The Hongkong and Shanghai Banking Corporation Limited

Supplementary Notes on the Financial Statements 2013

HSBC

Contents

Supplementary Notes on the Financial Statements (continued)

Introduction

The information contained in this document is for The Hongkong and Shanghai Banking Corporation Limited ('the Bank') and its subsidiaries (together 'the group'). It is supplementary to and should be read in conjunction with the 2013 Annual Report and Accounts. The Annual Report and Accounts and these Supplementary Notes, taken together, comply with the Banking (Disclosure) Rules made under section 60A of the Banking Ordinance, as amended by the Banking (Disclosure) (Amendment) Rules 2013. They also serve to comply with the disclosures on remuneration as required by the Hong Kong Monetary Authority ('HKMA') Supervisory Policy Manual CG-5 'Guideline on a Sound Remuneration System'.

References to 'HSBC', 'the Group' or 'the HSBC Group' within this document mean HSBC Holdings plc 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'. The abbreviations 'HK$m' and 'HK$bn' represent millions and billions (thousands of millions) of Hong Kong dollars respectively.

While the Supplementary Notes are not required to be externally audited, the document has been verified internally in accordance with the group's policies on disclosure and its financial reporting and governance processes.

1 Basis of preparation

a The group uses the advanced internal ratings-based approach to calculate its credit risk for the majority of its non-securitisation exposures and the internal ratings-based (securitisation) approach to determine credit risk for its banking book securitisation exposures. For market risk, the group uses an internal models approach to calculate its general market risk for the risk categories of interest rate and foreign exchange (including gold) exposures, and equity exposures. The group also uses an internal models approach to calculate its market risk in respect of specific risk for interest rate exposures and equity exposures. The group uses the standardised (market risk) approach for calculating other market risk positions as well as trading book securitisation exposures, and the standardised (operational risk) approach to calculate its operational risk.

The Banking (Capital) (Amendment) Rules 2012, effective on 1 January 2013, implemented the first phrase of the Basel III requirements in Hong Kong. Basel III makes significant changes to the definition of capital compared with Basel II, as well as changes the calculation of risk weighted assets for credit risk. Consequently, as certain information included in this document has been calculated on a different basis between 31 December 2013 (Basel III) and 31 December 2012 (Basel II), it is not directly comparable.

b Except where indicated otherwise, the financial information contained in these Supplementary Notes has been prepared on a consolidated basis. The basis of consolidation for regulatory purposes is different from that for accounting purposes. Information regarding subsidiaries that are not included in the consolidation for regulatory purposes is set out in note 20.

c The accounting policies applied in preparing these Supplementary Notes are the same as those applied in preparing the consolidated financial statements for the year ended 31 December 2013, as set out in note 3 on the financial statements in the 2013 Annual Report and Accounts.

d Certain comparative figures have not been provided where the current year is the first year of disclosure and the provision of comparatives is impracticable. Certain comparative figures have been reclassified to conform to the current year disclosure.

Supplementary Notes on the Financial Statements (continued)

2 Credit risk capital requirements

The group uses the advanced internal ratings-based ('IRBA') approach to calculate its credit risk for the majority of its non-securitisation exposures. The remainder of its credit risk for non-securitisation exposures was assessed using the standardised (credit risk) approach.

The table below shows the capital requirements for credit risk for each class and subclass of non-securitisation exposures as specified in the Banking (Capital) Rules. Capital requirement means the amount of capital required to be held for that risk based on its risk-weighted amount multiplied by 8%.

	At 31 December	
	2013	2012
	HK$m	HK$m
Capital required for exposures under the IRB approach		
Corporate exposures		
Specialised lending under the supervisory slotting criteria approach		
- Project finance	**874**	690
- Object finance	**79**	108
- Commodities finance	**170**	43
- Income- producing real estate	**3,078**	3,824
Small-and-medium sized corporates	**17,239**	17,266
Other corporates	**61,202**	53,100
Sovereign exposures		
Sovereigns	**12,772**	7,958
Bank exposures		
Banks	**15,660**	10,950
Securities firms	**468**	383
Retail exposures		
Residential mortgages		
- Individuals	**4,594**	4,410
- Property- holding shell companies	**224**	278
Qualifying revolving retail exposures	**3,688**	3,508
Small business retail exposures	**15**	17
Other retail exposures to individuals	**814**	753
Equity Exposures		
Equity exposures under the simple risk-weighted method	**4,058**	–
Other equity exposures	**7,476**	–
Other exposures		
Cash items	**61**	74
Other items	**9,572**	8,642
Total for the IRB approach	**142,044**	112,004
Capital required for exposures under the standardised (credit risk) approach		
Sovereign exposures	**43**	57
Public sector entity exposures	**638**	653
Multilateral development bank exposures	**–**	–
Bank exposures	**292**	296
Securities firm exposures	**5**	2
Corporate exposures	**6,420**	2,720
Collective investment scheme exposures	**–**	3
Cash items	**–**	–
Regulatory retail exposures	**4,257**	4,446
Residential mortgage loans	**3,675**	3,087
Other exposures which are not past due exposures	**1,145**	1,126
Past due exposures	**365**	389
Off-balance sheet exposures other than OTC derivative transactions and credit derivative contracts	**914**	813
OTC derivative transactions and credit derivative contracts	**418**	214
Total for the standardised (credit risk) approach	**18,172**	13,806
Capital required for Central Counterparties (CCP)	**1,040**	–
Capital required for Credit Valuation Adjustment (CVA)	**6,617**	–
Total	**167,873**	125,810

Supplementary Notes on the Financial Statements (continued)

3 Summary of risk-weighted assets

The group's total risk-weighted assets are summarised as follows:

	At 31 December	
	2013	2012
	HK$m	HK$m
Credit risk		
Standardised (credit risk) approach	**226,698**	172,582
Internal ratings-based approach	**1,747,206**	1,363,329
Exposures to Central Counterparties (CCP)	**12,999**	–
Credit Valuation Adjustment (CVA)	**82,716**	–
Internal ratings-based (securitisation) approach	**4,250**	1,173
	2,073,869	1,537,084
Market risk	**134,035**	116,911
Operational risk	**274,450**	250,139
	2,482,354	1,904,134

4 Credit risk under the internal ratings-based approach

a *The internal ratings system and its risk components*

Nature of exposures within each internal ratings-based ('IRB') class

The group uses the advanced IRB approach for the majority of its business under the approval granted by the Hong Kong Monetary Authority ('HKMA'). This includes the following major classes of non-securitisation exposures:

- Corporate exposures including exposures to global and local large corporates, middle-market corporates, non-bank financial institutions and specialised lending.
- Sovereign exposures including exposures to central governments, central monetary institutions and relevant international organisations.
- Bank exposures including exposures to banks and regulated securities firms.
- Retail exposures including residential mortgages, qualifying revolving retail exposures and other retail exposures.
- Equity exposures.
- Other exposures including cash items and other assets.

Measurement and monitoring – risk rating systems

Exposure to credit risk arises from a very wide range of customers and product types, and the risk rating systems in place to measure and monitor these risks are correspondingly diverse.

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

A fundamental principle of the group's policy and approach is that analytical risk rating systems and scorecards are decision tools facilitating management, serving ultimately judgemental decisions for which individual approvers are accountable. In the case of automated decision making processes, accountability rests with those responsible for the parameters built into those processes/systems and the controls surrounding their use. For distinct customers, the credit process requires at least annual review of facility limits granted. Review may be more frequent, as required by circumstances.

Supplementary Notes on the Financial Statements (continued)

4 Credit risk under the internal ratings-based approach *(continued)*

Group standards govern the process through which risk rating systems are initially developed, judged fit for purpose, approved and implemented; the conditions under which individual approvers can override analytical risk model outcomes; and the process of model performance monitoring and reporting. There is emphasis on an effective dialogue between business lines and risk management, appropriate independence of decision-takers, and a good understanding and robust reflection 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 and the greater availability and quality of data. Structured processes and metrics are in place to capture relevant data and feed it into continuous model improvement.

Application of IRB parameters

The group's credit risk rating framework incorporates the probability of default ('PD') of a borrower and the loss severity, expressed in terms of exposure at default ('EAD') and loss given default ('LGD'). These measures are used to calculate both expected loss ('EL') and capital requirements, subject to any floors required by the HKMA. 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.

The narrative explanations that follow relate to the IRB advanced approaches, that is: IRB advanced for distinct customers and retail IRB for the portfolio-managed retail business.

Wholesale business

PD for wholesale customer segments (Central Governments and Central Banks (sovereigns), Institutions, Corporates) 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 model for the individual borrower 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 additional information relevant to the risk rating determination, including external ratings where available. The approved CRR is mapped to a PD value range of which the 'mid-point' is used in the regulatory capital calculation. PD models are developed where the risk profile of corporate borrowers is specific to a country and sector. For illustration purpose, the CRR is also mapped to external ratings of Standard and Poor's ('S&P'), though we also benchmark against other agencies' ratings in an equivalent manner.

LGD and EAD estimation for the wholesale business is subject to a Group framework of basic principles. EAD is estimated to a 12-month 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 factors like 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.

The group uses the supervisory slotting criteria approach in rating its specialised lending exposures. Under this approach, ratings are determined by considering both the borrower and the transaction risk characteristics.

Retail business

The wide range of application and behavioural models used in the management of retail portfolios has been supplemented with models 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 PD bands, in 7 composite PD grades, facilitating comparability across the group's retail customer segments, business lines and product types.

4 Credit risk under the internal ratings-based approach *(continued)*

Model governance

Model governance of group risk rating models, including development, validation and monitoring, are under the general oversight of the Wholesale Credit and Market Risk ('WCMR') Model Oversight Committee ('MOC') and Retail Banking and Wealth Management Risk ('RBWMR') MOC. Both the WCMR MOC and RBWMR MOC are under the oversight of the Group MOC and are accountable to the group Risk Management Committee.

Internal Audit, or a comparable independent credit quality assurance unit, conducts regular reviews of the risk rating model application by the global businesses.

Use of internal estimates

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

- **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 the Board, Audit Committee and Risk Committee contain analyses of risk exposures, e.g. by customer segment and quality grade, employing IRB metrics;

- **pricing**: IRB 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 the group 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.

Supplementary Notes on the Financial Statements (continued)

4 Credit risk under the internal ratings-based approach *(continued)*

b *Exposures by IRB calculation approach*

The following shows the group's exposures (including the EAD of on-balance sheet exposures and off-balance sheet exposures) by each IRB calculation approach:

	Advanced IRB approach HK$m	Supervisory slotting criteria approach HK$m	Retail IRB approach HK$m	Total exposures HK$m
At 31 December 2013				
Corporate exposures	**1,766,810**	**78,261**	–	**1,845,071**
Sovereign exposures	**1,256,246**	–	–	**1,256,246**
Bank exposures	**1,027,098**	–	–	**1,027,098**
Retail exposures				
- Residential mortgages to individuals and property-holding shell companies	–	–	**670,260**	**670,260**
- Qualifying revolving retail exposures	–	–	**196,171**	**196,171**
- Other retail exposures to individuals and small business retail exposures	–	–	**51,089**	**51,089**
At 31 December 2012				
Corporate exposures	1,644,553	85,473	–	1,730,026
Sovereign exposures	1,204,474	–	–	1,204,474
Bank exposures	885,816	–	–	885,816
Retail exposures				
- Residential mortgages to individuals and property-holding shell companies	–	–	665,404	665,404
- Qualifying revolving retail exposures	–	–	182,827	182,827
- Other retail exposures to individuals and small business retail exposures	–	–	50,047	50,047

The corporate, sovereign and bank exposures reported under the IRBA approach as at 31 December 2013 include amounts of HK$82,787m, HK$4,239m and HK$219,147m respectively (31 December 2012: HK$74,268m, HK$7,898m and HK$184,565m respectively) that are subject to supervisory estimates. In addition, equity exposures of HK$11,965m reported under the simple risk-weighted method and amounts reported under the Supervisory Slotting Criteria approach are subject to supervisory estimates.

c *Exposures covered by recognised guarantees or recognised credit derivative contracts*

The following shows the group's exposures (after the effect of any on-balance sheet or off-balance sheet recognised netting) which are covered by recognised guarantees or recognised credit derivative contracts after the application of haircuts required under the Banking (Capital) Rules. These exposures exclude securities financing transactions and derivative contracts.

