

Report of the Directors: Operating and Financial Review

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Financial summary

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The management commentary included in the Report of the Directors: 'Overview' and 'Operating and Financial Review', together with the 'Employees' and 'Corporate sustainability' sections of 'Governance' and the 'Directors' Remuneration Report' is presented in compliance with the IFRS Practice Statement Management Commentary issued by the IASB.

Reconciliation of reported and underlying profit before tax

We measure our performance internally on a like-for-like basis by eliminating the effects of foreign currency translation differences, acquisitions and disposals of subsidiaries and businesses, and fair value movements on own debt attributable to credit spread where the net result of such movements will be zero upon maturity of the debt; all of which distort year-on-year comparisons. We refer to this as our underlying performance.

Reported results include the effects of the above items. They are excluded when monitoring progress against operating plans and past results because management believes that the underlying basis more accurately reflects operating performance.

Constant currency

Constant currency comparatives for 2009 referred to in the commentaries are computed by retranslating into US dollars for non-US dollar branches, subsidiaries, joint ventures and associates:

- the income statements for 2009 at the average rates of exchange for 2010; and
- the balance sheet at 31 December 2009 at the prevailing rates of exchange on 31 December 2010.

No adjustment has been made to the exchange rates used to translate foreign currency denominated assets and liabilities into the functional currencies of any HSBC branches, subsidiaries, joint ventures or associates. When reference is made to 'constant currency' in tables or commentaries, comparative data reported in the functional currencies of HSBC's operations have been translated at the appropriate exchange rates applied in the current period on the basis described above.

Underlying performance

The tables below compare our underlying performance in 2010 and 2009 with reported profits in those years.

The foreign currency translation differences reflect the relative strengthening of the US dollar against the euro and sterling, which offset its relative weakness against currencies in Asia, Mexico and Brazil during 2010.

The following acquisitions and disposals affected both comparisons:

- the acquisition of PT Bank Ekonomi Raharja Tbk ('Bank Ekonomi') in May 2009;
- the gain on sale of our 49% interest in a joint venture for a UK merchant acquiring business in June 2009 of US\$280m;
- the gain of US\$62m on reclassification of Bao Viet Holdings ('Bao Viet') from an available-for-sale asset to an associate in January 2010;
- the gain on sale of our stake in Wells Fargo HSBC Trade Bank in March 2010 of US\$66m;
- the gain on disposal of HSBC Insurance Brokers Limited of US\$107m in April 2010;
- the dilution gain of US\$188m which arose on our holding in Ping An Insurance (Group) Company of China, Limited ('Ping An Insurance') following the issue of shares by the company in May 2010;
- the loss of US\$42m on the completion of the sale of our investment in British Arab Commercial Bank plc in October 2010;
- the gain on sale of Eversholt Rail Group of US\$255m in December 2010; and
- the gain of US\$74m on the deconsolidation of private equity funds following the management buy-out of Headland Capital Partners Ltd (formally known as HSBC Private Equity (Asia) Ltd) in November 2010.

Reconciliation of reported and underlying profit before tax

	2010 compared with 2009								
	2009 as reported US\$m	2009 adjust- ments ¹⁰ US\$m	Currency translation ¹¹ US\$m	2009 at 2010 exchange rates ¹² US\$m	2010 as reported US\$m	2010 adjust- ments ¹⁰ US\$m	2010 under- lying US\$m	Re- ported change ¹³ %	Under- lying change ¹³ %
HSBC									
Net interest income	40,730	(1)	642	41,371	39,441	(31)	39,410	(3)	(5)
Net fee income	17,664	(210)	182	17,636	17,355	(3)	17,352	(2)	(2)
Changes in fair value ¹⁴	(6,533)	6,533	–	–	(63)	63	–	99	–
Other income	14,320	(283)	228	14,265	11,514	(719)	10,795	(20)	(24)
Net operating income¹⁵ ..	66,181	6,039	1,052	73,272	68,247	(690)	67,557	3	(8)
Loan impairment charges and other credit risk provisions	(26,488)	–	(330)	(26,818)	(14,039)	–	(14,039)	47	48
Net operating income	39,693	6,039	722	46,454	54,208	(690)	53,518	37	15
Operating expenses	(34,395)	200	(568)	(34,763)	(37,688)	19	(37,669)	(10)	(8)
Operating profit	5,298	6,239	154	11,691	16,520	(671)	15,849	212	36
Income from associates ...	1,781	(1)	11	1,791	2,517	–	2,517	41	41
Profit before tax	7,079	6,238	165	13,482	19,037	(671)	18,366	169	36
By geographical region									
Europe	4,009	2,546	(152)	6,403	4,302	(164)	4,138	7	(35)
Hong Kong	5,029	1	(10)	5,020	5,692	(130)	5,562	13	11
Rest of Asia-Pacific	4,200	3	205	4,408	5,902	(211)	5,691	41	29
Middle East	455	–	(2)	453	892	42	934	96	106
North America	(7,738)	3,688	46	(4,004)	454	(208)	246		
Latin America	1,124	–	78	1,202	1,795	–	1,795	60	49
Profit before tax	7,079	6,238	165	13,482	19,037	(671)	18,366	169	36
By customer group and global business									
Personal Financial									
Services	(2,065)	(2)	(70)	(2,137)	3,518	(10)	3,508		
Commercial Banking	4,275	(306)	64	4,033	6,090	(133)	5,957	42	48
Global Banking and Markets	10,481	13	173	10,667	9,536	(342)	9,194	(9)	(14)
Global Private Banking ...	1,108	–	1	1,109	1,054	1	1,055	(5)	(5)
Other	(6,720)	6,533	(3)	(190)	(1,161)	(187)	(1,348)	83	(609)
Profit before tax	7,079	6,238	165	13,482	19,037	(671)	18,366	169	36

For footnotes, see page 83.

Additional information is available on the HSBC website www.hsbc.com.

