The Hongkong and Shanghai Banking Corporation Limited

Supplementary Notes on the Financial Statements as at 31 December 2010

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Introduction

These notes are supplementary to and should be read in conjunction with the 2010 Annual Report and Accounts. The Annual Report and Accounts and these supplementary notes taken together comply with the Banking (Disclosure) Rules ('Rules') made under section 60A of the Banking Ordinance. 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'.

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 securitisation exposures. For market risk, the group uses an internal models approach to calculate its general market risk and market risk relating to equity options. The group uses an internal models approach to calculate its market risk in respect of specific risk for the interest rate risk category. The group uses the standardised (market risk) approach for calculating other market risk positions and the standardised (operational risk) approach to calculate its operational risk. There are no changes in the approaches used in 2010.

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. Further information regarding subsidiaries that are not included in the consolidation for regulatory purposes is set out in Supplementary Note 17.

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 2010, as set out in Note 3 on the financial statements on pages 38 to 54 of the Annual Report and Accounts.

2 Summary of risk-weighted amounts

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

	2010 HK$m	2009 HK$m
Credit risk		
Basic approach	**9,470**	7,378
Standardised (credit risk) approach	**173,055**	148,386
Internal ratings-based approach	**1,177,134**	967,660
Internal ratings-based (securitisation) approach	**327**	1,150
	1,359,986	1,124,574
Market risk	**35,251**	31,848
Operational risk	**216,866**	214,532
	1,612,103	1,370,954

Supplementary Notes on the Financial Statements (unaudited) (continued)

3 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, with the exception of some exposures acquired in 2009 where the basic approach is used.

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 the risk-weighted amount for that risk multiplied by 8 per cent.

	2010 HK$m	2009 HK$m
Capital required for exposures under the IRB approach		
Corporate exposures		
Specialised lending under supervisory slotting criteria approach		
- Project finance	276	226
- Object finance	69	69
- Commodities finance	10	92
- Income- producing real estate	3,447	2,370
Small-and-medium sized corporates	16,579	12,268
Other corporates	44,865	36,849
Sovereign exposures		
Sovereigns	4,733	3,394
Bank exposures		
Banks	11,077	9,552
Securities firms	463	521
Retail exposures		
Residential mortgages		
- Individuals	3,550	2,950
- Property- holding shell companies	218	205
Qualifying revolving retail exposures	3,425	3,463
Small business retail exposures	9	10
Other retail exposures to individuals	657	707
Other exposures		
Cash items	210	180
Other items	6,362	4,557
Total for the IRB approach	95,950	77,413
Capital required for exposures under the standardised (credit risk) approach		
Sovereign exposures	1	4
Public sector entity exposures	683	483
Bank exposures	170	150
Securities firm exposures	–	1
Corporate exposures	2,821	2,324
Collective investment scheme exposures	4	4
Cash items	–	–
Regulatory retail exposures	4,116	3,711
Residential mortgage loans	2,436	2,319
Other exposures which are not past due exposures	1,607	1,258
Past due exposures	430	671
Off-balance sheet exposures other than OTC derivative transactions and credit derivative contracts	1,312	816
OTC derivative transactions and credit derivative contracts	264	130
Total for the standardised (credit risk) approach	13,844	11,871
Capital required for exposures under the basic approach	758	590
Total	110,552	89,874

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 applies the IRB approach to the following 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.
- 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 ratings 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 all 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.

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 probability of default ('PD') of a borrower, loss severity expressed in terms of exposure at default ('EAD') and loss given default ('LGD'). These measures are used to calculate expected loss ('EL') and capital requirements. They are also used in conjunction with other inputs to inform rating assessments for the purpose of credit approval and many other risk management decisions.

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.

Supplementary Notes on the Financial Statements (unaudited) (continued)

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

Wholesale business

PD for wholesale customer segments (Central Governments and Central Banks (sovereigns), Institutions, Corporates) are estimated using a Customer Risk Rating ('CRR') scale of 23 grades (2009: 22 grades), of which 21 (2009: 20) 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.

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 experiences, 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 EL bands, in 10 composite EL grades, facilitating comparability across the group's retail customer segments, business lines and product types.

Model governance

In order to meet local regulatory requirements, model governance of group risk rating models, including development, validation and monitoring, is under the general oversight of the group Credit Risk Analytics Oversight Committee ('CRAOC') subject to overall Group CRAOC oversight. The group CRAOC meets bi-monthly and reports to the group Risk Management Committee. The group Chief Risk Officer ('CRO') chairs the group CRAOC which draws its members from Asia-Pacific Risk, customer groups, and finance.

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

Supplementary Notes on the Financial Statements (unaudited) (continued)

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

Use of internal estimates

While internal risk parameters derived from applying the IRB approach are employed in the calculation of risk-weighted exposure amounts for the purpose of determining regulatory capital requirements, they are also used in a multitude of contexts within risk management and business processes. Such uses continue to develop and become embedded as experience grows and the repository of quality data improves. They include:

- credit approval: authorities, including those for specific counterparty types and transactions, are delegated to the group's risk function using a risk-based approach, graded according to obligor CRR;
- credit risk analytical tools: IRB models, scorecards and other methodologies are valuable tools deployed in the assessment of customer and portfolio risk;
- 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;
- portfolio management: regular reports to the Board, Audit Committee and Risk Management Committee contain analyses of risk exposures employing internal-ratings based metrics;
- pricing: customer relationship managers apply a risk based approach in pricing through the usage of internal models;
- 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; and
- scenario analysis and stress testing: IRB measures are regularly and systematically stressed to understand the sensitivities of the group capital and business plans on a forward looking basis to the adverse effects of extreme but plausible events.

