 5.4 per cent and a 3.0 per cent leverage ratio, both after strategic management actions. The Tier 1 ratio was 5.9 per cent after strategic management action compared to the minimum Tier 1 requirement of 6.0 per cent. The PRA Board did not require the Group to submit a revised capital plan, in light of steps taken to strengthen its capital position in 2015, including an increase in the CET1 ratio to 11.5 per cent as at 30 June 2015, the issuance of \$2 billion AT1 securities in April 2015 and the \$5 billion rights issue. The Group believes that the results of the BoE stress tests demonstrate its resilience to a severe slowdown across the key markets in which it operates.

In October 2015, the BoE published its Approach to Stress Testing the UK Banking System, which outlined the CET1 threshold for future stress tests. Based on the requirements set out in that publication, the Group currently expects its CET1 threshold for the 2016 BoE stress test to be 5.8 per cent.

## Standard Chartered PLC – Capital continued

### Capital management and governance

The Group seeks to maintain a strong capital base to support the development of its business and to meet regulatory capital and leverage requirements.

Strategic, business and capital plans are drawn up covering a five-year horizon and are approved by the Board. The capital plan ensures that adequate levels of capital and an efficient mix of the different components of capital are maintained to support our strategy and business plans. Group Treasury is responsible for the ongoing assessment of the demand for capital and the updating of the Group's capital plan.

The capital plan takes the following into account:

- Current regulatory capital requirements and our assessment of future standards
- Demand for capital due to business outlook, loan impairment outlook and potential market shocks or stresses
- Available supply of capital and capital raising options

The Group formulates a capital plan with the help of internal models and other quantitative techniques. The Group uses a capital model to assess the capital demand for material risks and supports this with our internal capital adequacy assessment. Other internal models help to estimate potential future losses arising from credit, market and other risks and, using regulatory formulae, the amount of capital required to support them. In addition, the models enable the Group to gain an enhanced understanding of its risk profile, for example by identifying potential concentrations and assessing the impact of portfolio management actions. Stress testing and scenario analysis are an integral part of capital planning, and are used to ensure that the Group's internal capital adequacy assessment considers the impact of extreme but plausible scenarios on its risk profile and capital position. They provide an insight into the potential impact of significant adverse events and how these could be mitigated through appropriate management actions. The capital modelling process is a key part of our management discipline.

A strong governance and process framework is embedded in our capital planning and assessment methodology. The key capital management committee is the Group Asset and Liability Committee (GALCO). In 2015, members of the GALCO included the Group Executive Directors and the Group Chief Risk Officer, with senior attendees from Group Treasury, Finance, Risk and the businesses. The GALCO regularly reviews the capital plan and approves capital management policies and guidelines.

Following a review in 2015, a change to the key capital management committees is being implemented in 2016. The GALCO membership will be expanded to include the Group Treasurer and the Deputy Group Chief Financial Officer, as well as other senior members from the Management Team and the businesses. The remit of the GALCO will not change significantly, however certain policies currently approved by the GALCO will fall under the remit of the Group Chief Financial Officer with input from the Group Treasurer. The responsibilities previously delegated from GALCO to the Capital Management Committee will be moved to the newly created Operational Balance Sheet Committee (OBSC), which will focus on ensuring that in executing the business strategy, the Group operates within internally approved and externally required capital, loss absorbing capacity, liquidity and leverage risk tolerances.

The Group's capital position, including its relationship to the Group's risk appetite statement, is regularly considered by the Board Risk Committee. At a country level, capital is monitored by the Country Asset and Liability Committee. Appropriate policies are in place governing the transfer of capital within the Group.

The Group's view is that, in light of the uncertain economic environment and continuing uncertainty as to the end state for banks' regulatory capital and other loss absorbency requirements, it is appropriate to remain both strongly capitalised and well above regulatory requirements.

The capital that the Group is required to hold is determined by its balance sheet, off-balance sheet, counterparty and other risk exposures. Further detail on counterparty and risk exposures is included in the Risk and capital review on page 53.