Report of the Directors: Operating and Financial Review (continued)**Financial summary > Income statement****Consolidated income statement***Five-year summary consolidated income statement*

	2010 US\$m	2009 US\$m	2008 US\$m	2007 US\$m	2006 US\$m
Net interest income	39,441	40,730	42,563	37,795	34,486
Net fee income	17,355	17,664	20,024	22,002	17,182
Net trading income	7,210	9,863	6,560	9,834	8,222
Net income/(expense) from financial instruments designated at fair value	1,220	(3,531)	3,852	4,083	657
Gains less losses from financial investments	968	520	197	1,956	969
Gains arising from dilution of interests in associates	188	—	—	1,092	—
Dividend income	112	126	272	324	340
Net earned insurance premiums	11,146	10,471	10,850	9,076	5,668
Gains on disposal of French regional banks	—	—	2,445	—	—
Other operating income	2,374	2,788	1,808	1,439	2,546
Total operating income	80,014	78,631	88,571	87,601	70,070
Net insurance claims incurred and movement in liabilities to policyholders	(11,767)	(12,450)	(6,889)	(8,608)	(4,704)
Net operating income before loan impairment charges and other credit risk provisions	68,247	66,181	81,682	78,993	65,366
Loan impairment charges and other credit risk provisions	(14,039)	(26,488)	(24,937)	(17,242)	(10,573)
Net operating income	54,208	39,693	56,745	61,751	54,793
Total operating expenses ¹⁷	(37,688)	(34,395)	(49,099)	(39,042)	(33,553)
Operating profit	16,520	5,298	7,646	22,709	21,240
Share of profit in associates and joint ventures	2,517	1,781	1,661	1,503	846
Profit before tax	19,037	7,079	9,307	24,212	22,086
Tax expense	(4,846)	(385)	(2,809)	(3,757)	(5,215)
Profit for the year	14,191	6,694	6,498	20,455	16,871
Profit attributable to shareholders of the parent company	13,159	5,834	5,728	19,133	15,789
Profit attributable to non-controlling interests	1,032	860	770	1,322	1,082

Five-year financial information

	US\$	US\$	US\$	US\$	US\$
Basic earnings per share ¹⁸	0.73	0.34	0.41	1.44	1.22
Diluted earnings per share ¹⁸	0.72	0.34	0.41	1.42	1.21
Basic earnings excluding goodwill impairment per share ^{17,18}	0.73	0.34	1.19	1.44	1.22
Dividends per share ¹	0.34	0.34	0.93	0.87	0.76
Dividend payout ratio ¹⁹	%	%	%	%	%
– reported ¹⁶	46.6	100.0	226.8	60.4	62.3
– excluding goodwill impairment ^{17,18}	46.6	100.0	78.2	60.4	62.3
Post-tax return on average total assets	0.57	0.27	0.26	0.97	1.00
Return on average total shareholders' equity	9.5	5.1	4.7	15.9	15.7
Average foreign exchange translation rates to US\$:					
US\$1: £	0.648	0.641	0.545	0.500	0.543
US\$1: €	0.755	0.719	0.684	0.731	0.797

For footnotes, see page 83.

Reported profit before tax of US\$19.0bn in 2010 was 169% higher than in 2009, and 36% higher on an underlying basis. The difference between reported and underlying results is explained on page 14. Except where stated otherwise, the commentaries in the Financial Summary are on an underlying basis and references to HSBC Finance and HSBC Bank USA are on a management basis, rather than a legal entity basis (for details see page 37).

Net operating income before loan impairment charges and other credit risk provisions ('revenue') was lower than in 2009, notably due to a decline in balances in North America, lower trading income from adverse movements on non-qualifying hedges and a fall in revenue from GB&M. In the former, we continued to reposition our core businesses and we remained focused on managing down our run-off portfolios. As a consequence, revenue fell, reflecting declining balances in the run-off portfolios and in the Card and Retail Services business, where revenue was also adversely affected by new regulations. In GB&M, lower revenue was generated in Balance Sheet Management as higher yielding positions matured and funds were invested in lower yielding assets. Trading income declined driven by increased competition and reduced margins across core products, and less favourable market conditions caused by the European sovereign debt crisis. These factors were partly offset by increased CMB revenue from balance sheet growth, particularly in Asia, and higher trade-related fees.

Loan impairment charges were significantly lower than in 2009, with decreases across all regions and customer groups as economic conditions improved. The most significant decline in loan impairment charges was in North America, reflecting lower balances due to increased repayments, an improvement in delinquency rates in Card and Retail Services, and the continued run-off of balances in the Consumer Finance business. There were also marked declines in the Middle East and in

Latin America, primarily in Mexico and Brazil, reflecting a reduction in personal lending balances as selected portfolios were managed down, and an improvement in credit quality as origination criteria were tightened and collection practices improved. In GB&M, loan impairment charges were significantly lower, reflecting the improvement in the credit environment which resulted in fewer significant charges than those taken in 2009 in relation to a small number of clients, notably in Europe and other credit risk provisions fell in the available-for-sale asset-backed securities ('ABS') portfolio due to a slowing in the rate of anticipated losses in the underlying collateral pools.

Underlying profit before tax rose by 36% as a significant fall in impairment charges offset a decline in revenue.

Operating expenses were higher than in 2009, in part due to specific one-off items such as a US\$0.3bn charge for UK bank payroll tax in 2010 and the non-recurrence of a pension accounting gain of US\$0.5bn in 2009 relating to the treatment of staff benefits. Excluding these items, operating expenses rose in support of strategic growth initiatives in our target markets to invest in operational infrastructure and the selective recruitment of customer-facing staff.

Income from associates increased, driven by strong results in Asia which reflected robust economic growth in mainland China.

In 2010, taxable profits were achieved in the US, principally as the result of a gain from an internal reorganisation that was not recognised for accounting purposes which increased the effective tax rate by 6.4 percentage points. If this were excluded, the effective tax rate would be 19.1% which is in line with our geographical range of business activities. Reported profit after tax was US\$7.5bn higher than in 2009.