Supplementary Notes on the Financial Statements (unaudited) (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
2010				
Corporate exposures	**1,340,991**	**64,545**	**–**	**1,405,536**
Sovereign exposures	**774,060**	**–**	**–**	**774,060**
Bank exposures	**979,447**	**–**	**–**	**979,447**
Retail exposures				
- Residential mortgages to individuals and property-holding shell companies	**–**	**–**	**549,910**	**549,910**
- Qualifying revolving retail exposures	**–**	**–**	**151,771**	**151,771**
- Other retail exposures to individuals and small business retail exposures	**–**	**–**	**47,729**	**47,729**
2009				
Corporate exposures	1,009,148	47,633	–	1,056,781
Sovereign exposures	816,372	–	–	816,372
Bank exposures	917,911	–	–	917,911
Retail exposures				
- Residential mortgages to individuals and property-holding shell companies	–	–	420,792	420,792
- Qualifying revolving retail exposures	–	–	131,957	131,957
- Other retail exposures to individuals and small business retail exposures	–	–	27,699	27,699

The corporate, sovereign and bank exposures reported under the IRBA approach as at 31 December 2010 include amounts of HK$51,094m, HK$4,199m and HK$132,998m respectively (31 December 2009: HK$45,437m, HK$2,597m and HK$111,019m respectively) that are subject to supervisory estimates. By definition, amounts reported under the Supervisory Slotting Criteria approach continue to be subject to supervisory estimates.

Supplementary Notes on the Financial Statements (unaudited) (continued)

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

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 OTC derivative transactions, repo-style transactions and credit derivative contracts (other than recognised credit derivative contracts).

	2010 **HK$m**	2009 HK$m
Corporate exposures	**293,643**	198,460
Sovereign exposures	**492**	744
Bank exposures	**124,945**	186,017
Retail exposures	**39,553**	36,704
	458,633	421,925

d *Risk assessment for exposures under IRB approach*

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

	Exposure at default HK$m	**Exposure-weighted average risk-weight %**	**Exposure-weighted average PD %**	**Exposure-weighted average LGD %**
2010				
Minimal default risk	**98,534**	**14**	**0.04**	**45.4**
Low default risk	**398,350**	**27**	**0.10**	**45.5**
Satisfactory default risk	**481,823**	**53**	**0.37**	**45.4**
Fair default risk	**181,896**	**98**	**1.22**	**48.4**
Moderate default risk	**140,832**	**115**	**2.85**	**41.8**
Significant default risk	**17,247**	**167**	**6.48**	**46.5**
High default risk	**6,527**	**192**	**12.09**	**41.7**
Special management	**3,828**	**238**	**24.89**	**45.9**
Default	**11,954**	**–**	**100.00**	**52.9**
	1,340,991			
2009				
Minimal default risk	53,856	15	0.04	45.0
Low default risk	302,787	25	0.10	44.1
Satisfactory default risk	329,719	53	0.37	45.0
Fair default risk	161,345	93	1.20	46.0
Moderate default risk	112,984	120	2.87	43.3
Significant default risk	25,148	155	6.17	43.5
High default risk	6,036	223	11.91	48.5
Special management	6,988	250	23.48	47.1
Default	10,285	–	100.00	54.3
	1,009,148			

Supplementary Notes on the Financial Statements (unaudited) (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 %
2010		
Strong	**45,099**	**63**
Good	**13,905**	**85**
Satisfactory	**5,281**	**122**
Weak	**218**	**265**
Default	**42**	**–**
	64,545	
2009		
Strong	31,724	61
Good	11,876	87
Satisfactory	3,947	122
Weak	27	265
Default	59	–
	47,633	

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

Sovereign exposures – analysis by obligor grade

	Exposure at default HK$m	Exposure-weighted average risk-weight %	Exposure-weighted average PD %	Exposure-Weighted average LGD %
2010				
Minimal default risk	**585,030**	**2**	**0.02**	**12.8**
Low default risk	**158,923**	**14**	**0.09**	**34.2**
Satisfactory default risk	**633**	**33**	**0.27**	**19.3**
Fair default risk	**24,877**	**80**	**1.07**	**44.9**
Moderate default risk	**3,946**	**113**	**2.91**	**42.7**
Significant default risk	**651**	**102**	**5.75**	**31.1**
	774,060			
2009				
Minimal default risk	618,174	1	0.01	11.6
Low default risk	174,372	8	0.06	24.8
Satisfactory default risk	3,292	29	0.21	37.2
Fair default risk	14,377	87	1.11	45.0
Moderate default risk	5,457	117	2.88	44.5
Significant default risk	700	102	5.66	30.8
	816,372			

Supplementary Notes on the Financial Statements (unaudited) (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

