Cautionary statement regarding forward-looking statements

The *Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 ('Pillar 3 Disclosures 2011')* contains certain forward-looking statements with respect to HSBC's financial condition, results of operations and business.

Statements that are not historical facts, including statements about HSBC's beliefs and expectations, are forward-looking statements. Words such as 'expects', 'anticipates', 'intends', 'plans', 'believes', 'seeks', 'estimates', 'potential' and 'reasonably possible', variations of these words and similar expressions are intended to identify forward-looking statements. These statements are based on current plans, estimates and projections, and therefore undue reliance should not be placed on them. Forward-looking statements speak only as of the date they are made. HSBC makes no commitment to revise or update any forward-looking statements to reflect events or circumstances occurring or existing after the date of any forward-looking statements.

Written and/or oral forward-looking statements may also be made in the periodic reports to the US Securities and Exchange Commission, summary financial statements to shareholders, proxy statements, offering circulars and prospectuses, press releases and other written materials, and in oral statements made by HSBC's Directors, officers or employees to third parties, including financial analysts.

Forward-looking statements involve inherent risks and uncertainties. Readers are cautioned that a number of factors could cause actual results to differ, in some instances materially, from those anticipated or implied in any forward-looking statement. These factors include changes in general economic conditions in the markets in which we operate, changes in government policy and regulation and factors specific to HSBC.

Certain defined terms

Unless the context requires otherwise, 'HSBC Holdings' means HSBC Holdings plc and 'HSBC', the 'Group', 'we', 'us' and 'our' refers to HSBC Holdings together with its subsidiaries. Within this document the Hong Kong Special Administrative Region of the People's Republic of China is referred to as 'Hong Kong'. When used in the terms 'shareholders' equity' and 'total shareholders' equity', 'shareholders' means holders of HSBC Holdings ordinary shares and those preference shares classified as equity. The abbreviations 'US$m' and 'US$bn' represent millions and billions (thousands of millions) of US dollars, respectively.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011

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Tables

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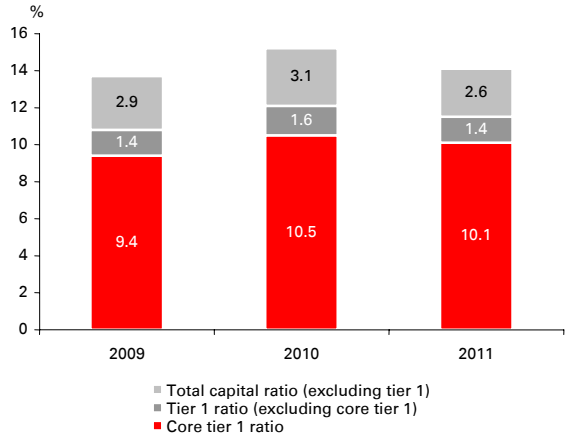
Key regulatory data

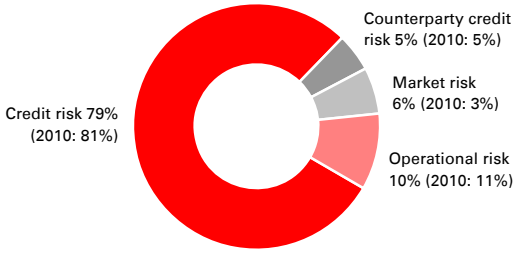
Capital ratio at 31 December

Components



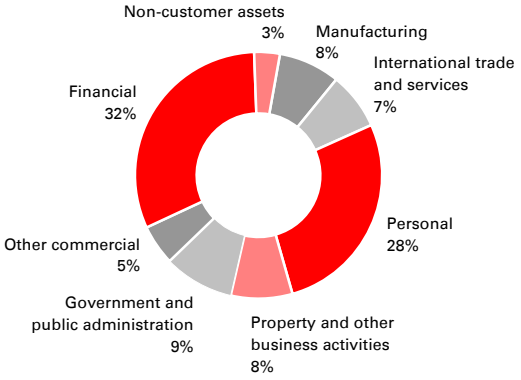
Risk-weighted assets ('RWA's) at 31 December 2011

By composition



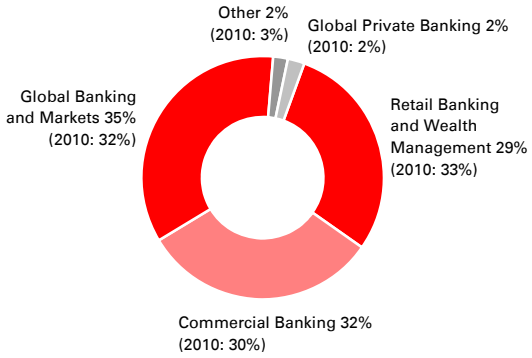
Basel II exposure at 31 December 2011

Credit risk by industry sector



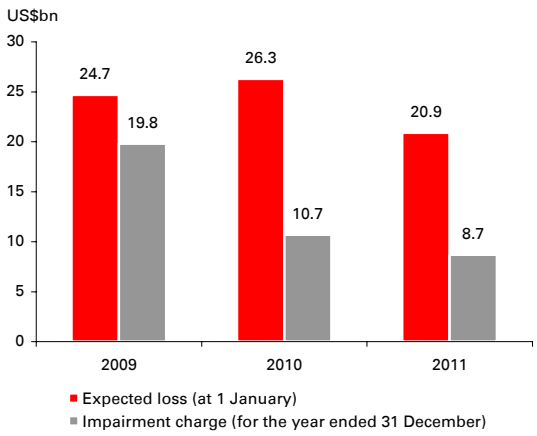
RWAs at 31 December 2011

By global business



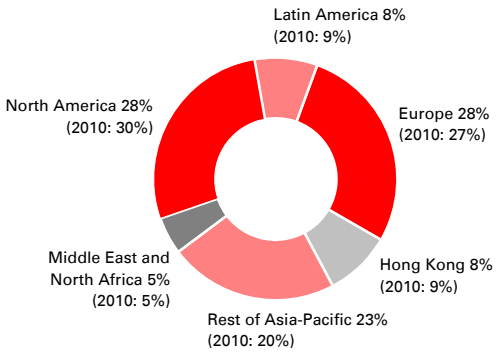
Expected loss and impairment charges

Comparison



RWAs at 31 December 2011

By geographical region



Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Introduction

HSBC is one of the world's largest banking and financial services organisations. We serve around 89 million customers through our four global businesses: Retail Banking and Wealth Management, Commercial Banking, Global Banking and Markets, and Global Private Banking.

Our network of around 7,200 offices covers 85 countries and territories in six geographical regions: Europe, Hong Kong, Rest of Asia-Pacific, Middle East and North Africa ('MENA'), North America and Latin America.

Listed on the London, Hong Kong, New York, Paris and Bermuda stock exchanges, shares in HSBC Holdings plc are held by over 220,000 shareholders in 132 countries and territories.

Details of the Group's principal activities, business and operating models and strategic direction may be found on page 10 of the Annual Report and Accounts 2011.

Basel II

The United Kingdom ('UK') Financial Services Authority ('FSA') supervises HSBC on a consolidated basis, and therefore receives information on the capital adequacy of, and sets capital requirements for, the Group as a whole. Individual banking subsidiaries are directly regulated by their local banking supervisors, who set and monitor their capital adequacy requirements.

We calculate capital at a Group level using the Basel II framework of the Basel Committee on Banking Supervision ('Basel Committee') as implemented by the FSA. However, local regulators are at different stages of implementation and local reporting may still be on a Basel I basis, notably in the United States ('US'). In most jurisdictions, non-banking financial subsidiaries are also subject to the supervision and capital requirements of local regulatory authorities.

Basel II is structured around three 'pillars': minimum capital requirements, supervisory review process and market discipline. The Capital Requirements Directive ('CRD') implemented Basel II in the European Union ('EU') and the FSA then gave effect to the CRD by including the requirements of the CRD in its own rulebooks.

Pillar 3 disclosures 2011

Pillar 3, market discipline, complements the minimum capital requirements and the supervisory review process. Its aim is to develop disclosures by banks which allow market participants to assess the scope of application of Basel II, capital, particular risk exposures and risk assessment processes, and hence the capital adequacy of the institution. Under the Pillar 3 framework all material risks must be disclosed, enabling a comprehensive view of the institution's risk profile.

All material and non-proprietary information required by Pillar 3 is included in the *Pillar 3 Disclosures 2011*, which comprise both quantitative and qualitative information and are provided at the HSBC Group consolidated level. The FSA permits certain Pillar 3 requirements to be satisfied by inclusion within the financial statements.

Where we adopt this approach, references are provided to the relevant pages of the Annual Report and Accounts 2011.

Principal changes to disclosures

The principal changes to our *Pillar 3 Disclosures 2011*, compared with the previous year, are those commonly known as Basel 2.5, implemented in the EU via CRD III, which increased the capital and disclosure requirements for re-securitisation exposures and market risk with effect from 31 December 2011. Further details are set out from page 34. In addition, we have replaced a table of counterparty sector exposures with a more granular industry sector analysis (page 18), and further developed our disclosures on remuneration (page 45).

Movement in risk-weighted assets in 2011

RWAs increased by US$106.4bn or 10% in 2011. Exchange rate differences caused a net reduction in RWAs of around US$9bn in the year, and the remaining increase in RWAs of US$115bn arose mainly in credit risk and market risk.

RWAs increased by approximately US$50bn as a result of the introduction of Basel 2.5, net of mitigating actions undertaken by management. Of this increase, around US$40bn was in market risk, of which the largest component was stressed VAR. Higher risk weights on re-securitisations increased credit risk RWAs by around US$10bn, primarily impacting the GB&M legacy portfolios.

The remaining increase in credit risk RWAs largely reflected growth in our global businesses, notably in Commercial Banking, and also included an increase in loan balances in our mainland China associates. Further details of the movement in our RWAs in 2011 may be found on page 211 of the *Annual Report and Accounts 2011*.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Future developments

The regulation of financial institutions continues to undergo significant change. In the areas of risk and capital management, considerable progress has been made in implementing the G20 governments' agenda to increase the stability and resilience of the financial system, and further major changes in regulation are foreseen.

Following Basel Committee issuance in December 2010 of 'Basel III' rules, the European Commission issued in July 2011 its related implementing proposals, known as CRD IV, comprising a Directive and Regulation which together will supersede earlier Directives. These proposals are currently under review within the European legislative process, which is expected to conclude in 2012.

Significant regulatory matters within the scope of CRD IV include quality and quantity of capital, counterparty credit risk, liquidity and funding, capital buffers and leverage. The new requirements will be phased in from 1 January 2013, as shown in the table below, with many areas subject to development of technical standards by the European Banking Authority and full implementation required by 1 January 2019.

Table 1: Basel III phase-in arrangements

	2013 %	2014 %	2015 %	2016 %	2017 %	2018 %	2019 %
Minimum common equity capital ratio	3.5	4.0	4.5	4.5	4.5	4.5	4.5
Capital conservation buffer	–	–	–	0.625	1.25	1.875	2.5
Minimum common equity plus capital conservation buffer	3.5	4.0	4.5	5.125	5.75	6.375	7.0
Minimum tier 1 ratio	4.5	5.5	6.0	6.0	6.0	6.0	6.0
Minimum total capital plus conservation buffer	8.0	8.0	8.0	8.625	9.25	9.875	10.5

In September 2011, the UK Independent Commission on Banking published its final Report, to which the Government responded before year end. At a global level, in November, the Basel Committee issued its final rules for the enhanced supervision of institutions designated global systemically important banks ('G-SIBs'). The capital requirements of HSBC, as a G-SIB, could be significantly affected by these measures, which are in addition to those expected under CRD IV.

An overview of the above, together with related developments on the G20 agenda for financial sector regulation, may be found in the discussion of macro-prudential and regulatory risks on page 100 of the *Annual Report and Accounts 2011*. An assessment of the impact of Basel III, measures for G-SIBs and various mitigating actions by management on our capital position and our target core tier 1 ratio may be found in the 'Capital' section on page 212 of the *Annual Report and Accounts 2011*.

Frequency

We publish comprehensive Pillar 3 disclosures annually on the HSBC internet site, with summarised regulatory capital information provided in our interim reports and management statements.

Comparison with the *Annual Report and Accounts 2011*

The *Pillar 3 Disclosures 2011* have been prepared in accordance with regulatory capital adequacy concepts and rules, rather than in accordance with International Financial Reporting Standards ('IFRS's). Therefore, some information in the *Pillar 3 Disclosures 2011* is not directly comparable with the financial information in the *Annual Report and Accounts 2011*. This is most pronounced for the credit risk disclosures, where credit exposure is defined as the amount at risk that is estimated by the Group under specified Basel II parameters. This differs from similar information in the *Annual Report and Accounts 2011*, which is mainly reported at the balance sheet date and therefore does not reflect the likelihood of future drawings of committed credit lines.

Verification

The *Pillar 3 Disclosures 2011* have been appropriately verified internally, but have not been audited by the Group's external auditor.

Significant subsidiaries

Links to the financial information of significant subsidiaries, including capital resources and requirements, are available on our investor relations website page www.hsbc.com/investor-relations/financial-results/hsbc-group-companies.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Consolidation basis

The basis of consolidation for financial accounting purposes is described on page 292 of the *Annual Report and Accounts 2011* and differs from that used for regulatory purposes. Investments in banking associates are equity accounted in the financial accounting consolidation, whereas their exposures are proportionally consolidated for regulatory purposes. Subsidiaries and associates engaged in insurance and non-financial activities are excluded from the regulatory consolidation and are deducted from regulatory capital. The regulatory consolidation does not include special purpose entities ('SPE's) where significant risk has been transferred to third parties. Exposures to these SPEs are risk-weighted as securitisation positions for regulatory purposes.

Scope of Basel II permissions

Credit risk capital requirements

Basel II applies three approaches of increasing sophistication to the calculation of Pillar 1 credit risk capital requirements. The most basic level, the standardised approach, requires banks to use external credit ratings to determine the risk weightings applied to rated counterparties. Other counterparties are grouped into broad categories and standardised risk weightings are applied to these categories. The next level, the internal ratings-based ('IRB') foundation approach, allows banks to calculate their credit risk capital requirements on the basis of their internal assessment of a counterparty's probability of default ('PD'), but subjects their quantified estimates of exposure at default ('EAD') and loss given default ('LGD') to standard supervisory parameters. Finally, the IRB advanced approach allows banks to use their own internal assessment in both determining PD and quantifying EAD and LGD.

The capital resources requirement, which is intended to cover unexpected losses, is derived from a formula specified in the regulatory rules, which incorporates PD, LGD, EAD and other variables such as maturity and correlation. Expected losses under the IRB approaches are calculated by multiplying PD by EAD and LGD. Expected losses are deducted from capital to the extent that they exceed total accounting impairment allowances.

For consolidated Group reporting, we have adopted the IRB advanced approach for the majority of our business. A number of Group companies and portfolios are in transition to IRB advanced from standardised or IRB foundation approaches, pending definition of local regulations or model development and approval; others will remain on standardised under exemptions from IRB treatment. Approaches used for securitisation exposures are described on page 36.

Counterparty credit risk capital requirement

Counterparty credit risk, in both the trading and non-trading books, is the risk that the counterparty to a transaction may default before completing the satisfactory settlement of the transaction. Three approaches to calculating counterparty credit risk and determining exposure values are defined by Basel II: standardised, mark-to-market and internal model method ('IMM'). These exposure values are used to determine capital requirements under one of the credit risk approaches; standardised, IRB foundation and IRB advanced.

We use the mark-to-market and IMM approaches for counterparty credit risk. Our longer-term aim is to migrate more positions from the mark-to-market to the IMM approach.

Market risk capital requirement

Market risk is the risk that movements in market risk factors, including foreign exchange, commodity prices, interest rates, credit spread and equity prices will reduce our income or the value of our portfolios.

The market risk capital requirement is measured using internal market risk models, where approved by the FSA, or the FSA standard rules. Following the implementation of Basel 2.5, our internal market risk models comprise VAR, stressed VAR, incremental risk charge and correlation trading under the comprehensive risk measure.

The majority of our market risk is subject to internal models, and we continue to increase the proportion that is assessed this way.

Operational risk capital requirement

Basel II includes capital requirements for operational risk, again utilising three levels of sophistication. The capital required under the basic indicator approach is a simple percentage of gross revenues, whereas under the standardised approach, it is one of three different percentages of gross revenues allocated to each of eight defined business lines. Both these approaches use an average of the last three financial years' revenues. Finally, the advanced measurement approach uses banks' own statistical analysis and modelling of operational risk data to determine capital requirements.

We have adopted the standardised approach in determining our operational risk capital requirement.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Capital and Risk

Capital management

Table 2: Capital structure

	At 31 December 2011 US$bn	At 31 December 2010 US$bn
Composition of regulatory capital		
Tier 1 capital		
Shareholders' equity	**154.1**	142.7
Shareholders' equity per balance sheet[1]	**158.7**	147.7
Preference share premium	**(1.4)**	(1.4)
Other equity instruments	**(5.9)**	(5.9)
Deconsolidation of special purpose entities[2]	**2.7**	2.3
Non-controlling interests	**4.0**	3.9
Non-controlling interests per balance sheet	**7.4**	7.2
Preference share non-controlling interests	**(2.4)**	(2.4)
Non-controlling interest transferred to tier 2 capital	**(0.5)**	(0.5)
Non-controlling interest in deconsolidated subsidiaries	**(0.5)**	(0.4)
Regulatory adjustments to the accounting basis	**(4.4)**	1.8
Unrealised losses on available-for-sale debt securities[3]	**2.2**	3.8
Own credit spread	**(3.6)**	(0.9)
Defined benefit pension fund adjustment[4]	**(0.4)**	1.7
Reserves arising from revaluation of property and unrealised gains on available-for-sale equities	**(2.7)**	(3.1)
Cash flow hedging reserve	**0.1**	0.3
Deductions	**(31.3)**	(32.3)
Goodwill capitalised and intangible assets	**(27.5)**	(28.0)
50% of securitisation positions	**(1.2)**	(1.5)
50% of tax credit adjustment for expected losses	**0.2**	0.3
50% of excess of expected losses over impairment allowances	**(2.8)**	(3.1)
Core tier 1 capital	**122.4**	116.1
Other tier 1 capital before deductions	**17.9**	17.9
Preference share premium	**1.4**	1.4
Preference share non-controlling interests	**2.4**	2.4
Hybrid capital securities	**14.1**	14.1
Deductions	**(0.8)**	(0.8)
Unconsolidated investments[5]	**(1.0)**	(1.1)
50% of tax credit adjustment for expected losses	**0.2**	0.3
Tier 1 capital	**139.5**	133.2
Tier 2 capital		
Total qualifying tier 2 capital before deductions	**48.7**	52.7
Reserves arising from revaluation of property and unrealised gains on available-for-sale equities	**2.7**	3.1
Collective impairment allowances[6]	**2.7**	3.1
Perpetual subordinated debt	**2.8**	2.8
Term subordinated debt	**40.2**	43.4
Non-controlling interest in tier 2 capital	**0.3**	0.3
Total deductions other than from tier 1 capital	**(17.9)**	(18.3)
Unconsolidated investments[5]	**(13.9)**	(13.7)
50% of securitisation positions	**(1.2)**	(1.5)
50% of excess of expected losses over impairment allowances	**(2.8)**	(3.1)
Total regulatory capital	**170.3**	167.6
Total tier 2 capital before deductions plus hybrid capital securities	**62.8**	66.8

1 *Includes externally verified profits for the year to 31 December 2011.*
2 *Mainly comprises unrealised losses on available-for-sale ('AFS') debt securities within special purpose entities which are excluded from the regulatory consolidation.*
3 *Under FSA rules, unrealised gains/losses on debt securities net of tax must be excluded from capital resources.*
4 *Under FSA rules, any defined benefit asset is derecognised, and the defined benefit liability may be substituted with the additional funding that will be paid into the relevant schemes over the following five year period.*
5 *Mainly comprise investments in insurance entities.*
6 *Under FSA rules, collective impairment allowances on loan portfolios on the standardised approach are included in tier 2 capital.*

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

	2011 %	2010 %
Capital ratios		
Core tier 1 ratio	**10.1**	10.5
Tier 1 ratio	**11.5**	12.1
Total capital ratio	**14.1**	15.2

	At 31 December 2011		At 31 December 2010	
	RWAs US$bn	Capital required[1] US$bn	RWAs US$bn	Capital required[1] US$bn
Credit risk	**958.2**	**76.7**	890.6	71.3
Counterparty credit risk	**53.8**	**4.3**	50.2	4.0
Market risk	**73.2**	**5.9**	38.7	3.1
Operational risk	**124.3**	**9.9**	123.6	9.8
Total	**1,209.5**	**96.8**	1,103.1	88.2

1 *The regulatory capital charge, calculated as 8% of RWAs.*

Table 3: Risk-weighted assets – by risk type and geographical region

	Europe US$bn	Hong Kong US$bn	Rest of Asia-Pacific US$bn	MENA US$bn	North America US$bn	Latin America US$bn	Total RWAs[1] US$bn
At 31 December 2011							
Credit risk	**233.9**	**80.9**	**241.5**	**50.3**	**273.5**	**78.1**	**958.2**
Counterparty credit risk	**25.2**	**3.7**	**5.1**	**1.1**	**14.6**	**4.1**	**53.8**
Market risk[1]	**43.8**	**6.6**	**10.6**	**1.0**	**21.2**	**4.2**	**73.2**
Operational risk	**37.3**	**14.5**	**22.1**	**6.5**	**28.0**	**15.9**	**124.3**
	340.2	**105.7**	**279.3**	**58.9**	**337.3**	**102.3**	**1,209.5**
At 31 December 2010							
Credit risk	217.3	86.3	190.9	45.7	274.5	75.9	890.6
Counterparty credit risk	22.7	3.3	4.1	1.6	16.3	2.2	50.2
Market risk[1]	22.4	2.0	3.5	0.3	11.3	2.8	38.7
Operational risk	39.2	15.3	19.0	6.5	28.6	15.0	123.6
	301.6	106.9	217.5	54.1	330.7	95.9	1,103.1

1 *RWAs are non-additive across geographical regions due to market risk diversification effects within the Group.*

Table 4: Risk-weighted assets – by global business and geographical region

	Europe US$bn	Hong Kong US$bn	Rest of Asia-Pacific US$bn	MENA US$bn	North America US$bn	Latin America US$bn	Total RWAs US$bn
At 31 December 2011							
Retail Banking and Wealth Management	**49.9**	**17.3**	**32.5**	**8.1**	**214.7**	**28.7**	**351.2**
Commercial Banking	**88.3**	**38.8**	**147.6**	**26.2**	**43.5**	**38.5**	**382.9**
Global Banking and Markets[1]	**182.0**	**40.3**	**85.3**	**23.0**	**72.1**	**34.5**	**423.0**
Global Private Banking	**15.0**	**2.1**	**1.5**	**0.2**	**3.3**	**0.4**	**22.5**
Other	**5.0**	**7.2**	**12.4**	**1.4**	**3.7**	**0.2**	**29.9**
	340.2	**105.7**	**279.3**	**58.9**	**337.3**	**102.3**	**1,209.5**
At 31 December 2010[2]							
Retail Banking and Wealth Management	53.0	18.5	26.6	7.6	220.8	30.5	357.0
Commercial Banking	80.1	39.8	109.8	24.8	45.0	34.9	334.4
Global Banking and Markets[1]	141.8	38.1	68.3	20.1	58.4	30.1	353.2
Global Private Banking	16.5	2.1	1.9	0.4	3.6	0.4	24.9
Other	10.2	8.4	10.9	1.2	2.9	–	33.6
	301.6	106.9	217.5	54.1	330.7	95.9	1,103.1

1 *RWAs are non-additive across geographical regions due to market risk diversification effects within the Group.*
2 *RWAs from associates, reported principally in 'Other' and 'Rest of Asia-Pacific' at 31 December 2010, have been reallocated in order to properly align with the classification of income. In addition, RWAs from Global Asset Management have been reallocated to Retail Banking and Wealth Management, principally from Global Banking and Markets.*

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Capital management and allocation

Our approach to capital management is driven by our strategic and organisational requirements, taking into account the regulatory, economic and commercial environment in which we operate.

It is our objective to maintain a strong capital base to support the development of our business and to meet regulatory capital requirements at all times. To achieve this, our policy is to hold capital in a range of different forms and from diverse sources.

Our policy on capital management is underpinned by a capital management framework, which enables us to manage our capital in a consistent and aligned manner. The framework, which is approved by the Group Management Board ('GMB') annually, incorporates a number of different capital measures including market capitalisation, invested capital, economic capital and regulatory capital.

The responsibility for global capital allocation principles and decisions rests with GMB. Through our structured internal governance processes, we maintain discipline over our investment and capital allocation decisions and seek to ensure that returns on investment are adequate after taking account of capital costs. Our strategy is to allocate capital to businesses on the basis of their economic profit generation, regulatory and economic capital requirements and cost of capital.