Report of the Directors: Operating and Financial Review (continued)**Financial summary > Group performance****Group performance by income and expense item****Net interest income**

	2010 US\$m	2009 US\$m	2008 US\$m
Interest income	58,345	62,096	91,301
Interest expense	(18,904)	(21,366)	(48,738)
Net interest income ²⁰	39,441	40,730	42,563
Average interest-earning assets	1,472,294	1,384,705	1,466,622
Gross interest yield ²¹	3.96%	4.48%	6.23%
Net interest spread ²²	2.55%	2.90%	2.87%
Net interest margin ²³	2.68%	2.94%	2.90%

Summary of interest income by type of asset

	2010			2009			2008		
	Average balance US\$m	Interest income US\$m	Yield %	Average balance US\$m	Interest income US\$m	Yield %	Average balance US\$m	Interest income US\$m	Yield %
Short-term funds and loans and advances to banks	236,742	4,555	1.92	192,578	4,199	2.18	240,111	9,646	4.02
Loans and advances to customers	858,499	44,186	5.15	870,057	48,301	5.55	943,662	68,722	7.28
Financial investments	378,971	9,375	2.47	322,880	9,425	2.92	264,396	12,618	4.77
Other interest-earning assets ²⁴	(1,918)	229	(11.94)	(810)	171	(21.11)	18,453	315	1.71
Total interest-earning assets	1,472,294	58,345	3.96	1,384,705	62,096	4.48	1,466,622	91,301	6.23
Trading assets ²⁵	332,511	6,027	1.81	357,504	7,614	2.13	428,539	16,742	3.91
Financial assets designated at fair value ²⁶ ...	52,692	1,033	1.96	62,143	1,032	1.66	37,303	1,108	2.97
Impairment provisions	(22,905)			(26,308)			(20,360)		
Non-interest-earning assets	664,308			667,942			596,885		
Total assets and interest income	2,498,900	65,405	2.62	2,445,986	70,742	2.89	2,508,989	109,151	4.35

Summary of interest expense by type of liability and equity

	2010			2009			2008		
	Average balance US\$m	Interest expense US\$m	Cost %	Average balance US\$m	Interest expense US\$m	Cost %	Average balance US\$m	Interest expense US\$m	Cost %
Deposits by banks ²⁷	111,443	1,136	1.02	117,847	1,659	1.41	135,747	4,959	3.65
Financial liabilities designated at fair value – own debt issued ²⁸	66,706	1,271	1.91	60,221	1,558	2.59	63,835	3,133	4.91
Customer accounts ²⁹	962,613	10,778	1.12	940,918	11,346	1.21	950,854	27,989	2.94
Debt securities in issue	189,898	4,931	2.60	225,657	5,901	2.62	286,827	11,982	4.18
Other interest-bearing liabilities	8,730	788	9.03	8,640	902	10.44	14,579	675	4.63
Total interest-bearing liabilities	1,339,390	18,904	1.41	1,353,283	21,366	1.58	1,451,842	48,738	3.36
Trading liabilities	258,348	3,497	1.35	205,670	3,987	1.94	277,940	11,029	3.97
Financial liabilities designated at fair value (excluding own debt issued)	17,456	283	1.62	15,688	293	1.87	21,266	345	1.62
Non-interest bearing current accounts	142,579			123,271			98,193		
Total equity and other non-interest bearing liabilities	741,127			748,074			659,747		
Total equity and liabilities	2,498,900	22,684	0.91	2,445,986	25,646	1.05	2,508,988	60,112	2.40

For footnotes, see page 83.

Reported net interest income fell by 3% to US\$39bn; the decline was 5% on an underlying basis. This was driven by the exceptionally low interest rate environment and by the effect of repositioning our customer assets towards secured lending as we reduced our higher risk and higher yielding portfolios.

Revenues in Balance Sheet Management decreased, as expected, from the strong levels of 2009 as higher yielding positions taken in prior years matured and opportunities for reinvestment at equivalent yields were limited by the prevailing low interest rates and flatter yield curves.

The fall in income from interest-earning assets was driven by declining yields on loans and advances to customers following the Group's decision to reposition the lending portfolio towards higher quality assets. Higher yielding unsecured lending balances decreased, particularly in North America, where the run-off portfolios continued to diminish and credit card balances fell as the number of active accounts declined and repayments by customers increased. Certain higher risk portfolios were also managed down in Latin America, Asia and the Middle East. This reduction was partly offset by commercial lending growth in CMB and GB&M, and growth in secured lending in the UK in residential mortgages.

The interest expense on debt issued by the Group fell, largely due to a decline in average balances in debt securities in issue as HSBC Finance's funding requirements continued to decrease in line with the run-off of the residual

balances in Mortgage Services and Consumer Lending and the sale of the vehicle finance portfolios.

Net interest income includes the expense of the internal funding of trading assets, while related revenue is reported in trading income. The cost of funding these assets declined as a result of the low interest rates. In reporting our customer group results, this cost is included within net trading income.

Net interest spread decreased due to lower yields on loans and advances to customers, partly as a result of the greater focus on secured lending. In addition, returns on financial investments and deposit spreads remained constrained due to low interest rates. Our net interest margin fell by a lesser amount due to the benefit from an increase in net free funds as customers held more funds in liquid non-interest bearing current accounts in the current low interest rate environment.

Net fee income

	2010 US\$m	2009 US\$m	2008 US\$m
Cards	3,801	4,625	5,844
Account services	3,632	3,592	4,353
Funds under management	2,511	2,172	2,757
Broking income	1,789	1,617	1,738
Credit facilities	1,635	1,479	1,313
Insurance	1,147	1,421	1,771
Imports/exports	991	897	1,014
Global custody	700	988	1,311
Remittances	680	613	610
Underwriting	623	746	325
Unit trusts	560	363	502
Corporate finance	440	396	381
Trust income	291	278	325
Mortgage servicing	118	124	120
Maintenance income on operating leases	99	111	130
Taxpayer financial services	73	87	168
Other	2,027	1,894	2,102
Fee income	21,117	21,403	24,764
Less: fee expense	(3,762)	(3,739)	(4,740)
Net fee income	17,355	17,664	20,024

Net fee income marginally decreased compared with 2009 on both a reported and an underlying basis. The significant decrease in fee income in North America, primarily in Card and Retail Services, was mostly offset by higher investment-related fees in Asia and Europe and an increase in trade-related fee income in Asia.

The significant fall in fee income from cards occurred primarily in North America, driven by lower volumes, improved delinquency rates and the revision to charging practices following the implementation of the Credit Card Accountability, Responsibility and Disclosure Act ('CARD Act').