	At 31 December 2013 HK$m	At 31 December 2012 HK$m
Corporate exposures	**326,787**	317,740
Sovereign exposures	**637**	658
Bank exposures	**14,970**	14,210
Retail exposures	**37,075**	37,978
	379,469	370,586

Supplementary Notes on the Financial Statements (continued)

4 Credit risk under the internal ratings-based approach *(continued)*

d *Risk assessment for exposures under IRB approach*

Corporate exposures (other than specialised lending) – analysis by obligor grade

	CRR	PD range %	Exposure at default HK$m	Exposure-weighted average PD %	Exposure-weighted average LGD %	Exposure-weighted average risk-weight %	RWAs HK$m	Mapped External Rating
At 31 December 2013								
Default risk								
Minimal	0.1	**0.000 to 0.010**	**–**	**–**	**–**	**–**	**–**	
	1.1	**0.011 to 0.028**	**11,859**	**0.03**	**41.3**	**11**	**1,344**	**AAA to AA-**
	1.2	**0.029 to 0.053**	**79,462**	**0.04**	**46.0**	**14**	**10,996**	**A+**
Low	2.1	**0.054 to 0.095**	**223,691**	**0.07**	**40.8**	**20**	**43,991**	**A**
	2.2	**0.096 to 0.169**	**282,074**	**0.13**	**44.5**	**32**	**88,916**	**A-**
Satisfactory	3.1	**0.170 to 0.285**	**243,358**	**0.22**	**43.4**	**40**	**96,144**	**BBB+**
	3.2	**0.286 to 0.483**	**210,819**	**0.37**	**44.9**	**55**	**116,183**	**BBB to BBB-**
	3.3	**0.484 to 0.740**	**177,356**	**0.63**	**42.8**	**68**	**120,337**	**BBB-**
Fair	4.1	**0.741 to 1.022**	**90,906**	**0.87**	**43.9**	**77**	**69,843**	**BB+**
	4.2	**1.023 to 1.407**	**112,938**	**1.20**	**41.7**	**86**	**96,786**	**BB**
	4.3	**1.408 to 1.927**	**111,622**	**1.65**	**38.5**	**86**	**95,473**	**BB-**
Moderate	5.1	**1.928 to 2.620**	**77,347**	**2.25**	**38.1**	**96**	**74,448**	**BB-**
	5.2	**2.621 to 3.579**	**64,776**	**3.05**	**41.1**	**112**	**72,243**	**B+**
	5.3	**3.580 to 4.914**	**46,331**	**4.20**	**38.0**	**116**	**53,869**	**B+**
Significant	6.1	**4.915 to 6.718**	**12,199**	**5.75**	**40.7**	**136**	**16,591**	**B**
	6.2	**6.719 to 8.860**	**8,249**	**7.85**	**41.9**	**166**	**13,664**	**B-**
High	7.1	**8.861 to 11.402**	**1,619**	**10.00**	**49.6**	**213**	**3,453**	**B-**
	7.2	**11.403 to 15.000**	**1,447**	**13.00**	**40.0**	**191**	**2,762**	**CCC+**
Special management	8.1	**15.001 to 22.000**	**1,234**	**19.00**	**44.6**	**243**	**3,000**	**CCC**
	8.2	**22.001 to 50.000**	**2**	**36.00**	**87.1**	**485**	**10**	**CCC-**
	8.3	**50.001 to 99.999**	**299**	**75.00**	**53.0**	**157**	**469**	**CC to C**
Default	9/10	**100.000**	**9,222**	**100.00**	**48.6**	**–**	**–**	**Default**
			1,766,810				**980,522**	
At 31 December 2012								
Default risk								
Minimal		0.000 to 0.053	130,103	0.04	45.5	15	19,744	
Low		0.054 to 0.053	495,704	0.10	45.1	26	129,479	
Satisfactory		0.170 to 0.740	544,890	0.37	44.5	52	282,002	
Fair		0.741 to 1.927	245,804	1.19	43.5	86	211,639	
Moderate		1.928 to 4.914	195,678	2.74	37.1	101	198,416	
Significant		4.915 to 8.860	17,554	6.44	38.9	142	24,954	
High		8.861 to 15.000	3,604	11.10	46.3	204	7,351	
Special management		15.001 to 99.999	2,605	20.69	43.9	230	5,992	
Default		100.000	8,611	100.00	48.3	–	–	
			1,644,553				879,577	

Supplementary Notes on the Financial Statements (continued)

4 Credit risk under the internal ratings-based approach *(continued)*

d *Risk assessment for exposures under IRB approach (continued)*

Corporate exposures (specialised lending) – analysis by supervisory rating grade

	Exposure at default HK$m	Exposure-weighted average risk-weight %
At 31 December 2013		
Strong	**63,831**	**61**
Good	**11,901**	**85**
Satisfactory	**2,063**	**122**
Weak	**351**	**265**
Default	**115**	**–**
	78,261	
At 31 December 2012		
Strong	69,721	**64**
Good	13,724	**84**
Satisfactory	1,717	**122**
Weak	194	**265**
Default	117	**–**
	85,473	

The supervisory rating grades and risk-weights of specialised lending are determined in accordance with section 158 of the Banking (Capital) Rules.

Supplementary Notes on the Financial Statements (continued)

4 Credit risk under the internal ratings-based approach *(continued)*

d *Risk assessment for exposures under IRB approach (continued)*

Sovereign exposures – analysis by obligor grade

	CRR	PD range %	Exposure at default HK$m	Exposure-weighted average PD %	Exposure-weighted average LGD %	Exposure-weighted average risk-weight %	RWAs HK$m	Mapped External Rating
At 31 December 2013								
Default risk								
Minimal	0.1	**0.000 to 0.010**	**215,766**	**0.01**	**43.9**	**4**	**8,578**	**AAA to AA+**
	1.1	**0.011 to 0.028**	**432,720**	**0.02**	**45.0**	**6**	**25,419**	**AA to AA-**
	1.2	**0.029 to 0.053**	**180,639**	**0.04**	**44.0**	**11**	**18,985**	**A+**
Low	2.1	**0.054 to 0.095**	**309,320**	**0.07**	**44.8**	**16**	**49,711**	**A**
	2.2	**0.096 to 0.169**	**61,677**	**0.13**	**44.2**	**30**	**18,670**	**A-**
Satisfactory	3.1	**0.170 to 0.285**	**12,647**	**0.22**	**45.0**	**40**	**5,062**	**BBB+**
	3.2	**0.286 to 0.483**	**21,218**	**0.37**	**45.0**	**47**	**9,981**	**BBB to BBB-**
	3.3	**0.484 to 0.740**	**2,434**	**0.63**	**45.0**	**67**	**1,622**	**BBB-**
Fair	4.1	**0.741 to 1.022**	**8,157**	**0.87**	**45.0**	**84**	**6,892**	**BB+**
	4.2	**1.023 to 1.407**	**1,918**	**1.20**	**45.0**	**99**	**1,902**	**BB**
	4.3	**1.408 to 1.927**	**–**	**–**	**–**	**–**	**–**	**BB-**
Moderate	5.1	**1.928 to 2.620**	**–**	**–**	**–**	**–**	**–**	**BB-**
	5.2	**2.621 to 3.579**	**6,766**	**3.05**	**45.0**	**125**	**8,425**	**B+**
	5.3	**3.580 to 4.914**	**2,016**	**4.20**	**44.4**	**132**	**2,668**	**B+**
Significant	6.1	**4.915 to 6.718**	**968**	**5.75**	**45.0**	**179**	**1,731**	**B**
	6.2	**6.719 to 8.860**	**–**	**–**	**–**	**–**	**–**	**B-**
High	7.1	**8.861 to 11.402**	**–**	**–**	**–**	**–**	**–**	**B-**
	7.2	**11.403 to 15.000**	**–**	**–**	**–**	**–**	**–**	**CCC+**
Special management	8.1	**15.001 to 22.000**	**–**	**–**	**–**	**–**	**–**	**CCC**
	8.2	**22.001 to 50.000**	**–**	**–**	**–**	**–**	**–**	**CCC-**
	8.3	**50.001 to 99.999**	**–**	**–**	**–**	**–**	**–**	**CC to C**
Default	9/10	**100.000**	**–**	**–**	**–**	**–**	**–**	**Default**
			1,256,246				**159,646**	
At 31 December 2012								
Default risk								
Minimal		0.000 to 0.053	825,760	0.02	13.0	2	16,490	
Low		0.054 to 0.053	329,530	0.08	31.0	15	48,109	
Satisfactory		0.170 to 0.740	33,515	0.49	45.0	54	18,143	
Fair		0.741 to 1.927	7,168	1.10	45.0	94	6,745	
Moderate		1.928 to 4.914	7,578	3.41	44.4	125	9,484	
Significant		4.915 to 8.860	923	5.75	16.3	54	502	
High		8.861 to 15.000	–	–	–	–	–	
Special management		15.001 to 99.999	–	–	–	–	–	
Default		100.000	–	–	–	–	–	
			1,204,474				99,473	

In 2013, the HKMA implemented an LGD floor of 45% for senior unsecured sovereign exposures, to reflect the relative paucity of loss observations across all firms.