Transferability of capital within the Group

Our capital management process is articulated in the annual Group capital plan which is approved by the Board. The plan is drawn up with the objective of maintaining both an appropriate amount of capital and an optimal mix between the different components of capital. HSBC Holdings and its major subsidiaries raise non-equity tier 1 capital and subordinated debt in accordance with our guidelines on market and investor concentration, cost, market conditions, timing, capital composition and maturity profile. Each of our subsidiaries manages its own capital to support its planned business growth and meet its local regulatory requirements within the context of the approved annual Group capital plan. In accordance with our capital management framework, capital generated by subsidiaries in excess of planned requirements is returned to HSBC Holdings, normally by way of dividends.

HSBC Holdings is the primary provider of equity capital to its subsidiaries and also provides non-equity capital to subsidiaries where necessary. These investments are substantially funded by HSBC Holdings' own capital issuance and profit retention. As part of its capital management process, HSBC Holdings seeks to maintain a prudent balance between the composition of its capital and that of its investment in subsidiaries.

During 2011 and 2010, none of the Group's subsidiaries experienced significant restrictions on paying dividends or repaying loans and advances.

Internal assessment of capital adequacy

We assess the adequacy of our capital by considering the resources necessary to cover unexpected losses arising from discretionary risks, such as credit risk and market risk, or non-discretionary risks, such as operational risk and reputational risk. The framework, together with related policies define the Internal Capital Adequacy Assessment Process ('ICAAP') by which GMB examines our risk profile from both regulatory and economic capital viewpoints and ensures that our level of capital:

- remains sufficient to support our risk profile and outstanding commitments;
- exceeds our formal minimum regulatory capital requirements by an agreed margin;
- is capable of withstanding a severe economic downturn stress scenario; and
- remains consistent with our strategic and operational goals, and shareholder and rating agency expectations.

The regulatory and economic capital assessments rely upon the use of models that are integrated into our management of risk. Economic capital is the internally calculated capital requirement which we deem necessary to support the risks to which we are exposed. The minimum regulatory capital that we are required to hold is determined by the rules established by the FSA for the consolidated Group and by local regulators for individual Group companies. The economic capital assessment is the more risk-sensitive measure, as it covers a wider range of risks and takes account of the substantial diversification of risk accruing from our operations. Our economic capital models are calibrated to quantify the level of capital that is sufficient to absorb potential losses over a one-year time horizon to a 99.95% level of confidence for our banking activities and to a 99.5% level of confidence for our insurance activities and pension risks. Our approach to capital management is aligned to our corporate structure, business model and strategic direction. Our discipline around capital allocation is maintained within established processes and benchmarks, further details of which can be found

on page 215 of the *Annual Report and Accounts 2011*.

Economic capital is the metric by which risk is measured and linked to capital within our risk appetite framework. The risk appetite statement, which describes the quantum and types of risks that we are prepared to take in executing our strategy, is approved annually by the Board of Directors of HSBC Holdings ('the Board'), advised by the Group Risk Committee ('GRC'). Its implementation is overseen by GMB.

Our risk management framework fosters the continuous monitoring of the risk environment and an integrated evaluation of risks and their interactions. Certain of these risks are assessed and managed via the capital planning process. Risks that are measured through economic capital and those that are not are compared below.

Further details on the risk appetite framework may be found on page 234 of the Annual Report and Accounts 2011.

Risks assessed via capital

Credit (including counterparty credit), market and operational risk

We assess economic capital requirements for these risk types by utilising the embedded operational infrastructure used for the pillar 1 capital calculation, together with an additional suite of models that take into account, in particular:

- the increased level of confidence required to meet our strategic goals (99.95%); and
- internal assessments of diversification of risks within our portfolios and, similarly, any concentrations of risk that arise.

Our economic capital assessment operates alongside our regulatory capital process and consistently demonstrates a substantially lower overall capital requirement for credit risk than the regulatory equivalent, reflecting the empirical evidence of the benefits of global diversification. However, we maintain a prudent stance on capital coverage, ensuring that any model risk is mitigated.

Interest rate risk in the banking book

Interest rate risk in the banking book ('IRRBB') is defined as the exposure of our non-trading products to interest rates.

This risk arises in such portfolios principally from mismatches between the future yield on assets and their funding costs, as a result of interest rate changes. Analysis of this risk is complicated by having to make assumptions on embedded optionality within certain product areas such as the incidence of mortgage prepayments, and from behavioural assumptions regarding the economic duration of liabilities which are contractually repayable on demand such as current accounts. IRRBB economic capital is measured as the amount of capital necessary to cover an unexpected loss in the value of our non-trading assets over one year to a 99.95% level of confidence.

Insurance risk

We operate a bancassurance model which provides insurance products for customers with whom we have a banking relationship. Many of these insurance products are manufactured by our subsidiaries but, where we consider it operationally more effective, third parties are engaged to manufacture insurance products for sale through our banking network. We work with a limited number of market-leading partners to provide such products. When manufacturing products ourselves, we underwrite the insurance risk and retain the risks and rewards associated with writing insurance contracts.

We continue to make progress in the implementation of a risk-based capital methodology for our insurance businesses. During 2011, we developed the use of risk-based capital metrics in the risk appetite statement, introduced internal economic capital reporting and enhanced the risk-based capital disclosure in the ICAAP.

Pension risk

We operate a number of pension plans throughout the world. Some of them are defined benefit plans, of which the largest is the HSBC Bank (UK) Pension Scheme. In order to fund the benefits associated with these plans, sponsoring Group companies (and in some instances, employees) make regular contributions in accordance with advice from actuaries and in consultation with the scheme's trustees (where relevant). In situations where a funding deficit emerges, sponsoring Group companies agree to make additional contributions to the plans, to address the deficit over an appropriate repayment period.

Further details of such payments may be found in Note 7 on page 316 of the Annual Report and Accounts 2011.

The defined benefit plans invest these contributions in a range of investments designed to meet their long-term liabilities.

Pension risk arises from the potential for a deficit in a defined benefit plan to arise from a number of factors, including:

- investments delivering a return below that required to provide the projected plan benefits. This could arise, for example, when there is a fall in the market value of equities, or when increases in long-term interest rates cause a fall in the value of fixed income securities held;
- the prevailing economic environment leading to corporate failures, thus triggering write-downs in asset values (both equity and debt);
- a change in either interest rates or inflation which causes an increase in the value of the scheme liabilities; and
- scheme members living longer than expected (known as longevity risk).

Pension risk is assessed by way of an economic capital model that takes into account potential variations in these factors, using VAR methodology.

Residual risk

Residual risk is, primarily, the risk that mitigation techniques prove less effective than expected. This category also includes risks that arise from specific reputational or business events that give rise to exposures not deemed to be included in the major risk categories. We conduct economic capital assessments of such risks on a regular, forward-looking basis to ensure that their impact is adequately covered by our capital base.

Risks not explicitly assessed via capital

Liquidity risk

We use cash-flow stress testing as part of our control processes to assess liquidity risk. We do not manage liquidity through the explicit allocation of capital as, in common with standard industry practice, this is not considered to be an appropriate or adequate mechanism for managing these risks. However, we recognise that a strong capital base can help to mitigate liquidity risk both by providing a capital buffer to allow an entity to raise funds and deploy them in liquid positions, and by serving to reduce the credit risk taken by providers of funds to the Group.

Structural foreign exchange risk

Structural foreign exchange risks arise from our net investments in subsidiaries, branches and associates, the functional currencies of which are other than the US dollar. Unrealised gains or losses due to revaluations of structural foreign exchange exposures are reflected in reserves, whereas other unrealised gains or losses arising from revaluations of foreign exchange positions are reflected in the income statement.

Our structural foreign exchange exposures are managed with the primary objective of ensuring, where practical, that our consolidated capital ratios and the capital ratios of the individual banking subsidiaries are largely protected from the effect of changes in exchange rates. This is usually achieved by ensuring that, for each subsidiary bank, the ratio of structural exposures in a given currency to RWAs denominated in that currency is broadly equal to the capital ratio of the subsidiary in question. We evaluate residual structural foreign exchange exposures using a VAR model, but typically do not assign any economic capital for these since they are managed within appropriate economic capital buffers.

Reputational risk

As a banking group, our good reputation depends upon the way in which we conduct our business, but it can also be affected by the way in which clients, to whom we provide financial services, conduct themselves. The safeguarding of our reputation is paramount and is the responsibility of all members of staff, supported by a global risk management structure, underpinned by relevant policies and practices, readily available guidance and regular training. A fresh emphasis in 2011 on values made these more explicit, to ensure we meet the expectations of society, customers, regulators and investors.

Sustainability risk

Sustainability risks arise from the provision of financial services to companies or projects which run counter to the needs of sustainable development; in effect, this risk arises when the environmental and social effects outweigh economic benefits. Sustainability risk is implicitly covered for economic capital purposes in credit risk, where risks associated with lending to certain categories of customers and industries are embedded.

Business risk

The FSA specifies that banks, as part of their internal assessment of capital adequacy process, should review their exposure to business risk.

Business risk is the potential negative impact on profits and capital from the Group not meeting our strategic objectives, as a result of unforeseen

changes in the business and regulatory environment, exposure to economic cycles and technological changes.

We manage and mitigate business risk through our business planning and stress testing processes, so that our business model and planned activities are resourced and capitalised consistent with the commercial, economic and risk environment in which the Group operates, and that any potential vulnerabilities of our business plans are identified at an early stage so that mitigating actions can be taken.

Details of our management of these risks may be found on the following pages of the Annual Report and Accounts 2011: *liquidity and funding 157, structural foreign exchange 166, reputational 183 and sustainability 184.*

Risk management

Overview

All our activities – whether lending, payment transmission, trading business to support clients and markets, or maintenance of our infrastructure for delivering financial services – involve to varying degrees the measurement, evaluation, acceptance and management of risks.

The objective of risk management, shared across the organisation, is to support Group strategies to build sustainably profitable business in the best long-term interests of our shareholders and other stakeholders. We aim to ensure that risk management is firmly embedded in how we run our business through:

- a historically strong risk culture, with personal accountability for decisions;
- a formal governance structure, with a clear, well understood framework of risk ownership, standards and policy;
- the alignment of risk and business objectives, and integration of risk appetite and stress testing into business planning and capital management; and
- an independent, integrated and specialist Global Risk function.

Risk culture

Our risk culture is a major strength of the Group, and fostering it is a key responsibility of senior executives assisted by the Global Risk function. All employees are held accountable for identifying, assessing and managing risks within the scope of their assigned responsibilities. A primary duty of the senior management in each country in which we operate is to implement and maintain an effective risk strategy to address all risks in the business they manage, and we have a system of personal, not collective, authorities for lending decisions. Personal accountability, reinforced by learning and development, helps sustain a disciplined and constructive culture of risk management and control throughout HSBC.

Risk governance and risk appetite

Our risk governance structure and approach to risk appetite are set out in the description of the responsibilities of the GRC on page 233 of the *Annual Report and Accounts 2011*. Strong risk management and internal control systems are evidenced in an established framework of risk ownership and documented standards, policy and procedures.

Risk management objectives are integrated into the performance scorecards of the heads of regions, global businesses and key functions from the GMB down, and cascaded through the organisation. The objectives of the Global Risk function are also fully aligned in this process with strategic business objectives.

Risk appetite is a key component of our management of risk. Our approach is designed to reinforce the integration of risk considerations into key business goals and planning processes. Preserving our strong capital position remains a key priority for HSBC, and the level of integration of our risk and capital management helps to optimise our response to business demand for regulatory and economic capital.

Global Risk

As risk is not static, our risk profile continually alters as a result of change in the scope and impact of a wide range of factors, from geopolitical to transactional. The risk environment requires continual monitoring and holistic assessment in order to understand and manage its complex interactions across the Group.

The Global Risk function, headed by the Group Chief Risk Officer ('GCRO'), provides an expert, integrated and independent assessment of risks across the Group:

- supporting our regions and global businesses in the development and achievement of strategic objectives;
- partnering the business in risk appetite planning and operation;

- carrying out central approvals, controls, risk systems leadership and the analysis and reporting of management information;
- fostering development of the Global Risk function and the Group's risk culture; and
- addressing risk issues in dealings with external stakeholders including regulators and analysts.

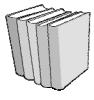
In addition to 'business as usual' operations, the Global Risk function engages fully with business development activities such as new product approval and post-implementation review, and acquisition due diligence.

Diversification

Diversification is an important aspect of our management of risk. The diversification of our lending portfolio across the regions, together with our broad range of global businesses and products, ensures that we are not overly dependent on a few countries or markets to generate income and growth. Our geographical diversification also supports our strategies for growth in faster-growing markets and those with international connectivity. Diversification models are developed, together with the business, within the Global Risk function's quantitative analytics discipline.

Stress testing

Global Risk leads work on stress scenario development, testing and analysis, the outcomes of which are used to assess the potential impact of relevant scenarios on the demand for regulatory capital, compared with its supply. Integrated with our risk appetite, planning and capital management processes, stress scenario analysis highlights any vulnerabilities of our business and capital plans to the adverse effects of extreme but plausible events. It is central to the monitoring of our top and emerging risks including among others: macro-economic and geopolitical risks such as that of sovereign and counterparty default in the eurozone; macro-prudential and regulatory change risks to our business model; and risks to our business operations including internet crime and information security risk.



The Group's top and emerging risks and areas of special interest are described on pages 235 and 112 respectively of the Annual Report and Accounts 2011.

Risk measurement and reporting systems

The purpose of our risk measurement and reporting systems is to ensure that, as far as possible, risks are comprehensively captured with all the attributes necessary to support well-founded decisions, that those attributes are accurately assessed and that information is delivered in a timely way to the right points in the organisation for those risks to be successfully managed and mitigated.

Risk measurement and reporting systems are also subject to a robust governance framework, to ensure that their design is fit for purpose and that they are functioning properly. Group risk information technology ('IT') systems development is a key responsibility of the GCRO, while the operation and development of risk rating and management systems and processes are ultimately subject to the oversight of the Board.

We invest significant resources in IT systems and processes in order to maintain and improve our risk management capabilities. Group policy promotes the deployment of preferred technology where practicable. Group standards govern the procurement and operation of systems used in our subsidiaries, processing risk information within business lines and risk functions. The measurement and monitoring of the major risks we encounter, including credit, market and operational risks, are increasingly delivered by central systems or, where this is not the case for sound business reasons, through structures and processes that support comprehensive oversight by senior management.

Risk measurement, monitoring and reporting structures deployed at Group Head Office level are replicated in global businesses and subsidiaries through a common operating model for integrated risk management and control. This model sets out the respective responsibilities of Group Risk, regional and country Risk functions in respect of such matters as risk governance and oversight, approval authorities and lending guidelines, global and local scorecards, management information and reporting, and relations with third parties including regulators, rating agencies and auditors.

In May 2011, we revised this model to further embed Compliance within Global Risk, to establish specific Chief Risk Officer roles for Retail Banking and Wealth Management ('RBWM') and Commercial Banking ('CMB') in alignment with other global businesses, and to broaden the responsibility of Security and Fraud Risk. The new global model is designed to enable the end-to-end management of risk to be carried out in a consistent manner.

Credit risk

Overview and objectives

Credit risk is the risk of financial loss if a customer or counterparty fails to meet a payment obligation under a contract. It arises principally from direct lending, trade finance and leasing business, but also from off-balance sheet products such as guarantees and derivatives, and from the Group's holdings of debt and other securities. Credit risk generates the largest regulatory capital requirement of the risks we incur. This includes a capital requirement for counterparty credit risk in the banking and trading books. Further details regarding our management of counterparty credit risk can be found on page 31.

The principal objectives of our credit risk management are:

- to maintain across HSBC a strong culture of responsible lending, and a robust risk policy and control framework;
- to both partner and challenge our businesses in defining, implementing and continually re-evaluating our risk appetite under actual and stress scenario conditions; and
- to ensure there is independent, expert scrutiny of credit risks, their costs and their mitigation.

Organisation and responsibilities

The credit risk functions within Wholesale Credit and Market Risk and Global Retail Risk Management are the constituent parts of Group Risk that support the GCRO in overseeing credit risks at the highest level. For this, their major duties comprise: undertaking independent reviews of larger and higher-risk credit proposals, large exposure policy and reporting oversight of our wholesale and retail credit risk management disciplines, ownership of our credit policy and credit systems programmes, and reporting on risk matters to senior executive management and to regulators. These credit risk functions work closely with other parts of the Global Risk function, for example: with Security and Fraud Risk on enhancement of protection against retail product fraud, with Market Risk on complex transactions, with Operational Risk on the internal control framework and with Risk Strategy on developing our economic capital model, risk appetite process and stress testing.

The credit responsibilities of Group Risk are described on page189 of the Annual Report and Accounts 2011.

Group-wide, the credit risk functions comprise a network of credit risk management offices reporting within regional, integrated risk functions. They fulfil an essential role as independent risk control units distinct from business line management in providing an objective scrutiny of risk rating assessments, credit proposals for approval and other risk matters.

For wholesale credit risk management, we operate through a hierarchy of personal credit limit approval authorities, not committee structures. Risk officers of individual operating companies, acting under authorities delegated by their boards and executive bodies within local and Group standards, are accountable for their recommendations and credit approval decisions. Each operating company is responsible for the quality and performance of its credit portfolios, and for monitoring and controlling all credit risks in those portfolios in accordance with Group standards.

Above certain risk-based thresholds established in line with authorities delegated by the Board, Group Risk concurrence must be sought for locally-approved facilities before they are extended to the customer. Moreover, risk proposals in certain portfolios – sovereign obligors, banks, some non-bank financial institutions and intra-Group exposures – are approved centrally in Group Risk to facilitate efficient control and the reporting of regulatory large and cross-border exposures.

Risk analytics

Group Risk manages credit risk analytics activities among a number of analytics disciplines supporting rating and scoring models, economic capital and stress testing. It formulates technical responses to industry developments and regulatory policy in the field of credit risk analytics, develops HSBC's global credit risk models, and oversees local model development and use around the Group in progress toward our implementation targets for the IRB advanced approach.

The risk analytics models are governed by the Group Credit Risk Analytics Oversight Committee ('CRAOC') which meets monthly and reports to Risk Management Meeting ('RMM'). Group CRAOC is chaired by the risk function, and its membership is drawn from Risk and global businesses. Its primary responsibilities are to oversee the governance of our risk rating models for both wholesale and retail business, to manage the development of global models and through its oversight of local CRAOCs, to monitor the development of local models.

Similarly structured model governance and decision-making arrangements are in place in the

Group's major subsidiaries. See also model governance on page 21.

Credit risk rating systems

Our exposure to credit risk arises from a very wide range of customer and product types, and the risk rating systems in place to measure and monitor these risks are correspondingly diverse. Each major subsidiary typically has some exposures across this range, and requirements differ from place to place.

Credit risk exposures are generally measured and managed in portfolios of either customer types or product categories. Risk rating systems for the former are designed to assess the default risk of, and loss severity associated with distinct customers who are typically managed as individual relationships. These rating systems tend to have a higher subjective content. Risk ratings systems for the latter are generally more quantitative, applying techniques such as behavioural analysis across product portfolios comprising large numbers of homogeneous transactions.

Whatever the nature of the exposure, a fundamental principle of our policy and approach is that analytical risk rating systems and scorecards are all valuable tools at the disposal of management, informing judgemental decisions for which individual approvers are ultimately accountable. In the case of automated decision-making processes, as used in retail credit origination where risk decisions may be taken 'at the point of sale' with no management intervention, that accountability rests with those responsible for the parameters built into those processes/systems and the governance and controls surrounding their use. For customers, the credit process provides for at least an annual review of facility limits granted. Review may be more frequent, as required by circumstances, such as the emergence of adverse risk factors, and any consequent amendments to risk ratings must be promptly implemented.

We constantly seek to improve the quality of our risk management. For central management and reporting purposes, Group IT systems are deployed to process credit risk data efficiently and consistently. A central database is used, which covers substantially all our direct lending exposures and holds the output of risk rating systems Group-wide. This continues to be enhanced in order to deliver comprehensive management information in support of business strategy, and solutions to evolving regulatory reporting requirements, both at an increasingly granular level.

Group standards govern the process through which risk rating systems are initially developed, judged fit for purpose, approved and implemented; the conditions under which analytical risk model outcomes can be overridden by decision-takers; and the process of model performance monitoring and reporting. The emphasis is on an effective dialogue between business line and risk management, suitable independence of decision-takers, and a good understanding and robust challenge on the part of senior management.

Like other facets of risk management, analytical risk rating systems are not static and are subject to review and modification in the light of the changing environment, the greater availability and quality of data and any deficiencies identified through internal and external regulatory review. Structured processes and metrics are in place to capture relevant data and feed this into continuous model improvement.

The following pages set out credit risk exposure values, RWAs and regulatory capital requirements.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Table 5: Credit risk – summary

	At 31 December 2011				At 31 December 2010			
	Exposure value US$bn	**Average exposure value US$bn**	**RWAs US$bn**	**Capital required[1] US$bn**	Exposure value US$bn	Average exposure value US$bn	RWAs US$bn	Capital required[1] US$bn
Total credit risk capital requirements								
Credit risk	**2,183.1**	**2,107.3**	**958.2**	**76.7**	1,998.7	1,923.4	890.6	71.3
Counterparty credit risk[2]	**145.8**	**144.7**	**53.8**	**4.3**	127.8	138.0	50.2	4.0
	2,328.9	**2,252.0**	**1,012.0**	**81.0**	2,126.5	2,061.4	940.8	75.3
Credit risk analysis by exposure class								
Exposures under the IRB advanced approach	**1,575.4**	**1,532.9**	**577.6**	**46.2**	1,458.0	1,416.3	557.2	44.7
Retail:								
– secured on real estate property	**300.0**	**298.5**	**153.6**	**12.3**	291.7	280.6	154.2	12.4
– qualifying revolving retail	**142.6**	**143.9**	**55.5**	**4.4**	138.6	142.7	57.6	4.6
– SMEs[3]	**13.0**	**13.4**	**7.0**	**0.6**	13.2	12.7	7.4	0.6
– other retail	**63.0**	**67.0**	**23.0**	**1.8**	69.0	68.5	27.9	2.2
Total retail	**518.6**	**522.8**	**239.1**	**19.1**	512.5	504.5	247.1	19.8
Central governments and central banks	**408.0**	**343.8**	**40.3**	**3.2**	291.5	265.7	31.8	2.5
Institutions	**145.4**	**169.1**	**27.7**	**2.2**	178.0	179.5	31.3	2.5
Corporates	**444.2**	**435.0**	**240.7**	**19.3**	413.7	397.7	228.3	18.4
Equity	**0.4**	**0.2**	**1.6**	**0.1**	–	–	–	–
Securitisation positions[4]	**58.8**	**62.0**	**28.2**	**2.3**	62.3	68.9	18.7	1.5
Exposures under the IRB foundation approach	**16.5**	**11.4**	**8.5**	**0.7**	7.8	7.6	4.1	0.3
Corporates	**16.5**	**11.4**	**8.5**	**0.7**	7.8	7.6	4.1	0.3
Exposures under the standardised approach	**591.2**	**563.0**	**372.1**	**29.8**	532.9	499.5	329.3	26.3
Central governments and central banks	**104.6**	**91.9**	**1.3**	**0.1**	82.4	76.3	0.9	0.1
Institutions	**41.9**	**42.5**	**14.0**	**1.1**	40.8	38.5	11.3	0.9
Corporates	**250.1**	**230.9**	**233.9**	**18.7**	210.3	192.2	197.5	15.9
Retail	**55.5**	**55.8**	**41.9**	**3.4**	54.9	52.3	41.7	3.3
Secured on real estate property	**47.1**	**42.4**	**25.6**	**2.0**	39.3	35.8	20.6	1.6
Past due items	**4.0**	**4.0**	**5.3**	**0.4**	4.0	4.4	5.6	0.4
Regional governments or local authorities	**1.0**	**1.5**	**0.8**	**0.1**	1.6	1.4	1.4	0.1
Equity	**6.5**	**6.4**	**8.4**	**0.7**	5.5	7.3	6.1	0.5
Other items[5]	**80.5**	**87.6**	**40.9**	**3.3**	94.1	91.3	44.2	3.5
	2,183.1	**2,107.3**	**958.2**	**76.7**	1,998.7	1,923.4	890.6	71.3

1 *The regulatory capital charge, calculated as 8% of RWAs.*
2 *For further details of counterparty credit risk, see page 31.*
3 *The FSA allows exposures to small and medium-sized enterprises ('SME's) to be treated under the Retail IRB approach, where the total amount owed to the Group by the counterparty is less than EUR 1m and the customer is not managed individually as a corporate counterparty.*
4 *Excludes trading book securitisation positions and positions deducted from regulatory capital (that would otherwise be risk-weighted at 1,250%).*
5 *Primarily includes such items as fixed assets, prepayments, accruals and Hong Kong Government certificates of indebtedness.*

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Exposure values are allocated to a region based on the country of incorporation of the HSBC subsidiary or associate where the exposure was originated.