Insurance fee income was markedly down. In the US, the decline resulted from lower sales of credit protection products associated with the cards business. In the UK, income was lower on a reported basis due to the sale of the insurance brokerage business in the first half of 2010.

Overall, underwriting fee income declined, particularly in Europe as a result of reduced capital market activity in the uncertain economic environment, although in Asia underwriting fees increased following several notable transactions.

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Financial summary > Group performance

Net fee income from sales of investment products in Asia and Europe increased, driven by a stronger investment performance in funds and improved customer sentiment which led to higher volumes.

Credit facilities fees also rose, notably in Asia, as a result of an increase in loan syndication transactions completed during the year.

Net fee income from trade finance also increased, particularly in Asia, reflecting a rise in trade activity.

Net trading income

	2010 US\$m	2009 US\$m	2008 US\$m
Trading activities	5,708	5,312	2,988
Net interest income on trading activities	2,530	3,627	5,713
Other trading income – hedge ineffectiveness:			
– on cash flow hedges	(9)	90	(40)
– on fair value hedges	38	(45)	5
Non-qualifying hedges	(1,057)	951	(1,122)
Losses on Bernard L. Madoff Investment Securities LLC fraud	–	(72)	(984)
Net trading income ^{30,31}	7,210	9,863	6,560

For footnotes, see page 83.

Reported net trading income was US\$7.2bn, 27% lower than in 2009. On an underlying basis, net trading income declined by 28% due to adverse movements on non-qualifying hedges and lower income from trading activities.

A US\$1.1bn adverse fair value movement was reported on non-qualifying hedges compared with a favourable fair value movement of US\$954m in 2009. These instruments are derivatives entered into as part of a documented interest rate management strategy for which hedge accounting was not, or could not be, applied. They are principally cross-currency and interest rate swaps used to economically hedge fixed rate debt issued by HSBC Holdings, floating rate debt issued by HSBC Finance and certain operating leased assets. The loss recognised on non-qualifying hedges was a result of fair value losses on these instruments, driven by the decrease in long-term US interest rates relative to sterling and euro rates. In HSBC Finance, the volume of non-qualifying hedge positions also increased as the duration of the mortgage book lengthened and swaps were used to align more closely the duration of the funding liabilities. The size and direction of the changes in fair value of non-qualifying hedges which are recognised in the income statement can be volatile from year to year, but do not alter the cash flows expected as part of the documented interest rate management strategy for both the instruments and the underlying economically hedged assets and liabilities.

The remaining decline in net trading income was driven by increased competition and reduced margins across core products. European sovereign debt concerns and increased economic uncertainty resulted in less favourable market conditions compared with 2009.

In the Credit business, corporate bond trading volumes remained robust following investment in electronic trading capabilities, though revenues were affected as margins declined and credit spread movements were more favourable in 2009. This was partly offset by gains on the legacy portfolio which included a net release of write-downs on legacy positions and monoline credit exposures of US\$429m. This compared with a reported write-down of US\$331m in 2009.

Rates income decreased, reflecting reduced margins and increased risk aversion from customers due to economic uncertainty. Turmoil in the eurozone led to sovereign debt downgrades and falling asset prices in certain European countries, leading to lower revenues in the trading portfolio. These factors were partly offset by a small favourable fair value movement on structured liabilities, compared with an adverse movement in 2009.

Lower net trading income was driven by a US\$2.0bn adverse movement on non-qualifying hedges from 2009.

Performance in the Foreign Exchange business remained strong, although was affected by a competitive trading environment and tighter bid-offer spreads as competitors sought to rebuild their businesses. In addition, revenues fell as market volatility declined from the exceptional levels seen in early 2009.

The Equities business continued to increase market share in its target markets, following investment in the equities platform. However, core revenues fell, as overall market volumes and margins declined.

Trading income benefited from foreign exchange gains on trading assets held as economic hedges of foreign currency debt designated at fair value compared with losses on these instruments in 2009. These gains were largely offset by corresponding losses reported in 'Net income from financial instruments designated at fair value'.

Net interest income earned on trading activities decreased by 30%, driven by reduced holdings of debt securities. The cost of internally funding these assets also declined, but this interest expense is reported under 'Net interest income' and excluded from net trading income.

Net income/(expense) from financial instruments designated at fair value

	2010 US\$m	2009 US\$m	2008 US\$m
Net income/(expense) arising from:			
– financial assets held to meet liabilities under insurance and investment contracts	2,349	3,793	(5,064)
– liabilities to customers under investment contracts	(946)	(1,329)	1,751
– HSBC's long-term debt issued and related derivatives	(258)	(6,247)	6,679
Change in own credit spread on long-term debt	(63)	(6,533)	6,570
Other changes in fair value ³²	(195)	286	109
– other instruments designated at fair value and related derivatives	75	252	486
Net income/(expense) from financial instruments designated at fair value	1,220	(3,531)	3,852

Assets and liabilities from which net income/(expense) from financial instruments designated at fair value arose

	2010 US\$m	2009 US\$m	2008 US\$m
Financial assets designated at fair value at 31 December	37,011	37,181	28,533
Financial liabilities designated at fair value at 31 December	88,133	80,092	74,587
Including:			
Financial assets held to meet liabilities under:			
– insurance contracts and investment contracts with DPF ³³	7,167	6,097	5,556
– unit-linked insurance and other insurance and investment contracts	19,725	16,982	12,758
Long-term debt issues designated at fair value	69,906	62,641	58,686

For footnotes, see page 83.

The accounting policies for the designation of financial instruments at fair value and the treatment of the associated income and expenses are described in Notes 2i and 2b on the Financial Statements, respectively.

The majority of the financial liabilities designated at fair value relate to certain fixed-rate long-term debt issues whose rate profile has been changed to floating through interest rate swaps as part of a documented interest rate management strategy. The movement in fair value of these long-term debt issues includes the effect of our credit spread changes and any ineffectiveness in the economic relationship between the related swaps and own debt. As credit spreads widen or narrow, accounting profits or losses, respectively, are booked. The size and direction of the changes in the credit spread on our debt and ineffectiveness, which are recognised in the income statement, can be volatile from year to year, but do not alter the cash flows envisaged as part of the documented interest rate management strategy. As a consequence, fair

value movements arising from changes in our own credit spread on long-term debt and other fair value movements on the debt and related derivatives are not regarded internally as part of managed performance and are therefore not allocated to customer groups, but are reported in 'Other'. Credit spread movements on own debt are excluded from underlying results, and related fair value movements are not included in the calculation of regulatory capital.