Supplementary Notes on the Financial Statements (continued)

4 Credit risk under the internal ratings-based approach *(continued)*

d *Risk assessment for exposures under IRB approach (continued)*

Bank exposures – analysis by obligor grade

	CRR	PD range %	Exposure at default HK$m	Exposure-weighted average PD %	Exposure-weighted average LGD %	Exposure-weighted average risk-weight %	RWAs HK$m	Mapped External Rating
At 31 December 2013								
Default risk								
Minimal	0.1	**0.000 to 0.010**	**18,539**	**0.03**	**30.8**	**9**	**1,736**	**AAA to AA+**
	1.1	**0.011 to 0.028**	**92,983**	**0.03**	**28.2**	**8**	**7,267**	**AA to AA-**
	1.2	**0.029 to 0.053**	**164,835**	**0.04**	**25.4**	**9**	**15,053**	**A+**
Low	2.1	**0.054 to 0.095**	**458,890**	**0.07**	**31.5**	**15**	**67,263**	**A**
	2.2	**0.096 to 0.169**	**99,200**	**0.13**	**33.1**	**24**	**23,929**	**A-**
Satisfactory	3.1	**0.170 to 0.285**	**71,782**	**0.22**	**32.6**	**31**	**22,133**	**BBB+**
	3.2	**0.286 to 0.483**	**79,998**	**0.37**	**33.5**	**43**	**34,574**	**BBB to BBB-**
	3.3	**0.484 to 0.740**	**15,803**	**0.63**	**26.5**	**42**	**6,659**	**BBB-**
Fair	4.1	**0.741 to 1.022**	**10,024**	**0.87**	**37.2**	**65**	**6,515**	**BB+**
	4.2	**1.023 to 1.407**	**6,731**	**1.20**	**36.7**	**76**	**5,115**	**BB**
	4.3	**1.408 to 1.927**	**905**	**1.65**	**41.5**	**91**	**823**	**BB-**
Moderate	5.1	**1.928 to 2.620**	**1,385**	**2.25**	**37.3**	**101**	**1,401**	**BB-**
	5.2	**2.621 to 3.579**	**647**	**3.05**	**26.7**	**84**	**544**	**B+**
	5.3	**3.580 to 4.914**	**860**	**4.20**	**38.1**	**106**	**915**	**B+**
Significant	6.1	**4.915 to 6.718**	**910**	**5.75**	**73.7**	**232**	**2,114**	**B**
	6.2	**6.719 to 8.860**	**787**	**7.85**	**71.1**	**259**	**2,035**	**B-**
High	7.1	**8.861 to 11.402**	**2,586**	**10.00**	**30.6**	**124**	**3,205**	**B-**
	7.2	**11.403 to 15.000**	**93**	**13.00**	**63.8**	**291**	**271**	**CCC+**
Special management	8.1	**15.001 to 22.000**	**–**	**–**	**–**	**–**	**–**	**CCC**
	8.2	**22.001 to 50.000**	**–**	**–**	**–**	**–**	**–**	**CCC-**
	8.3	**50.001 to 99.999**	**16**	**75.00**	**87.0**	**249**	**39**	**CC to C**
Default	9/10	**100.000**	**124**	**100.00**	**62.0**	**–**	**–**	**Default**
			1,027,098				**201,591**	
At 31 December 2012								
Default risk								
Minimal		0.000 to 0.053	236,678	0.04	25.1	7	15,068	
Low		0.054 to 0.053	525,820	0.09	32.8	13	68,952	
Satisfactory		0.170 to 0.740	93,256	0.34	34.3	33	30,593	
Fair		0.741 to 1.927	20,919	1.01	36.4	62	13,001	
Moderate		1.928 to 4.914	3,495	3.47	52.1	139	4,863	
Significant		4.915 to 8.860	2,384	6.60	62.2	205	4,884	
High		8.861 to 15.000	3,146	10.56	32.2	137	4,304	
Special management		15.001 to 99.999	8	75.00	43.0	123	9	
Default		100.000	110	100.00	64.7	–	–	
			885,816				141,674	

The EADs, PDs and LGDs disclosed above in respect of corporate, sovereign and bank exposures have taken into account the effect of recognised collateral, recognised netting, recognised guarantees and recognised credit derivative contracts.

Supplementary Notes on the Financial Statements (continued)

4 Credit risk under the internal ratings-based approach *(continued)*

d *Risk assessment for exposures under IRB approach (continued)*

Retail exposures – analysis by internal PD grade

	PD range %	Exposure at default HK$m	Exposure-weighted average PD %	Exposure-weighted average LGD %	Exposure-weighted average risk-weight %	RWAs HK$m
At 31 December 2013						
Residential mortgages						
Band 1	**0.000 to 0.483**	**472,939**	**0.14**	**11.8**	**4**	**20,756**
Band 2	**0.484 to 1.022**	**106,926**	**0.65**	**15.9**	**15**	**16,380**
Band 3	**1.023 to 4.914**	**78,473**	**2.27**	**10.2**	**22**	**17,197**
Band 4	**4.915 to 8.860**	**1,658**	**5.44**	**14.4**	**52**	**867**
Band 5	**8.861 to 15.000**	**7,890**	**13.23**	**11.9**	**64**	**5,009**
Band 6	**15.000 to 50.000**	**14**	**31.50**	**10.0**	**62**	**9**
Band 7	**50.001 to 100.000**	**2,360**	**100.00**	**16.4**	**–**	**–**
		670,260				**60,218**
Qualifying revolving retail exposures						
Band 1	**0.000 to 0.483**	**140,748**	**0.13**	**102.1**	**7**	**10,325**
Band 2	**0.484 to 1.022**	**23,182**	**0.68**	**97.5**	**29**	**6,810**
Band 3	**1.023 to 4.914**	**25,376**	**2.09**	**95.1**	**65**	**16,501**
Band 4	**4.915 to 8.860**	**4,102**	**6.78**	**96.4**	**151**	**6,186**
Band 5	**8.861 to 15.000**	**1,162**	**11.31**	**89.9**	**190**	**2,206**
Band 6	**15.000 to 50.000**	**1,506**	**25.68**	**88.7**	**260**	**3,913**
Band 7	**50.001 to 100.000**	**95**	**77.75**	**90.0**	**16**	**154**
		196,171				**46,095**
Other retail exposures						
Band 1	**0.000 to 0.483**	**36,523**	**0.17**	**14.9**	**8**	**2,896**
Band 2	**0.484 to 1.022**	**5,538**	**0.68**	**16.3**	**13**	**739**
Band 3	**1.023 to 4.914**	**7,186**	**2.67**	**49.1**	**71**	**5,072**
Band 4	**4.915 to 8.860**	**836**	**6.10**	**50.9**	**83**	**691**
Band 5	**8.861 to 15.000**	**407**	**11.75**	**71.7**	**134**	**545**
Band 6	**15.000 to 50.000**	**198**	**23.79**	**87.0**	**213**	**423**
Band 7	**50.001 to 100.000**	**401**	**100.00**	**69.6**	**–**	**–**
		51,089				**10,366**
Total retail						
Band 1	**0.000 to 0.483**	**650,210**	**0.14**	**31.5**	**5**	**33,977**
Band 2	**0.484 to 1.022**	**135,646**	**0.66**	**29.9**	**18**	**23,929**
Band 3	**1.023 to 4.914**	**111,035**	**2.26**	**32.1**	**35**	**38,770**
Band 4	**4.915 to 8.860**	**6,596**	**6.35**	**70.0**	**117**	**7,744**
Band 5	**8.861 to 15.000**	**9,459**	**12.93**	**24.0**	**82**	**7,760**
Band 6	**15.000 to 50.000**	**1,718**	**25.51**	**87.8**	**253**	**4,345**
Band 7	**50.001 to 100.000**	**2,856**	**99.26**	**26.4**	**5**	**154**
		917,520				**116,679**

Retail exposures – analysis by credit quality

	Residential mortgages HK$m	Qualifying revolving retail exposures HK$m	Other retail exposures HK$m	Total exposures HK$m
At 31 December 2012				
Strong	653,767	151,883	45,012	850,662
Medium	10,999	30,266	4,534	45,799
Sub-standard	638	676	490	1,804
Impaired	–	2	11	13
	665,404	182,827	50,047	898,278

Supplementary Notes on the Financial Statements (continued)

4 Credit risk under the internal ratings-based approach *(continued)*

d *Risk assessment for exposures under IRB approach (continued)*

Undrawn commitments

The following shows the amount of undrawn commitments and exposure-weighted average EAD for corporate, sovereign and bank exposures:

	At 31 December 2013		At 31 December 2012	
	Undrawn commitments HK$m	**Exposure-weighted average EAD HK$m**	Undrawn commitments HK$m	Exposure-weighted average EAD HK$m
Corporate exposures	**892,305**	**244,623**	906,331	273,983
Sovereign exposures	**856**	**252**	1,180	349
Bank exposures	**13,625**	**2,416**	15,789	2,882
	906,786	**247,291**	923,300	277,214

e *IRB expected loss and impairment charges*

The following table compares actual outcomes for the year against the risk elements estimated at the beginning of the year.

	PD		**LGD**		**EAD**	
	Actual %	**Projected %**	**Actual %**	**Projected %**	**Actual %**	**Projected %**
At 31 December 2013						
Sovereign	**0.00**	**0.28**	**0.0**	**19.2**	**0**	**100**
Bank	**0.01**	**0.88**	**0.0**	**31.1**	**0**	**95**
Corporate	**0.40**	**1.05**	**17.2**	**43.7**	**60**	**66**
Residential mortgages	**0.70**	**0.95**	**4.50**	**12.40**	**98.76**	**114.29**
Qualifying revolving retail	**0.43**	**0.68**	**85.92**	**92.79**	**90.29**	**92.07**
Other retail	**1.20**	**1.29**	**57.87**	**73.49**	**62.75**	**79.92**
At 31 December 2012[1]						
Sovereign	0.00	0.25	0.0	22.6	0	100
Bank	0.00	1.06	0.0	31.3	0	95
Corporate	0.14	1.08	45.8	44.3	41	66
Residential mortgages	0.72	0.97	5.81	10.58	99.61	112.17
Qualifying revolving retail	0.40	0.69	84.70	91.02	90.46	93.56
Other retail	1.22	1.26	64.86	86.96	73.15	86.74

1 *Comparatives have been restated to align with the basis of preparation used in the current year.*

The difference between actual PD and projected PD is driven by the difference in the time horizon used to calculate actual and estimated default rates. The actual default rate represents the actual number of borrower or account defaults during the year, whereas the projected PD is based on internally developed models built on long-run default experience.

The group measures actual LGD by calculating the economic loss incurred by the defaults, whereas projected LGD is based on an internally developed model built on loss experience in downturn conditions. For wholesale classes, due to the different calculation methodologies and the portfolio mix between the default population and the overall book, actual and projected results can differ. In general, the projected LGD was more conservative than actual LGD across asset classes.

The group measures actual EAD by comparing the realised credit exposure of the defaulted counterparties in 2013 against the limits one year prior to default. The projected EAD is based on an internally developed model built on long run default experience.

Supplementary Notes on the Financial Statements (continued)

4 Credit risk under the internal ratings-based approach *(continued)*

e *IRB expected loss and impairment charges (continued)*

The following table sets out, for each IRB exposure class, the expected loss (EL) and the actual loss experience reflected in impairment charge. EL is the estimated loss likely to be incurred arising from the potential default of the obligator in respect of the exposure over a one-year period. Impairment charges are the net charge for actual losses for each IRB class made during the year.

	2013		2012[1]	
	Expected loss at 1 Jan HK$m	**Impairment charge for the year HK$m**	Expected loss at 1 Jan HK$m	Impairment charge for the year HK$m
Sovereign	**342**	**–**	296	–
Bank	**699**	**–**	593	–
Corporate	**9,795**	**809**	9,867	1,284
Residential mortgages	**1,038**	**(52)**	943	(39)
Qualifying revolving retail	**1,551**	**663**	1,400	492
Other retail	**512**	**172**	474	133
	13,937	**1,592**	13,573	1,870

1 *Comparatives have been restated to align with the basis of preparation used in the current year.*

The EL was generally stable over the year, while the impairment charge for corporates reduced due to the non-recurrence of an impairment on a corporate exposure in Australia in 2012. It should be noted that impairment charges and EL are measured using different methodologies which are not directly comparable. In general, EL is greater than impairment charges for each IRB class. The limitation arises from the fundamental differences in the definition of 'loss' under the accounting standards which determine impairment charges by reflecting the current circumstances and specific cashflow expectations of a customer, and the Basel III framework which determines the regulatory EL calculation on a forward looking basis using modelled estimates.

5 Credit risk under the standardised (credit risk) approach

a *Application of the standardised approach*

The standardised (credit risk) 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 (credit risk) approach requires banks to use risk assessments prepared by External Credit Assessment Institutions ('ECAI') 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:

- Public sector entity exposures;
- Multilateral development bank exposures;
- Bank or corporate exposures (those without an internal CRR); and
- Collective investment scheme exposures.