Table 6: Credit risk exposure – by geographical region

	Exposure value								
	Europe US$bn	Hong Kong US$bn	Rest of Asia-Pacific US$bn	MENA US$bn	North America US$bn	Latin America US$bn	Total exposure US$bn	RWAs US$bn	Average RW %
At 31 December 2011									
IRB advanced approach	**557.8**	**300.2**	**240.9**	**25.3**	**413.3**	**37.9**	**1,575.4**	**577.6**	**37**
Central governments and central banks	**109.5**	**71.5**	**75.4**	**18.4**	**98.5**	**34.7**	**408.0**	**40.3**	**10**
Institutions	**32.8**	**48.3**	**35.2**	**6.7**	**19.2**	**3.2**	**145.4**	**27.7**	**19**
Corporates	**145.9**	**101.7**	**94.8**	**0.2**	**101.6**	**–**	**444.2**	**240.7**	**54**
Retail	**214.8**	**77.8**	**35.1**	**–**	**190.9**	**–**	**518.6**	**239.1**	**46**
Equity	**0.4**	**–**	**–**	**–**	**–**	**–**	**0.4**	**1.6**	**370**
Securitisation positions[1]	**54.4**	**0.9**	**0.4**	**–**	**3.1**	**–**	**58.8**	**28.2**	**48**
IRB foundation approach	**12.7**	**–**	**–**	**3.8**	**–**	**–**	**16.5**	**8.5**	**52**
Corporates	**12.7**	**–**	**–**	**3.8**	**–**	**–**	**16.5**	**8.5**	**52**
Standardised approach	**150.8**	**42.9**	**255.6**	**43.4**	**21.9**	**76.6**	**591.2**	**372.1**	**63**
Central governments and central banks	**54.1**	**0.7**	**47.5**	**1.9**	**–**	**0.4**	**104.6**	**1.3**	**1**
Institutions	**4.0**	**0.4**	**35.9**	**1.6**	**–**	**–**	**41.9**	**14.0**	**33**
Corporates	**53.8**	**2.4**	**121.6**	**30.3**	**2.5**	**39.5**	**250.1**	**233.9**	**94**
Retail	**6.0**	**2.4**	**17.4**	**4.2**	**3.4**	**22.1**	**55.5**	**41.9**	**75**
Secured on real estate property	**10.4**	**2.8**	**23.2**	**2.4**	**2.7**	**5.6**	**47.1**	**25.6**	**54**
Past due items	**0.7**	**–**	**0.3**	**1.2**	**0.1**	**1.7**	**4.0**	**5.3**	**133**
Regional governments or local authorities	**–**	**–**	**–**	**0.2**	**–**	**0.8**	**1.0**	**0.8**	**80**
Equity	**3.2**	**0.9**	**0.6**	**0.1**	**1.6**	**0.1**	**6.5**	**8.4**	**129**
Other items[2]	**18.6**	**33.3**	**9.1**	**1.5**	**11.6**	**6.4**	**80.5**	**40.9**	**51**
	721.3	**343.1**	**496.5**	**72.5**	**435.2**	**114.5**	**2,183.1**	**958.2**	**44**
At 31 December 2010									
IRB advanced approach	516.6	309.6	191.1	22.4	377.8	40.5	1,458.0	557.2	38
Central governments and central banks	57.8	65.6	52.2	16.2	63.5	36.2	291.5	31.8	11
Institutions	44.7	75.1	30.1	6.1	17.7	4.3	178.0	31.3	18
Corporates	142.6	97.4	75.8	0.1	97.8	–	413.7	228.3	55
Retail	216.6	70.3	32.5	–	193.1	–	512.5	247.1	48
Securitisation positions[1]	54.9	1.2	0.5	–	5.7	–	62.3	18.7	30
IRB foundation approach	7.8	–	–	–	–	–	7.8	4.1	53
Corporates	7.8	–	–	–	–	–	7.8	4.1	53
Standardised approach	156.7	41.7	192.1	45.0	24.6	72.8	532.9	329.3	62
Central governments and central banks	47.7	1.0	31.2	2.1	–	0.4	82.4	0.9	1
Institutions	9.6	0.2	29.2	1.7	–	0.1	40.8	11.3	28
Corporates	48.6	3.3	91.2	30.3	2.2	34.7	210.3	197.5	94
Retail	6.8	4.1	14.0	4.4	3.3	22.3	54.9	41.7	76
Secured on real estate property	11.0	4.5	15.0	2.2	2.1	4.5	39.3	20.6	52
Past due items	0.9	–	0.2	1.3	0.1	1.5	4.0	5.6	140
Regional governments or local authorities	–	–	–	0.2	–	1.4	1.6	1.4	88
Equity	1.2	1.0	1.0	0.2	2.0	0.1	5.5	6.1	111
Other items[2]	30.9	27.6	10.3	2.6	14.9	7.8	94.1	44.2	47
	681.1	351.3	383.2	67.4	402.4	113.3	1,998.7	890.6	45

1 *Excludes trading book securitisation positions and positions deducted from regulatory capital (that would otherwise be risk-weighted at 1,250%).*
2 *Primarily includes such items as fixed assets, prepayments, accruals and Hong Kong Government certificates of indebtedness.*

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Table 7: Risk weightings – by geographical region

	Europe US$bn	Hong Kong US$bn	Rest of Asia-Pacific US$bn	MENA US$bn	North America US$bn	Latin America US$bn	Total US$bn
At 31 December 2011							
IRB advanced approach							
Total exposure value	**557.8**	**300.2**	**240.9**	**25.3**	**413.3**	**37.9**	**1,575.4**
Total RWAs	**150.4**	**68.0**	**82.3**	**10.5**	**254.5**	**11.9**	**577.6**
Average RW (%)	**27**	**23**	**34**	**42**	**62**	**31**	**37**
IRB foundation approach							
Total exposure value	**12.7**	**–**	**–**	**3.8**	**–**	**–**	**16.5**
Total RWAs	**6.1**	**–**	**–**	**2.4**	**–**	**–**	**8.5**
Average RW (%)	**48**	**–**	**–**	**63**	**–**	**–**	**52**
Standardised approach							
Total exposure value	**150.8**	**42.9**	**255.6**	**43.4**	**21.9**	**76.6**	**591.2**
Total RWAs	**77.4**	**12.9**	**159.2**	**37.4**	**19.0**	**66.2**	**372.1**
Average RW (%)	**51**	**30**	**62**	**86**	**87**	**86**	**63**
Total credit risk							
Total exposure value	**721.3**	**343.1**	**496.5**	**72.5**	**435.2**	**114.5**	**2,183.1**
Total RWAs	**233.9**	**80.9**	**241.5**	**50.3**	**273.5**	**78.1**	**958.2**
Average RW (%)	**32**	**24**	**49**	**69**	**63**	**68**	**44**
At 31 December 2010							
IRB advanced approach							
Total exposure value	516.6	309.6	191.1	22.4	377.8	40.5	1,458.0
Total RWAs	140.3	72.1	68.7	6.9	256.1	13.1	557.2
Average RW (%)	27	23	36	31	68	32	38
IRB foundation approach							
Total exposure value	7.8	–	–	–	–	–	7.8
Total RWAs	4.1	–	–	–	–	–	4.1
Average RW (%)	53	–	–	–	–	–	53
Standardised approach							
Total exposure value	156.7	41.7	192.1	45.0	24.6	72.8	532.9
Total RWAs	72.9	14.2	122.2	38.8	18.4	62.8	329.3
Average RW (%)	47	34	64	86	75	86	62
Total credit risk							
Total exposure value	681.1	351.3	383.2	67.4	402.4	113.3	1,998.7
Total RWAs	217.3	86.3	190.9	45.7	274.5	75.9	890.6
Average RW (%)	32	25	50	68	68	67	45

Industry sector analysis

The table below presents an analysis of credit risk exposures by industry sector. This replaces the former counterparty sector table with a more granular distribution of exposures within their Basel II approaches and exposure classes across a wider range of sectors.

Table 8: Credit risk exposure – by industry sector

	Exposure Value								
	Personal US$bn	Manu-facturing US$bn	Inter-national trade and services US$bn	Property and other business activities US$bn	Govern-ment and public admin-istration US$bn	Other commercial US$bn	Financial US$bn	Non-customer assets US$bn	Total US$bn
At 31 December 2011									
IRB advanced approach	507.5	109.1	97.0	121.8	121.1	60.5	558.4	–	1,575.4
Central governments and central banks	–	–	–	–	102.3	0.2	305.5	–	408.0
Institutions	–	–	–	–	0.7	–	144.7	–	145.4
Corporates	1.9	108.1	94.4	115.1	17.4	58.7	48.6	–	444.2
Retail	505.6	1.0	2.6	6.7	0.7	1.6	0.4	–	518.6
Equity	–	–	–	–	–	–	0.4	–	0.4
Securitisation positions[1]	–	–	–	–	–	–	58.8	–	58.8
IRB foundation approach	–	5.9	3.6	1.7	0.6	2.9	1.8	–	16.5
Corporates	–	5.9	3.6	1.7	0.6	2.9	1.8	–	16.5
Standardised approach	88.9	62.8	58.2	52.5	82.1	51.9	119.4	75.4	591.2
Central governments and central banks	–	–	–	–	52.6	–	52.0	–	104.6
Institutions	–	–	–	–	–	–	41.9	–	41.9
Corporates	2.6	60.7	54.1	42.1	25.5	49.3	15.8	–	250.1
Retail	45.4	1.6	3.6	1.7	1.3	1.2	0.7	–	55.5
Secured on real estate property	38.8	–	–	7.3	–	0.9	0.1	–	47.1
Past due items	2.1	0.3	0.4	0.6	0.1	0.3	0.2	–	4.0
Regional governments or local authorities	–	–	–	–	0.8	–	0.2	–	1.0
Equity	–	0.1	0.1	0.8	–	0.2	5.3	–	6.5
Other items[2]	–	0.1	–	–	1.8	–	3.2	75.4	80.5
	596.4	177.8	158.8	176.0	203.8	115.3	679.6	75.4	2,183.1

1 *Excludes trading book securitisation positions and positions deducted from regulatory capital (that would otherwise be risk-weighted at 1,250%).*
2 *Primarily includes such items as fixed assets, prepayments, accruals and Hong Kong Government certificates of indebtedness.*

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The following is an analysis of exposures by period outstanding from the reporting date to the maturity date. The full exposure value is allocated to a residual maturity band based on the contractual end date.

Table 9: Credit risk exposure – by residual maturity

	Exposure value					
	Less than 1 year[1] US$bn	Between 1 and 5 years US$bn	More than 5 years US$bn	Undated US$bn	Total exposure US$bn	RWAs US$bn
At 31 December 2011						
IRB advanced approach	**765.1**	**399.8**	**410.0**	**0.5**	**1,575.4**	**577.6**
Central governments and central banks	**273.3**	**93.5**	**41.2**	**–**	**408.0**	**40.3**
Institutions	**111.6**	**32.2**	**1.5**	**0.1**	**145.4**	**27.7**
Corporates	**186.9**	**207.0**	**50.3**	**–**	**444.2**	**240.7**
Retail	**153.5**	**64.0**	**301.1**	**–**	**518.6**	**239.1**
Equity	**–**	**–**	**–**	**0.4**	**0.4**	**1.6**
Securitisation positions[2]	**39.8**	**3.1**	**15.9**	**–**	**58.8**	**28.2**
IRB foundation approach	**10.5**	**5.3**	**0.7**	**–**	**16.5**	**8.5**
Corporates	**10.5**	**5.3**	**0.7**	**–**	**16.5**	**8.5**
Standardised approach	**105.9**	**327.4**	**72.8**	**85.1**	**591.2**	**372.1**
Central governments and central banks	**8.9**	**81.6**	**14.1**	**–**	**104.6**	**1.3**
Institutions	**3.7**	**38.1**	**0.1**	**–**	**41.9**	**14.0**
Corporates	**65.0**	**166.9**	**18.0**	**0.2**	**250.1**	**233.9**
Retail	**22.3**	**28.4**	**4.8**	**–**	**55.5**	**41.9**
Secured on real estate property	**2.6**	**10.5**	**34.0**	**–**	**47.1**	**25.6**
Past due items	**2.8**	**0.9**	**0.3**	**–**	**4.0**	**5.3**
Regional governments or local authorities	**0.4**	**0.2**	**0.4**	**–**	**1.0**	**0.8**
Equity	**–**	**–**	**–**	**6.5**	**6.5**	**8.4**
Other items[3]	**0.2**	**0.8**	**1.1**	**78.4**	**80.5**	**40.9**
	881.5	**732.5**	**483.5**	**85.6**	**2,183.1**	**958.2**
At 31 December 2010						
IRB advanced approach	667.0	407.5	380.8	2.7	1,458.0	557.2
Central governments and central banks	177.4	71.2	42.4	0.5	291.5	31.8
Institutions	128.9	44.3	3.6	1.2	178.0	31.3
Corporates	186.1	179.1	47.5	1.0	413.7	228.3
Retail	133.7	109.6	269.2	–	512.5	247.1
Securitisation positions[2]	40.9	3.3	18.1	–	62.3	18.7
IRB foundation approach	3.6	3.7	0.5	–	7.8	4.1
Corporates	3.6	3.7	0.5	–	7.8	4.1
Standardised approach	117.1	247.7	69.5	98.6	532.9	329.3
Central governments and central banks	14.1	51.0	17.3	–	82.4	0.9
Institutions	8.1	32.5	0.2	–	40.8	11.3
Corporates	63.0	130.2	15.2	1.9	210.3	197.5
Retail	23.6	26.3	5.0	–	54.9	41.7
Secured on real estate property	2.0	6.8	30.5	–	39.3	20.6
Past due items	3.0	0.6	0.4	–	4.0	5.6
Regional governments or local authorities	0.6	0.3	0.7	–	1.6	1.4
Equity	–	–	–	5.5	5.5	6.1
Other items[3]	2.7	–	0.2	91.2	94.1	44.2
	787.7	658.9	450.8	101.3	1,998.7	890.6

1 *Revolving exposures such as overdrafts are considered to have a residual maturity of less than one year.*
2 *Excludes trading book securitisation positions and positions deducted from regulatory capital (that would otherwise be risk-weighted at 1,250%).*
3 *Primarily includes such items as fixed assets, prepayments, accruals and Hong Kong Government certificates of indebtedness.*

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Application of the IRB approach

This section sets out our overall risk rating systems, a description of the population of credit risk analytical models and our approaches to model governance and the use of IRB metrics.

Risk rating systems

Our Group-wide credit risk rating framework incorporates the PD of an obligor and loss severity expressed in terms of EAD and LGD. These measures are used to calculate regulatory expected loss and capital requirements. They are also used in conjunction with other inputs to inform rating assessments for the purpose of credit approval and many other risk management decisions.

Appropriate PD, EAD and LGD estimation requires strong governance, rigorous and well understood monitoring and the use of all information available, from the macro-economic down to individual client information, in order to assess risk correctly. The PD, EAD and LGD models that are described in more detail below are built to incorporate these requirements. While the model build process can ensure consistency, and that all factors which data demonstrates to be significant can be taken into account in assessing risk, judgmental and other exogenous factors will commonly also play a part. To ensure that this does not lead to distortions, our model outcomes are subject to formal internal challenge by risk and business practitioners to ensure that all factors are taken into account in the determination of final risk ratings.

Under our Basel II rollout plans for Group reporting purposes, a number of our Group companies and portfolios are in transition to advanced IRB approaches. At the end of 2011, portfolios in much of Europe, Hong Kong, Rest of Asia-Pacific and North America were on advanced IRB approaches. Others remain on the standardised or foundation approaches under Basel II, pending the definition of local regulations or model approval, or under exemptions from IRB treatment.

The narrative explanations that follow relate to the IRB approaches: advanced and foundation IRB for distinct customers and Retail IRB for the portfolio-managed retail business. Details of our use of the standardised approach can be found on page 29.

Wholesale business

PD for wholesale customer segments (Central Governments and Central Banks (sovereigns), Institutions, Corporates) and for certain individually assessed personal customers is estimated using a Customer Risk Rating ('CRR') scale of 23 grades, of which 21 are non-default grades representing varying degrees of strength of financial condition and two are default grades. A score generated by a credit risk rating model for the individual obligor type is mapped to the corresponding CRR. The process through which this or a judgementally amended CRR is then recommended to, and reviewed by, a credit approver takes into account all information relevant to the risk rating determination, including external ratings and market data where available. The finally approved CRR is mapped to a PD value range of which the 'mid-point' is used in the regulatory capital calculation. For clarity of presentation, the 23-grade scale is summarised at Table 11.

IRB equity exposures are treated under the simple risk weight approach.

EAD and LGD estimation for the wholesale business is subject to a Group framework of basic principles which permits flexibility in the definition of parameters by our operating entities to suit conditions in their own jurisdictions. Group Risk provides co-ordination, benchmarks and the sharing and promotion of best practice. EAD is estimated to a 12-month time horizon and broadly represents the current exposure plus an estimate for future increases in exposure, taking into account such factors as available but undrawn facilities and the crystallisation of contingent exposures, post-default. LGD focuses on the facility and collateral structure, involving such factors as facility priority/seniority, the type and value of collateral, type of client and regional variances in experience, and is expressed as a percentage of EAD.

Retail business

The wide range of application and behavioural models used in the management of retail portfolios has been supplemented with models used to derive the measures of PD, EAD and LGD required for Basel II. For management information and reporting purposes, retail portfolios are segmented according to local, analytically-derived EL bands, which map to composite EL grades, facilitating comparability across the Group's retail customer segments, business lines and product types.

Global and local models

Global PD models have been developed for asset classes or clearly identifiable sub-classes where the customer relationship is managed on a global basis: sovereigns, banks, certain non-bank financial

institutions and the largest corporate clients, typically operating internationally. Such global management facilitates consistent implementation by Group Risk and our operating subsidiaries worldwide of standards, policies, systems, approval procedures and other controls, reporting, pricing, performance guidelines and comparative analysis.

Local PD models are developed where the risk profile of obligors is specific to a country, sector or other non-global factor. This applies to large corporate clients having distinct characteristics in a particular geography, middle market corporates, corporate and retail small and medium-sized enterprises ('SME's) and all other retail segments. There are several hundred such models in use or under development within HSBC.

Our approach to EAD and LGD, the framework which is described under 'Risk rating systems' above, similarly encompasses both global and local models. The former include EAD and LGD models for each of sovereigns and banks, as exposures to these two customer types are managed centrally by Group Risk. All local EAD and LGD models fall within the scope and principles of the Group EAD and LGD framework, subject to dispensation from Group Risk.

Model governance

Model governance is under the general oversight of Group CRAOC, whose responsibilities are set out in 'Risk Analytics' on page 13. Group CRAOC has regional and entity-level counterparts with comparable terms of reference. The development and use of data and models to meet local requirements are the responsibility of regional and/or local entities under the governance of their own management, subject to overall Group policy and oversight.

The Group's global models require FSA approval for IRB accreditation and fall directly under the remit of Group CRAOC. Locally developed models must be referred for approval to Group CRAOC if they cover exposures generating RWA exceeding a prescribed threshold or are otherwise deemed material on grounds of risk, portfolio size, or business type, and must be referred to Group Risk if they fall within the criteria of the FSA's approval process for IRB models. The threshold for referral of material local models to Group CRAOC is a portfolio coverage of US$20bn or more by RWAs.

Group Risk utilises Group standards for the development, validation, independent review, approval, implementation and performance monitoring of credit risk rating models, and oversight of respective local standards for local models. All models must be reviewed at least annually, or more frequently as the need arises.

Compliance with Group standards is subject to examination both by risk oversight and review from within the Risk function itself, and by internal audit. While the standards set out minimum general requirements, Group Risk has discretion to approve dispensations exceptionally, and fosters best practice between offices.

Use of internal estimates

Internal risk parameters derived from applying the IRB approach are not only employed in the calculation of RWAs for the purpose of determining regulatory capital requirements, but also in many other contexts within risk management and business processes and include:

- **credit approval and monitoring**: IRB models, scorecards and other methodologies are valuable tools deployed in the assessment of customer and portfolio risk in lending decisions including the use of CRR grades within watch-list processes and other enhanced monitoring procedures;
- **risk appetite**: IRB measures are an important element of risk appetite definition at customer, sector and portfolio levels, and in the implementation of the Group risk appetite framework, for instance in subsidiaries' operating plans, and the calculation of remuneration through the assessment of performance;
- **portfolio management**: regular reports to RMM and the Board contain analyses of risk exposures, e.g. by customer segment and quality grade, employing IRB metrics;
- **pricing**: Basel II risk parameters are used in wholesale pricing tools when considering new transactions and annual reviews; and
- **economic capital**: IRB measures provide customer risk components for the economic capital model that has been implemented across HSBC to improve the consistent analysis of economic returns, help determine which customers, business units and products add greatest value, and drive higher returns through effective economic capital allocation.

The following tables provide an analysis of the IRB risk measures used to calculate RWAs under the IRB approach and set out the distribution of IRB exposures by credit quality.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Tables 10 to 12 cover advanced and foundation exposures to central governments and central banks, institutions and corporates. Table 13 presents the analysis of retail exposures, and the risk weighting analysis of securitisation exposures can be found at Table 27.