We reported net income from financial instruments designated at fair value of US\$1.2bn in 2010 compared with a net expense of US\$3.5bn in 2009. On an underlying basis, the equivalent figures were income of US\$1.3bn in 2010 and US\$2.9bn in 2009. The difference between the reported and underlying results arises from the exclusion from the latter of the credit spread-related movements in the fair value of our own long-term debt, on which we reported adverse fair value movements of US\$63m in 2010 and US\$6.5bn in 2009. In North America, a small favourable fair value movement was reported

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Financial summary > Group performance

in 2010 as credit spreads widened marginally, in contrast with a significant adverse fair value movement in 2009. In Europe, significantly lower adverse fair value movements were reported in 2010 as credit spreads tightened, but to a lesser extent than in the previous year.

Income arising from financial assets held to meet liabilities under insurance and investment contracts reflected lower investment gains as the growth in equity markets was less than that of 2009. This predominantly affected the value of assets held to support unit-linked contracts in the UK, Hong Kong, Singapore and Brazil and participating contracts in France.

For investment gains or losses related to assets held to back investment contracts, the corresponding movement in liabilities to customers is also recorded under 'Net income from financial instruments designated at fair value'.

Investment gains or losses related to assets held to back insurance contracts or investment contracts with discretionary participation features ('DPF') are offset by a corresponding change in 'Net insurance claims incurred and movement in liabilities to policyholders' to reflect the extent to which unit-linked policyholders, in particular, participate in the investment performance of the associated asset portfolios.

Gains less losses from financial investments

	2010 US\$m	2009 US\$m	2008 US\$m
Net gains/(losses) from disposal of:			
– debt securities	564	463	19
– equity securities	516	407	1,216
– other financial investments	(7)	8	4
	1,073	878	1,239
Impairment of available-for-sale equity securities	(105)	(358)	(1,042)
Gains less losses from financial investments	968	520	197

Reported gains less losses from financial investments increased by US\$448m to US\$968m. On an underlying basis, excluding an accounting gain arising from the reclassification of Bao Viet as an associate following our purchase of additional shares, they increased by 69%. This was driven by a decrease in the level of impairments on available-for-sale equity investments as market values improved, along with an increase in gains on the disposal of equity and debt securities.

Impairments on equity investments declined markedly compared with 2009 as the improving economic situation resulted in a reduction in the level of write-downs required on private equity and other strategic equity investments.

Higher net gains were reported in Balance Sheet Management on disposals of available-for-sale debt securities, mainly in Europe and Asia. These were partly offset by a decrease in North America, where net gains realised from the sale of mortgage-backed securities and other ABSs in 2009 did not recur.

Net gains on the disposal of equity securities increased, primarily in our private equity portfolio in Europe, as the market offered greater opportunities for divestment. This was partly offset by the non-recurrence of the gain on disposal of our holdings of Visa Inc. shares in 2009.

Net earned insurance premiums

	2010 US\$m	2009 US\$m	2008 US\$m
Gross insurance premium income	11,609	10,991	12,547
Reinsurance premiums	(463)	(520)	(1,697)
Net earned insurance premiums	11,146	10,471	10,850

Net earned insurance premiums increased by 6% to US\$11.1bn on both a reported and an underlying basis.

Growth was largely attributable to the continued

strong performance of life insurance products in Asia. Successful sales campaigns and the recruitment of additional insurance sales managers increased net earned premiums in Hong Kong, particularly from deferred annuity and unit-linked

products, and a life insurance product designed for high net worth individuals. Higher sales were also reported in Malaysia, Taiwan and mainland China, primarily from successful product launches and marketing campaigns.

Net earned premiums in Latin America increased marginally in the improved economic conditions, driven by higher sales in Brazil, Argentina and Mexico and repricing initiatives in Argentina.

In France, an increase in sales of investment contracts with DPF drove higher net earned

premiums. Strong sales activity also led to higher net earned premiums in our UK life insurance business.

This growth was partly offset by a reduction in non-life insurance premiums, primarily due to the run-off of the legacy motor book in the UK, which was closed during the second half of 2009, and the decision taken during 2010 not to renew certain contracts in the Irish business.

Net earned premiums in North America also decreased, reflecting a decline in sales of payment protection products following the discontinuation of mortgage originations in HSBC Finance.

Other operating income

	2010 US\$m	2009 US\$m	2008 US\$m
Rent received	535	547	606
Losses recognised on assets held for sale	(263)	(115)	(130)
Valuation gains/(losses) on investment properties	93	(24)	(92)
Gain on disposal of property, plant and equipment, intangible assets and non-financial investments	889	1,033	881
Change in present value of in-force long-term insurance business	705	605	286
Other	603	742	257
Other operating income	2,562	2,788	1,808

Reported other operating income of US\$2.6bn was 8% lower than in 2009. Income in 2010 included gains of US\$188m following the dilution of our holding in Ping An Insurance, US\$107m from the sale of HSBC Insurance Brokers, US\$66m from the disposal of our interest in the Wells Fargo HSBC Trade Bank and US\$255m from the sale of Eversholt Rail Group. In addition, we reported a gain of US\$74m resulting from the sale of HSBC Private Equity (Asia) Ltd, partly offset by a loss of US\$42m on the disposal of our shareholding in British Arab Commercial Bank plc. Reported results in 2009 included a gain of US\$280m from the sale of the remaining stake in the card merchant-acquiring business in the UK.

On an underlying basis, excluding the items referred to above, other operating income decreased by 23%, primarily because gains on the sale of properties in London and Hong Kong in 2009 did not recur.

Net losses recognised on assets held for sale increased, reflecting a US\$207m loss on the sale of the US vehicle finance servicing operation and associated US\$5.3bn loan portfolio.

Net investment valuation gains on investment properties contrasted with losses in 2009. This reflected improvements in the property markets in Hong Kong and the UK which led to net valuation gains on investment properties, compared with net valuation losses in 2009.

A loss on sale of the US vehicle finance business contributed to a fall in Other operating income.