The group uses external credit ratings from the following ECAIs:

- Fitch Ratings;
- Moody's Investors Service; and
- Standard & Poor's Ratings Services.

The group determines ECAI issuer ratings or ECAI issue specific ratings in the banking book in a process consistent with Part 4 of the Banking (Capital) Rules.

All other exposure classes are assigned risk weightings as prescribed in the HKMA's Banking (Capital) Rules.

5 Credit risk under the standardised (credit risk) approach *(continued)*

b Credit risk exposures under the standardised (credit risk) approach

At 31 December 2013	Total exposures[1] HK$m	Exposures after recognised credit risk mitigation[2] Rated HK$m	Unrated HK$m	Total HK$m	Risk-weighted amounts Rated HK$m	Unrated HK$m	Total HK$m	Total exposures covered by recognised collateral HK$m	Total exposures covered by recognised guarantees or recognised credit derivative contracts HK$m
Assets									
On-balance sheet									
Sovereign	3,534	23,713	–	23,713	533	–	533	–	53
Public sector entity	70,135	55,994	–	55,994	7,970	–	7,970	126	14,448
Multilateral development bank	47,218	47,218	–	47,218	–	–	–	–	–
Bank	7,585	1,774	7,895	9,669	694	2,954	3,648	3	–
Securities firm	130	–	130	130	–	65	65	–	–
Corporate	124,675	2,262	78,077	80,339	2,098	78,148	80,246	37,578	7,042
Cash items	455	–	455	455	–	–	–	–	–
Collective investment scheme	–	–	–	–	–	–	–	–	–
Regulatory retail	77,229	–	70,950	70,950	–	53,212	53,212	4,870	1,408
Residential mortgage loan	89,805	–	89,729	89,729	–	45,936	45,936	75	2
Other exposures which are not past due exposures	45,798	–	14,315	14,315	–	14,315	14,315	31,399	83
Past due exposures	3,209	249	2,960	3,209	180	4,388	4,568	200	76
Total on-balance sheet	469,773	131,210	264,511	395,721	11,475	199,018	210,493	74,251	23,112
Off-balance sheet									
Off-balance sheet exposures other than OTC derivative transactions or credit derivative contracts	22,341	1,946	12,756	14,702	547	10,883	11,430	7,640	1,718
Derivative contracts and securities financing transactions	12,590	5,565	4,229	9,794	1,112	4,119	5,231	2,796	–
Total off-balance sheet	34,931	7,511	16,985	24,496	1,659	15,002	16,661	10,436	1,718
Total	504,704	138,721	281,496	420,217	13,134	214,020	227,154	84,687	24,830
Exposures risk-weighted at 1,250%	–								

5 Credit risk under the standardised (credit risk) approach *(continued)*

b *Credit risk exposures under the standardised (credit risk) approach (continued)*

At 31 December 2012	Total exposures[1] HK$m	Exposures after recognised credit risk mitigation[2] Rated HK$m	Unrated HK$m	Total HK$m	Risk-weighted amounts Rated HK$m	Unrated HK$m	Total HK$m	Total exposures covered by recognised collateral HK$m	Total exposures covered by recognised guarantees or recognised credit derivative contracts HK$m
Assets									
On-balance sheet									
Sovereign	4,127	22,678	–	22,678	713	–	713	–	–
Public sector entity	79,777	60,360	–	60,360	8,165	–	8,165	5,058	14,879
Multilateral development bank	46,801	46,801	–	46,801	–	–	–	–	–
Bank	8,094	3,064	6,532	9,596	773	2,930	3,703	–	–
Securities firm	58	–	58	58	–	29	29	–	–
Corporate	41,699	43	34,004	34,047	34	33,972	34,006	4,393	3,261
Cash items	359	–	359	359	–	–	–	–	–
Collective investment scheme	39	–	39	39	–	39	39	–	–
Regulatory retail	78,157	–	74,084	74,084	–	55,563	55,563	1,773	2,301
Residential mortgage loan	70,327	–	70,246	70,246	–	38,578	38,578	79	2
Other exposures which are not past due exposures	17,418	–	14,079	14,079	–	14,079	14,079	3,207	133
Past due exposures	3,363	135	3,228	3,363	67	4,796	4,863	8	69
Total on-balance sheet	350,219	133,081	202,629	335,710	9,752	149,986	159,738	14,518	20,645
Off-balance sheet									
Off-balance sheet exposures other than OTC derivative transactions or credit derivative contracts	14,774	2,106	10,788	12,894	861	9,306	10,167	1,881	920
OTC derivative transactions	6,935	4,834	1,994	6,828	1,042	1,636	2,678	107	–
Total off-balance sheet	21,709	6,940	12,782	19,722	1,903	10,942	12,845	1,988	920
Total	371,928	140,021	215,411	355,432	11,655	160,928	172,583	16,506	21,565
Exposures deducted from Core Capital or Supplementary Capital	–								

1 *Total exposures are the principal amounts for on-balance sheet exposures, or the credit equivalent amount or default exposure for off-balance sheet exposures, as applicable, net of individually assessed impairment allowances.*
2 *Exposures covered by recognised guarantees or recognised credit derivative contracts are reclassified after credit risk mitigation to reflect the exposures to the credit protection providers.*

Supplementary Notes on the Financial Statements (continued)

6 Counterparty credit risk-related exposures

a Counterparty credit risk arises from securities financing transactions and derivative contracts. It is calculated in both the trading and non-trading books, and is the risk that counterparty to a transaction may default before completing the satisfactory settlement of the transaction. Following the implementation of Basel III on 1 January 2013, changes have been introduced to the capital treatment of counterparty credit risk exposures, which expanded the scope of transactions for which counterparty credit risk needs to be considered as well as amending the capital calculation

In respect of the group's counterparty credit risk exposures arising from these transactions, all credit limits are established in advance of transacting the business. Credit and settlement risk is captured, monitored and reported in accordance with group risk methodologies. Credit exposures are divided into two categories: (1) exposure measures in book or market value terms depending on the product involved; and (2) exposure measures on the basis of 95 percentile potential worst case loss estimates. These methods of calculating credit exposure apply to all counterparties and differences in credit quality are reflected in the size of the limits.

The group adopts the current exposure method to determine its exposures to counterparty credit risk to OTC derivative transactions and credit derivative contracts.

Collateral arrangements

The policy for secured collateral on derivatives is guided by the group's internal Best Practice Guidelines ensuring that the due diligence necessary to understand the effectiveness of netting and collateralisation by jurisdiction, counterparty, product and agreement type is assessed and that due-diligence standards are consistently applied.

Credit ratings downgrade

The credit ratings downgrade language in a Master Agreement or Credit Support Annexes defines the series of events that are triggered if the credit rating of the affected party falls below a specified level. The group presently produces a report which identifies the additional collateral requirements where credit ratings downgrade language affects the threshold levels within a collateral agreement.

Under the terms of our current collateral obligations under derivative contracts and based on the positions at 31 December 2013, we estimate that we could be required to post additional collateral of up to HK$364m (2012: HK$566m) in the event of a one-notch downgrade in credit ratings, which would increase to HK$529m (2012: HK$695m) in the event of a two-notch downgrade.

Wrong-way risk

Wrong-way risk occurs when a counterparty's exposures are adversely correlated with its credit quality. There are two types of wrong-way risk.

- General wrong-way risk occurs when the probability of counterparty default is positively correlated with general risk factors such as 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.
- Specific wrong-way risk occurs when the exposure to a particular counterparty is positively correlated with the probability of counterparty default such as a reverse repo on the counterparty's own bonds. HSBC policy sets out that specific wrong-way transactions are approved on a case by case basis.

We use a range of tools to monitor and control wrong-way risk, including requiring the business to obtain prior approval before undertaking wrong-way risk transactions outside pre-agreed guidelines. The regional Traded Risk functions are responsible for the control and the monitoring process. This includes the monthly submission of wrong-way risk information to Group Risk and the GM Risk Management Committee.

Supplementary Notes on the Financial Statements (continued)

6 Counterparty credit risk-related exposures (continued)

b *Counterparty credit risk exposures under the advanced internal ratings-based approach*

	Derivative contracts HK$m	Securities financing transactions HK$m
At 31 December 2013		
Gross total positive fair value	**366,648**	**–**
Default risk exposures, net of bilateral netting	**306,173**	**69,545**
Default risk exposures, net of cross-product netting	**–**	**–**
Recognised collateral held by type:		
Debt securities	**5,798**	**156,413**
Others	**36,423**	**83,673**
	42,221	**240,086**
Default risk exposures, net of recognised collateral held[1]	**306,173**	**69,545**
Risk-weighted amounts	**88,324**	**2,048**
Notional amounts of recognised credit derivative contracts which provide credit protection	**–**	**–**

	OTC derivative transactions HK$m	Repo-style transactions HK$m	Credit derivative contracts HK$m
At 31 December 2012			
Gross total positive fair value	385,240	–	2,644
Credit equivalent amounts/ Net credit exposures[2]	265,824	23,686	4,182
Recognised collateral held by type:			
Debt securities	2,675	124,498	1
Others	17,714	52,373	430
	20,389	176,871	431
Credit equivalent amounts/ net credit exposures net of recognised collateral[3]	265,824	23,686	4,182
Exposure at default	265,824	23,686	4,182
Risk-weighted amounts	76,227	1,375	1,098
Notional amounts of recognised credit derivative contracts which provide credit protection	–	–	–

1 *For securities financing transactions, where there is a netting agreement in place, the recognised collateral is netted against the default risk exposures, otherwise, the recognised collateral is reflected in the LGD.*
2 *For repo-style transactions, the recognised collateral is netted against the EAD.*
3 *For OTC and credit derivative contracts, the recognised collateral is reflected in the LGD.*

Supplementary Notes on the Financial Statements (continued)

6 Counterparty credit risk-related exposures *(continued)*

c *Counterparty credit risk exposures under the standardised (credit risk) approach*

	Derivative contracts HK$m	Securities financing transactions HK$m
At 31 December 2013		
Gross total positive fair value	**7,123**	**–**
Default risk exposures, net of bilateral netting	**12,448**	**142**
Default risk exposures, net of cross-product netting	**–**	**–**
Recognised collateral held by type:		
Debt securities	**1,012**	**1,290**
Others	**2,185**	**399**
	3,197	**1,689**
Default risk exposures, net of recognised collateral held[1]	**12,448**	**142**
Risk-weighted amounts	**5,105**	**126**
Notional amounts of recognised credit derivative contracts which provide credit protection	**–**	**–**

	OTC derivative transactions HK$m	Repo-style transactions HK$m	Credit derivative contracts HK$m
At 31 December 2012			
Gross total positive fair value	3,694	–	–
Credit equivalent amounts/ Net credit exposures[2]	6,935	35	–
Recognised collateral held by type:			
Debt securities	–	411	–
Others	117	17	–
	117	428	–
Credit equivalent amounts/ net credit exposures net of recognised collateral[3]	6,935	35	–
Risk-weighted amounts	2,678	31	–
Notional amounts of recognised credit derivative contracts which provide credit protection	–	–	–

1 *For securities financing transactions, where there is a netting agreement in place, the recognised collateral is netted against the default risk exposures, otherwise, the recognised collateral is reflected in the LGD.*
2 *For repo-style transactions, the recognised collateral is netted against the EAD.*
3 *For OTC and credit derivative contracts, the recognised collateral is reflected in the LGD.*