Table 10: IRB advanced exposure – by risk components[1]

	Exposure value US$bn	Undrawn commit-ments US$bn	Exposure weighted average PD %	Exposure weighted average LGD %	Exposure weighted average risk weight %	RWAs US$bn
At 31 December 2011						
Central governments and central banks	**408.0**	**2.4**	**0.11**	**20.3**	**10**	**40.3**
Institutions	**145.4**	**14.9**	**0.46**	**32.5**	**19**	**27.7**
Corporates	**432.9**	**260.2**	**2.57**	**39.2**	**54**	**233.1**
At 31 December 2010						
Central governments and central banks	291.5	3.9	0.11	20.9	11	31.8
Institutions	178.0	10.9	0.36	29.5	18	31.3
Corporates	409.4	227.3	2.82	38.4	55	226.0

1 *Excludes securitisation and equity exposures, and specialised lending exposures subject to the supervisory slotting approach.*

Table 11: IRB advanced exposure – by obligor grade[1,2]

	At 31 December 2011				
	Exposure value US$bn	Exposure weighted average PD %	Exposure weighted average LGD %	Exposure weighted average risk weight %	RWAs US$bn
Central governments and central banks					
Minimal default risk	**302.1**	**0.02**	**13.5**	**3**	**7.8**
Low default risk	**82.8**	**0.07**	**38.0**	**17**	**13.9**
Satisfactory default risk	**13.6**	**0.39**	**43.7**	**52**	**7.1**
Fair default risk	**4.1**	**1.27**	**43.6**	**95**	**3.9**
Moderate default risk	**4.8**	**3.20**	**45.0**	**125**	**6.0**
Significant default risk	**0.2**	**7.46**	**45.0**	**150**	**0.3**
High default risk	**0.3**	**9.74**	**88.0**	**367**	**1.1**
Special management	**0.1**	**53.88**	**61.2**	**200**	**0.2**
	408.0	**0.11**	**20.3**	**10**	**40.3**
Institutions					
Minimal default risk	**37.1**	**0.03**	**28.6**	**7**	**2.5**
Low default risk	**82.9**	**0.09**	**32.8**	**14**	**11.6**
Satisfactory default risk	**18.1**	**0.29**	**34.5**	**33**	**5.9**
Fair default risk	**4.8**	**1.10**	**39.5**	**73**	**3.5**
Moderate default risk	**0.9**	**3.18**	**45.6**	**122**	**1.1**
Significant default risk	**0.6**	**5.95**	**50.1**	**183**	**1.1**
High default risk	**0.6**	**11.50**	**62.0**	**283**	**1.7**
Special management	**0.2**	**74.69**	**45.6**	**150**	**0.3**
Default[3]	**0.2**	**100.00**	**70.0**	**–**	**–**
	145.4	**0.46**	**32.5**	**19**	**27.7**
Corporates					
Minimal default risk	**42.9**	**0.04**	**40.5**	**14**	**6.0**
Low default risk	**99.4**	**0.10**	**41.6**	**26**	**25.8**
Satisfactory default risk	**151.5**	**0.39**	**39.4**	**49**	**74.5**
Fair default risk	**73.9**	**1.20**	**37.4**	**79**	**58.1**
Moderate default risk	**42.9**	**2.93**	**35.6**	**101**	**43.3**
Significant default risk	**8.8**	**6.57**	**33.9**	**122**	**10.7**
High default risk	**4.5**	**10.70**	**36.6**	**171**	**7.7**
Special management	**2.7**	**32.41**	**36.3**	**181**	**4.9**
Default[3]	**6.3**	**100.00**	**40.7**	**33**	**2.1**
	432.9	**2.57**	**39.2**	**54**	**233.1**

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	At 31 December 2010				
	Exposure value US$bn	Exposure weighted average PD %	Exposure weighted average LGD %	Exposure weighted average risk weight %	RWAs US$bn
Central governments and central banks					
Minimal default risk	210.9	0.01	13.8	3	5.8
Low default risk	62.2	0.08	37.6	17	10.6
Satisfactory default risk	9.3	0.42	44.7	59	5.5
Fair default risk	7.0	1.24	44.7	91	6.4
Moderate default risk	1.3	2.88	47.8	131	1.7
Significant default risk	0.6	5.75	44.7	150	0.9
High default risk	0.2	9.52	87.4	350	0.7
Special management	–	19.00	88.0	456	0.2
	291.5	0.11	20.9	11	31.8
Institutions					
Minimal default risk	44.6	0.03	26.8	6	2.7
Low default risk	104.8	0.10	29.1	13	13.8
Satisfactory default risk	20.3	0.31	31.3	30	6.1
Fair default risk	5.5	1.29	41.9	82	4.5
Moderate default risk	1.3	2.82	44.6	115	1.5
Significant default risk	0.7	6.20	44.3	143	1.0
High default risk	0.6	12.27	60.8	267	1.6
Special management	–	18.17	30.2	170	–
Default[3]	0.2	100.00	62.7	50	0.1
	178.0	0.36	29.5	18	31.3
Corporates					
Minimal default risk	34.5	0.04	39.7	13	4.4
Low default risk	94.0	0.10	40.2	23	21.4
Satisfactory default risk	137.8	0.39	39.0	49	67.2
Fair default risk	76.4	1.28	36.5	78	59.5
Moderate default risk	39.6	2.98	35.3	99	39.3
Significant default risk	9.1	6.57	35.4	129	11.7
High default risk	8.0	10.58	36.8	171	13.7
Special management	3.8	32.05	35.9	184	7.0
Default[3]	6.2	100.00	44.9	29	1.8
	409.4	2.82	38.4	55	226.0

1 *See glossary for definition of obligor grade.*
2 *Excludes securitisation and equity exposures, and specialised lending exposures subject to the supervisory slotting approach.*
3 *There is a requirement to hold additional capital for unexpected losses on defaulted exposures where LGD exceeds best estimate of EL. As a result, in some cases, RWAs arise for exposures in default.*

Table 12: IRB foundation exposure[1,2]

	Exposure value US$bn	**Exposure weighted average risk weight %**	**RWAs US$bn**
Corporates			
At 31 December 2011	**16.5**	**52**	**8.5**
At 31 December 2010	7.8	53	4.1

1 *Exposures have not been disclosed by obligor grade as the amounts are not significant at Group level.*
2 *Excludes securitisation and equity exposures, and specialised lending exposures subject to the supervisory slotting approach.*

The variations between different jurisdictions' definitions underlying retail PD and LGD preclude the use of either measure as a global comparator. Our EL bandings for the retail business summarise a more granular EL scale for these customer segments, which combines obligor and facility/product risk factors in a composite measure of PD and LGD. This enables the diverse risk profiles of retail portfolios across the Group to be assessed on a more comparable scale than through the direct use of disparate PD and LGD measures.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Table 13: Retail IRB exposure – by geographical region[1]

	Exposure value				
	Europe US$bn	Hong Kong US$bn	Rest of Asia–Pacific US$bn	North America US$bn	Total exposure US$bn
At 31 December 2011					
Secured on real estate property					
Expected loss band					
– less than 1%	**126.7**	**44.8**	**31.4**	**44.4**	**247.3**
– greater than or equal to 1% and less than 5%	**2.0**	**0.5**	**0.6**	**22.1**	**25.2**
– greater than or equal to 5% and less than 10%	**0.4**	**–**	**–**	**5.7**	**6.1**
– greater than or equal to 10% and less than 20%	**0.5**	**–**	**–**	**5.8**	**6.3**
– greater than or equal to 20% and less than 40%	**0.7**	**–**	**–**	**3.5**	**4.2**
– greater than or equal to 40% or exposures in default	**0.3**	**0.1**	**0.3**	**10.2**	**10.9**
	130.6	**45.4**	**32.3**	**91.7**	**300.0**
Qualifying revolving retail exposures					
Expected loss band					
– less than 1%	**28.0**	**17.8**	**–**	**57.4**	**103.2**
– greater than or equal to 1% and less than 5%	**6.4**	**3.1**	**–**	**15.7**	**25.2**
– greater than or equal to 5% and less than 10%	**1.0**	**0.5**	**–**	**6.3**	**7.8**
– greater than or equal to 10% and less than 20%	**0.3**	**0.1**	**–**	**2.1**	**2.5**
– greater than or equal to 20% and less than 40%	**0.2**	**0.1**	**–**	**1.6**	**1.9**
– greater than or equal to 40% or exposures in default	**0.4**	**–**	**–**	**1.6**	**2.0**
	36.3	**21.6**	**–**	**84.7**	**142.6**
SMEs[2]					
Expected loss band					
– less than 1%	**4.8**	**0.8**	**–**	**0.6**	**6.2**
– greater than or equal to 1% and less than 5%	**4.5**	**–**	**–**	**0.2**	**4.7**
– greater than or equal to 5% and less than 10%	**0.6**	**–**	**–**	**–**	**0.6**
– greater than or equal to 10% and less than 20%	**0.2**	**–**	**–**	**–**	**0.2**
– greater than or equal to 20% and less than 40%	**0.2**	**–**	**–**	**–**	**0.2**
– greater than or equal to 40% or exposures in default	**1.1**	**–**	**–**	**–**	**1.1**
	11.4	**0.8**	**–**	**0.8**	**13.0**
Other retail					
Expected loss band					
– less than 1%	**31.7**	**9.4**	**2.8**	**6.7**	**50.6**
– greater than or equal to 1% and less than 5%	**3.3**	**0.4**	**–**	**3.8**	**7.5**
– greater than or equal to 5% and less than 10%	**0.6**	**0.1**	**–**	**1.2**	**1.9**
– greater than or equal to 10% and less than 20%	**0.2**	**–**	**–**	**0.9**	**1.1**
– greater than or equal to 20% and less than 40%	**0.1**	**–**	**–**	**0.4**	**0.5**
– greater than or equal to 40% or exposures in default	**0.6**	**0.1**	**–**	**0.7**	**1.4**
	36.5	**10.0**	**2.8**	**13.7**	**63.0**
Total retail					
Expected loss band					
– less than 1%	**191.2**	**72.8**	**34.2**	**109.1**	**407.3**
– greater than or equal to 1% and less than 5%	**16.2**	**4.0**	**0.6**	**41.8**	**62.6**
– greater than or equal to 5% and less than 10%	**2.6**	**0.6**	**–**	**13.2**	**16.4**
– greater than or equal to 10% and less than 20%	**1.2**	**0.1**	**–**	**8.8**	**10.1**
– greater than or equal to 20% and less than 40%	**1.2**	**0.1**	**–**	**5.5**	**6.8**
– greater than or equal to 40% or exposures in default	**2.4**	**0.2**	**0.3**	**12.5**	**15.4**
	214.8	**77.8**	**35.1**	**190.9**	**518.6**

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

	Exposure value				
	Europe US$bn	Hong Kong US$bn	Rest of Asia-Pacific US$bn	North America US$bn	Total exposure[1] US$bn
At 31 December 2010					
Secured on real estate property					
Expected loss band					
– less than 1%	116.3	40.4	29.1	51.3	237.1
– greater than or equal to 1% and less than 5%	2.0	0.3	0.6	21.5	24.4
– greater than or equal to 5% and less than 10%	0.5	–	–	8.2	8.7
– greater than or equal to 10% and less than 20%	0.2	–	–	5.7	5.9
– greater than or equal to 20% and less than 40%	0.1	–	–	4.8	4.9
– greater than or equal to 40% or exposures in default	1.1	0.1	0.3	9.2	10.7
	120.2	40.8	30.0	100.7	291.7
Qualifying revolving retail exposures					
Expected loss band					
– less than 1%	33.3	15.4	–	47.2	95.9
– greater than or equal to 1% and less than 5%	6.8	3.2	–	16.4	26.4
– greater than or equal to 5% and less than 10%	1.4	0.6	–	6.6	8.6
– greater than or equal to 10% and less than 20%	0.6	0.2	–	2.9	3.7
– greater than or equal to 20% and less than 40%	0.2	0.1	–	0.9	1.2
– greater than or equal to 40% or exposures in default	0.8	–	–	2.0	2.8
	43.1	19.5	–	76.0	138.6
SMEs[2]					
Expected loss band					
– less than 1%	4.1	0.6	–	0.7	5.4
– greater than or equal to 1% and less than 5%	5.6	–	–	0.2	5.8
– greater than or equal to 5% and less than 10%	0.5	–	–	–	0.5
– greater than or equal to 10% and less than 20%	0.4	–	–	–	0.4
– greater than or equal to 20% and less than 40%	0.1	–	–	–	0.1
– greater than or equal to 40% or exposures in default	1.0	–	–	–	1.0
	11.7	0.6	–	0.9	13.2
Other retail					
Expected loss band					
– less than 1%	34.2	8.9	2.5	5.9	51.5
– greater than or equal to 1% and less than 5%	4.7	0.3	–	4.7	9.7
– greater than or equal to 5% and less than 10%	1.1	0.1	–	1.7	2.9
– greater than or equal to 10% and less than 20%	0.4	–	–	1.4	1.8
– greater than or equal to 20% and less than 40%	0.2	–	–	0.7	0.9
– greater than or equal to 40% or exposures in default	1.0	0.1	–	1.1	2.2
	41.6	9.4	2.5	15.5	69.0
Total retail					
Expected loss band					
– less than 1%	187.9	65.3	31.6	105.1	389.9
– greater than or equal to 1% and less than 5%	19.1	3.8	0.6	42.8	66.3
– greater than or equal to 5% and less than 10%	3.5	0.7	–	16.5	20.7
– greater than or equal to 10% and less than 20%	1.6	0.2	–	10.0	11.8
– greater than or equal to 20% and less than 40%	0.6	0.1	–	6.4	7.1
– greater than or equal to 40% or exposures in default	3.9	0.2	0.3	12.3	16.7
	216.6	70.3	32.5	193.1	512.5

1 *The MENA and Latin America regions are not included in this table as retail exposures in these regions are calculated under the standardised approach.*

2 *The FSA allows exposures to SMEs to be treated under the Retail IRB approach, where the total amount owed to the Group by the counterparty is less than EUR 1m and the customer is not managed individually as a corporate counterparty.*

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Risk mitigation

Our approach when granting credit facilities is to do so on the basis of capacity to repay rather than place primary reliance on credit risk mitigants. Depending on a customer's standing and the type of product, facilities may be provided unsecured. Mitigation of credit risk is nevertheless a key aspect of effective risk management and, in a diversified financial services organisation such as HSBC, takes many forms.

Our general policy is to promote the use of credit risk mitigation, justified by commercial prudence and good practice as well as capital efficiency. Specific, detailed policies cover the acceptability, structuring and terms of various types of business with regard to the availability of credit risk mitigation, for example in the form of collateral security. These policies, together with the determination of suitable valuation parameters, are subject to regular review to ensure that they are supported by empirical evidence and continue to fulfil their intended purpose.

The most common method of mitigating credit risk is to take collateral. Usually, in our residential and commercial real estate businesses a mortgage over the property is taken to help secure claims. Physical collateral is also taken in various forms of specialised lending and leasing transactions where income from the physical assets that are financed is also the principal source of facility repayment. In the commercial and industrial sectors, charges are created over business assets such as premises, stock and debtors. Loans to private banking clients may be made against the pledge of eligible marketable securities, cash (known as Lombard lending) or real estate. Facilities to SMEs are commonly granted against guarantees given by their owners and/or directors. Guarantees from third parties can arise where the Group extends facilities without the benefit of any alternative form of security, e.g. where it issues a bid or performance bond in favour of a non-customer at the request of another bank.

In the institutional sector, trading facilities are supported by charges over financial instruments such as cash, debt securities and equities. Financial collateral in the form of marketable securities is used in much of the Group's over-the-counter ('OTC') derivatives activities and in securities financing transactions ('SFT's) such as repos, reverse repos, securities lending and borrowing. Netting is used extensively and is a prominent feature of market standard documentation. Further information regarding collateral held for trading exposures can be found on page 32.

Our Global Banking and Markets business utilises credit risk mitigation to actively manage the credit risk of its portfolios, with the goal of reducing concentrations in individual names, sectors or portfolios. The techniques in use include credit default swap ('CDS') purchases, structured credit notes and securitisation structures. Buying credit protection creates credit exposure against the protection provider, which is monitored as part of the overall credit exposure to the relevant protection provider. Our exposure to CDS protection providers is diversified among mainly higher-rated bank counterparties.

Policies and procedures govern the protection of our position from the outset of a customer relationship, for instance in requiring standard terms and conditions or specifically agreed documentation permitting the offset of credit balances against debt obligations, and through controls over the integrity, current valuation and, if necessary, realisation of collateral security.

Valuation strategies are established to monitor collateral mitigants to ensure that they will continue to provide the anticipated secure secondary repayment source. Where collateral is subject to high volatility, valuation is frequent; where stable, less so. Market trading activities such as collateralised OTC derivatives and SFTs typically carry out daily valuations in support of margining arrangements. In the residential mortgage business, Group policy prescribes re-valuation at intervals of up to three years, or more frequently as the need arises, for example where market conditions are subject to significant change. Residential property collateral values are determined through a combination of professional appraisals, house price indices or statistical analysis.

Due to the complexity and customer cost associated with collateral valuations for Commercial Real Estate ('CRE'), local valuation policies determine the frequency of review, based on local market conditions. Revaluations are sought with greater frequency where, as part of the regular credit assessment of the obligor, material concerns arise in relation to the performance of the collateral. CRE revaluation also occurs commonly in circumstances where an obligor's credit quality has declined sufficiently to cause concern that the principal payment source may not fully meet the obligation.

Within an IRB approach, risk mitigants are considered in two broad categories: first, those which reduce the intrinsic probability of default of an obligor and therefore operate as determinants of PD; and second, those which affect the estimated

recoverability of obligations and require adjustment of LGD or, in certain circumstances, EAD.

The first typically include full parental guarantees – where one obligor within a group of companies guarantees another. This is usually factored into the estimate of the latter's PD, as it is assumed that the guarantor's performance materially informs the PD of the guaranteed entity. PD estimates are also subject to supplementary methodologies in respect of a 'sovereign ceiling', constraining the risk ratings assigned to obligors in countries of higher risk, and where only partial parental support exists.

In the second category, LGD estimates are affected by a wider range of collateral including cash, charges over real estate property, fixed assets, trade goods, receivables and floating charges such as mortgage debentures. Unfunded mitigants, such as third party guarantees, are also taken into consideration in LGD estimates where there is evidence they reduce loss expectation.

EAD and LGD values, in the case of individually assessed exposures, are determined by reference to regionally approved internal risk parameters based on the nature of the exposure. For retail portfolios, credit risk mitigation data is incorporated into the internal risk parameters for exposures and feeds into the calculation of the EL band value summarising both customer delinquency and product or facility risk. Credit and credit risk mitigation data form inputs submitted by all Group offices to centralised databases and processing, including performance of calculations to apply the relevant Basel II rules and approach. A range of collateral recognition approaches are applied to IRB capital treatments:

- unfunded protection, which includes credit derivatives and guarantees, is reflected through adjustment or determination of PD, or LGD. Under the IRB advanced approach, recognition may be through PD (as a significant factor in grade determination) or LGD, or both;
- eligible financial collateral under the IRB advanced approach is taken into account in LGD models. Under the IRB foundation approach, regulatory LGD values are adjusted. The adjustment to LGD is based on the degree to which the exposure value would be adjusted notionally if the Financial Collateral Comprehensive Method were applied; and
- for all other types of collateral, including real estate, the LGD for exposures calculated under the IRB advanced approach will be calculated by models. For IRB foundation, base regulatory LGDs are adjusted depending on the value and type of the asset taken as collateral relative to the exposure. The types of eligible mitigant recognised under the FIRB approach are also more limited.

The table below sets out for IRB exposures the exposure value and the effective value of credit risk mitigation expressed as the exposure value covered by the credit risk mitigant.

Further information on credit risk mitigation may be found on page 144 of the Annual Report and Accounts 2011.

Table 14: IRB exposure – credit risk mitigation

	At 31 December 2011		At 31 December 2010	
	Exposure value covered by credit derivatives or guarantees US$bn	**Exposure value US$bn**	Exposure value covered by credit derivatives or guarantees US$bn	Exposure value US$bn
Exposures under the IRB advanced approach				
Central governments and central banks	**0.3**	**408.0**	0.3	291.5
Institutions	**6.2**	**145.4**	18.4	178.0
Corporates	**50.0**	**444.2**	48.8	413.7
Retail	**29.5**	**518.6**	23.9	512.5
Equity	**–**	**0.4**	–	–
Securitisation positions	**–**	**58.8**	–	62.3
		1,575.4		1,458.0
Exposures under the IRB foundation approach				
Corporates[1]	**0.2**	**16.5**	0.1	7.8

1 *The value of exposures under the IRB foundation approach covered by eligible financial and other collateral was US$0.2bn (2010: US$0.3bn).*

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Loss experience and model validation

We analyse credit loss experience in order to assess the performance of our risk measurement and control processes, and to inform corrective measures. This analysis includes validation of the outputs of predictive risk analytical models, compared with other reported measures of risk and losses.

The disclosures below set out commentary on the relationship between regulatory EL and impairment allowances recognised in our financial statements and EL and impairment charges by exposure class (within Retail IRB, also by sub-class) and by region; and model performance: projected and actual IRB metrics for major global models in our portfolio.

EL and impairment

EL is calculated on IRB portfolios other than Securitisations, and FSA rules require that, to the extent that EL exceeds individual and collective impairment allowances, it is to be deducted from capital. When comparing EL with accounting impairment allowances on the related assets, differences need to be taken into account between the definition of EL under Basel II principles and impairment allowances within financial statements prepared under IFRSs. For example:

- EL is generally based on through-the-cycle PD estimates over a one-year future horizon, determined via statistical analysis of historical default experience, while impairment allowances in the financial statements means losses that have incurred at the reporting date. Further detail of policy on the impairment of loans and advances is provided on page 297 of the *Annual Report and Accounts 2011*;
- EL is based on downturn estimates of LGD while impairment allowances are based on loss experience at the balance sheet date; and
- EL is based on exposure values that incorporate expected future drawings of committed credit lines, while impairment allowances are, generally, based on on-balance sheet assets.

These and other technical differences influence the way in which the impact of business and economic drivers is expressed in the accounting and regulatory measures, which include the impairment charge that is the subject of the Pillar 3 disclosure. The following tables set out, for IRB credit exposures, the EL and the actual loss experience reflected in impairment charges.

Table 15: IRB expected loss and impairment charges – by exposure class[1]

	Expected loss at 1 January 2011 US$bn	**Impairment charge for 2011 US$bn**	Expected loss at 1 January 2010 US$bn	Impairment charge for 2010 US$bn
IRB exposure classes				
Central governments and central banks	**0.1**	**–**	0.2	–
Institutions	**0.3**	**–**	0.4	–
Corporates	**4.8**	**1.3**	5.9	1.4
Retail	**15.7**	**7.4**	19.8	9.3
– secured on real estate property	**8.4**	**4.9**	8.5	4.5
– qualifying revolving retail	**4.3**	**1.9**	6.7	2.8
– SMEs	**0.8**	**–**	0.7	–
– other retail	**2.2**	**0.6**	3.9	2.0
	20.9	**8.7**	26.3	10.7

1 *Excludes securitisation exposures because EL is not calculated for this exposure class.*

Table 16: IRB expected loss and impairment charges – by geographical region[1]

	Expected loss at 1 January 2011 US$bn	**Impairment charge for 2011 US$bn**	Expected loss at 1 January 2010[1] US$bn	Impairment charge for 2010 US$bn
Europe	**5.6**	**1.6**	6.7	2.3
Hong Kong	**0.9**	**0.2**	0.9	0.1
Rest of Asia-Pacific	**1.0**	**–**	0.9	0.1
MENA	**0.1**	**–**	0.1	–
North America	**13.2**	**6.9**	17.6	8.2
Latin America	**0.1**	**–**	0.1	–
	20.9	**8.7**	26.3	10.7

1 *Excludes securitisation exposures because EL is not calculated for this exposure class.*

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Impairment charges reflect loss events which arose during the financial year and changes in estimates of losses arising on events which occurred prior to the current year. The majority of EL at 1 January 2011 and the impairment charge through the year ended 31 December 2011 relate to our Retail exposures in North America. The drivers of the impairment allowances and charges for 2011 in North America, including delinquency experience and loss severities, are discussed on pages 124 and 131 of the *Annual Report and Accounts 2011*.

The levels of delinquency and loan loss allowances are reducing across North America as we continue to write down or write off an increasing number of loans upon either modification or foreclosure. The EL for North America decreased by US$4.4bn or 25% at 1 January 2011. This reflected the continuing reduction of Retail exposures in US portfolios which were US$22.2bn or 10% lower at 1 January 2011 than at 1 January 2010. Despite these reductions, the EL for North America remained elevated as the delinquency and losses resulting from prolonged US economic weakness and delays in completing foreclosures increased our loss severities and were progressively captured in the various Basel II model parameters.

Full details of the Group's impaired loans and advances, past due but not impaired assets and impairment allowances and charges are set out from page 127 of the *Annual Report and Accounts 2011*. These figures are prepared on an accounting consolidation basis but are not significantly different from those calculated on a regulatory consolidation basis.

Our approach for determining impairment allowances is explained on page 297 of the *Annual Report and Accounts 2011*.

Model performance

A large number of models are used within the Group, and data at individual model level is in most cases immaterial in the context of the Group overall. Disclosure of such specific data could place proprietary information at risk, while aggregation of it would greatly reduce its usefulness. We therefore currently disclose model performance data only for the major global IRB portfolio models in use.

The table below shows projected values at 1 January of each year, and subsequent actual values, of key Basel II metrics for the central governments and central banks, institutions and global large corporate models. The latter covers the segment of larger, often multinational companies with a minimum annual turnover of US$0.7bn and its PD analysis exceptionally includes foundation IRB exposures.

Table 17: IRB advanced models – projected and actual values

	PD[1]		LGD[1,2]		EAD[2,3]
	Projected %	Actual %	Projected %	Actual %	Actual %
2011					
Central governments and central banks model	**0.11**	**–**	**17.6**	**–**	**–**
Institutions model	**0.30**	**0.01**	**28.4**	**29.0**	**100.0**
Global large corporates model	**0.67**	**0.48**	**39.2**	**15.5**	**30.8**
2010					
Central governments and central banks model	0.11	–	17.2	–	–
Institutions model	0.36	–	28.8	–	–
Global large corporates model	0.75	0.09	32.6	11.7	65.0

1 *All PD and LGD values are calculated on a facility-weighted basis. Projected values represent the whole portfolio subject to the respective model, while actuals represent the obligors that defaulted during the reported year.*
2 *The LGD and EAD analyses include IRB advanced exposures only because, under the IRB foundation approach, regulatory parameters are applied. For the global large corporates model, LGD and EAD are sourced from local corporate models.*
3 *Actual EAD is the average observed EAD of defaulted obligors as a percentage of their total facility limits at the time of default. Projected EAD figures for defaulted obligors are not disclosed, this population having been undefined at the start of the period.*

Application of the standardised approach

The standardised approach is applied where exposures do not qualify for use of an IRB approach and/or where an exemption from IRB has been granted. The standardised approach requires banks to use risk assessments prepared by External Credit Assessment Institutions ('ECAI's) or Export Credit Agencies to determine the risk weightings applied to rated counterparties.

ECAI risk assessments are used within the Group as part of the determination of risk weightings for the following classes of exposure:

- Central governments and central banks;
- Institutions;

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

- Corporates;
- Securitisation positions;
- Short-term claims on institutions and corporates;
- Regional governments and local authorities; and
- Multilateral development banks.

We have nominated three FSA-recognised ECAIs for this purpose – Moody's Investors Service ('Moodys'), Standard & Poor's Ratings Group ('S&P') and Fitch Group ('Fitch'). We have not nominated any Export Credit Agencies.

Credit quality step	Moody's assessments	S&P's assessments	Fitch's assessments
1	Aaa to Aa3	AAA to AA–	AAA to AA–
2	A1 to A3	A+ to A–	A+ to A–
3	Baa1 to Baa3	BBB+ to BBB–	BBB+ to BBB–
4	Ba1 to Ba3	BB+ to BB–	BB+ to BB–
5	B1 to B3	B+ to B–	B+ to B–
6	Caa1 and below	CCC+ and below	CCC+ and below

Data files of external ratings from the nominated ECAIs are matched with customer records in our centralised credit database.

When calculating the risk-weighted value of an exposure using ECAI risk assessments, risk systems identify the customer in question and look up the available ratings in the central database according to the FSA's rating selection rules. The systems then apply the FSA's prescribed credit quality step mapping to derive from the rating the relevant risk weight.