	Exposure at default HK$m	Exposure-weighted average risk-weight %	Exposure-weighted average PD %	Exposure-weighted average LGD %
2010				
Minimal default risk	**335,146**	**6**	**0.04**	**25.8**
Low default risk	**531,482**	**13**	**0.10**	**29.3**
Satisfactory default risk	**85,376**	**31**	**0.31**	**33.3**
Fair default risk	**17,441**	**67**	**1.19**	**36.8**
Moderate default risk	**5,129**	**111**	**2.88**	**44.9**
Significant default risk	**2,904**	**149**	**6.16**	**44.9**
High default risk	**1,851**	**274**	**12.06**	**62.8**
Special management	**8**	**101**	**19.00**	**19.7**
Default	**110**	**–**	**100.00**	**38.4**
	979,447			
2009				
Minimal default risk	275,538	5	0.03	23.8
Low default risk	451,471	11	0.09	25.9
Satisfactory default risk	157,402	24	0.25	28.1
Fair default risk	25,351	49	0.96	28.0
Moderate default risk	3,592	84	2.79	34.1
Significant default risk	2,259	121	5.34	39.0
High default risk	2,003	181	11.57	42.7
Special management	15	228	19.00	45.8
Default	280	–	100.00	50.0
	917,911			

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 (unaudited) (continued)

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

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

Retail exposures - analysis by credit quality

The following shows a breakdown of exposures on a pool basis by quality classification:

	Residential mortgages HK$m	Qualifying revolving retail exposures HK$m	Other retail exposures HK$m	Total exposures HK$m
2010				
Strong	**539,655**	**119,669**	**43,435**	**702,759**
Medium	**9,361**	**31,205**	**3,868**	**44,434**
Sub-standard	**894**	**895**	**423**	**2,212**
Impaired	**–**	**2**	**3**	**5**
	549,910	**151,771**	**47,729**	**749,410**
2009				
Strong	409,827	99,286	22,930	532,043
Medium	9,564	31,599	4,352	45,515
Sub-standard	1,401	1,069	413	2,883
Impaired	–	3	4	7
	420,792	131,957	27,699	580,448

Undrawn commitments

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

	2010		2009	
	Undrawn commitments HK$m	**Exposure-weighted average EAD HK$m**	Undrawn commitments HK$m	Exposure-weighted average EAD HK$m
Corporate exposures	**662,092**	**234,603**	577,929	222,694
Sovereign exposures	**2,631**	**741**	2,773	821
Bank exposures	**33,495**	**9,258**	23,458	9,014
	698,218	**244,602**	604,160	232,529

Supplementary Notes on the Financial Statements (unaudited) (continued)

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

e *Analysis of actual loss and estimates*

The following table shows the expected loss and actual loss by class of exposure. The expected loss (EL) is the estimated loss likely to be incurred arising from the potential default of the obligor in respect of the exposure over a one-year period. The actual loss is the net charge (including write-offs and individually assessed impairment loss allowances) for each IRB class made during the year:

	2010		2009	
	Expected loss HK$m	**Actual loss HK$m**	Expected loss HK$m	Actual loss HK$m
Sovereign	**193**	**–**	173	–
Bank	**634**	**–**	649	104
Corporate	**10,610**	**3,149**	8,448	3,964
Residential mortgages	**986**	**489**	879	(39)
Qualifying revolving retail	**1,685**	**1,113**	1,618	957
Other retail	**490**	**226**	410	132
	14,598	**4,977**	12,177	5,118

Actual losses decreased in 2010 primarily driven by improvements in the credit performance of the corporate portfolio which drove the decrease in impairment charges and the increase in provision release.

Corporate EL increased, driven by the generally weaker financial conditions of borrowers through the economic downturn in 2008-09.

It should be noted that actual loss and EL are measured with different methodologies which are not directly comparable. In general, EL was greater than the actual loss for each IRB class. The limitation arises from the fundamental differences in the definition of ‘loss’ under the accounting standards which determine the actual loss (write-off and impairment loss allowance) and the Basel II framework which determines the regulatory EL calculation.

Supplementary Notes on the Financial Statements (unaudited) (continued)

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

e *Analysis of actual loss and estimates (continued)*

The following table compares actual outcomes for 2010 year end against the risk elements estimated as at 31 December 2009.

	PD		LGD		EAD	
	Actual %	Projected %	Actual %	Projected %	Actual %	Projected %
At 31 December 2010						
Sovereign	**0.00**	**0.26**	**0.0**	**15.3**	**0**	**100**
Bank	**0.00**	**1.41**	**0.0**	**25.8**	**0**	**97**
Corporate	**0.31**	**1.21**	**25.4**	**44.8**	**86**	**68**
Residential mortgages	**0.88**	**1.00**	**12.1**	**10.9**	**80**	**87**
Qualifying revolving retail	**0.54**	**0.95**	**87.0**	**101.0**	**63**	**56**
Other retail	**1.48**	**1.25**	**27.3**	**32.0**	**70**	**77**
At 31 December 2009						
Sovereign	0.00	0.31	0.0	13.8	0	100
Bank	0.02	1.50	69.7	19.3	100	98
Corporate	0.96	1.25	43.8	46.9	76	70
Residential mortgages	0.65	0.91	6.0	10.8	98	97
Qualifying revolving retail	1.02	0.94	84.4	100.5	69	58
Other retail	2.36	1.25	37.7	27.1	68	55

The difference between actual PD and projected PD is driven by the difference in the time horizon used to calculate the actual and estimated default rates. The actual default rate is a 'point-in-time' measurement referencing the actual number of borrower defaults over a one-year horizon whereas the projected PD is based on a 'through-the-cycle' credit experience.

The group measures actual LGD by using resolved default cases within the year 2010 whereas projected LGD is based on a downturn recovery experience. Due to the different calculation methodologies and the portfolio mix between the default population and the overall book, the actual and projected results can differ.

The group measures actual EAD by comparing the realised credit exposure of the defaulted counterparties in 2010 against the limits one year prior to default. The projected EAD is based on a 'through-the-cycle' credit experience.