Supplementary Notes on the Financial Statements (continued)

6 Counterparty credit risk-related exposures *(continued)*

d *Major classes of exposures under the advanced internal ratings-based approach by counterparty type*

	Derivative contracts HK$m	Securities financing transactions HK$m
At 31 December 2013		
Notional amounts:		
Sovereigns	**386,798**	**22,105**
Banks	**21,827,969**	**166,930**
Corporates	**3,068,696**	**53,759**
	25,283,463	**242,794**
Default risk exposures[1]:		
Sovereigns	**4,239**	**22,142**
Banks	**219,147**	**39,779**
Corporates	**82,787**	**7,624**
	306,173	**69,545**
Risk-weighted amounts:		
Sovereigns	**1,009**	**753**
Banks	**39,198**	**850**
Corporates	**48,117**	**445**
	88,324	**2,048**

	OTC derivative transactions HK$m	Repo-style transactions HK$m	Credit derivative contracts HK$m
At 31 December 2012			
Notional amounts:			
Sovereigns	502,657	23,749	77
Banks	22,623,707	131,348	325,546
Corporates	2,760,911	34,109	33,765
	25,887,275	189,206	359,388
Exposure at default[2]:			
Sovereigns	7,895	1,856	4
Banks	181,719	20,765	2,950
Corporates	76,210	1,065	1,228
	265,824	23,686	4,182
Risk-weighted amounts:			
Sovereigns	1,256	156	2
Banks	29,511	999	550
Corporates	45,460	220	546
	76,227	1,375	1,098

1 *For securities financing transactions, where there is a netting agreement in place, the recognised collateral is netted against the default risk exposures, otherwise, the recognised collateral is reflected in the LGD.*
2 *For repo-transactions, the recognised collateral is netted against the EAD. For OTC and credit derivative contracts, the recognised collateral is reflected in the LGD.*

Supplementary Notes on the Financial Statements (continued)

6 Counterparty credit risk-related exposures *(continued)*

e *Major classes of exposures under the standardised (credit risk) approach by counterparty type*

	Derivative contracts HK$m	**Securities financing transactions HK$m**
At 31 December 2013		
Notional amounts:		
Sovereigns	**18,847**	**–**
Public sector entities	**126,048**	**4**
Banks	**1,156**	**–**
Corporates	**169,369**	**1,657**
	315,420	**1,661**
Default risk exposures	**12,448**	**142**
Risk-weighted amounts	**5,105**	**126**

	OTC derivative transactions HK$m	Repo-style transactions HK$m	Credit derivative contracts HK$m
At 31 December 2012			
Notional amounts:			
Sovereigns	36,723	–	–
Public sector entities	135,358	19	–
Banks	497	–	–
Corporates	74,697	432	–
	247,275	451	–
Credit equivalent amounts/net credit exposures	6,935	35	–
Risk-weighted amounts	2,678	31	–

Supplementary Notes on the Financial Statements (continued)

6 Counterparty credit risk-related exposures *(continued)*

f *Risk exposures to derivative transactions*

	Contract amount HK$m	Risk-weighted amount HK$m	Fair value HK$m
At 31 December 2013			
Exchange rate contracts			
Forwards	**6,955,051**	**23,471**	**42,776**
Options purchased	**583,691**	**9,542**	**2,906**
Swaps	**3,364,049**	**28,643**	**41,100**
	10,902,791	**61,656**	**86,782**
Interest rate contracts			
Forwards	**781,700**	**251**	**12**
Options purchased	**113,517**	**921**	**1,266**
Swaps	**12,660,269**	**21,841**	**29,324**
	13,555,486	**23,013**	**30,602**
Credit derivative contracts	**251,130**	**1,096**	**359**
Other OTC derivative contracts	**889,476**	**7,664**	**14,756**
	25,598,883	**93,429**	**132,499**
At 31 December 2012			
Exchange rate contracts			
Forwards	7,313,214	19,263	32,249
Options purchased	396,776	7,886	2,087
Swaps	3,251,523	23,756	29,485
	10,961,513	50,905	63,821
Interest rate contracts			
Forwards	355,358	–	8
Options purchased	178,377	1,168	1,664
Swaps	14,269,029	22,861	28,438
	14,802,764	24,029	30,110
Credit derivative contracts	359,388	1,098	302
Other OTC derivative contracts	370,273	3,971	8,070
	26,493,938	80,003	102,303

The above table is compiled in accordance with the 'Capital Adequacy Ratio' return submitted to the HKMA. This return is prepared using a consolidated basis as specified by the HKMA under the requirements of section 3C of the Banking (Capital) Rules. This consolidation basis is different from the group's basis of consolidation for accounting purposes, as explained in note 20. Therefore, the contract amounts shown in the above table are different from those disclosed in Note 17 of the 2013 Annual Report and Accounts.

The fair values are calculated after taking into account the effect of valid bilateral netting agreements amounting to HK$241,272m (2012: HK$289,275m).

Supplementary Notes on the Financial Statements (continued)

6 Counterparty credit risk-related exposures *(continued)*

g *Contract amounts of credit derivative contracts which create exposure to counterparty credit risk*

	At 31 December	
	2013	2012
	HK$m	HK$m
Used for credit portfolio		
Credit default swaps		
Protection bought	**2,950**	2,763
Protection sold	**–**	–
Total return swaps		
Protection bought	**21,681**	29,278
Protection sold	**–**	–
	24,631	32,041
Used for intermediation activities		
Credit default swaps		
Protection bought	**113,654**	164,249
Protection sold	**110,760**	152,173
Total return swaps		
Protection bought	**1,310**	3,215
Protection sold	**775**	7,710
	226,499	327,347

Supplementary Notes on the Financial Statements (continued)

7 Credit risk mitigation

The group grants credit facilities on the basis of capacity to repay, rather than place primary reliance on credit risk mitigation. Depending on a customer's standing and the type of product, unsecured facilities may be provided. The mitigation of credit risk is nevertheless a key aspect of effective risk management. By consideration of type, jurisdiction and geographical location of the credit risk mitigation held, there is no material concentration.

The group's 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. The main types of recognised collateral taken by the group are those as stated in section 77 of the Banking (Capital) Rules, including (but not limited to) cash on deposit, a mortgage over property, a charge over business assets, guarantees, equities (including convertible bonds) included in any main indices, units or shares in collective investment schemes and various recognised debt securities.

In accordance with sections 98 and 99 of the Banking (Capital) Rules, certain guarantees and credit derivative contracts are recognised for credit risk mitigation purposes. The main types of guarantees are from sovereigns, corporates and banks. The credit mitigating effect of recognised guarantees is grounded on empirical evidence of loss recovery experiences regionally. Exposures related to sovereign and bank guarantees are managed by central teams in HSBC Group Head Office in London.

Trading facilities are often supported by charges over financial instruments such as cash, debt securities and equities. Netting is extensively used and is a prominent feature of market standard documentation. Techniques such as credit default swaps, structured credit notes and securitisation structures can be deployed to actively manage the credit risk of the portfolios. The credit and market risk concentrations within the credit risk mitigants (recognised collateral, netting, guarantees and credit derivative contracts) used by the group are not considered to be material.

The group's policy stipulates that netting should only be applied where there is a legal right to do so. Under section 209 of the Banking (Capital) Rules, recognised netting is defined as any netting done pursuant to a valid bilateral netting arrangement. Consistent with the Banking (Capital) Rules, only bilateral netting arrangements are eligible to net amounts owed by the group for capital adequacy purposes.

The group has in place specific policies with respect to the valuation and re-valuation of credit risk mitigants. The primary objective of these policies is to monitor and ensure that the respective mitigants will provide the secure repayment source as anticipated at the time they were taken. Where collateral is subject to high volatility, valuation is frequent; where stable, less so. Policies in respect of credit mitigants underlying past due accounts are more stringent and call for more frequent monitoring and valuation.

In terms of their application within an IRB approach risk mitigants are considered in two broad categories: first, those which reduce the intrinsic probability of default of a borrower and therefore are accounted for with adjustments to PD estimation; secondly, those which affect the estimated recoverability of obligations and are accounted for with adjustments of LGD or, in certain circumstances, EAD.

The adjustment of PD estimation is also subject to supplementary methodologies in respect of a 'sovereign floor' constraining the risk ratings assigned to borrowers in countries of higher risk, and partial parental support.

LGD and EAD values, in the case of individually assessed exposures, are determined by reference to internal risk parameters based on the nature of the exposure, subject to the relevant regulatory requirements and floors. For retail portfolios, credit mitigation data is incorporated into the internal risk parameters and fed into the calculation of the EL band summarising both customer delinquency and product or facility risk.

8 Asset securitisation

Group securitisation strategy

The group's strategy is to use securitisations to meet its needs for aggregate funding or capital management, to the extent that market, regulatory treatments and other conditions are suitable, and for customer facilitation.

Group securitisation roles

The roles played by the group in the securitisation process are as follows:

- Investor: where the group invests in a securitisation transaction directly or provides derivatives or liquidity facilities to a securitisation;
- Originator: where the group originates the assets being securitised, either directly or indirectly; and
- Sponsor: in relation to an asset backed commercial paper ('ABCP') programme, or a programme with similar features, where the group establishes and manages a securitisation programme that purchases exposures from third parties.

The group as investor

The group has exposure to third-party securitisations, including re-securitisation positions, in the form of investments, liquidity facilities and as a derivative counterparty. The majority of the group's securitisation positions are held as part of its investment portfolios in the banking book. The group also holds securitisation positions occasionally to generate trading profits. The credit and market risks of securitisation positions are monitored and managed along with their respective business portfolios. Factors such as the estimated future cash flows on underlying pools of collateral, including prepayment speeds, and whether historical performance remains representative of current economic and credit conditions are considered in assessing impairment of these positions.

The group as originator

The group securitises customer loans and advances that it originated using special purpose entities ('SPEs'), in order to diversify its sources of funding for asset origination and for capital efficiency purposes. In such cases, the group transfers the loans and advances to the SPEs for cash, and the SPEs issue debt securities to investors to fund the cash purchases. The group may also act as a derivative counterparty or provide a guarantee. Credit enhancements to the underlying assets may be used to obtain investment grade ratings on the senior debt issued by the SPEs. The group currently consolidates these securitisations for accounting purposes. The group did not use any SPEs to securitise exposures acquired from third parties during the year (2012: none). The group's policy on credit risk mitigation to mitigate the risks of securitisation exposures retained is the same as that for non-securitisation exposures, as set out in Note 7.

In addition, the group uses SPEs to mitigate the capital absorbed by some of the customer loans and advances it has 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 SPEs write credit default swap protection to the group. These SPEs are consolidated for accounting purposes when the group is exposed to the majority of risks and rewards of ownership. The group did not originate any synthetic securitisations during the year (2012: none).

The group as sponsor

There were no outstanding underlying exposures in securitisation transactions where the group acted as a sponsor (2012: none).

8 Asset securitisation *(continued)*

Valuation of securitisation positions

The group's banking and trading book investments in securitisation exposures, including re-securitisation exposures, are valued according to their accounting classification. Valuation methods include, but are not limited to, quotations from third parties, observed trade levels and calibrated valuations from market standard models. The principal assumptions to determine fair value are based on benchmark information about prepayment speeds, default rates, loss severities and the historical performance of the underlying assets. This process did not change in 2013.

There were no assets awaiting securitisation at the year end. To the extent that the group has exposures that it intends to securitise, they continue to be valued according to their original accounting classification.