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

Standard Chartered Bank is authorised by the PRA and regulated by the Financial Conduct Authority and the PRA as Standard Chartered Bank (Solo Consolidated). The Group operates through branches and a number of significant subsidiaries including Standard Chartered Bank, Standard Chartered Bank (HK) Limited and Standard Chartered Bank Korea Limited. These subsidiaries are subject to local regulation and, therefore may be subject to different rules relating to capital and RWA requirements and the implementation and phasing of Basel III. The Group's 2015 Pillar 3 Disclosures provide further details on these subsidiaries.

## Standard Chartered PLC - Related party transactions

### Directors and officers

Details of directors' remuneration and interests in shares are disclosed in the Directors' remuneration report of the Annual accounts.

IAS 24 'Related party disclosures' requires the following additional information for key management compensation. Key management comprises non-executive directors, executive directors of Standard Chartered PLC, the Court Directors of Standard Chartered Bank and the Persons Discharging Managerial Responsibilities (PDMR) of Standard Chartered PLC.

|   | 2015<br>\$million | 2014<br>\$million |
|---|-------------------|-------------------|
| Salaries, allowances and benefits in kind | 42                | 28                |
| Pension contributions                     | 3                 | 9                 |
| Bonuses paid or receivable                | -                 | 1                 |
| Share based payments                      | 40                | 37                |
|   | 85                | 75                |

### Transactions with directors and others

At 31 December 2015, the total amounts to be disclosed under the Companies Act 2006 (the Act) and the Listing Rules of the Hong Kong Stock Exchange Limited (HK Listing Rules) about loans to directors were as follows:

|           | 2015   |           | 2014   |           |
|-----------|--------|-----------|--------|-----------|
|           | Number | \$million | Number | \$million |
| Directors | 1      | -         | 3      | 6         |

The loan transaction provided to the director of Standard Chartered PLC was a connected transaction under Chapter 14A of the HK Listing Rule. It was fully exempt as financial assistance under Rule 14A.87(1), as it was provided in our ordinary and usual course of business and on normal commercial terms.

As at 31 December 2015, Standard Chartered Bank had created a charge over \$74 million (2014: \$68 million) of cash assets in favour of the independent trustee of its employer financed retirement benefit scheme.

Other than as disclosed in the Annual Report and Accounts, there were no other transactions, arrangements or agreements outstanding for any director, connected person or officer of the Company which have to be disclosed under the Act, the rules of the UK Listing Authority or the HK Listing Rules.

### Company

The Company has received \$627 million (2014: \$633 million) of interest income from Standard Chartered Bank. The Company issues debt externally and lends proceeds to Group companies. At 31 December 2015, it had loans to and debt instruments issued by Standard Chartered Bank of \$16,209 million (2014: \$13,308 million), derivative financial assets of \$639 million (2014: \$865million) and \$1,438 million derivative financial liabilities (2014: \$477 million) with Standard Chartered Bank, loans of \$130 million (2014: \$130 million) to Standard Chartered Holdings Limited. At 31 December 2015, it had loans to Standard Chartered International Holdings of \$1,801 million ((2014: \$1,925million).

The Company has an agreement with Standard Chartered Bank that in the event of Standard Chartered Bank defaulting on its debt coupon interest payments, where the terms of such debt requires it, the Company shall issue shares as settlement for non-payment of the coupon interest.