Supplementary Notes on the Financial Statements (unaudited) (continued)

5 Credit risk under the standardised (credit risk) approach

a *Ratings from External Credit Assessment Institutions*

The following exposure classes include exposures where IRB exemption has been granted by the HKMA. Such exposures are reported under the standardised (credit risk) approach based on external credit ratings from External Credit Assessment Institutions ('ECAI')**:**

- Public sector entity exposures;
- Multilateral development bank exposures;
- Bank exposures (those without internal CRR);
- Securities firm exposures (those without CRR);
- Corporate exposures (those without CRR); and
- Collective investment scheme exposures.

The group uses the external credit ratings from the following ECAIs:

- Fitch Ratings;
- Moody's Investors Service;
- Standard & Poor's Ratings Services; and
- Rating and Investment Information, Inc.

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.

Supplementary Notes on the Financial Statements (unaudited) (continued)

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

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

		Exposures after recognised credit risk mitigation[2]		Risk- weighted amounts				
2010	**Total exposures[1] HK$m**	**Rated HK$m**	**Unrated HK$m**	**Rated HK$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	–	4,892	–	14	–	14	–	–
Public sector entity	51,336	51,398	–	8,537	–	8,537	–	631
Multilateral development bank	68,707	68,707	–	–	–	–	–	–
Bank	5,047	1,343	4,943	354	1,768	2,122	–	–
Securities firm	2	–	2	–	1	1	–	–
Corporate	41,976	364	34,987	164	35,100	35,264	2,763	10,813
Collective investment scheme	53	–	53	–	53	53	–	–
Regulatory retail	73,034	–	68,604	–	51,452	51,452	2,111	2,321
Residential mortgage loan	52,407	–	52,346	–	30,450	30,450	52	56
Other exposures which are not past due exposures	24,746	–	20,087	–	20,087	20,087	4,657	–
Past due exposures	4,438	–	4,438	–	5,370	5,370	975	20
Total on-balance sheet	321,746	126,704	185,460	9,069	144,281	153,350	10,558	13,841
Off-balance sheet								
Off-balance sheet exposure other than OTC derivative transactions or credit derivative contracts	20,917	433	18,705	136	16,264	16,400	1,779	414
OTC derivative transactions	6,023	4,042	1,966	1,428	1,877	3,305	15	–
Total off-balance sheet	26,940	4,475	20,671	1,564	18,141	19,705	1,794	414
Total	348,686	131,179	206,131	10,633	162,422	173,055	12,352	14,255
Exposures deducted from Core Capital or Supplementary Capital	5							

Supplementary Notes on the Financial Statements (unaudited) (continued)

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

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

2009	Total exposures[1] HK$m	Exposures after recognised credit risk mitigation[2] Rated HK$m	Exposures after recognised credit risk mitigation[2] Unrated HK$m	Risk-weighted amounts Rated HK$m	Risk-weighted amounts Unrated HK$m	Risk-weighted amounts Total HK$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	–	4,080	–	50	–	50	–	–
Public sector entity	42,004	41,065	–	6,038	–	6,038	418	1,912
Multilateral development bank	67,150	67,150	–	–	–	–	–	–
Bank	5,044	1,222	4,490	256	1,619	1,875	–	–
Securities firm	24	–	24	–	12	12	–	–
Corporate	40,902	789	28,463	393	28,661	29,054	8,719	2,956
Collective investment scheme	48	–	48	–	48	48	–	–
Regulatory retail	64,475	–	61,855	–	46,391	46,391	1,378	1,242
Residential mortgage loan	48,360	–	48,282	–	28,983	28,983	24	55
Other exposures which are not past due exposures	17,035	–	15,726	–	15,726	15,726	1,310	–
Past due exposures	5,834	11	5,822	6	8,382	8,388	599	24
Total on-balance sheet	290,876	114,317	164,710	6,743	129,822	136,565	12,448	5,469
Off-balance sheet								
Off-balance sheet exposure other than OTC derivative transactions or credit derivative contracts	14,501	897	11,936	252	9,950	10,202	1,668	424
OTC derivative transactions	4,040	3,140	649	846	773	1,619	251	–
Total off-balance sheet	18,541	4,037	12,585	1,098	10,723	11,821	1,919	424
Total	309,417	118,354	177,295	7,841	140,545	148,386	14,367	5,893
Exposures deducted from Core Capital or Supplementary Capital	61							

1 *Total exposures are the principal amounts for on-balance sheet exposures, or the credit equivalent amounts 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.*

6 Counterparty credit risk-related exposures

a Counterparty credit risk is the risk that a counterparty to a transaction may default before completing the satisfactory settlement of the transaction.

In respect of the group's counterparty credit risk which arises from over-the-counter ('OTC') derivative transactions, repo-style transactions and credit derivative contracts (other than recognised credit derivative contracts), 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 policy for secured collateral on derivatives is guided by the group's internal Best Practice Guidelines ensuring that the due-diligence necessary to fully understand the effectiveness of netting and collateralisation by jurisdiction, counterparty, product and agreement type is fully assessed and that high due-diligence standards are consistently applied.