Securitisation activities in 2013

As an investor, the group's securitisation activities in 2013 mainly consisted of changes to the existing portfolio mix in the normal course of business. There was no transfer of securitisation exposures between the banking book and trading book during the year (2012: none).

As an originator, the group did not securitise any assets in 2013. This was in contrast to 2012 where HK$12bn of additional residential mortgages in the banking book were securitised. There were no gains or losses recognised (2012: none).

Securitisation accounting treatment

For accounting purposes, the group consolidates SPEs when the substance of the relationship indicates that it controls them. In assessing control, all relevant factors are considered, including qualitative and quantitative aspects. The group reassesses the required consolidation whenever there is a change in the substance of the relationship between the group and an SPE, for example, when the nature of its involvement or the governing rules, contractual arrangements or capital structure of the SPE change.

For securitisation transactions originated, the transfer of assets to an SPE may give rise to 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.

Full derecognition occurs when the group transfers its contractual right to receive cash flows from the financial assets, or retains the right but assumes an obligation to pass on the cash flows from the asset, and transfers substantially all the risks and rewards of ownership. The risks include credit, interest rate, currency, prepayment and other price risks.

Partial derecognition occurs when the group sells or otherwise transfers 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 the group's continuing involvement.

The rights and obligations that the group retains from its 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.

When the group has contractual arrangements that could require it to provide financial support for the underlying exposures that have been securitised, these are recognised following the accounting policies as set out in the group's Annual Report and Accounts.

Securitisation regulatory capital approaches

The group uses the internal ratings-based (securitisation) approach to calculate the credit risk for its securitisation exposures in the banking book. Securitisation positions in the trading book are treated under the standardised (market risk) approach, which calculates the market risk capital charge for specific interest rate risk using the same methodology as the internal ratings-based (securitisation) approach.

The group uses Standard & Poor's Rating Services, Moody's Investors Service and Fitch Ratings as the ECAIs for each and all classes of securitisation exposures.

Supplementary Notes on the Financial Statements (continued)

8 Asset securitisation *(continued)*

a *Securitisation transactions – underlying exposures and impairment*

	At 31 December	
	2013	2012
	HK$m	HK$m
As originator		
Traditional securitisations:		
Residential mortgage loans	**12,913**	19,213
	12,913	19,213

There were no material impaired or overdue exposures securitised (2012: none) and there were no losses recognised during the year (2012: none).

The group does not report any amounts under the internal ratings-based (securitisation) approach or the standardised (market risk) approach for these securitisation exposures as they do not fall within the scope of s229(1) of the Banking (Capital) Rules. The related credit risk has been calculated using the same approach as other non-securitisation exposures. The capital requirements and the amounts deducted from capital under the internal ratings-based (securitisation) approach are therefore nil.

b *Securitisation exposures – by exposure type*

	At 31 December 2013			At 31 December 2012		
	Banking book	**Trading book**	**Total**	Banking book	Trading book	Total
On-balance sheet exposures	**HK$m**	**HK$m**	**HK$m**	HK$m	HK$m	HK$m
As investor						
Residential mortgage loans	**936**	**7**	**943**	1,264	8	1,272
Student loans	**63**	**–**	**63**	179	–	179
Commercial mortgage loans	**427**	**–**	**427**	436	–	436
Loans and receivables	**431**	**–**	**431**	1,186	–	1,186
Auto loans	**2,737**	**–**	**2,737**	–	–	–
Others	**152**	**–**	**152**	149	–	149
	4,746	**7**	**4,753**	3,214	8	3,222
Off-balance sheet exposures				–	–	–
As investor				–	–	–
Residential mortgage loans	**–**	**–**	**–**	–	–	–
Student loans	**–**	**–**	**–**	–	–	–
Commercial mortgage loans	**757**	**–**	**757**	798	–	798
Loans and receivables	**–**	**–**	**–**	82	–	82
Auto loans	**–**	**–**	**–**	–	–	–
Others	**–**	**–**	**–**	–	–	–
	757	**–**	**757**	880	–	880
	5,503	**7**	**5,510**	4,094	8	4,102

Supplementary Notes on the Financial Statements (continued)

8 Asset securitisation *(continued)*

c *Securitisation exposures – by risk-weight bands*

	Securitisation exposures			Capital requirements		
	Banking book HK$m	Trading book HK$m	Total HK$m	Banking book HK$m	Trading book HK$m	Total HK$m
At 31 December 2013						
As investor						
Securitisations						
- less than or equal to 10%	**1,236**	**–**	**1,236**	**8**	**–**	**8**
- greater than 10% and less than or equal to 20%	**735**	**–**	**735**	**10**	**–**	**10**
- greater than 20% and less than or equal to 50%	**–**	**–**	**–**	**–**	**–**	**–**
- greater than 50% and less than or equal to 100%	**3,509**	**–**	**3,509**	**298**	**–**	**298**
- greater than 100% and less than or equal to 650%	**–**	**–**	**–**	**–**	**–**	**–**
- greater than 650% and less than 1,250%	**–**	**–**	**–**	**–**	**–**	**–**
- 1,250%	**17**	**7**	**24**	**18**	**8**	**26**
	5,497	**7**	**5,504**	**334**	**8**	**342**
Re-securitisations						
- 1,250%	**6**	**–**	**6**	**6**	**–**	**6**
	5,503	**7**	**5,510**	**340**	**8**	**348**
At 31 December 2012						
As investor						
Securitisations						
- less than or equal to 10%	2,850	–	2,850	19	–	19
- greater than 10% and less than or equal to 20%	423	–	423	7	–	7
- greater than 20% and less than or equal to 50%	–	–	–	–	–	–
- greater than 50% and less than or equal to 100%	798	–	798	68	–	68
- greater than 100% and less than or equal to 650%	–	–	–	–	–	–
- greater than 650% and less than 1,250%	–	–	–	–	–	–
- deducted from capital	17	8	25	17	8	25
	4,088	8	4,096	111	8	119
Re-securitisations						
- deducted from capital	6	–	6	6	–	6
	4,094	8	4,102	117	8	125

Capital requirement means the amount of capital required to be held for that risk based on the risk-weighted amount for that risk multiplied by 8%. Securitisation exposures are presented as the principal amount net of specific provision or partial write-offs.

d *Securitisation exposures deducted from capital*

Capital requirements	**At 31 December 2013**			At 31 December 2012		
	Banking book HK$m	**Trading book HK$m**	**Total HK$m**	Banking book HK$m	Trading book HK$m	Total HK$m
Residential mortgage loans	**–**	**–**	**–**	3	8	11
Commercial mortgage loans	**–**	**–**	**–**	13	–	13
Loans and receivables	**–**	**–**	**–**	7	–	7
Others	**–**	**–**	**–**	–	–	–
	–	**–**	**–**	23	8	31

There were no credit-enhancing interest-only strips and other exposures that have been allocated a risk-weight of 1,250% by the group (2012: none deducted from core and supplementary capital).

Supplementary Notes on the Financial Statements (continued)

8 Asset securitisation *(continued)*

e *Other disclosures*

(i) There were no securitisation transactions that were subject to an early amortisation provision in which the group was the originating institution (2012: none).

(ii) There were no securitisation transactions under the internal ratings-based (securitisation) approach which were covered by recognised guarantees or recognised credit derivative contracts during the year (2012: none). There were no re-securitisation exposures to which credit risk mitigation or guarantees were applied.

(iii) There were no affiliates (2012: no related companies) within the meaning of section 35 of the Banking (Capital) Rules that the group managed or advised, which invested in the securitisation exposures issued by (i) the group; or (ii) the SPEs of which the group was a sponsor.

(iv) There were no outstanding exposures held by the group with the intention of transferring into securitisation transactions (2012: none).

9 Market risk

Market risk is the risk that movements in market factors, including foreign exchange rates, interest rates, credit spreads or equity and commodity prices will result in profits or losses to the group. The group uses an internal models approach to calculate its general market risk for the risk categories of interest rate and foreign exchange (including gold) exposures, and equity exposures. The group also uses an internal models approach to calculate its market risk in respect of specific risk for interest rate exposures and equity exposures. The group uses the standardised approach for calculating other market risk positions as well as trading book securitisation exposures.

The group's market risk capital requirement under the internal models approach uses value at risk ('VAR'), stressed VAR and an incremental risk charge. The comprehensive risk charge is not used by the group.

Market risk capital requirement

	At 31 December	
	2013	2012
	HK$m	HK$m
Under the standardised (market risk) approach		
Commodity exposures	**–**	–
Other equity exposures	**11**	11
Interest rate exposures- non-securitisations	**–**	–
Interest rate exposures- securitisations[1]	**8**	–
Under the internal models approach		
VAR	**1,078**	1,012
Stressed VAR	**2,649**	2,625
Incremental risk charge	**5,566**	4,672
Add-ons for interest rate	**245**	–
Add-ons for equity	**1,166**	1,033
Capital requirement for market risk	**10,723**	9,353

1 *Certain items that were previously deducted from capital are given a 1,250% risk weighting following the implementation of Basel III on 1 January 2013.*

9 Market risk *(continued)*

Capital requirement means the amount of regulatory capital which the group is required to hold for an exposure to a relevant risk which, if multiplied by 12.5, becomes the risk-weighted amount of that exposure for that risk.

Methodology and Characteristics of Market Risk Models

VAR and stressed VAR models

VAR is a technique that estimates the potential losses that could occur on risk positions as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence. A Historical Simulation approach is used to model foreign currency, equity and interest rate risk, generated by revaluing the portfolio for each historical scenario from one-day market movements, and is derived from a clean two-year time series of historical market risk factor data.

A Monte Carlo approach is used to model idiosyncratic interest rate risk and default risk, generated from a statistical model calibrated using historical time series data.

The VAR and stressed VAR models cover all material sources of price risk relating to foreign exchange risk, general interest rate risk and specific interest rate risk, as well as general equity risk and specific equity risk. Foreign exchange risk factors include, but are not limited to, foreign currency prices and foreign currency option volatility. General interest rate risk factors include, but are not limited to, interest rate curves and interest rate option volatilities. Specific interest rate risk factors are principally bond and credit derivative spread changes. Equity risk factors include, but are not limited to, equity and equity index prices and volatilities.

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.

Historical, hypothetical and technical scenario stress testing is performed on positions on a weekly basis. Back-testing of the interest rate, foreign exchange, equity and credit spread models uses clean and hypothetical profits and losses from trading operations and compares these to overall and individual business level VAR on a daily basis.

A comparison of the group's trading VAR with the actual profit and loss during the year reveals no loss side back-testing exceptions (2012: none). For capital charge calculation purposes, the number of loss exceptions is accumulated on a 250 business days basis.

Add-ons are used to capture the risks that are not adequately captured in the VaR models. The add-ons include, but are not limited to, inflation risk, interest rate basis risk on Libor tenor and overnight indexed swap, as well as equity risk on equity event, equity dividend and equity volatility skew. These add-ons are calibrated at least as conservatively as comparable risk factors under the internal models approach.

To enable group entities to aggregate and hold a risk-adjusted amount of capital resources appropriate to the group, all entities with trading book portfolios have adopted the group's VAR approach.

Incremental risk charge

The IRC 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 IRC model is calibrated to the 99.9^{th} percentile loss over a one-year capital horizon. Risk factors covered include credit migration, default, product basis, concentration, hedge mismatch, recovery rate and liquidity.

Liquidity horizons are assessed based on a combination of factors including issuer type, currency and size of exposure, and are floored to three months.

The IRC is a standalone charge generating no diversification benefit with other charges.