All other exposure classes are assigned risk weightings as prescribed in the FSA's rulebook.

Exposures to, or guaranteed by, central governments of EEA States are risk-weighted at 0% using the Standardised approach, provided they would be eligible under that approach for a 0% risk weighting.

Banking associates' exposures are calculated under the standardised approach and, at 31 December 2011, represented approximately 16% (2010: 13%) of Group credit risk RWAs.

The table below sets out the distribution of standardised exposures across credit quality steps. This analysis excludes regional governments or local authorities, short-term claims, securitisation positions, collective investment undertakings and multilateral development banks, as these exposures continue to be immaterial as a percentage of total standardised exposures. Also excluded, because the credit quality step methodology does not apply, are retail, equity, past due items and exposures secured on real estate property.

Table 18: Standardised exposure – by credit quality step

	At 31 December 2011		At 31 December 2010	
	Exposure value US$bn	**RWAs US$bn**	Exposure value US$bn	RWAs US$bn
Central governments and central banks				
Credit quality step 1	**57.2**		51.6	
Credit quality step 2	**46.0**		29.6	
Credit quality step unrated	**1.4**		1.2	
	104.6	**1.3**	82.4	0.9
Institutions				
Credit quality step 1	**4.3**		11.1	
Credit quality step 2	**0.5**		0.9	
Credit quality step 3	**0.1**		–	
Credit quality step unrated	**37.0**		28.8	
	41.9	**14.0**	40.8	11.3
Corporates				
Credit quality step 1	**7.5**		4.8	
Credit quality step 2	**3.0**		4.2	
Credit quality step 3	**33.1**		28.7	
Credit quality step 4	**7.6**		6.8	
Credit quality step 5	**1.2**		1.7	
Credit quality step 6	**0.8**		0.6	
Credit quality step unrated	**196.9**		163.5	
	250.1	**233.9**	210.3	197.5

Risk mitigation

For exposures subject to the standardised approach – covered by an eligible guarantee, non-financial collateral, or credit derivatives – the exposure is divided into covered and uncovered portions. The covered portion, determined after applying an appropriate 'haircut' for currency and maturity mismatch (and for omission of restructuring clauses for credit derivatives, where appropriate) to the amount of protection provided, attracts the risk weight of the protection provider, while the uncovered portion attracts the risk weight of the obligor. For exposures fully or partially covered by eligible financial collateral, the value of the exposure is adjusted under the Financial Collateral Comprehensive Method using supervisory volatility adjustments, including those arising from currency mismatch, which are determined by the specific type of collateral (and, in the case of eligible debt securities, their credit quality) and its liquidation period. The adjusted exposure value is subject to the risk weight of the obligor.

The table below sets out the effective value of credit risk mitigation for exposures under the standardised approach, expressed as the exposure value covered by the credit risk mitigant.

Table 19: Standardised exposure – credit risk mitigation

	At 31 December 2011			At 31 December 2010		
	Exposure value covered by eligible financial and other collateral US$bn	**Exposure value covered by credit derivatives or guarantees US$bn**	**Exposure value US$bn**	Exposure value covered by eligible financial and other collateral US$bn	Exposure value covered by credit derivatives or guarantees US$bn	Exposure value US$bn
Exposures under the standardised approach						
Central governments and central banks	**–**	**0.5**	**104.6**	–	0.2	82.4
Institutions	**–**	**2.5**	**41.9**	–	6.8	40.8
Corporates	**7.1**	**6.0**	**250.1**	7.5	3.4	210.3
Retail	**1.2**	**0.4**	**55.5**	1.0	0.4	54.9
Secured on real estate property	**–**	**–**	**47.1**	–	0.4	39.3
Past due items	**–**	**–**	**4.0**	0.1	–	4.0
Regional governments or local authorities	**–**	**–**	**1.0**	–	–	1.6
Equity	**–**	**–**	**6.5**	–	–	5.5
Other items[1]	**0.8**	**–**	**80.5**	0.6	0.1	94.1
			591.2			532.9

1 *Primarily includes such items as fixed assets, prepayments, accruals and Hong Kong Government certificates of indebtedness.*

Counterparty credit risk

Counterparty credit risk arises for over-the-counter ('OTC') derivatives and securities financing transactions. It is calculated in both the trading and non-trading books, and is the risk that a counterparty to a transaction may default before completing the satisfactory settlement of the transaction. An economic loss occurs if the transaction or portfolio of transactions with the counterparty has a positive economic value at the time of default.

As stated on page 5, there are three approaches under Basel II to calculating exposure values for counterparty credit risk: the standardised, the mark-to-market and the IMM. Exposure values calculated under these methods are used to determine RWAs using one of the credit risk approaches. Across the Group, we use both the mark-to-market method and the IMM for counterparty credit risk. Under the IMM, the EAD is calculated by multiplying the effective expected positive exposure with a multiplier called 'alpha'. Alpha accounts for several portfolio features that increase the expected loss in the event of default above that indicated by effective expected positive exposure: co-variance of exposures, correlation between exposures and default, concentration risk and model risk. It also accounts for the level of volatility/correlation that might coincide with a downturn. The default alpha value of 1.4 is used. Limits for counterparty credit risk exposures are assigned within the overall credit process for distinct customer limit approval. The measure used for counterparty credit risk management – both limits and utilisations – is the 95th percentile of potential future exposure.

The models and methodologies used in the calculation of counterparty risk are approved by the Counterparty Risk Methodology Committee, a sub-committee of CRAOC. In line with the IMM

governance standards, models are subject to independent review when they are first developed and thereafter annual review.

Credit valuation adjustment

The credit valuation adjustment is an adjustment to the value of OTC derivative transaction contracts to reflect, within fair value, the possibility that the counterparty may default, and we may not receive the full market value of the transactions. We calculate a separate credit valuation adjustment for each HSBC legal entity, and within each entity for each counterparty to which the entity has exposure. The adjustment aims to calculate the potential loss arising from the portfolio of derivative transactions against each third party, based upon a modelled expected positive exposure profile, including allowance for credit risk mitigants such as netting agreements and Credit Support Annexes ('CSA's).

Further details of our credit valuation adjustment methodology may be found on page 350 of the Annual Report and Accounts 2011.

Collateral arrangements

It is our policy to revalue all traded transactions and associated collateral positions on a daily basis. An independent Collateral Management function manages the collateral process, which includes pledging and receiving collateral, and investigating disputes and non-receipts.

Eligible collateral types are controlled under a policy which ensures the collateral agreed to be taken exhibits characteristics such as price transparency, price stability, liquidity, enforceability, independence, reusability and eligibility for regulatory purposes. A valuation 'haircut' policy reflects the fact that collateral may fall in value between the date the collateral was called and the date of liquidation or enforcement. At least 95% of collateral held as credit risk mitigation under CSAs is either cash or government securities.

Credit ratings downgrade

The Credit Rating Downgrade clause in a Master Agreement or the Credit Rating Downgrade Threshold clause in the Credit Support Annex are designed to trigger a series of events which may include the requirement to pay or increase collateral, the termination of transactions by the non-affected party, or assignment by the affected party, if the credit rating of the affected party falls below a specified level.

We control the inclusion of credit ratings downgrade language in a Master Agreement or a Credit Support Annex by requiring each Group office to obtain the endorsement of the relevant Credit authority together with the approval of both the Regional Global Markets COO and Group Risk.

Our position with regard to credit ratings downgrade language is monitored through two reports, as below, which ensures a knowledge of the liquidity implications of the contingent risk associated with credit ratings downgrade triggers:

- a report is produced which identifies the trigger ratings and individual details for documentation where credit ratings downgrade language exists within an ISDA ('International Swaps and Derivatives Association') Master Agreement; and
- a further report is produced which identifies the additional collateral requirements where credit ratings downgrade language affects the threshold levels within a collateral agreement.

At 31 December 2011, the potential value of the additional collateral that we would need to post with counterparties in the event of a one notch downgrade of our rating was US$3.0bn (2010: US$0.9bn) and for a two notch downgrade US$3.8bn (2010: US$1.2bn).

Wrong-way risk

Wrong-way risk is an aggravated form of concentration risk and arises when there is a strong correlation between the counterparty's probability of default and the mark-to-market value of the underlying transaction. Wrong-way risk can be seen in the following examples:

- where the counterparty is resident and/or incorporated in a higher-risk country and seeks to sell a non-domestic currency in exchange for its home currency;
- where the trade involves the purchase of an equity put option from a counterparty whose shares are the subject of the option;
- the purchase of credit protection from a counterparty who is closely associated with the reference entity of the credit default swap or total return swap; and
- the purchase of credit protection on an asset type which is highly concentrated in the exposure of the counterparty selling the credit protection.

Capital and Risk Management Pillar 3 Disclosures as at 31 December 2011 (continued)

We use a range of procedures to monitor and control wrong-way risk, including requiring entities to obtain prior approval before undertaking wrong-way risk transactions outside pre-agreed guidelines. The regional Credit Risk Management functions undertake control and the monitoring process. A regular meeting of the local Risk Management Committee ('RMC') comprising senior management from Global Markets, Credit, Market Risk Management and Finance is responsible for reviewing and actively managing wrong-way risk, including allocating capital. A global report is now produced and submitted to Global Banking & Markets RMC and to RMM.

Table 20: Counterparty credit risk – net derivative credit exposure[1]

	At 31 December	
	2011 US$bn	2010 US$bn
Counterparty credit risk[2]		
Gross positive fair value of contracts	**346.4**	260.7
Less: netting benefits	**(271.9)**	(178.3)
Netted current credit exposure	**74.5**	82.4
Less: collateral held	**(33.7)**	(19.2)
Net derivative credit exposure	**40.8**	63.2

1 *This table provides a further breakdown of totals reported in the* Annual Report and Accounts 2011 *on an accounting consolidation basis.*
2 *Excludes add-on for potential future credit exposure.*

Table 21: Counterparty credit risk exposure – by exposure class

	IMM		Mark-to-market method[1]		Total counterparty credit risk	
	Exposure value US$bn	**RWAs US$bn**	**Exposure value US$bn**	**RWAs US$bn**	**Exposure value US$bn**	**RWAs US$bn**
At 31 December 2011						
IRB advanced approach	**25.3**	**10.2**	**109.9**	**38.4**	**135.2**	**48.6**
Central governments and central banks	**2.9**	**0.2**	**11.6**	**1.5**	**14.5**	**1.7**
Institutions	**5.9**	**2.4**	**58.1**	**12.9**	**64.0**	**15.3**
Corporates	**16.5**	**7.6**	**40.2**	**24.0**	**56.7**	**31.6**
IRB foundation approach	**–**	**–**	**4.3**	**2.0**	**4.3**	**2.0**
Corporates	**–**	**–**	**4.3**	**2.0**	**4.3**	**2.0**
Standardised approach	**–**	**–**	**6.3**	**3.2**	**6.3**	**3.2**
Central governments and central banks	**–**	**–**	**2.4**	**–**	**2.4**	**–**
Institutions	**–**	**–**	**0.1**	**–**	**0.1**	**–**
Corporates	**–**	**–**	**3.8**	**3.2**	**3.8**	**3.2**
Total	**25.3**	**10.2**	**120.5**	**43.6**	**145.8**	**53.8**
At 31 December 2010						
IRB advanced approach	14.6	7.7	105.2	38.9	119.8	46.6
Central governments and central banks	2.8	0.4	4.4	1.1	7.2	1.5
Institutions	2.5	1.8	62.1	14.2	64.6	16.0
Corporates	9.3	5.5	38.7	23.6	48.0	29.1
IRB foundation approach	–	–	3.8	1.6	3.8	1.6
Corporates	–	–	3.8	1.6	3.8	1.6
Standardised approach	–	–	4.2	2.0	4.2	2.0
Central governments and central banks	–	–	1.9	–	1.9	–
Institutions	–	–	0.2	–	0.2	–
Corporates	–	–	2.1	2.0	2.1	2.0
	14.6	7.7	113.2	42.5	127.8	50.2

1 *Includes add-on for potential future credit exposure.*

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Table 22: Counterparty credit risk exposure – by product

	IMM		Mark-to-market method[1]		Total counterparty credit risk	
	Exposure value US$bn	**RWAs US$bn**	**Exposure value US$bn**	**RWAs US$bn**	**Exposure value US$bn**	**RWAs US$bn**
At 31 December 2011						
OTC derivatives[1]	**25.3**	**10.2**	**95.2**	**38.7**	**120.5**	**48.9**
Securities financing transactions	**–**	**–**	**24.0**	**3.7**	**24.0**	**3.7**
Other[2]	**–**	**–**	**1.3**	**1.2**	**1.3**	**1.2**
	25.3	**10.2**	**120.5**	**43.6**	**145.8**	**53.8**
At 31 December 2010						
OTC derivatives[1]	14.6	7.7	96.2	38.4	110.8	46.1
Securities financing transactions	–	–	16.2	3.6	16.2	3.6
Other[2]	–	–	0.8	0.5	0.8	0.5
	14.6	7.7	113.2	42.5	127.8	50.2

1 *OTC derivatives under the mark-to-market method include add-on for potential future credit exposure.*
2 *Includes free deliveries not deducted from regulatory capital.*

Table 23: Counterparty credit risk exposure – credit derivative transactions[1]

	At 31 December 2011		At 31 December 2010	
	Protection bought US$bn	**Protection sold US$bn**	Protection bought US$bn	Protection sold US$bn
Credit derivative products used for own credit portfolio				
Credit default swaps	**2.5**	**–**	1.6	–
Total notional value	**2.5**	**–**	1.6	–
Credit derivative products used for intermediation				
Credit default swaps	**496.5**	**503.5**	511.3	513.2
Total return swaps	**17.2**	**27.0**	15.2	20.8
Credit spread options	**0.3**	**–**	0.6	–
Other	**1.3**	**0.9**	1.5	1.0
Total notional value	**515.3**	**531.4**	528.6	535.0

1 *This table provides a further breakdown of totals reported in the* Annual Report and Accounts 2011 *on an accounting consolidation basis.*

Securitisation

New regulatory requirements under Basel 2.5 were introduced from 31 December 2011 resulting in increased risk weights for re-securitisation exposures, a standard treatment for trading book securitisation positions and enhancement of disclosures which include an analysis between trading and non-trading books.

Group securitisation strategy

HSBC acts as originator, sponsor, liquidity provider and derivative counterparty to its own originated and sponsored securitisations, as well as those of third party securitisations. Our strategy is to use securitisations to meet our needs for aggregate funding or capital management, to the extent that market, regulatory treatments and other conditions are suitable, and for customer facilitation. We have senior exposures to the securities investment conduits ('SIC's), Mazarin Funding Limited, Barion Funding Limited, Malachite Funding Limited and Solitaire Funding Limited, which are not considered core businesses, and resulting exposures are being repaid as the securities held by the SICs amortise.

Group securitisation roles

Our roles in the securitisation process are as follows:

- *Originator:* where we originate the assets being securitised, either directly or indirectly;
- *Sponsor:* where we establish and manage a securitisation programme that purchases exposures from third parties; and
- *Investor:* where we invest in a securitisation transaction directly or provide derivatives or liquidity facilities to a securitisation.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

HSBC as originator

We use SPEs to securitise customer loans and advances that we have originated, in order to diversify our sources of funding for asset origination and for capital efficiency purposes. In such cases, we transfer the loans and advances to the SPEs for cash, and the SPEs issue debt securities to investors to fund the cash purchases. This activity is conducted in a number of regions and across a number of asset classes. We also act as a derivative counterparty. Credit enhancements to the underlying assets may be used to obtain investment grade ratings on the senior debt issued by the SPEs. The majority of these securitisations are consolidated for accounting purposes. We have also established multi-seller conduit securitisation programmes for the purpose of providing access to flexible market-based sources of finance for our clients to finance discrete pools of third-party originated trade and vehicle finance loan receivables.

In addition, we use SPEs to mitigate the capital absorbed by some of our customer loans and advances we have originated. Credit derivatives are used to transfer the credit risk associated with such customer loans and advances to an SPE, using securitisations commonly known as synthetic securitisations by which the SPE writes credit default swap protection to HSBC. These SPEs are consolidated for accounting purposes when we are exposed to the majority of risks and rewards of ownership.

HSBC as sponsor

We are sponsor to a number of types of securitisation entity, including:

- three active multi-seller conduit vehicles which were established to provide finance to clients – Regency Assets Limited in Europe, Bryant Park Funding LLC in the US and Performance Trust in Canada – to which we provide senior liquidity facilities and programme-wide credit enhancement; and
- four SICs established to provide tailored investments to third party clients, backed primarily by senior tranches of securitisations and securities issued by financial institutions. Solitaire Funding Limited and Mazarin Funding Limited are asset-backed commercial paper conduits to which we provide transaction-specific liquidity facilities; Barion Funding Limited and Malachite Funding Limited are vehicles to which we provide senior term funding. We also provide a first loss letter of credit to Solitaire Funding Limited. The performance of our exposure to these vehicles is primarily subject to the credit risk of the underlying securities.

Further details of these entities may be found on page 403 of the Annual Report and Accounts 2011.

HSBC as investor

We have exposure to third-party securitisations across a wide range of sectors in the form of investments, liquidity facilities and as a derivative counterparty. These are primarily legacy exposures that are expected to be held to maturity.

These securitisation positions are managed by a dedicated team that uses a combination of market standard systems and third party data providers to monitor performance data and manage market and credit risks.

In the case of re-securitisation positions, similar processes are conducted in respect of the underlying securitisations.

Valuation of securitisation positions

The valuation process of our investments in securitisation exposures primarily focuses on quotations from third parties, observed trade levels and calibrated valuations from market standard models. This process did not change in 2011.

Further details may be found on page 346 of the Annual Report and Accounts 2011.

Group securitisation activities in 2011

Our securitisation activities in 2011 mainly consisted of structural amendments to existing transactions, as both sponsor and investor, in the normal course of business.

The downward migration in the ratings on third party securitisation investments seen in previous years has abated to a certain extent in 2011.

During 2011, there were realised losses of US$0.3bn (2010: US$0.2bn) on securitisation asset disposals.

Securitisation accounting treatment

For accounting purposes, we consolidate SPEs when the substance of the relationship indicates that we control them. In assessing control, all relevant factors are considered, including qualitative and quantitative aspects.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Full details of these assessments may be found on page 401 of the Annual Report and Accounts 2011.

We reassess the required consolidation whenever there is a change in the substance of the relationship between HSBC and an SPE, for example, when the nature of our involvement or the governing rules, contractual arrangements or capital structure of the SPE change.

The transfer of assets to an SPE may give rise to the full or partial derecognition of the financial assets concerned. Only in the event that derecognition is achieved are sales and any resultant gains on sales recognised in the financial statements. In a traditional securitisation, assets are sold to an SPE and no gain or loss on sale is recognised at inception.

Full derecognition occurs when we transfer our contractual right to receive cash flows from the financial assets, or retain the right but assume an obligation to pass on the cash flows from the assets, and transfer substantially all the risks and rewards of ownership. The risks include credit, interest rate, currency, prepayment and other price risks.

Partial derecognition occurs when we sell or otherwise transfer financial assets in such a way that some but not substantially all of the risks and rewards of ownership are transferred but control is retained. These financial assets are recognised on the balance sheet to the extent of our continuing involvement.

A small portion of financial assets that do not qualify for derecognition relate to loans, credit cards, debt securities and trade receivables that have been securitised under arrangements by which we retain a continuing involvement in such transferred assets. Continuing involvement may entail retaining the rights to future cash flows arising from the assets after investors have received their contractual terms (for example, interest rate strips); providing subordinated interest; liquidity support; continuing to service the underlying asset; or entering into derivative transactions with the securitisation vehicles. As such, we continue to be exposed to risks associated with these transactions.

Where assets have been derecognised in whole or in part, the rights and obligations that we retain from our continuing involvement in securitisations are initially recorded as an allocation of the fair value of the financial asset between the part that is derecognised and the part that continues to be recognised on the date of transfer.

Securitisation regulatory treatment

For regulatory purposes, SPEs are not consolidated where significant risk has been transferred to third parties. Exposure to these SPEs are risk weighted as securitisation positions for regulatory purposes, including any derivatives or liquidity facilities. Of the US$4.9bn (2010: US$6.2bn) of unrealised losses on available-for-sale ('AFS') asset-backed securities disclosed in the *Annual Report and Accounts 2011*, US$2.7bn (2010: US$2.3bn) relates to assets within SPEs that are not consolidated for regulatory purposes. The remaining US$2.2bn (2010: US$3.8bn) is subject to the FSA's prudential filter that removes unrealised gains and losses on AFS debt securities from capital and also adjusts the exposure value of the positions by the same amount before the relevant risk weighting is applied.

Calculation of risk-weighted assets for securitisation exposures

Basel II specifies two methods for calculating credit risk requirements for securitisation positions in the non-trading book, being the standardised and IRB approaches. Both approaches rely on the mapping of rating agency credit ratings to risk weights, which range between 7% and 1,250%. Positions that would be weighted at 1,250% are deducted from capital. We have nominated three FSA-recognised ECAIs for this purpose – Moodys, S&P and Fitch.

Within the IRB approach, we use the Ratings Based Method ('RBM'), the Internal Assessment Approach ('IAA') and the Supervisory Formula Method ('SFM').

We use the IRB approach for the majority of our non-trading book positions. Where previously, trading book positions had been treated like other market risk positions, following rule changes with effect from 31 December 2011, these now fall under an FSA standard rules approach to the calculation of specific issuer risk, as shown in tables 24, 27 and 28.

Securitisation exposures analysed below are on a regulatory consolidated basis and include those deducted from capital, rather than risk weighted. Movement in the year represents any purchase or sale of securitisation assets, the repayment of capital on amortising or maturing securitisation assets, the inclusion of trading book assets when their credit ratings fall below investment grade and the revaluation of these assets. Movements in the year also reflect the re-assessment of assets no longer treated under the securitisation framework. When assets within re-securitisations are re-securitised to achieve a more granular rating, there is no change in the exposure value, and so no movement in the year is reported.