Supplementary Notes on the Financial Statements (unaudited) (continued)

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

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

	OTC derivative transactions HK$m	Repo-style transactions HK$m	Credit derivative Contracts HK$m
2010			
OTC derivative & credit derivatives:			
Gross total positive fair value	**286,320**	**–**	**5,313**
Credit equivalent amounts	**182,897**	**–**	**6,325**
Repo-style transactions:			
Net credit exposures[1]	**–**	**10,179**	**–**
Value of recognised collateral by type:			
Debt securities	**918**	**84,528**	**–**
Others	**8,596**	**53,237**	**–**
	9,514	**137,765**	**–**
Credit equivalent amounts/ net credit exposures net of recognised collateral[2]	**182,897**	**10,179**	**6,325**
Exposure at default	**182,897**	**10,179**	**6,325**
Risk-weighted amounts	**51,230**	**516**	**1,284**
Notional amounts of recognised credit derivative contracts which provide credit protection	**–**	**–**	**–**
2009			
OTC derivative & credit derivatives:			
Gross total positive fair value	214,421	–	12,625
Credit equivalent amounts	149,657	–	9,921
Repo-style transactions:			
Net credit exposures[1]	–	9,451	–
Value of recognised collateral by type:			
Debt securities	861	91,153	–
Others	7,711	57,889	8
	8,572	149,042	8
Credit equivalent amounts/ net credit exposures net of recognised collateral[2]	149,657	9,451	9,921
Exposure at default	149,657	9,451	9,921
Risk-weighted amounts	44,834	514	1,731
Notional amounts of recognised credit derivative contracts which provide credit protection	–	–	–

1 *For repo-style transactions, the recognised collateral is netted against the EAD.*
2 *For OTC and credit derivative contracts, the recognised collateral is reflected in the LGD.*

Supplementary Notes on the Financial Statements (unaudited) (continued)

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

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

	OTC derivative transactions HK$m	Repo-style transactions HK$m	Credit derivative contracts HK$m
2010			
OTC derivative & credit derivatives:			
Gross total positive fair value	**4,647**	**–**	**–**
Credit equivalent amounts	**6,023**	**–**	**–**
Repo-style transactions:			
Net credit exposures	**–**	**233**	**–**
Value of recognised collateral by type:			
Debt securities	**–**	**–**	**–**
Others	**15**	**438**	**–**
	15	**438**	**–**
Credit equivalent amounts/ net credit exposures net of recognised collateral	**6,023**	**233**	**–**
Risk-weighted amounts	**3,305**	**139**	**–**
Notional amounts of recognised credit derivative contracts which provide credit protection	**–**	**–**	**–**
2009			
OTC derivative & credit derivatives:			
Gross total positive fair value	3,358	–	–
Credit equivalent amounts	4,040	–	–
Repo-style transactions:			
Net credit exposures	–	74	–
Value of recognised collateral by type:			
Debt securities	260	766	–
Others	28	154	–
	288	920	–
Credit equivalent amounts/ net credit exposures net of recognised collateral	4,040	74	–
Risk-weighted amounts	1,619	35	–
Notional amounts of recognised credit derivative contracts which provide credit protection	–	–	–

Supplementary Notes on the Financial Statements (unaudited) (continued)

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

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

	OTC derivative transactions HK$m	Repo-style transactions HK$m	Credit derivative contracts HK$m
2010			
Notional amounts:			
Sovereigns	**229,547**	**47,616**	**–**
Banks	**19,991,145**	**85,570**	**509,077**
Corporates	**2,067,943**	**3,940**	**27,050**
	22,288,635	**137,126**	**536,127**
Exposure at default[1]:			
Sovereigns	**4,199**	**1,049**	**-**
Banks	**127,051**	**8,665**	**5,947**
Corporates	**51,647**	**465**	**378**
	182,897	**10,179**	**6,325**
Risk-weighted amounts:			
Sovereigns	**662**	**133**	**–**
Banks	**20,458**	**356**	**1,054**
Corporates	**30,110**	**27**	**230**
	51,230	**516**	**1,284**
2009			
Notional amounts:			
Sovereigns	164,592	59,939	233
Banks	13,182,135	82,329	582,887
Corporates	1,219,728	4,172	38,272
	14,566,455	146,440	621,392
Exposure at default[1]:			
Sovereigns	2,568	2,114	29
Banks	102,522	7,223	8,497
Corporates	44,567	114	1,395
	149,657	9,451	9,921
Risk-weighted amounts:			
Sovereigns	434	194	–
Banks	15,345	285	1,201
Corporates	29,055	35	530
	44,834	514	1,731

1 *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 (unaudited) (continued)

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

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

	OTC derivative transactions HK$m	Repo-style transactions HK$m	Credit derivative contracts HK$m
2010			
Notional amounts:			
Sovereigns	**12,388**	**–**	**–**
Public sector entities	**187,668**	**270**	**–**
Banks	**3,035**	**–**	**–**
Corporates	**97,195**	**289**	**269**
	300,286	**559**	**269**
Credit equivalent amounts/net credit exposures	**6,023**	**233**	**–**
Risk-weighted amounts	**3,305**	**139**	**–**
2009			
Notional amounts:			
Sovereigns	6,882	–	–
Public sector entities	137,565	467	–
Banks	7,140	–	–
Corporates	35,828	468	329
	187,415	935	329
Credit equivalent amounts/net credit exposures	4,040	74	–
Risk-weighted amounts	1,619	35	–