We recognised gains of US\$194m and US\$56m in 2010 on the sale and leaseback of our Paris and New York headquarters buildings, respectively. These compared with more substantial underlying gains of US\$667m (US\$686m as reported) on the sale and leaseback of 8 Canada Square and the sale of a property in Hong Kong in 2009.

Strong sales of life insurance products, notably in Hong Kong, resulted in favourable movements in the present value of in-force ('PVIF') long-term insurance business. These were offset in part by the non-recurrence of gains recognised in 2009 following the refinement of the income recognition methodology in HSBC Finance.

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Financial summary > Group performance

Net insurance claims incurred and movement in liabilities to policyholders

	2010 US\$m	2009 US\$m	2008 US\$m
Insurance claims incurred and movement in liabilities to policyholders:			
– gross	11,969	12,560	9,206
– reinsurers' share	(202)	(110)	(2,317)
– net ³⁴	11,767	12,450	6,889

For footnote, see page 83.

Net insurance claims incurred and movement in liabilities to policyholders decreased by 5% and 4% on a reported and an underlying basis, respectively.

Lower investment returns than in 2009, particularly in Asia, Europe and Brazil, led to a decrease in the movement in liabilities to policyholders on unit-linked insurance contracts and, to a certain extent, participating contracts, whose policyholders share in the investment performance of the assets supporting their policies. The gains or losses experienced on the financial assets designated at fair value held to support insurance contract liabilities and investment contracts with DPF are reported in 'Net income from financial instruments designated at fair value'.

In Asia, the effect of the lower investment returns was more than offset by additional reserves established for new business written, consistent with the increase in net insurance premiums earned, particularly in Hong Kong, as a result of successful sales campaigns and the recruitment of additional insurance sales managers.

In addition, the increase in reserves in 2009 on the now closed UK motor insurance book, which reflected the rising incidence and severity of claims at that time, did not recur. The decision taken in 2010 not to renew certain contracts in our Irish business resulted in a further decrease in net insurance claims incurred and movement in liabilities to policyholders.

Loan impairment charges and other credit risk provisions

	2010 US\$m	2009 US\$m	2008 US\$m
Loan impairment charges			
New allowances net of allowance releases	14,568	25,832	24,965
Recoveries of amounts previously written off	(1,020)	(890)	(834)
	13,548	24,942	24,131
Individually assessed allowances	2,625	4,458	2,064
Collectively assessed allowances	10,923	20,484	22,067
Impairment of available-for-sale debt securities	472	1,474	737
Other credit risk provisions	19	72	69
Loan impairment charges and other credit risk provisions	14,039	26,488	24,937
	%	%	%
– as a percentage of net operating income excluding the effect of fair value movements in respect of credit spread on own debt and before loan impairment charges and other credit risk provisions	20.6	36.4	33.2
Impairment charges on loans and advances to customers as a percentage of gross average loans and advances to customers	1.5	2.8	2.5
	US\$m	US\$m	US\$m
Customer impaired loans	28,091	30,606	25,352
Customer loan impairment allowances	20,083	25,542	23,909

On a reported basis, loan impairment charges and other credit risk provisions were US\$14bn, a decline of 47% compared with 2009 and 48% on an underlying basis. There was improvement across all regions and in all customer groups.

At 31 December 2010, the aggregate balance of customer loan impairment allowances was US\$20.1bn. This represented 2.2% of gross loans and advances to customers (net of reverse repos and settlement accounts) compared with 3.0% at 31 December 2009.

We actively managed down some of our higher risk portfolios in all regions and enhanced credit quality through tighter underwriting and increased focus on the sale of secured products to customers where we already held a banking relationship. Loan impairment charges in our CMB and GB&M businesses fell as economic conditions improved and we recognised fewer large loan impairment charges against specific clients than in 2009.

Loan impairment charges and other credit risk provisions of US\$14bn were 48% or US\$12.8bn lower than in 2009.

Impairments on available-for-sale debt securities declined markedly to US\$472m from the US\$1.5bn reported in 2009, mainly reflecting a slowing in the rate of anticipated losses in the underlying collateral pools.

The most significant decline in loan impairment charges was in our HSBC Finance portfolios in **the US**, where lending balances reduced and delinquency levels improved.

Loan impairment charges and other credit risk provisions in the US declined by 48% to US\$7.9bn, the lowest level since 2006, representing 57% of the Group's total reduction compared with 2009. This mainly occurred in the US PFS business, where loan impairment charges declined by US\$6.1bn to US\$8.0bn, primarily in the Card and Retail Services business of HSBC Finance and, to a lesser extent, in the run-off consumer finance portfolios.

In Cards and Retail Services, loan impairment charges declined by 57% to US\$2.2bn. This improvement reflected the continuing effects of additional steps taken from the fourth quarter of 2007 to manage risk, including tightening underwriting criteria, lowering credit limits and reducing the number of active cards. An increased focus by our customers on reducing outstanding credit card debt helped improve delinquency levels.

Loan impairment charges in our Consumer Lending and Mortgage Services businesses declined by 29% to US\$5.7bn, due to the continued run-off of lending balances in these portfolios and lower delinquency balances. Total loss severities on foreclosed loans improved compared with 2009, reflecting an increase in the number of properties for which we accepted a deed in lieu of foreclosure or a short sale, both of which result in lower losses compared with loans which are subject to a formal foreclosure process.

During 2010, state and federal prosecutors announced investigations into foreclosure practices

of certain mortgage service providers. As a result, we expect that the scrutiny of documents will increase, and in some states additional verification of information will be required. If these trends continue there may be delays in their processing. See page 83 for more information on the investigation into US foreclosure practices.

In HSBC Bank USA, loan impairment charges in PFS fell by 92% to US\$50m, reflecting lower lending balances and improved credit quality in the residential mortgage portfolio.

In GB&M in the US, a net release of loan impairment charges and other credit risk provisions reflected the improved credit environment and a release of impairments of available-for-sale ABSs as mentioned previously. In CMB, loan impairment charges declined by US\$194m as the improved economic conditions resulted in credit upgrades on certain accounts, and fewer downgrades across all business lines.