Capital and Risk Management Pillar 3 Disclosures as at 31 December 2011 (continued)

Table 24: Securitisation exposure – movement in the year

	Total at 1 January US$bn	Movement in year[1] As originator US$bn	As sponsor US$bn	As investor US$bn	Total at 31 December US$bn
2011					
Aggregate amount of securitisation exposures (retained or purchased)					
Residential mortgages	**4.4**	**–**	**–**	**8.5**	**12.9**
Commercial mortgages	**3.7**	**–**	**(0.1)**	**1.0**	**4.6**
Credit cards	**0.1**	**–**	**–**	**(0.1)**	**–**
Loans to corporates or SMEs	**0.1**	**–**	**16.2**	**0.1**	**16.4**
Consumer loans	**0.8**	**–**	**–**	**–**	**0.8**
Trade receivables	**12.4**	**–**	**2.6**	**0.2**	**15.2**
Re-securitisations[2]	**43.4**	**–**	**(4.1)**	**(2.6)**	**36.7**
Other assets	**0.4**	**–**	**0.1**	**–**	**0.5**
	65.3	**–**	**14.7**	**7.1**	**87.1**
2010					
Aggregate amount of securitisation exposures (retained or purchased)					
Residential mortgages	5.4	–	–	(1.0)	4.4
Commercial mortgages	4.0	(0.1)	0.1	(0.3)	3.7
Credit cards	–	–	–	0.1	0.1
Leasing	0.1	–	–	(0.1)	–
Loans to corporates or SMEs	0.3	–	–	(0.2)	0.1
Consumer loans	1.0	–	–	(0.2)	0.8
Trade receivables	14.8	–	(3.0)	0.6	12.4
Re-securitisations[2]	54.8	–	(8.1)	(3.3)	43.4
Other assets	–	–	0.4	–	0.4
	80.4	(0.1)	(10.6)	(4.4)	65.3

1 *Exposures increased in 2011 due to the impact of Basel 2.5, which resulted in trading book securitisation positions that are not deducted from capital being given an FSA standard rules treatment for specific issuer risk and not, as previously, being treated among market risk positions using VAR.*
2 *Re-securitisations principally include exposures to Solitaire Funding Limited, Mazarin Funding Limited, Barion Funding Limited and Malachite Funding Limited.*

Table 25: Securitisation exposure – by trading and non-trading book

	At 31 December 2011 Trading book[1] US$bn	Non-trading book US$bn	Total[2] US$bn	2010 Total US$bn
As sponsor	**16.2**	**46.5**	**62.7**	48.0
Commercial mortgages	**–**	**0.3**	**0.3**	0.4
Loans to corporates or SMEs	**16.2**	**–**	**16.2**	–
Trade receivables	**–**	**14.4**	**14.4**	11.8
Re-securitisations	**–**	**31.3**	**31.3**	35.4
Other assets	**–**	**0.5**	**0.5**	0.4
As investor	**9.7**	**14.7**	**24.4**	17.3
Residential mortgages	**8.3**	**4.6**	**12.9**	4.4
Commercial mortgages	**0.7**	**3.6**	**4.3**	3.3
Credit cards	**–**	**–**	**–**	0.1
Loans to corporates or SMEs	**–**	**0.2**	**0.2**	0.1
Consumer loans	**0.1**	**0.7**	**0.8**	0.8
Trade receivables	**–**	**0.8**	**0.8**	0.6
Re-securitisations	**0.6**	**4.8**	**5.4**	8.0
	25.9	**61.2**	**87.1**	65.3

1 *Comparative figures for 31 December 2010 are not available for the analysis between trading and non-trading book.*
2 *The exposure comprises US$55.6bn (2010: US$53.0bn) using RBM, US$14.7bn (2010: US$11.8bn) using IAA, US$16.7bn (2010: US$0.4bn) on SFM and US$0.1bn (2010: US$0.1bn) on the Standardised approach.*

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Table 26: Securitisation exposure – asset values and impairment charges

	At 31 December 2011			At 31 December 2010		
	Underlying assets[1]		Securitisation exposures impairment charge	Underlying assets[1]		Securitisation exposures impairment charge
	Total	Impaired and past due		Total	Impaired and past due	
	US$bn	US$bn	US$bn	US$bn	US$bn	US$bn
As originator	**1.3**	**–**	**–**	1.7	–	–
Residential mortgages	**0.6**	**–**	**–**	0.8	–	–
Commercial mortgages	**0.7**	**–**	**–**	0.9	–	–
As sponsor	**71.0**	**4.9**	**1.5**	46.7	6.8	2.4
Commercial mortgages	**2.2**	**–**	**–**	2.1	–	–
Loans to corporates and SMEs	**16.2**	**–**	**–**	–	–	–
Trade receivables	**15.4**	**–**	**–**	9.2	–	–
Re-securitisations[2]	**34.9**	**4.9**	**1.5**	35.4	6.8	2.4
Other assets	**2.3**	**–**	**–**	–	–	–
As investor[3]			**0.5**			0.4
Residential mortgages			**0.1**			0.3
Commercial mortgages			**0.1**			–
Re-securitisations			**0.3**			0.1
			2.0			2.8

1 *Securitisation exposures may exceed the underlying asset values when HSBC provides liquidity facilities while also acting as derivative counterparty and a note holder in the SPE.*
2 *For re-securitisations where HSBC has derived regulatory capital based on the underlying pool of assets, the asset value used for the regulatory capital calculation is used in the disclosure of total underlying assets. For other re-securitisations, the carrying value of the assets per the* Annual Report and Accounts 2011 *is disclosed.*
3 *For securitisations where HSBC acts as investor, information on third-party underlying assets is not available.*

Table 27: Securitisation exposure – by risk weighting

	Exposure value at 31 December[1]							
	Trading book[2,3]		Non-trading book[4]		Total			
	S[5] 2011 US$bn	R[6] 2011 US$bn	S[5] 2011 US$bn	R[6] 2011 US$bn	S[5] 2011 US$bn	R[6] 2011 US$bn	2011 US$bn	Total 2010 US$bn
Long-term category – risk weights								
– less than or equal to 10%	**8.3**	**–**	**21.8**	–	**30.1**	–	**30.1**	40.8
– greater than 10% and less than or equal to 20%	–	–	**5.0**	**2.0**	**5.0**	**2.0**	**7.0**	12.5
– greater than 20% and less than or equal to 50%	**16.4**	**0.4**	**1.3**	**21.2**	**17.7**	**21.6**	**39.3**	3.4
– greater than 50% and less than or equal to 100%	–	–	**2.5**	**0.4**	**2.5**	**0.4**	**2.9**	3.4
– greater than 100% and less than or equal to 650%	**0.6**	**0.2**	**1.2**	**3.3**	**1.8**	**3.5**	**5.3**	2.2
– greater than 650% and less than 1,250%	–	–	–	**0.1**	–	**0.1**	**0.1**	–
Deductions from capital	**–**	**–**	**1.3**	**1.1**	**1.3**	**1.1**	**2.4**	3.0
	25.3	**0.6**	**33.1**	**28.1**	**58.4**	**28.7**	**87.1**	65.3

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

	Capital required at 31 December[1]							
	Trading book[2,3]		Non-trading book		Total			
	S[5] 2011 US$bn	R[6] 2011 US$bn	S[5] 2011 US$bn	R[6] 2011 US$bn	S[5] 2011 US$bn	R[6] 2011 US$bn	2011 US$bn	Total[7] 2010 US$bn
Long-term category – risk weights								
– less than or equal to 10%	**0.1**	**–**	**0.1**	**–**	**0.2**	**–**	**0.2**	0.3
– greater than 10% and less than or equal to 20%	**–**	**–**	**0.1**	**–**	**0.1**	**–**	**0.1**	0.2
– greater than 20% and less than or equal to 50%	**0.3**	**–**	**–**	**0.7**	**0.3**	**0.7**	**1.0**	0.1
– greater than 50% and less than or equal to 100%	**–**	**–**	**0.1**	**–**	**0.1**	**–**	**0.1**	0.2
– greater than 100% and less than or equal to 650%	**0.1**	**–**	**0.4**	**0.9**	**0.5**	**0.9**	**1.4**	0.7
– greater than 650% and less than 1,250%	**–**	**–**	**–**	**–**	**–**	**–**	**–**	–
Deductions from capital	**–**	**–**	**1.3**	**1.1**	**1.3**	**1.1**	**2.4**	3.0
	0.5	**–**	**2.0**	**2.7**	**2.5**	**2.7**	**5.2**	4.5

1 *There are no short-term category exposures at 31 December 2011 (2010: nil).*
2 *The standard treatment for trading book exposures is a new regulatory requirement under Basel 2.5, and therefore there are no comparative figures for 31 December 2010.*
3 *Trading book securitisation capital requirements total US$0.5bn which is included under Market Risk disclosures in Table 28.*
4 *Non-trading book figures for 31 December 2011 and 2012, include US$0.1bn exposures treated under the Standardised approach.*
5 *Securitisation.*
6 *Re-securitisation.*
7 *At 31 December 2011, due to regulatory changes as a result of Basel 2.5, higher risk weights have been introduced for re-securitisations and therefore there is no comparative analysis for 31 December 2010.*

Market risk

Overview and objectives

Market risk is the risk that movements in market factors, including foreign exchange rates, commodity prices, interest rates, credit spreads and equity prices, will reduce our income or the value of our portfolios.

We separate exposures to market risk into trading and non-trading portfolios. Trading portfolios include positions arising from market-making, position-taking and others designated as marked-to-market. Non-trading portfolios include positions that primarily arise from the interest rate management of our retail and commercial banking assets and liabilities, financial investments designated as available for sale and held to maturity.

Where appropriate, we apply similar risk management policies and measurement techniques to both trading and non-trading portfolios. The application of these to the trading portfolios is described in the section below. Our objective is to manage and control market risk exposures in order to optimise return on risk while maintaining a market profile consistent with our status as one of the world's largest banking and financial services organisations.

Further information on Market Risk may be found on page163 of the Annual Report and Accounts 2011.

Organisation and responsibilities

The management of market risk is principally undertaken in Global Markets using risk limits approved by the GMB. Limits are set for portfolios, products and risk types, with market liquidity being a primary factor in determining the level of limits set.

Group Risk, an independent unit within Group Head Office, is responsible for our market risk management policies and measurement techniques. Each major operating entity has an independent market risk management and control function which is responsible for measuring market risk exposures in accordance with the policies defined by Group Risk, and monitoring and reporting these exposures against the prescribed limits on a daily basis.

Each operating entity is required to assess the market risks arising on each product in its business. It is the responsibility of each operating unit to ensure that market risk exposures remain within the limits specified for that entity. The nature of the hedging and risk mitigation strategies performed across the Group corresponds to the market risk management instruments available within each operating jurisdiction. These strategies range from the use of traditional market instruments, such as interest rate swaps, to more sophisticated hedging strategies to address a combination of risk factors arising at portfolio level.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Measurement and monitoring

Market Risk across the portfolio is measured, monitored and limited using a range of techniques which include sensitivity analysis, VAR, stressed VAR, the incremental risk charge, the comprehensive risk measure and stress testing.

The remainder of this section primarily addresses market risks in the trading book, except that foreign exchange position risk and commodity position risk relate to both trading and non-trading books. Other non-trading book market risks are covered under Other risks on page 42.

Table 28: Market risk

	Capital required[1] US$bn	RWAs US$bn
At 31 December 2011		
Internal model based	**4.4**	**54.7**
VAR	**0.9**	**11.3**
Stressed VAR	**1.6**	**19.2**
Incremental risk charge	**0.4**	**5.2**
Comprehensive risk measure	**0.5**	**6.0**
VAR and stressed VAR from CRD equivalent jurisdictions[2]	**1.0**	**13.0**
FSA standard rules	**1.5**	**18.5**
Interest rate position risk	**0.8**	**8.3**
Foreign exchange position risk	**0.1**	**1.7**
Equity position risk	**0.1**	**1.7**
Commodity position risk	**–**	**0.3**
Collective investment undertaking	**–**	**0.4**
Securitisations	**0.5**	**6.1**
	5.9	**73.2**
At 31 December 2010	**3.1**	**38.7**

1 *The regulatory capital charge, representing 8% of RWAs. The increase in the charge compared with the previous year is due mainly to the introduction of new Basel 2.5-compliant calculations (stressed VAR and the Comprehensive Risk Measure), changes in our existing incremental risk charge methodology, and the requirement to treat trading book securitisations under FSA standard rules. These were partially offset by additional diversification benefits from consolidation of our approved US model on a line-by-line basis, rather than by aggregation. These factors result in comparatives being unavailable.*
2 *Includes requirements calculated under local VAR models and other calculation rules.*

Sensitivity analysis

We use sensitivity measures to monitor the market risk positions within each risk type, for example, the present value of a basis point movement in interest rates, for interest rate risk. Sensitivity limits are set for portfolios, products and risk types, with the depth of the market being one of the principal factors in determining the level of limits set.

VAR and stressed VAR

VAR is a technique that estimates the potential losses on risk positions in the trading portfolio as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence.

The VAR models we use are based predominantly on historical simulation. These models derive plausible future scenarios from past series of recorded market rates and prices, taking into account inter-relationships between different markets and rates such as interest rates and foreign exchange rates. The models also incorporate the effect of option features on the underlying exposures.

Stressed VAR is the measure of VAR using a specific, continuous one-year period of stress for the trading portfolio.

The historical simulation models used incorporate the following features:

- potential market movements are calculated with reference to data from the past two years;
- historical market rates and prices are calculated with reference to foreign exchange rates and commodity prices, interest rates, equity prices and the associated volatilities; and
- VAR measures are calculated to a 99% confidence level and use a one-day holding period scaled to 10 days, whereas stressed VAR uses a 10-day holding period.

The nature of the VAR models means that an increase in observed market volatility will lead to

an increase in VAR without any changes in the underlying positions.

We routinely validate the accuracy of our VAR models by back-testing the actual daily profit and loss results, adjusted to remove non-modelled items such as fees and commissions, against the corresponding VAR numbers. Statistically, we would expect to see losses in excess of VAR only 1% of the time over a one-year period. The actual number of excesses over this period can therefore be used to gauge how well the models are performing.

Although a valuable guide to risk, VAR should always be viewed in the context of its limitations. For example:

- the use of historical data as a proxy for estimating future events may not encompass all potential events, particularly those which are extreme in nature;
- the use of a one-day holding period assumes that all positions can be liquidated or the risks offset in one day. This may not fully reflect the market risk arising at times of severe illiquidity, when a one-day holding period may be insufficient to liquidate or hedge all positions fully;
- the use of a 99% confidence level, by definition, does not take into account losses that might occur beyond this level of confidence;
- VAR is calculated on the basis of exposures outstanding at the close of business and therefore does not necessarily reflect intra-day exposures; and
- VAR is unlikely to reflect loss potential on exposures that only arise under significant market moves.

We have not disclosed the scope of our VAR permissions as this is commercially sensitive proprietary information.

Incremental Risk Charge

The incremental risk charge measures the default and migration risk of issuers of traded instruments. It is computed using Monte-Carlo simulation and employing a multi-factor Gaussian Copula model. The incremental risk charge model calculates the 99.9th percentile worst loss over a one year capital horizon. Risk factors covered include credit migrations, defaults, product basis, concentration risk, hedge mismatch, recovery rate risk and liquidity. Liquidity horizons are assessed based on a combination of factors including issuer type, currency, size of exposure and are floored to three months.

Comprehensive Risk Measure

The comprehensive risk measure is used to measure all price risks emanating from the correlation trading portfolio within the bank. This model is calibrated to the same soundness standard as the incremental risk charge (99.9th percentile worst loss over a one year capital horizon). Risk factors covered include credit migrations, defaults, credit spreads, correlations, recovery rates and basis risks. It also reflects the impact of liquidity, concentrations and hedging. In accordance with Basel 2.5, this measure is floored at 8% of the standard charge for the portfolio.

Stress testing

In recognition of VAR's limitations, we augment it with stress testing to evaluate the potential impact on portfolio values of more extreme, although plausible, events or movements in a set of financial variables.

We determine the scenarios to be applied at portfolio and consolidated levels, as follows:

- sensitivity scenarios consider the impact of any single risk factor or set of factors that are unlikely to be captured within the VAR models, such as the break of a currency peg;
- technical scenarios consider the largest move in each risk factor, without consideration of any underlying market correlation;
- hypothetical scenarios consider potential macro-economic events, for example, a global flu pandemic; and
- historical scenarios incorporate historical observations of market movements during previous periods of stress which would not be captured within VAR.

Managed risk positions

Interest rate position risk

Interest rate position risk arises within the trading portfolios, principally from mismatches between the future yield on assets and their funding cost, as a result of interest rate changes. Analysis of this risk is complicated by having to make assumptions on embedded optionality within certain product areas such as the incidence of mortgage prepayments.

We aim, through our management of market risk in non-trading portfolios, to mitigate the effect of prospective interest rate movements which could reduce future net interest income, while balancing the cost of such hedging activities on the current net revenue stream.

Interest rate position risk arising within the trading portfolios is measured, where practical, on a daily basis. We use a range of tools to monitor and limit interest rate risk exposures. These include the present value of a basis point movement in interest rates, VAR, stress testing and sensitivity analysis.

Foreign exchange position risk

Foreign exchange position risk arises as a result of movements in the relative value of currencies. In addition to VAR and stress testing, we control the foreign exchange risk within the trading portfolio by limiting the open exposure to individual currencies, and on an aggregate basis.

Specific issuer risk

Specific issuer (credit spread) risk arises from a change in the value of debt instruments due to a perceived change in the credit quality of the issuer or underlying assets. As well as through VAR and stress testing, we manage the exposure to credit spread movements within the trading portfolios through the use of limits referenced to the sensitivity of the present value of a basis point movement in credit spreads.

Equity position risk

Equity position risk arises from the holding of open positions, either long or short, in equities or equity based instruments, which create exposure to a change in the market price of the equities or underlying equity instruments. As well as VAR and stress testing, we control the equity risk within our trading portfolios by limiting the size of the net open equity exposure.

Other risks

Equity and interest rate risk

Non-trading book exposures in equities

Our non-trading equities exposures are reviewed by RMM at least annually. At 31 December 2011, on a regulatory consolidation basis, we had equity investments in the non-trading book of US$7.7bn (2010: US$8.5bn). These consist of investments held for the following purposes:

Table 29: Non-trading book equity investments

	At 31 December 2011			At 31 December 2010		
	Available for sale US$bn	**Designated at fair value US$bn**	**Total US$bn**	Available for sale US$bn	Designated at fair value US$bn	Total US$bn
Strategic investments	**3.3**	**0.2**	**3.5**	4.0	0.2	4.2
Private equity investments	**3.0**	**0.1**	**3.1**	2.8	0.1	2.9
Business facilitation[1]	**1.1**	**–**	**1.1**	1.0	–	1.0
Short-term cash management	**–**	**–**	**–**	0.4	–	0.4
	7.4	**0.3**	**7.7**	8.2	0.3	8.5

1 *Includes holdings in government-sponsored enterprises and local stock exchanges.*

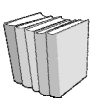
We make investments in private equity primarily through managed funds that are subject to limits on the amount of investment. We risk assess potential new commitments to ensure that industry and geographical concentrations remain within acceptable levels for the portfolio as a whole, and perform regular reviews to substantiate the valuation of the investments within the portfolio.

A detailed description of the valuation techniques applied to private equity may be found on page 351 of the Annual Report and Accounts 2011.

Exchange traded investments amounted to US$0.5bn (2010: US$0.8bn), with the remainder being unlisted. These investments are held at fair value in line with market prices.

On a regulatory consolidation basis, the net gain from disposal of equity securities amounted to US$0.4bn (2010: US$0.5bn), while impairment of AFS equities amounted to US$0.2bn (2010: US$0.1bn).

Unrealised gains on AFS equities included in tier 2 capital equated to US$1.5bn (2010: US$2.1bn).



Details of our accounting policy for AFS equity investments and the valuation of financial instruments may be found on pages 301 and 295, respectively, of the Annual Report and Accounts 2011.

Non-trading book interest rate risk

Interest rate risk in non-trading portfolios is known as IRRBB, as defined on page 9. This risk arises principally from mismatches between the future yield on assets and their funding cost, as a result of interest rate changes. The prospective change in future net interest income from non-trading portfolios will be reflected in the current realisable value of positions, should they be sold or closed prior to maturity.

A principal element of our management of market risk in non-trading portfolios is monitoring the sensitivity of projected net interest income under varying interest rate scenarios. We aim to mitigate the effect of prospective interest rate movements which could reduce future net interest income, while balancing the cost of such hedging activities on the current net revenue stream.

Our businesses use a combination of scenarios relevant to them and their local markets and standard scenarios which are required throughout HSBC. The standard scenarios are consolidated to illustrate the combined pro forma effect on our consolidated portfolio valuations and net interest income.

Our control of market risk in the non-trading portfolios is based on transferring the risks to the books managed by Global Markets or the local Asset and Liability Management Committee ('ALCO'). The net exposure is typically managed through the use of interest rate swaps within agreed limits. The VAR for these portfolios is included within the Group trading and non-trading VAR.

Details of the Group's monitoring of the sensitivity of projected net interest income under varying interest rate scenarios may be found on page166 of the Annual Report and Accounts 2011.

Operational risk

Overview and objectives

Operational risk is defined as 'the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events, including legal risk'.

Operational risk is relevant to every aspect of our business and covers a wide spectrum of issues. Losses arising through fraud, unauthorised activities, errors, omission, inefficiency, systems failure or from external events all fall within the definition of operational risk.

In the past, we have historically experienced operational risk losses in the following major categories:

- fraudulent and other external criminal activities;
- breakdowns in processes/procedures due to human error, misjudgement or malice;
- terrorist attacks;
- system failure or non-availability; and
- in certain parts of the world, vulnerability to natural disasters.

We recognise that operational risk losses can be incurred for a wide variety of reasons, including rare but extreme events.

The objective of our operational risk management is to manage and control operational risk in a cost-effective manner within targeted levels of operational risk consistent with our risk appetite, as defined by GMB.

Organisation and responsibilities

Operational risk management is primarily the responsibility of all employees and business management.

Each regional, global business, country or business unit Head has responsibility for maintaining oversight over operational risk and internal control, covering all businesses and operations for which they are responsible.

The Group Operational Risk function and the Operational Risk Management Framework ('ORMF') assist business management with discharging this responsibility.

The ORMF defines minimum standards and processes, and the governance structure for operational risk and internal control across our geographical regions and global businesses.

The Global Operational Risk and Control Committee, which reports to RMM, meets at least quarterly to discuss key risk issues and review the effective implementation of the ORMF.

Operational risk is organised as a specific risk discipline within Group Risk. The Group Operational Risk function reports to the GCRO and supports the Global Operational Risk and Control Committee. It is responsible for establishing and maintaining the ORMF, monitoring the level of operational losses and the effectiveness of the control environment. It is also responsible for operational risk reporting at Group level, including preparation of reports for consideration by RMM and GRC.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Measurement and monitoring

We have codified our ORMF in a high level standard, supplemented by detailed policies. The detailed policies explain our approach to identifying, assessing, monitoring and controlling operational risk and give guidance on mitigating action to be taken when weaknesses are identified.

In each of our subsidiaries, business managers are responsible for maintaining an acceptable level of internal control, commensurate with the scale and nature of operations. They are responsible for identifying and assessing risks, designing controls and monitoring the effectiveness of these controls. The ORMF helps managers to fulfil these responsibilities by defining a standard risk assessment methodology and providing a tool for the systematic reporting of operational loss data.

Operational risk capital requirements are calculated under the standardised approach, as a percentage of the average of the last three financial years' gross revenues. The table below sets out a geographical analysis of our operational risk capital requirement.

Table 30: Operational risk

	At 31 December 2011		At 31 December 2010	
	Capital required[1] US$bn	**RWAs US$bn**	Capital required[1] US$bn	RWAs US$bn
Operational risk				
Europe	**3.0**	**37.3**	3.1	39.2
Hong Kong	**1.1**	**14.5**	1.2	15.3
Rest of Asia-Pacific	**1.8**	**22.1**	1.5	19.0
MENA	**0.5**	**6.5**	0.5	6.5
North America	**2.2**	**28.0**	2.3	28.6
Latin America	**1.3**	**15.9**	1.2	15.0
	9.9	**124.3**	9.8	123.6

1 *The regulatory capital charge, calculated as 8% of RWAs.*

Operational risk and control assessment approach

Operational risk and control assessments are performed by individual business units and functions. The risk and control assessment process is designed to provide business areas and functions with a forward looking view of operational risks and an assessment of the effectiveness of controls, and a tracking mechanism for action plans so that they can proactively manage operational risks within acceptable levels. Risk and control assessments are reviewed and updated at least annually.

All appropriate means of mitigation and controls are considered. These include:

- making specific changes to strengthen the internal control environment;
- investigating whether cost-effective insurance cover is available to mitigate the risk; and
- other means of protecting us from loss.

Recording

We use a centralised database to record the results of our operational risk management process. Operational risk and control assessments, as described above, are input and maintained by business units. Business management and Business Risk and Control Managers monitor and follow up the progress of documented action plans.

Operational risk loss reporting

To ensure that operational risk losses are consistently reported and monitored at Group level, all Group companies are required to report individual losses when the net loss is expected to exceed US$10,000 and to aggregate all other operational risk losses under US$10,000. Losses are entered into the Operational Risk IT system and are reported to the Group Operational Risk function on a quarterly basis.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Remuneration

The following tables show the remuneration awards made by HSBC in respect of 2011 and subsequent paragraphs provide information on decision-making policies for remuneration and links between pay and performance. These disclosures reflect the requirements of the FSA's Policy Statement PS10/21 'Implementing CRD III requirements on the disclosure of remuneration' issued in December 2010.