Supplementary Notes on the Financial Statements (unaudited) (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
2010			
Exchange rate contracts			
Forward	**5,051,896**	**14,038**	**18,653**
Option purchased	**247,641**	**3,694**	**4,380**
Swap	**2,634,785**	**18,171**	**21,326**
	7,934,322	**35,903**	**44,359**
Interest rate contracts			
Forward	**265,986**	**–**	**7**
Option purchased	**325,480**	**756**	**1,133**
Swap	**13,855,242**	**16,616**	**20,319**
	14,446,708	**17,372**	**21,459**
Credit derivative contracts	**536,396**	**1,284**	**743**
Other OTC derivative contracts	**208,054**	**1,260**	**4,236**
	23,125,480	**55,819**	**70,797**
2009			
Exchange rate contracts			
Forward	3,160,234	10,559	16,794
Option purchased	188,145	3,787	6,693
Swap	1,310,245	14,507	8,888
	4,658,624	28,853	32,375
Interest rate contracts			
Forward	196,270	1	14
Option purchased	256,227	919	2,417
Swap	9,524,864	13,613	18,903
	9,977,361	14,533	21,334
Credit derivative contracts	621,721	1,731	1,821
Other OTC derivative contracts	118,186	3,067	13,357
	15,375,892	48,184	68,887

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 requirement of section 98(2) of the Banking Ordinance. Such consolidation basis may be different from the group's accounting policies adopted. Therefore, the contract amounts shown in the above table are different from those disclosed in Note 17 of the 2010 Annual Report and Accounts.

The fair values are calculated after taking into account the effect of valid bilateral netting agreements amounting to HK$225,484m (2009: HK$161,517m).

Supplementary Notes on the Financial Statements (unaudited) (continued)

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

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

	2010 HK$m	2009 HK$m
Used for credit portfolio		
Credit default swap		
Protection bought	**1,768**	1,832
Protection sold	**–**	1,124
Total return swap		
Protection bought	**11,017**	8,530
Protection sold	**–**	–
	12,785	11,486
Used for intermediation activities		
Credit default swap		
Protection bought	**265,541**	309,959
Protection sold	**253,941**	300,276
Total return swap		
Protection bought	**575**	–
Protection sold	**3,554**	–
	523,611	610,235

7 Credit risk mitigation

The group grants credit facilities on the basis of capacity to repay, rather than to 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 types, jurisdictions and geographical locations 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. These policies are subject to regular review.

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, mortgage over property, charge over business assets, guarantees, equities listed on a main index and/or a recognised exchange, 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 the Banking (Capital) Rules section 209, 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 ceiling' constraining the risk ratings assigned to borrowers in countries of higher risk, and partial parental support.

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

8 Asset securitisation

The group's strategy is to use securitisations to meet its needs for aggregate funding, to the extent that market, regulatory treatments and other conditions are suitable, and for customer facilitation. The group uses the internal ratings-based (securitisation) approach to calculate the credit risk for its securitisation exposures. 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: where the group establishes and manages a securitisation programme that purchases exposures from third parties.

a *Investor*

The group is an investor for all securitisation exposures below. In some cases, it also performs other roles, such as swap provider.

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

Securitisation exposures

	2010 HK$m	2009 HK$m
Residential mortgage loans	**2,157**	2,937
Student loans	**988**	1,508
Commercial mortgage loans	**336**	1,144
Others	**867**	1,000
	4,348	6,589

Breakdown by risk-weights of the securitisation exposures

	Securitisation exposures HK$m	**Risk-weighted amount HK$m**	**Capital requirements HK$m**
2010			
7%	**3,240**	**241**	**19**
8%	**685**	**58**	**5**
60%	**44**	**28**	**2**
250%	–	–	–
425%	–	–	–
650%	–	–	–
Deducted from capital	**379**	–	–
	4,348	**327**	**26**
2009			
7%	4,833	359	29
8%	775	66	5
60%	98	62	5
250%	6	15	1
425%	36	161	13
650%	424	488	39
Deducted from capital	417	–	–
	6,589	1,151	92

8 Asset securitisation *(continued)*

Exposures deducted from Core Capital or Supplementary Capital

	2010	2009
	HK$m	HK$m
Residential mortgage loans	**45**	324
Commercial mortgage loans	**292**	32
Others	**42**	61
	379	417

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 per cent. In 2009, securitisation exposures represent the principal amount gross of specific provisions or partial write-offs. From mid-June, 2010, securitisation exposures are presented as the principal amount net of specific provisions or partial write-offs.

b *Originator*

The group originates securitisation transactions in the normal course of business by which it transfers recognised financial assets directly to third parties or to special purposes entities (SPEs). These transfers may give rise to the full or partial derecognition of the financial assets concerned.

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. 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.

For synthetic securitisations, 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. These SPEs are consolidated when the group is exposed to the majority of risks and rewards of ownership.

The group is an originating institution for the classes of exposure below. The group does not report any amounts under the internal ratings-based (securitisation) approach as these securitisation exposures do not fall within the scope of s229(1) of the Banking (Capital) Rules and so the related credit risk has been calculated using the same approach as other non-securitisation exposures. The risk-weighted amounts, the capital requirements and the amounts deducted from capital under the internal ratings-based (securitisation) approach are therefore nil.

8 Asset securitisation *(continued)*

(i) Securitisations where the group continues to retain exposure

	2010 HK$m	2009 HK$m
Traditional securitisations:		
Residential mortgage loans	**11,338**	13,045

(ii) Securitisations originated during the year where the group did not retain any exposure.