In **the UK**, loan impairment charges in PFS and CMB declined as economic conditions improved and interest rates remained at low levels, resulting in an improvement in delinquency levels. In PFS, loan impairment charges fell by 35% to US\$1.1bn as we actively reduced our exposure to unsecured lending, while collections increased mainly due to programmes implemented to improve performance. In the UK secured lending book, credit quality continued to be high and loan impairment charges remained at low levels. In CMB, loan impairment charges declined by US\$159m due to strengthened credit risk management and improved collections, notably in the UK property, retail and service sectors.

Loan impairment charges and other credit provisions fell markedly in GB&M, reflecting the improved credit outlook, loan restructuring activity and the non-recurrence of significant charges against a small number of clients in the financial and property sectors. Credit risk provisions on certain available-for-sale ABSs also reduced.

Loan impairment charges and other credit risk provisions in **Latin America** declined by 44% to US\$1.5bn. In PFS, loan impairment charges of US\$1.2bn were 45% lower, mainly in Mexico due to a reduction in balances and improved delinquency rates in our credit card portfolio. In Brazil, they also declined as we managed down the size of certain consumer finance portfolios and economic conditions improved. In 2010, initiatives taken in the region to improve the quality of the loan portfolios continued. These steps included the tightening of underwriting criteria, reducing and, in some

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Financial summary > Group performance

instances, eliminating the use of higher risk, non-branch sales channels, and continued investment in our collections infrastructure. In our CMB portfolios, loan impairment charges and other credit risk provisions declined by 50% to US\$293m, as improved economic conditions and credit quality resulted in lower specific impairment charges in all sectors.

In the **Middle East**, loan impairment charges and other credit risk provisions fell by 53% to US\$627m as lower loan impairment charges in both PFS and CMB were partly offset by an increase in GB&M following restructuring activities. In our PFS business, loan impairment charges declined by 61% to US\$227m, reflecting a marked decline in delinquency levels and lower lending balances, particularly in our credit card and unsecured personal lending book, as a result of managing down higher risk portfolios. Credit limits were tightened and our customer acquisition strategy was revised in the region to concentrate on Premier and Advance customers. This resulted in an improvement in credit quality. In CMB, lower loan impairment charges

reflected a reduction in collective impairment charges and fewer specific loan impairment charges as economic conditions improved.

In **Rest of Asia-Pacific**, loan impairment charges declined as the credit environment improved. In India, loan impairment charges fell by 83% to US\$82m, mainly in PFS as certain unsecured lending portfolios and the higher risk elements of the credit card portfolio were managed down, and economic conditions improved. Impairment charges also declined in CMB, due to the non-recurrence of charges against specific technology-related exposures in 2009. Partly offsetting these increases were higher specific loan impairment charges in GB&M.

In **Hong Kong**, loan impairment charges fell by 77% to US\$114m, as economic conditions improved and fewer large specific loan impairment charges were reported against the CMB and GB&M portfolios. Loan impairment charges fell in PFS too, mainly on unsecured lending as unemployment and bankruptcy levels reduced.

Operating expenses

By expense category

	2010 US\$m	2009 US\$m	2008 US\$m
Employee compensation and benefits	19,836	18,468	20,792
Premises and equipment (excluding depreciation and impairment)	4,348	4,099	4,305
General and administrative expenses	10,808	9,293	10,955
Administrative expenses	34,992	31,860	36,052
Depreciation and impairment of property, plant and equipment	1,713	1,725	1,750
Amortisation and impairment of intangible assets	983	810	733
Goodwill impairment	—	—	10,564
Operating expenses	37,688	34,395	49,099

Staff numbers (full time equivalents)

	At 31 December		
	2010	2009	2008
Europe	75,698	76,703	82,093
Hong Kong	29,171	27,614	29,330
Rest of Asia-Pacific	91,607	87,141	89,706
Middle East	8,676	8,281	8,453
North America	33,865	35,458	44,725
Latin America	56,044	54,288	58,559
Staff numbers	295,061	289,485	312,866

Operating expenses increased by 10% to US\$37.7bn on a reported basis and by 8% on an underlying basis. Significant one-off items included aggregate payroll taxes of US\$324m levied on 2009 bonuses in the UK and France, and the curtailment of certain benefits delivered through pension schemes, which generated accounting credits of US\$148m in the US and US\$480m (US\$499m as reported) in the UK in

2010 and 2009, respectively. Excluding these items, expenses grew by 6% as we continued to invest in our operational infrastructure, customer-facing and support staff, and GB&M's capabilities and platforms.

Employee compensation and benefits increased by 7%, partly due to the net effect of the curtailment gains and the payroll tax referred to above.

Excluding these items, staff costs rose by 3%. Performance-related costs increased, primarily in Asia, reflecting improved business performance and increased staff numbers. While year-end staff numbers increased as the pace of recruitment accelerated in the second half of the year, average staff numbers remained below 2009 levels. The growth in staff numbers in Asia encompassed both customer-facing and back-office staff supporting business growth and increased operational capacity. In Latin America, staff costs grew following union-agreed salary increases and the recruitment of customer-facing and regional support staff, primarily in the latter part of the year. We also increased resources in our Global Service Centres as we continued to move processes there.

Staff costs declined in the US due to the non-recurrence of restructuring costs associated with the closure of the Consumer Lending branch network in 2009. Also, headcount fell due to the sale of the vehicle finance portfolio and related servicing platform. Similarly, reported staff numbers fell in Europe due to the sale of the insurance broking business in the UK and business reorganisation in France, though this was partly offset by higher numbers of customer-facing staff in the UK and Turkey.

Premises and equipment costs increased as rental costs in the UK, the US and France rose

Cost efficiency ratios

	2010 %	2009 %	2008 %
HSBC	55.2	52.0	60.1
Personal Financial Services	57.7	51.7	76.4
Europe	67.4	68.7	62.7
Hong Kong	35.3	34.9	32.2
Rest of Asia-Pacific	85.1	81.2	81.5
Middle East	62.2	53.5	53.2
North America	46.9	38.1	106.8
Latin America	72.1	66.7	59.7
Commercial Banking	49.4	46.4	43.0
Europe	51.9	47.4	44.2
Hong Kong	32.2	33.7	26.2
Rest of Asia-Pacific	49.2	47.0	45.9
Middle East	36.4	33.8	32.0
North America	46.6	47.7	46.1
Latin America	65.7	57.0	55.0
Global Banking and Markets	49.9	39.1	67.3
Global Private Banking	65.8	60.5	58.3

Our cost efficiency ratio worsened by 3.2 percentage points on a reported basis and by 8.4 percentage points to 55.8% on an underlying basis.

following the sale and leaseback of 8 Canada Square, London and our headquarters buildings in the US and France, combined with business expansion in Asia and Europe and refurbishment costs in Europe and Latin America. This was partly offset by lower costs in the US following the closure of the Consumer Lending branch offices and the non-recurrence of the related restructuring costs.