Table 31: Aggregate remuneration expenditure

	Retail Banking and Wealth Management US$m	Commercial Banking US$m	Global Banking and Markets US$m	Global Private Banking US$m	Other US$m	Total US$m
Aggregate remuneration expenditure (Code Staff)[1,2]						
2011	**46.4**	**6.7**	**248.1**	**32.1**	**175.0**	**508.3**
2010[3]	41.8	4.2	261.5	31.9	132.1	471.5

1 *Code Staff is defined in the Glossary.*
2 *Includes salary and bonus awarded in respect of performance year 2011and 2010 (including deferred component) and any pension or benefits outside of policy.*
3 *Numbers restated for the movement of Asset Management staff from Global Banking and Markets to Retail Banking and Wealth Management and Insurance staff from Other to Retail Banking and Wealth Management.*

Table 32: Remuneration – fixed and variable amounts

	2011			2010		
	Senior management	Code Staff (non-senior management)	Total	Senior management	Code Staff (non-senior management)	Total
Number of Code Staff	**59**	**261**	**320**	58	222	280
of which, number of UK Code Staff	**23**	**182**	**205**	28	158	186
	US$m	**US$m**	**US$m**	US$m	US$m	US$m
Fixed						
Cash based	**49.6**	**99.3**	**148.9**	38.2	59.3	97.5
Total Fixed	**49.6**	**99.3**	**148.9**	38.2	59.3	97.5
Total Fixed (UK Code Staff only)	**23.0**	**61.2**	**84.2**	18.8	36.5	55.3
Variable[1]						
Cash	**11.8**	**29.8**	**41.6**	22.1	56.0	78.1
Non-deferred shares[2]	**25.8**	**73.3**	**99.1**	22.1	53.2	75.3
Deferred cash	**16.3**	**40.3**	**56.6**	32.3	73.6	105.9
Deferred shares	**67.5**	**94.6**	**162.1**	40.2	74.5	114.7
Total Variable Pay	**121.4**	**238.0**	**359.4**	116.7	257.3	374.0
Total Variable Pay (UK Code Staff only)	**56.1**	**105.0**	**161.1**	60.7	111.7	172.4

1 *Variable pay in respect of performance year 2011 and 2010.*
2 *Vested shares, subject to a 6-month retention period. For UK based employees 50% of the Vested shares awarded are subject to a 6-month retention period.*

Table 33: Deferred remuneration

	2011			2010		
	Senior management US$m	Code Staff (non-senior management) US$m	Total US$m	Senior management US$m	Code Staff (non-senior management) US$m	Total US$m
Deferred remuneration at 31 December						
Outstanding, unvested[1]	**199.5**	**434.6**	**634.1**	266.3	374.0	640.3
Awarded during financial year[2,3]	**70.2**	**131.1**	**201.3**	97.0	158.5	255.5
Paid out[4]	**85.0**	**109.6**	**194.6**	37.7	68.9	106.6
Reduced through performance adjustments	**0.8**	**–**	**0.8**	–	–	–

1 *Value of cash and shares unvested at 31 December 2011 and 31 December 2010.*

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

2 *Value of deferred cash and shares awarded during 2010. Share price taken at 31 December 2010.*
3 *Value of deferred cash and shares awarded during 2011. Share price taken at 31 December 2011.*
4 *Value of vested shares and cash during 2011 and 2010. Share price taken at day of vesting.*

Table 34: Sign-on and severance payments

	2011			2010		
	Senior management US$m	**Code Staff (non-senior management) US$m**	**Total US$m**	Senior management US$m	Code Staff (non-senior management) US$m	Total US$m
Sign-on payments						
Made during year (US$m)	**–**	**3.5**	**3.5**	–	7.1	7.1
Number of beneficiaries	**–**	**1**	**1**	–	3	3
Severance payments						
Made during year (US$m)	**0.4**	**1.3**	**1.7**	–	0.5	0.5
Number of beneficiaries	**1**	**1**	**2**	–	1	1
Highest such award to single person (US$m)	**0.4**	**1.3**	**1.7**	–	0.5	0.5

Table 35: Code staff remuneration by band

	Number of Code Staff		
	Senior management	**Code Staff (non-senior management)**	**Total**
$0 – $1,000,000	**5**	**145**	**150**
$1,000,001 – $2,000,000	**20**	**54**	**74**
$2,000,001 – $3,000,000	**12**	**33**	**45**
$3,000,001 – $4,000,000	**8**	**14**	**22**
$4,000,001 – $5,000,000	**8**	**11**	**19**
$5,000,001 – $6,000,000	**3**	**4**	**7**
$6,000,001 – $7,000,000	**1**	**0**	**1**
$11,000,001 – $12,000,000	**2**	**0**	**2**

HSBC Group Remuneration Committee

Within the authority delegated by the Board, the Group Remuneration Committee (the 'Committee') is responsible for approving the Group's remuneration policy. The Committee also determines the remuneration of Directors, other senior Group employees, employees in positions of significant influence and employees whose activities have or could have an impact on our risk profile and in doing so takes into account the pay and conditions across our Group.

No Directors are involved in deciding their own remuneration.

The members of the Committee during 2011 were J D Coombe, W S H Laidlaw, G Morgan and J L Thornton.

There were nine meetings of the Committee during 2011. Following each meeting, the Committee reports to the Board on its activities.

The Committee has decided to not use advisers except in exceptional circumstances. No external advisers were used by the Committee in 2011.

During the year, the Group Chief Executive provided regular briefings to the Committee and the Committee received advice from the Group Managing Director, Human Resources, A Almeida, the Group Head of Performance and Reward, T Roberts and M Moses, GCRO. The Committee also received advice and feedback from the GRC on risk-related matters relevant to remuneration and the alignment of remuneration with risk appetite.

HSBC reward strategy

The quality and commitment of our human capital is deemed fundamental to our success and accordingly the Board aims to attract, retain and motivate the very best people. As trust and relationships are vital in our business our broad policy is to recruit those who are committed to making a long-term career with the organisation.

HSBC's reward strategy supports this objective through focusing on both short-term and sustainable performance over the long-term. It aims to reward success, not failure, and be properly aligned with risk. The strategy is applicable to all HSBC foreign subsidiaries and branches.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

In order to ensure alignment between remuneration and our strategy, individual remuneration is determined through assessment of performance delivered against both annual and long-term objectives summarised in performance scorecards and adherence to the HSBC Values of being 'open, connected and dependable' and acting with 'courageous integrity'. Altogether, performance is judged, not only on what is achieved over the short and medium term, but also on how it is achieved, as the latter contributes to the sustainability of the organisation.

The financial and non-financial measures that comprise the annual and long-term scorecards are carefully considered to ensure alignment with the long-term strategy of the Group.

Overview of remuneration

In order to ensure clarity over remuneration, there are just four elements of remuneration, two of which are performance related. These are:

- fixed pay;
- the annual bonus;
- the Group Performance Share Plan (the new long-term incentive plan of the HSBC Share Plan 2011); and
- benefits.

The Group Performance Share Plan ('GPSP') was developed over 2010 and 2011 to incentivise senior executives to deliver sustainable long-term business performance. A key feature of the GPSP is that participants are required to hold the awards, once they have vested, until retirement, thereby enhancing the alignment of interest between the senior executives of the Group and shareholders. As part of the HSBC Share Plan 2011, the GPSP was approved by shareholders at the Annual General Meeting in May 2011 and the first awards were made in June 2011. It replaces the previous long-term incentive plan. Further information may be found on page 256 of the *Annual Report and Accounts 2011*. Executive Directors, Group Managing Directors and Group General Managers participate in both performance-related plans, namely the annual bonus and the GPSP. Other employees across the Group are eligible to participate in annual bonus arrangements. Both the annual bonus and GPSP are funded from a single annual variable pay pool from which individual awards are considered.

Group variable pay pool determination

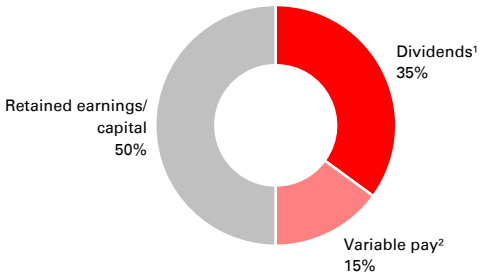
The Committee considers many factors in determining the Group's variable pay pool funding.

The variable pay pool takes into account the performance of the Group which is, considered within the context of our risk appetite statement. This helps to ensure that the variable pay pool is shaped by risk considerations. The risk appetite statement describes and measures the amount and types of risk that HSBC is prepared to take in executing our strategy. It shapes our integrated approach to business, risk and capital management and supports achievement of our objectives. The GCRO regularly updates the Committee on the Group's performance against the risk appetite statement.

The Committee uses these updates when considering remuneration to ensure that return, risk and remuneration are aligned. The risk appetite statement for 2011 was approved by the Board and was cascaded across global businesses and regions.

In addition, our funding methodology considers the relationship between capital, dividends and variable pay to ensure that the distribution of post-tax profits between these three elements is considered appropriate. On a pro forma basis, attributable profits (excluding movements in the fair value of own debt and before variable pay distributions) are allocated in the following proportions:

2011 pro forma post-tax profits allocation



1 *Inclusive of dividends to holders of other equity instruments and net of scrip issuance.*
2 *Total variable pay pool for 2011 net of tax and portion to be delivered by the award of HSBC Shares.*

Finally the commercial requirements to remain competitive in the market and overall affordability are considered.

Individual awards

Individual awards are based on the achievement of both financial and non-financial objectives. These objectives, which are aligned with the Group's strategy, are detailed in participants' annual performance scorecards and the collective long-term performance scorecard of participants in the GPSP.

Performance is then measured and reviewed against the objectives on a regular basis.

HSBC Values are key to the running of a sound, sustainable bank. Overall performance under both scorecards is judged on performance outcomes and, importantly, adherence to the HSBC Values. Our most senior employees had a separate values rating for 2011 which directly influenced their overall performance rating and, accordingly, their variable pay.

In addition, the global Risk and Compliance functions carry out annual reviews for senior executives and risk takers (defined as Code Staff). These reviews determine whether there are any instances of non-compliance with Risk and Compliance procedures and expected behaviour. Instances of non-compliance are escalated to senior management for consideration in variable pay decisions, clawback and ongoing employment.

Group-wide thematic reviews of risk are also carried out to determine if there are any transgressions for sizing variable pay or any instances where clawback is required. Risk and Compliance input is a critical part of the assessment process in determining the performance of HSBC Code Staff (which includes senior management) and in ensuring that their individual remuneration has been appropriately assessed with regard to risk.

The performance and hence remuneration of control function staff is assessed according to a performance scorecard of objectives specific to the functional role they undertake which is independent of the businesses they oversee. Remuneration is carefully benchmarked against the market and internally to ensure that it is set at an appropriate level.

We require a proportion of variable pay awards above certain thresholds to be deferred into awards of HSBC shares. This is to ensure that our interests and those of our employees are aligned with those of our shareholders, that our approach to risk management supports the interests of all stakeholders and that remuneration is consistent with effective risk management. In addition, employees are encouraged to participate in our savings-related share options plans and local share ownership arrangements.

All variable pay and incentive schemes are required to adhere to a set of policy principles and approval standards as defined in the Group Standards Manual. Under the terms of the Group Standards Manual, all plans require the approval of the Finance, Risk, Legal, Compliance and HR functions. The Finance function validates the achievement of relevant financial metrics (e.g. the definition of profitability from which bonus funding is derived).

Finally, in considering individual awards, a comparison of the pay and employment conditions of our employees, Directors and senior executives is considered by the Committee.

Clawback

In order to reward genuine performance and not failure, individual awards are made on the basis of a risk-adjusted view of both financial and non-financial performance. However, if the assessment of performance subsequently proves to be inaccurate or incorrect, then previously unvested deferred awards made since 2010 can be clawed back by the Committee. Clawback has been exercised by the Committee in 2012 in relation to the inappropriate advice given to advisors of NHFA Limited and in relation to the settlement of claims around the historic selling of Payment Protection Insurance in the UK.

Code Staff criteria

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

- Senior Management whose roles are judged as falling within the FSA Code Staff definition (including executive board Directors, Group Managing Directors and Group General Managers);
- Staff performing a Significant Influence Function within HSBC Bank plc (including Non-Executive Directors ('NEDs');
- Global Banking & Markets Operating Committee members (excluding specific roles that do not have a significant risk impact e.g. business support roles);
- Global Private Banking Executive Committee members (excluding specific roles that do not have a significant risk impact e.g. business support roles);
- Global Banking Management Committee members (excluding specific roles that do not have a significant risk impact e.g. business support roles);
- Global Markets Management Committee members (excluding specific roles that do not have a significant risk impact e.g. business support roles); and

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

- High earners who have a material impact on the risk profile of the Group.

The categories above cover all senior level management across the Group as well as those responsible for the management of the Global Banking and Markets businesses and Global Private Banking. All heads of major Global Banking & Markets businesses are included as well as the heads of all significant Global Markets products and all high earners who have a material impact on the risk profile of the Group.

All UK based employees, including Code Staff receiving a variable pay award greater than £50,000 will have the total cash element delivered in non-deferred shares and the total deferred cash element delivered in deferred shares.

Structure of remuneration

Description	Strategic Purpose	Eligibility		
		Senior Management	Other Code Staff excluding NEDs	NEDs
Fixed Pay	• Takes account of experience and personal contribution to the individual's role	✓	✓	
Fees	• Fees are regularly reviewed and compared with other large international companies of comparable complexity			✓
Annual Bonus	• The award is non-pensionable • Drives and rewards performance against annual financial and non-financial measures and adherence to HSBC Values which are consistent with the medium to long-term strategy • For Code Staff, 40% to 60% of variable remuneration is deferred over a period of 3 years, in line with the FSA requirements. 50% of both the deferred and non-deferred components will be in the form of restricted shares with the remaining 50% as cash. Vesting of deferred awards, both cash and shares, will be annually over a three-year period with 33% vesting on the first anniversary of grant, 33% on the second anniversary and 34% on the third anniversary. Deferred and non-deferred share awards will be subject to a six month retention period following vesting. Any Code Staff employee with total remuneration of no more than £500,000 (or local currency equivalent) and variable remuneration which is no more than 33% of total remuneration will not be subject to the Code Staff deferral policy but will be subject to the Group minimum deferral policy. During the vesting period, the Committee has the power to claw back part or all of the award.	✓	✓	
GPSP	• Maximum award is six times fixed pay (a reduction from the maximum of seven times under the previous long-term incentive plan) • The award is non-pensionable • Incentivises sustainable long-term performance and alignment with shareholder interests. • Award levels are determined by considering performance prior to the date of grant against enduring performance measures set out in the long-term performance scorecard; • The award is subject to a five-year vesting period during which the Committee has the authority to claw back part or all of the award; and • On vesting the net of tax shares must be retained until the participant retires	✓		

Group Performance Share Plan ('GPSP')

Performance measurement/assessment

Awards to be granted in 2012 in respect of 2011 were assessed against the 2011 long-term scorecard detailed below:

Table 36: 2011 Long-term scorecard and performance outcome

Measure	Long-term target range	Weighting	Actual 2011 Performance	Outcome
Return on equity	12% - 15%	15%	10.9%[1]	–
Cost efficiency ratio	48% - 52%	15%	57.5%[1]	–
Capital strength	>10%	15%	10.1%[1]	15.0%
Dividends (payout ratio)	40% - 60%	15%	42.4%[1]	15.0%
Strategy	Judgement	10%	Judgement	7.5%
Brand equity	Top 3 rating and improve US$bn value	10%	Top 3 rating but drop in value[2]	5.0%
Compliance and reputation	Judgement	10%	Not met	–
People and values	Judgement	10%	Judgement	7.5%
Performance outcome		100%		50.0%

1 *As reported in the* Annual Report and Accounts 2011.
2 *Based on results from The 2012 Brand Finance® Banking 500 Survey.*

The performance outcome under the 2011 long-term scorecard was based upon the Committee's assessment of the achievement of the objectives as detailed above. This approach took into account performance under both financial and non-financial objectives and was set within the context of the risk appetite and strategic direction agreed by the Board.

Irrespective of the performance outcome, eligibility for a GPSP award requires confirmation of adherence to HSBC Values and all participants passed that test in 2011.

The weighting between financial and non-financial measures was set at 60% and 40% respectively. In aggregate an overall performance outcome of 50% of the scorecard was judged to have been achieved. A summary of the assessment and rationale for the conclusions is set out below.

Financial (60% weighting – achieved 30%)

The Committee considered that in the key areas of Capital Strength and Dividend Progression, HSBC was meeting its short term targets and preparing carefully for the incoming higher standards embedded within the new regulatory regime. Accordingly these elements of longer term financial performance were fully met.

The Group did not however meet its targets for Return on Equity or the Cost Efficiency Ratio in 2011. The Committee considered the extent to which steps had been taken to improve both metrics over the longer term. In its deliberations, the Committee noted positively the progress under the five filters approach to divesting or closing underperforming and sub-scale businesses, the business model and organisational efficiency programmes underway to deliver targeted cost savings, the focus in terms of capital deployment on sustainable opportunities within the larger economies in which the Group has meaningful positions and in the faster growing markets which will drive incremental trade and investment flows, and lastly the concentration on businesses that take advantage of the connectivity of the Group's geographic reach and global business product platforms.

The Committee scored progress towards the Return on Equity and Cost Efficiency Ratio targets but concluded at this early stage in the application of GPSP it would not make any partial award for such achievement. This will be looked at again in future years.

Non-financial (40% weighting – achieved 20%)

With regard to Strategy, looking at progress made on addressing the longer term issues, the Committee looked favourably on the framework developed and being actioned to address underperforming and sub-scale businesses. Greater clarity has also been brought to the Board on the options to deliver more value from the Group's leading position in mainland China, to develop a larger Wealth Management business and reshape the long-term business of HSBC in the US. Given the clarity delivered, the Committee awarded 75% achievement for this element.

On People and values the Committee awarded 75% of the available opportunity of 10% to reflect the bringing together quickly and constructively of

the new management team, positive actions regarding team building and succession planning, the rolling out of the HSBC Values and the well thought out re-shaping of the organisational structure under the new leadership team.

In considering Brand equity the Committee noted positively the recognition in February 2012 in the Brand Finance Banking 500 2012 report that HSBC was judged to be the most valuable banking brand in the world, rising from third place one year prior. Despite the number one rating in the Brand Finance survey the value of the brand (as measured using Brand Finance's methodology) decreased during 2011 and accordingly only 50% achievement was awarded to this element.

Finally with regard to Compliance and reputation, the Committee concluded that as a consequence of the incidence of the PPI redress settlement, the mis-selling instances uncovered at Nursing Homes Fees Agency and continuing legacy legal and compliance issues ongoing in the US, there could be no award under this element of the scorecard.

The performance outcome of 50% was then applied to maximum face values (expressed as a percentage of salary) for each participant.

Vesting period

Five year vesting period with the requirement to hold the awards until retirement.

Terms and conditions of capital securities

Capital securities issued by the Group

All capital securities included in the capital base of HSBC have been issued in accordance with the rules and guidance in the FSA's General Prudential Sourcebook ('GENPRU'). For regulatory purposes, HSBC's capital base is divided into two categories, or tiers, depending on the degree of permanency and loss absorbency exhibited. These are tier 1 and tier 2.

The main features of capital securities issued by the Group are described below. The balances disclosed in the tables below are the balance sheet carrying amounts under IFRSs from the *Annual Report and Accounts 2011* and are not the amounts that the instruments contribute to regulatory capital. The regulatory treatment of these instruments and the accounting treatment under IFRSs differ, for example, in the treatment of issuance costs or regulatory amortisation. Therefore, the balances disclosed will not reconcile to other amounts disclosed in this document.

Tier 1 capital

Tier 1 capital is comprised of shareholders' equity and related non-controlling interests and qualifying capital instruments such as preference shares and hybrid capital securities, after the deduction of certain regulatory adjustments.

	At 31 December	
	2011	2010
	US$m	US$m
Called up share capital		
HSBC Holdings ordinary shares (of nominal value US$0.50 each)[1]	**8,934**	8,843

1 *All ordinary shares in issue confer identical rights in respect of capital, dividends, voting and otherwise.*

Preference shares

Preference shares are issues of securities for which there is no obligation to pay a dividend and if not paid, the dividend is not cumulative. Such shares do not generally carry voting rights but rank higher than ordinary shares for dividend payments and in the event of a winding-up. The instruments have no stated maturity date but may be called and redeemed by the issuer, subject to prior notification to the FSA, and, where relevant, the consent of the local banking regulator. Dividends on the floating rate preference shares are generally related to interbank offer rates. The following table lists the qualifying preference shares in issue:

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Preference shares

		At 31 December	
		2011	2010
		US$m	US$m
HSBC Holdings			
US$1,450m	6.20% dollar preference shares, Series A, callable from December 2010[1]	**1,450**	1,450
HSBC USA Inc. & HSBC Finance Corporation			
US$575m	6.36% preferred stock, Series B, callable from June 2010	**559**	559
US$518m	Floating rate preferred stock, Series F, callable from April 2010	**518**	518
US$374m	Floating rate preferred stock, Series G, callable from January 2011	**374**	374
US$374m	6.50% preferred stock, Series H, callable from July 2011	**374**	374
Other HSBC subsidiaries			
CAD250m	5 year rate reset class 1 preferred shares, Series E, callable from June 2014	**245**	251
Other preference shares each less than US$200m		**342**	350

1 *These preference shares have a nominal value of US$0.01 each. The amount disclosed denotes the aggregate redemption price. For detailed description of these preference shares, refer to page 394 of the* Annual Report and Accounts 2011.

Hybrid capital

Hybrid capital securities are deeply subordinated securities which display some equity features and can be included as tier 1 capital. Hybrid capital securities are issues of securities for which there is no obligation to pay a coupon and if not paid, the coupon is not cumulative. Such securities do not generally carry voting rights but rank higher than ordinary shares for coupon payments and in the event of a winding-up. Coupons on the floating rate hybrid capital securities are generally related to interbank offer rates. The securities may be called and redeemed by the issuer, subject to prior notification to the FSA, and, where relevant, the consent of the local banking regulator. If not redeemed, coupons payable may step-up and become floating rate or, fixed rate for a further five years based on the relevant reference security plus a margin. The following table lists the qualifying hybrid capital securities in issue:

Hybrid capital securities

		At 31 December	
		2011	2010
		US$m	US$m
HSBC Holdings			
US$3,800m	8.00% capital securities, Series 2, callable December 2015[1]	**3,718**	3,718
US$2,200m	8.125% capital securities, callable April 2013[1]	**2,133**	2,133
Step-up perpetual preferred securities guaranteed by HSBC Holdings			
US$1,250m	4.61% preferred securities, callable June 2013, steps to 3 month LIBOR plus 1.995%[2]	**1,163**	1,185
US$900m	10.176% preferred securities, Series 2, callable June 2030, steps to 3 month LIBOR plus 4.98%[2]	**891**	891
€1,400m	5.3687% preferred securities, callable March 2014, steps to 3 month EURIBOR plus 2%[2]	**1,693**	1,843
€750m	5.13% preferred securities, callable March 2016, steps to 3 month EURIBOR plus 1.9%[2]	**872**	958
€600m	8.03% preferred securities, callable June 2012, steps to 3 month EURIBOR plus 3.65%[2]	**776**	801
£500m	8.208% preferred securities, callable June 2015, steps to 5 year UK Gilts yield plus 4.65%[2]	**771**	772
Step-up perpetual preferred securities guaranteed by HSBC Bank plc			
£700m	5.844% preferred securities, callable November 2031, steps to 6 month LIBOR plus 1.76%[2]	**1,084**	1,087
£300m	5.862% preferred securities, callable April 2020, steps to 6 month LIBOR plus 1.85%[2]	**378**	434

1 *For detailed description of these capital securities, refer to page 395 of the* Annual Report and Accounts 2011.
2 *For detailed description of these preferred securities, refer to page 389 of the* Annual Report and Accounts 2011.