	Underlying exposures HK$m	Recognised gain or loss HK$m
2010		
Commercial loans	–	–
2009		
Commercial loans	2,695	25

c *Sponsor*

(i) Securitisation exposures of the institution resulting from securitisation transactions in which the group acted as a sponsor

	2010 HK$m	2009 HK$m
Others	**218**	298

d *Other disclosures*

(i) There were no material impaired or overdue exposures securitised during the year (2009: none) and there were no losses recognised during the year (2009: none).

(ii) Securitisation transactions repurchased by the group during the year.

	2010 HK$m	2009 HK$m
Residential mortgage loans	**8,657**	12

(iii) There were no securitisation transactions entered into during the year that were subject to an early amortisation provision (2009: none).

(iv) 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 (2009: none).

9 Market risk

Market risk is the risk that movements in foreign exchange rates, interest rates, credit spreads, or equity and commodity prices will result in profits or losses to the group. The group uses the internal models approach to calculate market risk changes in debt security prices or interest rates, and changes in exchange rates. The CAD1 model is used to calculate market risk in respect of options exposures to equities. The group uses the standardised (market risk) approach to calculate market risk for other exposures.

Market risk capital charge

	2010 **HK$m**	2009 HK$m
Under the standardised (market risk) approach		
Interest rate exposures	**10**	4
Equity options	**128**	114
Other equity exposures	**147**	108
Under the internal models approach		
Default risk surcharge	**1,225**	945
General market risk and specific interest rate risk	**1,310**	1,377
Capital charge for market risk	**2,820**	2,548

Capital charge 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.

Methodology for valuation of market risk position

- General market risk and specific interest rate risk– VAR model

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 Historic Simulation approach is used to model foreign currency and interest rate risk, generated by revaluing the portfolio for each of 500 historical scenarios from one-day market movements, and is derived from a clean two-year time series of historic 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 and 10,000 Monte Carlo scenarios.

- Equity options – Disaster Limit Matrix

For equity options, a conservative market risk measurement on Disaster Limit Matrix, the CAD1 model, captures the worst case scenario for each underlying position in absolute aggregate.

Characteristics and coverage of market risk model

- General market risk and specific interest rate risk– VAR model

The VAR models cover all material sources of price risk relating to foreign exchange risk and general interest rate risk and specific interest rate 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.

Historical simulation and Monte Carlo approaches are used for all outright interest rate, foreign exchange and credit spread positions using a 99 per cent confidence interval and a one day time horizon that is scaled up to a ten day holding period.

9 Market risk *(continued)*

Historical, hypothetical and technical scenario stress testing is performed on positions on a weekly basis. Back-testing of the interest rate, foreign exchange and credit spread models uses clean and hypothetical profits and losses from trading operations and compares these to overall and individual business level value at risk 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 exception. For capital charge calculation purposes, the number of loss exceptions is accumulated on a rolling year basis.

- Equity options – Disaster Limit Matrix

Specific equity option risks are computed on gross utilisation bases on the underlying equity in the worst case scenario.

Assessment of market risk model on Regulatory Capital Environment

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 must adopt the Group's VAR approach.

10 Operational risk

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

	2010 **HK$m**	2009 HK$m
Capital charge for operational risk	**17,349**	17,163

Capital charge 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 do not comprise 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(g) and (h) 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.

	2010 **HK$m**	2009 HK$m
Realised gains from sales for the year	**1,173**	1,190
Unrealised gains:		
Amount included in reserves but not through the income statement	**56,797**	41,617
Amount included in supplementary capital	**1,487**	1,146

12 Interest rate exposures in the banking book

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. The group monitors the sensitivity of projected net interest income under varying interest rate scenarios (simulation modelling) on a monthly basis.

For simulation modelling, our businesses use a combination of scenarios relevant to them and local markets and standard scenarios which are required throughout the Group. The standard scenarios are consolidated to illustrate the combined proforma 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 incremental 25 basis points parallel falls or rises in all yield curves at the beginning of each quarter during the 12 months from 1 January 2011. Assuming no management actions, the sensitivity of projected net interest income is as follows:

	HK$m
Change in 2011 projected net interest income arising from a shift in yield curves of:	
+25 basis points at the beginning of each quarter	**4,445**
-25 basis points at the beginning of each quarter	**(5,826)**
Change in 2010 projected net interest income arising from a shift in yield curves of:	
+25 basis points at the beginning of each quarter	4,113
-25 basis points at the beginning of each quarter	(6,810)

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 Global Markets or in the business units to mitigate the impact of this interest rate risk. In reality, Global Markets 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 and, therefore, do not reflect the potential effect on net interest income of some rates changing while others remain unchanged. In addition, the projections take account of the anticipated net interest income impact of rate change differences 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 too, including that positions will run to maturity and incorporating 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.

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: core deposit franchises and Global Markets.

- Core deposit franchises: these are exposed to changes in the cost of deposits raised and spreads on wholesale funds. In a low interest rate environment, the net interest income benefit of core deposits increases as interest rates rise and decreases as interest rates fall. This risk is asymmetrical in a very low interest rate environment, however, as there is limited room to lower deposit pricing in the event of interest rate reductions.
- Residual interest rate risk is managed within Global Markets, under the group's policy of transferring interest rate risk to Global Markets to be managed within defined limits and with flexibility as to the instruments used.

The year on year movements in the sensitivity of the group's net interest income to the changes in interest rates tabulated above were driven by the following:

- Changes in the market environment which may have an impact on the group's ability to pass on rate changes to customers; and
- Changes in Global Markets' net trading asset positions. The funding of net trading assets is generally sourced from floating rate retail deposits and recorded in 'Net interest income' whereas the income from such assets is recorded in 'Net trading income'.