To validate the incremental risk charge model, the model assumptions such as correlations and recovery rates are regularly compared to current market data. Re-calibration is performed when necessary.

9 Market risk *(continued)*

Analysis of VAR, stressed VAR and incremental risk charge measures

The group's VAR and stressed VAR for the positions covered by the internal models approach were as follows:

	2013		2012	
	VAR HK$m	Stressed VAR HK$m	VAR HK$m	Stressed VAR HK$m
Total				
Year end	102	1,439	114	1,084
Average	109	805	133	953
Maximum	157	1,439	218	1,529
Minimum	68	359	84	673
Interest rate				
Year end	83	961	94	1,035
Average	91	720	108	813
Maximum	120	1,137	158	1,146
Minimum	55	364	62	579
Foreign exchange				
Year end	49	255	38	225
Average	52	259	42	161
Maximum	114	584	88	340
Minimum	20	64	22	75
Credit spread				
Year end	28	497	41	354
Average	28	159	46	348
Maximum	51	516	98	656
Minimum	13	25	29	224
Equity				
Year end	16	237	38	201
Average	22	239	25	188
Maximum	41	382	42	410
Minimum	13	130	17	25

The above table is prepared in accordance with the basis of preparation used to calculate the group's market risk capital charge under the internal models approach. The preparation basis and the amounts shown are different from those disclosed in the Risk Report of the 2013 Annual Report and Accounts, which reflects the group's trading VAR within Global Markets, where the management of market risk is principally undertaken.

The following table shows an analysis of the group's incremental risk charge:

	2013 HK$m	2012 HK$m
Year end	5,561	4,672
Average	4,189	2,186
Maximum	7,327	4,672
Minimum	2,416	1,294

Supplementary Notes on the Financial Statements (continued)

10 Operational risk

The group uses the standardised (operational risk) approach to calculate its operational risk.

	At 31 December	
	2013	2012
	HK$m	HK$m
Capital requirement for operational risk	**21,956**	20,011

Capital requirement means an amount of regulatory capital which the group is required to hold for an exposure to a relevant risk which, if multiplied by 12.5, becomes the risk-weighted amount of that exposure for that risk.

11 Equity exposures in the banking book

Investments in equity shares which are intended to be held on a continuing basis, but which are not investments in associates, jointly controlled entities or subsidiaries, are classified as available-for-sale securities and are reported in the balance sheet as financial investments. Available-for-sale securities are measured at fair value as described in Notes 3(h) and (i) on the financial statements. Included within this category are primarily investments made by the group for strategic purposes, which are subject to additional internal procedures and approvals to ensure that the investment is in accordance with the group's and HSBC Group's strategy and to ensure compliance with all relevant regulatory and legal restrictions. In some cases, additional investments may be made later such that the investee becomes an associate, jointly controlled entity or subsidiary, at which point the investment is reclassified in accordance with the group's accounting policies. In certain cases, some investments may be held for sale such that their carrying amounts will be recovered principally through sale, they are available for sale in their present condition and their sale is highly probable. These are reclassified and measured following the group's accounting policies as described in note 3(ad) on the financial statements.

	2013	2012
	HK$m	HK$m
Realised gains from sales for the year	**34,230**	2,722
Unrealised gains:		
Amount included in reserves but not through the income statement	**4,802**	37,214
Amount included in supplementary capital[1]		1,135

1 *Following the implementation of Basel III on 1 January 2013, no adjustment is made to CET1 capital for unrealised gains or losses on available-for-sale equities.*

12 Interest rate exposures in the banking book

A principal part of our management of market risk in non-trading portfolios is to monitor the sensitivity of projected net interest income under varying interest rate scenarios (simulation modelling). The group aims, through its 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.

For simulation modelling, our businesses use a combination of scenarios and assumptions relevant to them and local markets as well as standard scenarios which are required throughout the HSBC Group. The standard scenarios are consolidated to illustrate the combined pro forma effect on the group's consolidated portfolio valuations and net interest income.

The table below sets out the effect on future net interest income of an incremental 25 basis points parallel rise or fall in all yield curves at the beginning of each quarter during the 12 months from 1 January. Assuming no management actions, the sensitivity of projected net interest income is as follows:

	HK$m
Change in 2014 projected net interest income arising from a shift in yield curves of:	
+25 basis points at the beginning of each quarter	**5,658**
-25 basis points at the beginning of each quarter	**(7,289)**
Change in 2013 projected net interest income arising from a shift in yield curves of:	
+25 basis points at the beginning of each quarter	4,681
-25 basis points at the beginning of each quarter	(5,571)

The sensitivity analysis reflects the fact that our deposit taking businesses generally benefit from rising rates which are partly offset by increased funding costs in Balance Sheet Management given our simplifying assumption of unchanged Balance Sheet Management positioning. The main drivers of the year-on-year changes in the sensitivity of the group's net interest income from the changes in rates shown in the table above were due to higher implied Hong Kong dollar yield curves under a reducing interest rate scenario, wider margins in a rising interest rate scenario and a decrease in the funding requirements of the trading book. Net interest income and its associated sensitivity, as reflected in the table above, include the expense of internally funding trading assets, while the related revenue is reported in 'Net trading income'.

The interest rate sensitivities set out in the table above are illustrative only and are based on simplified scenarios. The figures represent the effect of the pro forma movements in net interest income based on the projected yield curve scenarios and the group's current interest rate risk profile. This effect, however, does not incorporate actions that would be taken by Balance Sheet Management or in the business units to mitigate the effect of interest rate risk. In reality, Balance Sheet Management seeks proactively to change the interest rate risk profile to minimise losses and optimise net revenues. The projections above also assume that interest rates of all maturities move by the same amount (although rates are not assumed to become negative in the falling rates scenario) and, therefore, do not reflect the potential impact on net interest income of some rates changing while others remain unchanged. In addition, the projections take account of the effect on net interest income of anticipated differences in changes between interbank interest rates and interest rates linked to other bases (such as Central Bank rates, or product rates over which the entity has discretion in terms of the timing and extent of rate changes). The projections make other simplifying assumptions, including that contractually fixed term positions run to maturity, managed rate products and non-interest bearing balances, such as interest free current accounts, are subject to interest rate risks behaviouralisation, and any material effect from the extent to which movements in interest rates will alter the demand for the group's products and how customers' behaviour may change with movements in interest rates, such as loan repayments are incorporated.

Projecting the movements in net interest income from prospective changes in interest rates is a complex interaction of structural and managed exposures. The group's exposure to the effect of movements in interest rates on its net interest income arises in two main areas: savings and demand deposit accounts and Balance Sheet Management portfolios.

- The net interest income of savings and demand deposit accounts increases as interest rates rise and decreases as interest rates fall. However, this risk is asymmetrical in a very low interest rate environment as there is limited room to lower deposit pricing in the event of interest rate reductions.
- Residual interest rate risk is transferred from the commercial bank to Balance Sheet Management under our policy where interest rate risk is managed within defined limits.

Supplementary Notes on the Financial Statements (continued)

13 Off-balance sheet exposures other than derivative transactions

	At 31 December	
	2013	2012
	HK$m	HK$m
Contract amounts		
Direct credit substitutes	**95,496**	69,044
Transaction-related contingencies	**122,734**	124,065
Trade-related contingencies	**111,199**	107,558
Forward asset purchases	**2,301**	2,457
Forward deposits placed	**2,564**	–
Commitments that are unconditionally cancellable without prior notice	**1,423,126**	1,290,390
Commitments which have an original maturity of not more than one year	**70,096**	97,458
Commitments which have an original maturity of more than one year	**150,046**	150,716
	1,977,562	1,841,688
Risk-weighted amounts	**222,817**	214,479

The table above gives the nominal contract amounts and risk-weighted amounts of contingent liabilities and commitments. The information is consistent with that in the ‘Capital Adequacy Ratio’ return submitted to the HKMA by the group. The return is prepared on a consolidated basis as specified by the HKMA under the requirement of section 3C(1) of the Banking (Capital) Rules.

For accounting purposes, acceptances and endorsements are recognised on the balance sheet in ‘Other assets’ in accordance with HKAS 39 ‘Financial Instruments: Recognition and Measurement’. For the purpose of the Banking (Capital) Rules, acceptances and endorsements are included in the capital adequacy calculation as if they were contingencies.

14 Loans and advances to customers by geographical area

Analysis of loans and advances to customers by geographical areas according to the location of counterparties, after recognised risk transfer:

	Hong Kong HK$m	**Rest of Asia-Pacific/ Other HK$m**	**Total HK$m**
At 31 December 2013			
Gross loans and advances to customers	**1,238,711**	**1,440,028**	**2,678,739**
At 31 December 2012			
Gross loans and advances to customers	1,090,273	1,268,541	2,358,814

Supplementary Notes on the Financial Statements (continued)

15 Loans and advances to customers by industry sectors

The following analysis of the group's loans and advances to customers is based on the categories contained in the 'Quarterly Analysis of Loans and Advances and Provisions' return required to be submitted to the Hong Kong Monetary Authority ('HKMA') by branches of the Bank and by banking subsidiaries in Hong Kong.

	Gross Advances at 31 December		**Collateral and other security at 31 December**	
	2013	2012	**2013**	2012
	HK$m	HK$m	**HK$m**	HK$m
Gross loans and advances to customers for use in Hong Kong				
Industrial, commercial and financial				
Property development	**82,700**	68,345	**26,960**	21,530
Property investment	**217,098**	206,760	**169,273**	162,437
Financial concerns	**34,786**	13,533	**18,293**	3,020
Stockbrokers	**5,828**	3,373	**257**	680
Wholesale and retail trade	**93,187**	88,658	**28,429**	25,331
Manufacturing	**36,799**	33,904	**8,465**	7,566
Transport and transport equipment	**37,480**	27,328	**21,722**	19,402
Recreational activities	**263**	480	**63**	154
Information technology	**9,980**	5,741	**1,230**	1,390
Others	**85,317**	60,170	**29,596**	23,608
	603,438	508,292	**304,288**	265,118
Individuals				
Advances for the purchase of flats under the Hong Kong Government's Home Ownership Scheme, Private Sector Participation Scheme and Tenants Purchase Scheme	**25,040**	24,426	**25,040**	24,426
Advances for the purchase of other residential properties	**349,541**	336,906	**349,529**	336,906
Credit card advances	**48,452**	45,941	**–**	–
Others	**54,358**	39,554	**24,262**	9,522
	477,391	446,827	**398,831**	370,854
Gross loans and advances to customers for use in Hong Kong	**1,080,829**	955,119	**703,119**	635,972
Trade finance	**218,096**	166,521	**28,858**	26,784
Gross loans and advances to customers for use outside Hong Kong	**1,379,814**	1,237,174	**558,746**	445,386
Gross loans and advances to customers	**2,678,739**	2,358,814	**1,290,723**	1,108,142

The categories of advances, and the relevant definitions, used by the HKMA differ from those used for internal purposes by the HSBC Group, including The Hongkong and Shanghai Banking Corporation Limited and its subsidiaries, as disclosed in note 18 on the financial statements.

The geographical information shown above has been classified by the location of the principal operations of the subsidiary or, in the case of the Bank, by the location of the branch responsible for advancing the funds.

Collateral includes any tangible security that has a determinable fair market value and is readily marketable. This includes (but is not limited to) cash and deposits, stocks and bonds, mortgages over properties and charges over other fixed assets such as plant and equipment. Where collateral values are greater than gross advances, only the amount of collateral up to the gross advance has been included.