Tier 2 capital

Tier 2 capital comprises qualifying subordinated loan capital, related non-controlling interests, allowable collective impairment allowances, unrealised gains arising on the fair valuation of equity instruments held as available-for-sale and reserves arising from the revaluation of properties. Tier 2 capital is divided into two tiers: upper and lower tier 2.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Upper tier 2 capital

Upper tier 2 securities are subordinated loan capital that do not have a stated maturity date but may be called and redeemed by the issuer, subject to prior notification to the FSA, and, where relevant, the consent of the local banking regulator. Interest coupons on the floating rate upper tier 2 securities are generally related to interbank offer or mid rates and in some cases may be subject to a minimum rate payable. Upper tier 2 capital may also include, for regulatory purposes, some preference share securities not meeting the full GENPRU requirements for inclusion in the tier 1 capital base. The following table lists the qualifying upper tier 2 securities in issue:

Perpetual subordinated loan capital and other upper tier 2 instruments

		At 31 December	
		2011	2010
HSBC Bank plc & subsidiaries		**US$m**	US$m
US$750m	Undated floating rate primary capital notes, callable since June 1990	**750**	750
US$500m	Undated floating rate primary capital notes, callable since September 1990	**500**	500
US$300m	Undated floating rate primary capital notes, series 3, callable since June 1992	**300**	300
Other perpetual subordinated loan capital each less than US$200m		**21**	22
The Hongkong and Shanghai Banking Corporation Ltd. & subsidiaries			
US$400m	Primary capital undated floating rate notes, callable since August 1990	**406**	407
US$400m	Primary capital undated floating rate notes (second series), callable since December 1990	**403**	403
US$400m	Primary capital undated floating rate notes (third series), callable since August 1991	**400**	400
Other HSBC subsidiaries			
Other perpetual subordinated loan capital each less than US$200m		**300**	300

Lower tier 2 capital

Lower tier 2 capital comprises dated subordinated loan capital repayable at par on maturity (in certain cases at a premium over par) and which have an original maturity of at least five years. Some subordinated loan capital may be called and redeemed by the issuer, subject to prior notification to the FSA, and, where relevant, the consent of the local banking regulator. If not redeemed, interest coupons payable may step-up or become floating rate related to interbank offer rates and in some cases may be subject to a floor. Lower tier 2 capital may also include, for regulatory purposes, some preference share or undated capital securities not meeting the full GENPRU requirements for inclusion in the capital base as either tier 1 or upper tier 2 capital. For regulatory purposes, it is a requirement that lower tier 2 securities be amortised on a straight-line basis in their final five years of maturity thus reducing the amount of capital that is recognised for regulatory purposes. The following table lists the qualifying lower tier 2 securities in issue:

Subordinated loan capital and other tier 2 instruments

		At 31 December	
		2011	2010
HSBC Holdings		**US$m**	US$m
US$1,400m	5.25% subordinated notes due December 2012	**1,438**	1,492
US$488m	7.625% subordinated notes due May 2032	**578**	582
US$222m	7.35% subordinated notes due November 2032	**257**	258
US$2,000m	6.5% subordinated notes due May 2036	**2,048**	2,050
US$2,500m	6.5% subordinated notes due September 2037	**2,634**	2,695
US$1,500m	6.8% subordinated notes due June 2038	**1,486**	1,485
€1,000m	5.375% subordinated notes due December 2012	**1,327**	1,405
€1,600m	6.25% subordinated notes due March 2018	**2,073**	2,142
€1,750m	6.0% subordinated notes due June 2019	**2,388**	2,578
€700m	3.625% subordinated notes due June 2020, callable June 2015, steps to 3 month EURIBOR plus 0.93%	**869**	928
£250m	9.875% subordinated bonds due April 2018, callable April 2013, steps to higher of (i) 9.875% or (ii) sum of the yield on the relevant benchmark treasury stock plus 2.5%	**445**	467
£900m	6.375% subordinated notes due October 2022, callable October 2017, steps to 3 month LIBOR plus 1.3%	**1,416**	1,493
£650m	5.75% subordinated notes due December 2027	**926**	971
£650m	6.75% subordinated notes due September 2028	**997**	1,000
£750m	7.0% subordinated notes due April 2038	**1,205**	1,210
£900m	6.0% subordinated notes due March 2040	**1,369**	1,372
US$750m	Subordinated floating rate notes due October 2016, callable October 2011, 0.5% interest margin step[1]	**–**	750

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Subordinated loan capital and other tier 2 instruments (continued)

		At 31 December	
		2011	2010
		US$m	US$m
HSBC Bank plc & subsidiaries			
US$300m	7.65% subordinated notes due May 2025	**374**	342
€500m	Subordinated floating rate notes due September 2020, callable September 2015, 0.5% interest margin step	**550**	592
£350m	Subordinated variable coupon notes due June 2017, callable June 2012, steps to sum of gross redemption yield on the then prevailing 5 year UK gilt plus 1.7%	**550**	562
£500m	4.75% subordinated notes due September 2020, callable September 2015, steps to 3 month LIBOR plus 0.82%	**759**	774
£350m	5.00% subordinated notes due March 2023, callable March 2018, steps to sum of gross redemption yield on the then prevailing 5 year UK gilt plus 1.8%	**533**	547
£300m	6.5% subordinated notes due July 2023	**463**	462
£350m	5.375% subordinated step-up notes due November 2030, callable November 2025, steps to 3 month LIBOR plus 1.5%	**493**	510
£500m	5.375% subordinated notes due August 2033	**678**	729
£225m	6.25% subordinated notes due January 2041	**346**	347
£600m	4.75% subordinated notes due March 2046	**917**	919
US$300m	6.95% subordinated notes due March 2011	**–**	310
€800m	Subordinated floating rate notes due March 2016, callable March 2011, 0.5% interest margin step[2]	**–**	1,070
€600m	4.25% subordinated notes due March 2016, callable March 2011, steps to 3 month EURIBOR plus 1.05%[2]	**–**	823
Other term subordinated loan capital each less than US$200m		**503**	554
The Hongkong and Shanghai Banking Corporation Ltd. & subsidiaries			
US$300m	Subordinated floating rate notes due July 2017, callable July 2012, 0.5% interest margin step	**300**	300
AUD200m	Subordinated floating rate notes due November 2020, callable November 2015	**203**	204
US$450m	Subordinated floating rate notes due July 2016, callable July 2011, 0.5% interest margin step[3]	**–**	450
AUD200m	Subordinated floating rate notes due May 2016, callable May 2011, 0.5% interest margin step[4]	**–**	204
Other term subordinated loan capital each less than US$200m		**362**	368
HSBC USA Inc., HSBC Bank USA, N.A. & HSBC Finance Corporation			
US$1,000m	4.625% subordinated notes due April 2014	**1,009**	1,009
US$500m	6.00% subordinated notes due August 2017	**505**	526
US$1,250m	4.875% subordinated notes due August 2020	**1,259**	1,252
US$750m	5.00% subordinated notes due September 2020	**744**	747
US$2,939m	6.676% senior subordinated notes due January 2021[5]	**2,177**	2,174
US$200m	7.808% capital securities due December 2026, callable since December 2006	**200**	200
US$200m	8.38% capital securities due May 2027, callable since May 2007	**200**	200
US$1,000m	5.875% subordinated notes due November 2034	**951**	971
US$1,000m	5.911% trust preferred securities due November 2035, callable November 2015, steps to 3 month LIBOR plus 1.926%	**994**	994
US$750m	5.625% subordinated notes due August 2035	**712**	728
US$700m	7.00% subordinated notes due January 2039	**681**	694
US$250m	7.20% subordinated debentures due July 2097	**214**	213
Other term subordinated loan capital each less than US$200m		**644**	754
Other HSBC subsidiaries			
CAD200m	4.94% subordinated debentures due March 2021	**195**	200
CAD400m	4.80% subordinated notes due April 2022, callable April 2017, steps to 90-day Bankers' Acceptance Rate plus 1%	**417**	417
BRL500m	Subordinated floating rate certificates of deposit due December 2016	**268**	301
BRL383m	Subordinated certificates of deposit due February 2015	**206**	231
Other term subordinated loan capital each less than US$200m		**650**	707

1 *In October 2011, HSBC Holdings redeemed its US$750m callable subordinated floating rate notes due 2016.*
2 *In March 2011, HSBC redeemed its €800m callable subordinated floating rate notes due 2016 and its €600m 4.25% callable subordinated notes due 2016 at par.*
3 *In July 2011, HSBC redeemed its US$450m callable subordinated floating rate notes due 2016 at par.*
4 *In May 2011, HSBC redeemed its AUD200m callable subordinated floating rate notes due 2016 at par.*
5 *Approximately 25% of the 6.676% senior subordinated notes due January 2021 is held by HSBC Holdings.*

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Glossary

Abbreviation	Brief description
A	
ABS[1]	Asset-Backed Security
AFS[1]	Available For Sale
ALCO	Asset and Liability Management Committee
B	
Basel Committee	Basel Committee on Banking Supervision
C	
CRAOC	Credit Risk Analytics Oversight Committee
CRD	Capital Requirements Directive
CRR[1]	Customer Risk Rating
CSA[1]	Credit Support Annex
E	
EAD[1]	Exposure at Default
ECAI	External Credit Assessment Institution, such as Moody's Investors Service, Standard & Poor's Ratings Group or Fitch Group
EURIBOR	Euro Interbank Offered Rate
F	
Fitch	Fitch Group
FSA	Financial Services Authority (UK)
G	
GCRO	Group Chief Risk Officer
GENPRU	The FSA's rules, as set out in the General Prudential Sourcebook
GMB	Group Management Board
GRC	Group Risk Committee
G-SIB	Global Systemically Important Bank
H	
Hong Kong	The Hong Kong Special Administrative Region of the People's Republic of China
HSBC	HSBC Holdings together with its subsidiary undertakings
HSBC Bank	HSBC Bank plc, formerly Midland Bank plc
HSBC Holdings	HSBC Holdings plc, the parent company of HSBC
I	
IAA[1]	Internal Assessment Approach
ICAAP[1]	Internal Capital Adequacy Assessment Process
IFRSs	International Financial Reporting Standards
IMM[1]	Internal Model Method
IRB[1]	Internal Ratings-Based
ISDA	International Swaps and Derivatives Association
L	
LGD[1]	Loss Given Default
LIBOR	London Interbank Offer Rate
M	
MENA	The Middle East and North Africa
Moodys	Moody's Investors Service
O	
ORMF	Operational Risk Management Framework
OTC[1]	Over-the-Counter

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Abbreviation	Brief description
P	
PD[1]	Probability of Default
R	
RBM[1]	Ratings Based Method
RMC	Risk Management Committee
RMM	Risk Management Meeting of the Group Management Board
RWA[1]	Risk-Weighted Asset
S	
S&P	Standard and Poor's Ratings Group
SFM[1]	Supervisory Formula Method
SIC	Securities Investment Conduit
SME	Small and Medium-sized Enterprise
SPE[1]	Special Purpose Entity
U	
UK	United Kingdom
US	United States of America
V	
VAR[1]	Value at Risk

1 *Full definition included in Glossary of Terms on page 57.*

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Term	Definition
A	
Arrears	Customers are said to be in arrears (or in a state of delinquency) when they are behind in fulfilling their obligations, with the result that an outstanding loan is unpaid or overdue. When a customer is in arrears, the total outstanding loans on which payments are overdue are described as delinquent.
Asset-backed securities ('ABS's)	Securities that represent an interest in an underlying pool of referenced assets. The referenced pool can comprise any assets which attract a set of associated cash flows but are commonly pools of residential or commercial mortgages.
Available-for-sale ('AFS') financial assets	Those non-derivative financial assets that are designated as available for sale or are not classified as a) loans and receivables b) held-to-maturity investments or c) financial assets at fair value through profit or loss.
B	
Back-testing	A statistical technique used to monitor and assess the accuracy of a model, and how that model would have performed had it been applied in the past.
Basel II	The capital adequacy framework issued by the Basel Committee on Banking Supervision in June 2006 in the form of the 'International Convergence of Capital Measurement and Capital Standards', amended by subsequent changes to the capital requirements for market risk and re-securitisations, commonly known as Basel 2.5, which took effect in December 2011.
Basel III	In December 2010, the Basel Committee issued final rules 'Basel III: A global regulatory framework for more resilient banks and banking systems' and 'International framework for liquidity risk measurement, standards and monitoring'. Together these documents present the Basel Committee's reforms to strengthen global capital and liquidity rules with the goal of promoting a more resilient banking sector. In June 2011, the Basel Committee issued a revision to the former document setting out the finalised capital treatment for counterparty credit risk in bilateral trades. The Basel III requirements will be phased in starting 1 January 2013 with full implementation by 1 January 2019.
C	
Code Staff	Senior management, risk takers, staff engaged in control functions, and any employee whose total remuneration takes them into the same remuneration bracket as senior management and risk takers and whose professional activities have a material impact on the firm's risk profile.
Commercial paper	An unsecured, short-term debt instrument issued by a corporation, typically for the financing of accounts receivable, inventories and meeting short-term liabilities. The debt is usually issued at a discount, reflecting prevailing market interest rates.
Commercial real estate	Any real estate investment, comprising buildings or land, intended to generate a profit, either from capital gain or rental income.
Common equity tier 1 capital	The highest quality form of regulatory capital under Basel III that comprises common shares issued and related share premium, retained earnings and other reserves excluding the cash flow hedging reserve, less specified regulatory adjustments.
Comprehensive risk measure	The comprehensive risk measure model covers all positions that are part of the correlation trading portfolio. Comprehensive risk measure covers all price risks including spread, default and migration. Like incremental risk charge, it is calibrated to a 99.9 percentile loss and a one-year capital horizon to generate a capital add-on to VAR.
Conduits	HSBC sponsors and manages multi-seller conduits and securities investment conduits ('SIC's). The multi-seller conduits hold interests in diversified pools of third-party assets such as vehicle loans, trade receivables and credit card receivables funded through the issuance of short-dated commercial paper and supported by a liquidity facility. The SICs hold predominantly asset-backed securities referencing such items as commercial and residential mortgages, vehicle loans and credit card receivables funded through the issuance of both long-term and short-term debt.
Core tier 1 capital	The highest quality form of regulatory capital under Basel II that comprises total shareholders' equity and related non-controlling interests, less goodwill and intangible assets and certain other regulatory adjustments.
Counterparty credit risk	Counterparty credit risk, in both the trading and non-trading books, is the risk that the counterparty to a transaction may default before completing the satisfactory settlement of the transaction.
Credit default swap ('CDS')	A derivative contract whereby a buyer pays a fee to a seller in return for receiving a payment in the event of a defined credit event (e.g. bankruptcy, payment default on a reference asset or assets, or downgrades by a rating agency) on an underlying obligation (which may or may not be held by the buyer).
Credit enhancements	Facilities used to enhance the creditworthiness of financial obligations and cover losses due to asset default.
Credit quality step	A step in the FSA credit quality assessment scale which is based on the credit ratings of ECAIs. It is used to assign risk weights under the standardised approach.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Term	Definition
Credit risk	Risk of financial loss if a customer or counterparty fails to meet an obligation under a contract. It arises mainly from direct lending, trade finance and leasing business, but also from products such as guarantees, derivatives and debt securities.
Credit valuation adjustment	An adjustment to the valuation of OTC derivative contracts to reflect the creditworthiness of OTC derivative counterparties.
Credit risk mitigation	A technique to reduce the credit risk associated with an exposure by application of credit risk mitigants such as collateral, guarantees and credit protection.
Credit spread option	A derivative that transfers risk from one party to another. The buyer pays an initial premium in exchange for potential cash flows if the credit spread changes from its current level.
Credit Support Annex ('CSA')	A legal document that regulates credit support (collateral) for OTC derivative transactions between two parties.
Customer risk rating ('CRR')	An internal scale of 23 grades measuring obligor probability of default.
D	
Delinquency	See 'Arrears'.
Debt securities	Assets on the Group's balance sheet representing certificates of indebtedness of credit institutions, public bodies or other undertakings, excluding those issued by Central Banks.
E	
Economic capital	The internally calculated capital requirement which is deemed necessary by HSBC to support the risks to which it is exposed.
Equity risk	The risk arising from positions, either long or short, in equities or equity-based instruments, which create exposure to a change in the market price of the equities or equity instruments.
Expected loss	A regulatory calculation of the amount expected to be lost on an exposure using a 12-month time horizon and downturn loss estimates. EL is calculated by multiplying the Probability of Default (a percentage) by the Exposure at Default (an amount) and Loss Given Default (a percentage).
Exposure	A claim, contingent claim or position which carries a risk of financial loss.
Exposure at default ('EAD')	The amount expected to be outstanding after any credit risk mitigation, if and when the counterparty defaults. EAD reflects drawn balances as well as allowance for undrawn amounts of commitments and contingent exposures.
Exposure value	Exposure at default ('EAD').
F	
Fair value	Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.
FSA Standard rules	The method prescribed by the FSA for calculating market risk capital requirements in the absence of VAR model approval.
G	
Global Markets	HSBC's treasury and capital markets services in Global Banking and Markets.
Group	HSBC Holdings together with its subsidiary undertakings.
G-SIB	A bank that meets the criteria defined in the Basel Committee's final rules set out in their 4 November 2011 document 'Global systemically important banks: Assessment methodology and the additional loss absorbency requirement'. At 31 December 2011, the official list of such banks comprised the 29 names, which include HSBC, published by the Financial Stability Board also on 4 November 2011. The Financial Stability Board is co-ordinating, on behalf of the G20 Group of Governors and Heads of Supervision ('GHOS'), the overall set of measures to reduce the moral hazard and risks to the global financial system posed by global systemically important financial institutions ('G-SIFI's) of all kinds.
H	
Haircut	With respect to credit risk mitigation, a downward adjustment to collateral value to reflect any currency or maturity mismatches between the credit risk mitigant and the underlying exposure to which it is being applied. Also a valuation adjustment to reflect any fall in value between the date the collateral was called and the date of liquidation or enforcement.
Held-to-maturity	An accounting classification for investments acquired with the intention and ability of being held until they mature.
High risk (regulatory)	Standardised approach exposures that have been defined by the FSA as 'high risk exposures'. These include exposures arising out of venture capital business (whether or not the firm itself carries on the venture capital business) and any high risk positions in Collective Investment Undertakings that are illiquid and held with a view to long-term sale or realisation.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Term	Definition
I	
Impaired loans	Loans where the Group does not expect to collect all the contractual cash flows or expects to collect them later than they are contractually due.
Impairment allowances	Management's best estimate of losses incurred in the loan portfolios at the balance sheet date.
Incremental risk charge	The Incremental Risk Charge model captures the potential distribution of profit and loss due to default and migration for a portfolio of credit positions. For credit positions held on the trading book, and subject to specific interest rate risk VAR for regulatory capital, an incremental risk charge based on the 99.9th percentile of the incremental risk charge distribution, over a one year capital horizon, is used as a capital add-on to VAR.
Institutions	Under the standardised approach, Institutions comprise credit institutions or investment firms. Under the IRB approach, Institutions also include regional governments and local authorities, public sector entities and multilateral development banks.
Insurance risk	A risk, other than financial risk, transferred from the holder of a contract to the insurance provider. The principal insurance risk is that, over time, the combined cost of claims, administration and acquisition of the contract may exceed the aggregate amount of premiums received and investment income.
Internal Assessment Approach ('IAA')	One of three calculation methods defined under the IRB approach to securitisations. The IAA is limited to exposures arising from asset-backed commercial paper programmes, mainly related to liquidity facilities and credit enhancement. Eligible ECAI rating methodology is applied to each asset class in order to derive the equivalent rating level for each transaction. This methodology is verified by the internal Credit function as part of the approval process for each new transaction. The performance of each underlying asset portfolio is monitored to confirm that the applicable equivalent rating level still applies and is independently verified.
Internal Capital Adequacy Assessment Process ('ICAAP')	The Group's own assessment of the levels of capital that it needs to hold through an examination of its risk profile from regulatory and economic capital viewpoints.
Internal Model Method ('IMM')	One of three approaches defined by Basel II to determine exposure values for counterparty credit risk.
Internal ratings-based approach ('IRB')	A method of calculating credit risk capital requirements using internal estimates of risk parameters.
Invested capital	Equity capital invested in HSBC by its shareholders.
IRB advanced approach	A method of calculating credit risk capital requirements using internal PD, LGD and EAD models.
IRB foundation approach	A method of calculating credit risk capital requirements using internal PD models but with supervisory estimates of LGD and conversion factors for the calculation of EAD.
ISDA master agreement	Standardised contract developed by ISDA used as an umbrella under which bilateral derivatives contracts are entered into.
L	
Liquidity risk	The risk that HSBC does not have sufficient financial resources to meet its obligations as they fall due, or will have to do so at an excessive cost. This risk arises from mismatches in the timing of cash flows.
Loss given default ('LGD')	The estimated ratio (percentage) of the loss on an exposure to the amount outstanding at default (EAD) upon default of a counterparty.
M	
Market risk	The risk that movements in market risk factors, including foreign exchange rates and commodity prices, interest rates, credit spreads and equity prices will reduce income or portfolio values.
Mark-to-market approach	One of three approaches defined by Basel II to determine exposure values for counterparty credit risk.
N	
Net interest income	The amount of interest received or receivable on assets net of interest paid or payable on liabilities.
O	
Obligor grade	Obligor grades, summarising a more granular underlying counterparty risk rating scale for estimates of probability of default, are defined as follows: • *'Minimal Default Risk':* The strongest credit risk, with a negligible probability of default. • *'Low Default Risk':* A strong credit risk, with a low probability of default. • *'Satisfactory Default Risk':* A good credit risk, with a satisfactory probability of default.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Term	Definition
	• *'Fair Default Risk'*: The risk of default remains fair, but identified weaknesses may warrant more regular monitoring. • *'Moderate Default Risk':* The overall position will not be causing any immediate concern, but more regular monitoring will be necessary as a result of sensitivities to external events that give rise to the possibility of risk of default increasing. • *'Significant Default Risk':* Performance may be limited by one or more troublesome aspect, known deterioration, or the prospect of worsening financial status. More regular monitoring required. • *'High Default Risk':* Continued deterioration in financial status, that requires frequent monitoring and ongoing assessment. The probability of default is of concern but the borrower currently has the capacity to meet its financial commitments. • *'Special Management':* The probability of default is of increasing concern and the borrower's capacity to fully meet its financial commitments is becoming increasingly less likely. • *'Default':* A default is considered to have occurred with regard to a particular obligor when either or both of the following events has taken place: the Group considers that the obligor is unlikely to pay its credit obligations in full, without recourse by the Group to actions such as realising security, or the obligor is past due more than 90 days on any material credit obligation to the Group.
Operational risk	The risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events, including legal risk.
Over-the-counter ('OTC')	A bilateral transaction (e.g. derivatives) that is not exchange traded and that is valued using valuation models.
P	
Private equity investments	Equity securities in operating companies not quoted on a public exchange, often involving the investment of capital in private companies or the acquisition of a public company that results in its delisting.
Probability of default ('PD')	The probability that an obligor will default within a one-year time horizon.
Q	
Qualifying revolving retail exposures	Retail IRB exposures that are revolving, unsecured, and, to the extent they are not drawn, immediately and unconditionally cancellable, such as credit cards.
R	
Ratings Based Method ('RBM')	One of three calculation methods defined under the IRB approach to securitisations. The approach uses risk weightings based on ECAI ratings, the granularity of the underlying pool and the seniority of the position and whether it is a re-securitisation.
Regulatory capital	The capital which HSBC holds, determined in accordance with rules established by the FSA for the consolidated Group and by local regulators for individual Group companies.
Re-securitisation	A securitisation of a securitisation exposure, where the risk associated with an underlying pool of exposures is tranched and at least one of the underlying exposures is a securitisation exposure.
Residual maturity	The period outstanding from the reporting date to the maturity or end date of an exposure.
Restricted Shares	Awards of Restricted Shares define the number of HSBC Holdings ordinary shares to which the employee will become entitled, generally between one and three years from the date of the award, and normally subject to the individual remaining in employment. The shares to which the employee becomes entitled may be subject to retention requirement.
Retail IRB	Retail exposures that are treated under the IRB approach.
Return on equity	Profit attributable to ordinary shareholders divided by average invested capital.
Risk appetite	An assessment of the types and quantum of risks to which HSBC wishes to be exposed.
Risk-weighted assets ('RWAs')	Calculated by assigning a degree of risk expressed as a percentage (risk weight) to an exposure in accordance with the applicable Standardised or IRB approach rules.
S	
Securitisation	A transaction or scheme whereby the credit risk associated with an exposure, or pool of exposures, is tranched and where payments to investors in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures. A traditional securitisation involves the transfer of the exposures being securitised to an SPE which issues securities. In a synthetic securitisation, the tranching is achieved by the use of credit derivatives and the exposures are not removed from the balance sheet of the originator.
Significant Influence Function	FSA registered role, recognised as being a control function role.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

Term	Definition
Simple risk weight approach	Simple risk weight approach is a simple method of allocating capital to private equity exposures in sufficiently diversified portfolios (190% RW), exchange traded equity exposures (290% RW) or other equity exposures (370% RW).
Specialised lending exposure	Specialised lending exposures are defined by the FSA as exposures to an entity which was created specifically to finance and/or operate physical assets, where the contractual arrangements give the lender a substantial degree of control over the assets and the income that they generate and the primary source of repayment of the obligation is the income generated by the assets being financed, rather than the independent capacity of a broader commercial enterprise.
Special Purpose Entity ('SPE')	A corporation, trust or other non-bank entity, established for a narrowly defined purpose, including for carrying on securitisation activities. The structure of the SPE and its activities are intended to isolate the obligations from those of the originator and the holders of the beneficial interests in the securitisation.
Specific issuer risk	Specific issuer (credit spread) risk arises from a change in the value of debt instruments due to a perceived change in the credit quality of the issuer or underlying assets.
Standardised approach	In relation to credit risk, a method for calculating credit risk capital requirements using ECAI ratings and supervisory risk weights. In relation to operational risk, a method of calculating the operational capital requirement by the application of a supervisory defined percentage charge to the gross income of eight specified business lines.
Stressed VAR	Stressed VAR is the measure of VAR using a specific, continuous one-year period of stress of the trading portfolio.
Supervisory Formula Method ('SFM')	An alternative Ratings Based Method to be used primarily on sponsored securitisations. It is used to calculate the capital requirements of exposures to a securitisation as a function of the collateral pool and contractual properties of the tranche or tranches retained.
Supervisory slotting approach	A method for calculating capital requirements for Specialised Lending exposures where the internal rating of the obligor is mapped to one of five supervisory categories, each associated with a specific supervisory risk weight.
T	
Through-the-cycle	A rating methodology which seeks to take cyclical volatility out of the estimation of default risk by assessing a borrower's performance over the business cycle.
Tier 1 capital	A component of regulatory capital, comprising core tier 1 capital and other tier 1 capital. Other tier 1 capital includes qualifying capital instruments such as non-cumulative perpetual preference shares and hybrid capital securities.
Tier 2 capital	A component of regulatory capital, comprising qualifying subordinated loan capital, related non-controlling interests, allowable collective impairment allowances and unrealised gains arising on the fair valuation of equity instruments held as available-for-sale. Tier 2 capital also includes reserves arising from the revaluation of properties.
Total return swap	A credit derivative transaction that swaps the total return on a financial instrument (cash flows and capital gains and losses), for a guaranteed interest rate, such as an inter-bank rate, plus a margin.
V	
Value at risk ('VAR')	A measure of the loss that could occur on risk positions as a result of adverse movements in market risk factors (e.g. rates, prices, volatilities) over a specified time horizon and to a given level of confidence.
W	
Write-down	Reduction in the carrying value of an asset due to impairment or fair value movements.
Wrong-way risk	An adverse correlation between the counterparty's probability of default and the mark-to-market value of the underlying transaction.

Capital and Risk Management Pillar 3 Disclosures at 31 December 2011 (continued)

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