Supplementary Notes on the Financial Statements (unaudited) (continued)

13 Off-balance sheet exposures other than derivative transactions

	2010 HK$m	2009 HK$m
Contract amounts		
Direct credit substitutes	**50,451**	44,774
Transaction-related contingencies	**85,599**	78,582
Trade-related contingencies	**99,711**	73,754
Forward asset purchases	**3,194**	3,103
Forward deposits placed	**259**	816
Commitments that are unconditionally cancellable without prior notice	**1,059,747**	916,875
Commitments which have an original maturity of not more than one year	**104,720**	77,111
Commitments which have an original maturity of more than one year	**132,343**	86,938
	1,536,024	1,281,953
Risk-weighted amounts	**217,098**	195,566

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 98(2) of the Banking Ordinance.

For the purposes of these financial statements, 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.

Supplementary Notes on the Financial Statements (unaudited) (continued)

14 Non-structural foreign exchange positions

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

Group

	United States dollars HK$m	Singapore dollars HK$m	Brunei dollars HK$m	Chinese renminbi HK$m
At 31 December 2010				
Spot assets	**3,600,303**	**664,036**	**103,968**	**347,444**
Spot liabilities	**(3,536,433)**	**(741,911)**	**(29,881)**	**(326,844)**
Forward purchases	**4,690,542**	**259,447**	**148**	**649,086**
Forward sales	**(4,781,960)**	**(170,855)**	**(84,574)**	**(671,025)**
Net options positions	**13,842**	**(127)**	**–**	**(100)**
	(13,706)	**10,590**	**(10,339)**	**(1,439)**
At 31 December 2009				
Spot assets	3,053,837	247,020	84,729	109,807
Spot liabilities	(3,010,444)	(311,720)	(27,308)	(92,862)
Forward purchases	2,560,540	189,887	170	342,940
Forward sales	(2,632,313)	(120,564)	(62,207)	(361,662)
Net options positions	13,870	–	–	–
	(14,510)	4,623	(4,616)	(1,777)

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

15 Liquidity ratio

The Banking Ordinance requires banks operating in Hong Kong to maintain a minimum liquidity ratio, calculated in accordance with the provisions of the Fourth Schedule of the Banking Ordinance, of 25 per cent. This requirement applies separately to the Hong Kong branches of the Bank and to those subsidiary companies which are Authorised Institutions under the Banking Ordinance in Hong Kong.

The average liquidity ratios for the year are as follows:

	2010 %	2009 %
Hong Kong branches of the Bank	**39.3**	50.4

Supplementary Notes on the Financial Statements (unaudited) (continued)

16 Senior management compensation and benefits

Remuneration of senior management and key personnel

The following tables show the remuneration paid by the group to senior management and key personnel. These disclosures are made pursuant to the HKMA Supervisory Policy Manual CG-5 'Guideline on a Sound Remuneration System'. Comparative data have not been provided as this is the first year of disclosure. Senior management is defined as those persons responsible for oversight of the group's strategy or material business lines and includes executive members of the Board of Directors and Executive Committee of the Bank. Key personnel is defined as individual employees whose duties involve the assumption of material risk or the taking on of material exposures on behalf of the group.

Analysis of remuneration between fixed and variable amounts

	2010		
	Senior management (19 people) HK$m	Key personnel (20 people) HK$m	Total HK$m
Fixed			
Cash based	75	52	127
Share based	–	–	–
Other	–	–	–
	75	52	127
Variable			
Cash based	94	211	305
Share based	85	211	296
Other	–	–	–
	179	422	601

Deferred remuneration consists of cash and shares, both of which vest over a period of 3 years. Further details on share schemes can be found in note 50 of the Annual Report and Accounts.

Analysis of deferred remuneration

	2010		
	Senior management (19 people) HK$m	Key personnel (20 people) HK$m	Total HK$m
Deferred remuneration			
Outstanding, vested	–	–	–
Outstanding, unvested	330	638	968
Awarded during the year	105	264	369
Paid out	36	87	123
Reduced through performance adjustments	–	–	–

Supplementary Notes on the Financial Statements (unaudited) (continued)

17 Principal subsidiaries and basis of consolidation

The basis of consolidation for accounting purposes is in accordance with HKFRS.

The major subsidiaries of the Bank for accounting purposes are:

Hang Seng Bank Limited
HSBC Bank (China) Company Limited
HSBC Bank Malaysia Berhad
HSBC Bank Australia Limited*
HSBC Bank (Taiwan) Limited*
HSBC Insurance (Asia) Limited*
HSBC Life (International) Limited*

* Held indirectly

The basis of consolidation for regulatory purposes is different from the basis of consolidation for accounting purposes. Subsidiaries included in consolidation for regulatory purposes are specified in a notice from the HKMA in accordance with section 98(2) of the Banking Ordinance. 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 Bank's shareholdings in these subsidiaries are deducted from its core capital and supplementary capital as determined in accordance with Part 3 of the Banking (Capital) Rules.

With respect to Notes 2 to 11 and 13, the principal subsidiaries that are not included in consolidation for regulatory purposes are:

Hang Seng Insurance Company Limited
HSBC Insurance (Asia Pacific) Holdings Limited and subsidiaries
HSBC Securities Japan Limited
Hang Seng General Insurance (Hong Kong) Company Limited
HSBC Futures (Singapore) Pte Ltd
HSBC Securities Brokers (Asia) Limited

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.

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