Supplementary Notes on the Financial Statements (continued)

16 Non-bank mainland exposures

The analysis of non-bank mainland exposures is based on the categories of non-bank counterparties and the type of direct exposures defined by the HKMA under the Banking (Disclosure) Rules with reference to the HKMA return for non-bank mainland exposures, which includes the mainland exposures extended by the Bank and its wholly owned banking subsidiaries in mainland China.

	On-balance sheet exposure HK$m	Off-balance sheet exposure HK$m	Total exposures HK$m	Specific provisions HK$m
At 31 December 2013				
Mainland entities	**138,876**	**11,354**	**150,230**	**–**
Companies and individuals outside the mainland where the credit is granted for use in the mainland	**48,332**	**4,638**	**52,970**	**15**
Other counterparties the exposures to whom are considered by the Bank to be non-bank mainland exposures	**36,132**	**4,552**	**40,684**	**2**
	223,340	**20,544**	**243,884**	**17**
Mainland exposures of wholly owned mainland subsidiaries:				
Loans and advances	**171,875**	**4,137**	**176,012**	**165**
Debt securities and other	**154,835**	**35,993**	**190,828**	**–**
	326,710	**40,130**	**366,840**	**165**
	550,050	**60,674**	**610,724**	**182**
At 31 December 2012				
Mainland entities	122,389	10,794	133,183	–
Companies and individuals outside the mainland where the credit is granted for use in the mainland	29,586	1,195	30,781	46
Other counterparties the exposures to whom are considered by the Bank to be non-bank mainland exposures	3,703	2,537	6,240	–
	155,678	14,526	170,204	46
Mainland exposures of wholly owned mainland subsidiaries:				
Loans and advances	147,122	3,544	150,666	138
Debt securities and other	107,667	19,757	127,424	–
	254,789	23,301	278,090	138
	410,467	37,827	448,294	184

Supplementary Notes on the Financial Statements (continued)

17 Cross-border exposures

The group's country risk exposures in the tables below are prepared in accordance with the HKMA Return of External Positions Part II: Cross-Border Claims (MA(BS)9) guidelines.

Cross-border claims are on-balance sheet exposures to counterparties based on the location of the counterparties after taking into account the transfer of risk.

The tables show claims on individual countries and territories or areas, after recognised risk transfer, amounting to not less than 10% of the aggregate cross-border claims.

Cross-border risk is controlled centrally through a well-developed system of country limits and is frequently reviewed to avoid concentration of transfer, economic or political risk.

	Banks HK$m	Public sector entities[1] HK$m	Others HK$m	Total HK$m
At 31 December 2013				
Asia-Pacific excluding Hong Kong				
China	**357,745**	**72,148**	**171,219**	**601,112**
Others	**188,520**	**172,504**	**324,098**	**685,122**
	546,265	**244,652**	**495,317**	**1,286,234**
Americas	**67,170**	**135,554**	**194,379**	**397,103**
Europe	**207,891**	**54,688**	**132,858**	**395,437**
At 31 December 2012				
Asia-Pacific excluding Hong Kong				
China	312,712	18,708	157,617	489,037
Others	172,179	214,737	277,901	664,817
	484,891	233,445	435,518	1,153,854
Americas	60,989	136,765	131,321	329,075
Europe	226,409	58,524	94,623	379,556

1 *Includes balances with central banks.*

Supplementary Notes on the Financial Statements (continued)

18 Foreign currency positions

The group had the following non-structural foreign currency positions that were not less than 10% of the net non-structural positions in all foreign currencies in either year:

	United States dollars HK$m	Singapore dollars HK$m	Brunei dollars HK$m	Chinese Renminbi HK$m	Korea Won HK$m
At 31 December 2013					
Spot assets	**1,624,983**	**315,356**	**17,512**	**728,767**	**82,924**
Spot liabilities	**(1,815,034)**	**(254,883)**	**(31,553)**	**(635,263)**	**(74,413)**
Forward purchases	**5,989,494**	**349,352**	**197**	**1,392,469**	**450,665**
Forward sales	**(5,769,631)**	**(396,101)**	**(22)**	**(1,479,839)**	**(458,471)**
Net options positions	**1,779**	**(9)**	**–**	**(418)**	**–**
Net long (net short) position	**31,591**	**13,715**	**(13,866)**	**5,716**	**705**
At 31 December 2012					
Spot assets	1,401,014	255,743	18,949	529,950	65,400
Spot liabilities	(1,599,404)	(235,337)	(23,941)	(508,122)	(22,994)
Forward purchases	6,365,644	558,434	3,822	1,018,430	533,171
Forward sales	(6,162,237)	(574,195)	(3,801)	(1,040,813)	(574,781)
Net options positions	3,205	(268)	–	(215)	529
Net long (net short) position	8,222	4,377	(4,971)	(770)	1,325

The net options positions reported above are calculated using the delta-weighted position of the options contracts.

Supplementary Notes on the Financial Statements (continued)

19 Senior management compensation and benefits

Remuneration of senior management and key personnel

The following tables show the remuneration paid to senior management and key personnel. These disclosures are in compliance with the guideline in Part 3 (disclosure on remuneration) of the HKMA Supervisory Policy Manual CG-5 'Guideline on a Sound Remuneration System'.

Senior management is defined as those persons responsible for oversight of the group's strategy, activities or material business lines. This includes the Executive Directors, Executive Committee members, Chief Executive, Alternative Chief Executive and Managers as registered with the HKMA. There were 23 members of senior management in 2013 (2012: 23 members). This includes one member (2012: two) who is a Director of, and is remunerated by, HSBC Holdings Plc and is consequently not included in the disclosures below.

Key personnel is defined as individual employees whose duties or activities involve the assumption of material risk or the taking on of material exposures on behalf of the group.

The group follows the remuneration system of HSBC Holdings plc. Please refer to the Director's Remuneration Report in the Annual Report and Accounts and the Capital and Risk Management Pillar 3 Disclosures of HSBC Holdings plc for details of the governance structure and the major design characteristics of the remuneration system.

Analysis of remuneration between fixed, variable, deferred and non-deferred amounts

	2013			2012		
	Senior management (22 people) HK$m	**Key personnel (38 people) HK$m**	**Total HK$m**	Senior management (21 people) HK$m	Key personnel (31 people) HK$m	Total HK$m
Fixed						
Cash based	**98**	**126**	**224**	91	112	203
Variable[1]						
Cash	**53**	**107**	**160**	62	100	162
Non-Deferred Shares	**41**	**86**	**127**	31	84	115
Deferred cash	**54**	**125**	**179**	45	124	169
Deferred shares	**116**	**142**	**258**	107	139	246
Total variable pay	**264**	**460**	**724**	245	447	692

Analysis of deferred remuneration

	2013			2012		
	Senior management (22 people) HK$m	**Key personnel (38 people) HK$m**	**Total HK$m**	Senior management (21 people) HK$m	Key personnel (31 people) HK$m	Total HK$m
Deferred remuneration at 31 December						
Outstanding, unvested[2]	**336**	**550**	**886**	346	674	1,020
Outstanding, cash	**85**	**186**	**271**	84	168	252
Outstanding, shares	**251**	**364**	**615**	262	506	768
Awarded during the year	**144**	**254**	**398**	210	332	542
Paid out	**454**	**774**	**1,228**	323	628	951
Deferred shares paid out	**396**	**684**	**1,080**	301	593	894
Deferred cash paid out	**58**	**90**	**148**	22	35	57
Reduced through performance adjustment	**–**	**–**	**–**	–	–	–

1 *The forms of variable remuneration and the proportion deferred are based on the seniority, role and responsibilities of employees and their level of total variable compensation.*
2 *Outstanding, unvested, deferred remuneration is exposed to ex post explicit adjustments. There is no retained remuneration exposed to ex post explicit adjustments as at 31 December 2013 and 31 December 2012.*
3 *There is no reduction of deferred remuneration and retained remuneration due to ex post explicit adjustments during 2013 and 2012.*

20 Principal subsidiaries and basis of consolidation

The basis of consolidation for financial accounting purposes is in accordance with Hong Kong Financial Reporting Standards, as described in Note 1 on the financial statements in the *2013 Annual Report and Accounts*.

The basis of consolidation for regulatory purposes is different from that for accounting purposes. Subsidiaries included in the consolidation for regulatory purposes are specified in a notice from the HKMA in accordance with section 3C(1) of the Banking (Capital) Rules. Subsidiaries not included in consolidation for regulatory purposes are securities and insurance companies that are authorised and supervised by a regulator and are subject to supervisory arrangements regarding the maintenance of adequate capital to support business activities comparable to those prescribed for authorised institutions under the Banking (Capital) Rules and the Banking Ordinance. The capital invested by the group in these subsidiaries is deducted from the capital base as determined in accordance with Part 3 of the Banking (Capital) Rules.

A list of these subsidiaries is shown below:

		At 31 December 2013	
		Total assets	**Total equity**
	Principal activity	**HK$m**	**HK$m**
HSBC Broking Futures (Hong Kong) Ltd	Futures broking	**2,828**	**458**
HSBC Broking Services (Asia) Ltd and its subsidiaries	Broking services	**18,016**	**2,428**
HSBC Futures (Singapore) Pte Ltd	Futures broking	**67**	**67**
HSBC Global Asset Management Holdings (Bahamas) Ltd and its subsidiaries	Asset management	**1,355**	**780**
HSBC Insurance (Asia- Pacific) Holdings Ltd and its subsidiaries	Insurance	**251,617**	**17,031**
HSBC InvestDirect (India) Ltd and its subsidiaries	Financial Services	**679**	**476**
HSBC Securities (Asia) Ltd and its subsidiaries	Broking services	**420**	**419**
HSBC Securities (Japan) Ltd	Broking services	**48,828**	**1,341**
HSBC Securities (Singapore) Pte Ltd	Broking services	**83**	**37**
HSBC Securities Brokers (Asia) Ltd	Broking services	**8,856**	**982**
Hang Seng (Nominee) Ltd	Nominee services	**–**	**–**
Hang Seng Bank (Trustee) Ltd	Trustee services	**5**	**3**
Hang Seng Bank Trustee International Ltd	Trust business	**16**	**12**
Hang Seng Futures Ltd	Futures broking	**102**	**102**
Hang Seng Insurance (Bahamas) Ltd	Insurance	**–**	**–**
Hang Seng Insurance Co. Ltd and its subsidiaries	Insurance	**95,736**	**8,796**
Hang Seng Investment Management Ltd	Asset management	**715**	**602**
Hang Seng Investment Services Ltd	Investment services	**9**	**9**
Hang Seng Securities Ltd	Broking services	**3,019**	**1,451**

For insurance entities, the figures shown above exclude deferred acquisition cost assets as these are derecognised for consolidation purpose due to the recognition of the present value of in-force long-term insurance business (‘PVIF’) on long-term insurance contracts and investment contracts with discretionary participation features at group level. The PVIF asset of HK$28,916m and the related deferred tax liability, however, are recognised at the consolidated group level only, and are therefore also not included in the asset or equity positions for the standalone entities shown above.

There are no subsidiaries which are included within both the accounting scope of consolidation and the regulatory scope of consolidation but where the method of consolidation differs at 31 December 2013.

There are no subsidiaries which are included within the regulatory scope of consolidation but not included within the accounting scope of consolidation at 31 December 2013.

The group operates subsidiaries in a number of countries and territories where capital is governed by local rules and there may be restrictions on the transfer of regulatory capital and funds between members of the banking group.