### Associate and Joint Ventures

|  | 2015                          |                                   |                               |                              | 2014                                       |                                   |                               |                              |
|--|-------------------------------|-----------------------------------|-------------------------------|------------------------------|--|-----------------------------------|-------------------------------|------------------------------|
|  | China Bohai Bank<br>\$million | Asia Commercial Bank<br>\$million | Clifford Capital<br>\$million | PT Bank Permata<br>\$million | China Bohai Bank <sup>1</sup><br>\$million | Asia Commercial Bank<br>\$million | Clifford Capital<br>\$million | PT Bank Permata<br>\$million |
| <b>Assets</b>                                |                               |                                   |                               |                              |  |                                   |                               |                              |
| Loans and advances                           | 11                            | -                                 | -                             | 69                           | -  | -                                 | 30                            | 136                          |
| Debt securities                              | -                             | -                                 | -                             | 112                          | -  | -                                 | -                             | 120                          |
| Derivative assets                            | 18                            | -                                 | 6                             | -                            | 18   | -                                 | -                             | -                            |
| <b>Total assets</b>                          | <b>29</b>                     | <b>-</b>                          | <b>6</b>                      | <b>181</b>                   | <b>18</b>                                  | <b>-</b>                          | <b>30</b>                     | <b>256</b>                   |
| <b>Liabilities</b>                           |                               |                                   |                               |                              |  |                                   |                               |                              |
| Deposits                                     | 70                            | -                                 | -                             | 16                           | 89   | -                                 | 4                             | 40                           |
| Derivative liabilities                       | 3                             | -                                 | -                             | -                            | 1  | -                                 | -                             | -                            |
| <b>Total liabilities</b>                     | <b>73</b>                     | <b>-</b>                          | <b>-</b>                      | <b>16</b>                    | <b>90</b>                                  | <b>-</b>                          | <b>4</b>                      | <b>40</b>                    |
| <b>Loan commitments and other guarantees</b> | <b>-</b>                      | <b>-</b>                          | <b>50</b>                     | <b>-</b>                     | <b>-</b>                                   | <b>-</b>                          | <b>50</b>                     | <b>-</b>                     |

<sup>1</sup> Balances have been restated

## Standard Chartered PLC – Statement of directors’ responsibilities

The directors are responsible for preparing the Annual Report and Accounts and the Group and Company financial statements in accordance with applicable law and regulations.

Company law requires the directors to prepare the Group and Company financial statements for each financial year. Under that law, they are required to prepare the Group financial statements in accordance with International Financial Reporting Standards (IFRS), as adopted by the European Union (EU) and applicable law, and have elected to prepare the Company financial statements on the same basis.

Under company law, the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Company and of their profit or loss for that year. In preparing each of the Group and Company financial statements, the directors are required to:

- Select suitable accounting policies and then apply them consistently
- Make judgements and estimates that are reasonable and prudent
- State whether they have been prepared in accordance with IFRS as adopted by the EU
- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group and the Company will continue in business

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company’s transactions, and disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that its financial statements comply with the Companies Act 2006. They have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group and to prevent and detect fraud and other irregularities.

Under applicable law and regulations, the directors are also responsible for preparing a Directors’ report, Strategic report, Directors’ remuneration report and Corporate governance statement that comply with that law and those regulations.

The directors are responsible for the maintenance and integrity of the corporate and financial information included on the company’s website. Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

The directors consider that the Annual Report and Accounts, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the position and performance, strategy and business model of the Group.

### Directors’ responsibility statement

We confirm that to the best of our knowledge:

- The financial statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation taken as a whole
- The Strategic report includes a fair review of the development and performance of the business and the position of the Company and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face

By order of the Board

Andy Halford  
*Group Chief Financial Officer*  
23 February 2016

As of the date of this announcement, the Board of Directors of Standard Chartered PLC comprises:

#### *Chairman:*

Sir John Wilfred Peace

#### *Executive Directors:*

Mr William Thomas Winters, CBE; Mr Andrew Nigel Halford and Mr Alun Michael Guest Rees (stepping down on 30 April 2016)

#### *Independent Non-Executive Directors:*

Mr Om Prakash Bhatt; Dr Kurt Michael Campbell; Dr Louis Chi-Yan Cheung; Mr David Philbrick Conner; Dr Byron Elmer Grote; Dr Han Seung-soo, KBE; Mrs Christine Mary Hodgson; Ms Gay Huey Evans, OBE; Mr Naguib Kheraj (Senior Independent Director); Mr Simon Jonathan Lowth and Ms Jasmine Mary Whitbread