General and administrative expenses rose, reflecting in part higher marketing and advertising costs. These grew in North America in Card and Retail Services, partly from complying with the CARD Act. Marketing costs also rose in Asia and Latin America in support of the launch of Advance and sales campaigns for credit cards and investment products. Project costs increased from various initiatives to enhance operational capabilities, in connection with which consultancy and contractors' fees rose, primarily in the UK as GB&M continued to invest in strategic initiatives to drive future revenue growth. These included the development of Prime Services and equity market capabilities, and the expansion of the Rates and foreign exchange e-commerce platforms.

Travel costs increased as we increased our focus on international connectivity and business growth. Costs also increased due to litigation provisions in North America and Europe.

In PFS, there was a deterioration of 5.7 percentage points in the cost efficiency ratio. Operating expenses remained broadly unchanged as a rise in costs in

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Asia in support of business expansion was broadly offset by strict cost control across the Group and lower costs in the US. Revenue fell, largely in the run-off portfolio and in Card and Retail Services in North America.

In CMB, the cost efficiency ratio deteriorated by 2.9 percentage points as we continued to invest for future revenue growth in those markets that we see as central to international connectivity. Revenue grew in all regions, albeit at a slower pace, resulting in a deterioration in the cost efficiency ratio, with the exception of Hong Kong where strong revenue growth led to an improvement of 1.5 percentage points.

In GB&M, the cost efficiency ratio deteriorated by 12.1 percentage points reflecting the one-off payroll and bonus taxes in the UK and France. Excluding them, the ratio deteriorated by 10.5 percentage points following a rise in costs related to higher support costs and continued investment in strategic initiatives being undertaken to drive future revenue growth. Revenue fell during 2010 mainly due to lower net interest income in Balance Sheet Management and lower trading income.

In GPB, the cost efficiency ratio deteriorated by 5.3 percentage points as costs increased, reflecting the hiring of front-line staff, investment in systems and higher compliance costs coupled with lower revenue in the low interest rate environment.

Share of profit in associates and joint ventures

	2010 US\$m	2009 US\$m	2008 US\$m
Associates			
Bank of Communications Co., Limited	987	754	741
Ping An Insurance (Group) Company of China, Limited	848	551	324
Industrial Bank Co., Limited	327	216	221
The Saudi British Bank	161	172	251
Other	156	42	63
Share of profit in associates	2,479	1,735	1,600
Share of profit in joint ventures	38	46	61
Share of profit in associates and joint ventures	2,517	1,781	1,661

The share of profit from associates and joint ventures increased by 41% to US\$2.5bn on both a reported and an underlying basis as our associates in mainland China capitalised on the improved economic conditions in region.

Our share of profits in Ping An Insurance increased due to strong insurance sales performance, while fee income and lending growth resulted in

higher profits from the Bank of Communications Co., Limited ('Bank of Communications') and from Industrial Bank Co., Limited ('Industrial Bank').

These results were partly offset by a decrease in our share of profits from The Saudi British Bank as revenue declined amidst challenging economic conditions.

Tax expense

	2010 US\$m	2009 US\$m	2008 US\$m
Profit before tax	19,037	7,079	9,307
Tax expense	(4,846)	(385)	(2,809)
Profit after tax	14,191	6,694	6,498
Effective tax rate	25.5%	5.4%	30.2%

The most significant factor influencing the year on year changes to the effective tax rate is the changing geographical split of profits, including the relative proportion of tax on the share of profits in associates and joint ventures included within profit before tax. The impact of the tax on profit on associates and joint ventures included within pre-tax profits was a reduction in the effective tax rate of 3.7% in 2010 and 7.1% in 2009.

In 2010 HSBC's US operations achieved taxable profits, principally as a result of realising a taxable gain from an internal reorganisation which increased the effective tax rate by 6.4%. If this was excluded the effective tax rate would be 19.1% which is in line with the geographic profile of the Group.

Consolidated balance sheet

Five-year summary consolidated balance sheet and selected financial information

	At 31 December				
	2010 US\$m	2009 US\$m	2008 US\$m	2007 US\$m	2006 US\$m
ASSETS					
Cash and balances at central banks	57,383	60,655	52,396	21,765	12,732
Trading assets	385,052	421,381	427,329	445,968	328,147
Financial assets designated at fair value	37,011	37,181	28,533	41,564	20,573
Derivatives	260,757	250,886	494,876	187,854	103,702
Loans and advances to banks	208,271	179,781	153,766	237,366	185,205
Loans and advances to customers ³⁵	958,366	896,231	932,868	981,548	868,133
Financial investments	400,755	369,158	300,235	283,000	204,806
Other assets	147,094	149,179	137,462	155,201	137,460
Total assets	2,454,689	2,364,452	2,527,465	2,354,266	1,860,758
LIABILITIES AND EQUITY					
Liabilities					
Deposits by banks	110,584	124,872	130,084	132,181	99,694
Customer accounts	1,227,725	1,159,034	1,115,327	1,096,140	896,834
Trading liabilities	300,703	268,130	247,652	314,580	226,608
Financial liabilities designated at fair value	88,133	80,092	74,587	89,939	70,211
Derivatives	258,665	247,646	487,060	183,393	101,478
Debt securities in issue	145,401	146,896	179,693	246,579	230,325
Liabilities under insurance contracts	58,609	53,707	43,683	42,606	17,670
Other liabilities	109,954	148,414	149,150	113,432	103,010
Total liabilities	2,299,774	2,228,791	2,427,236	2,218,850	1,745,830
Equity					
Total shareholders' equity	147,667	128,299	93,591	128,160	108,352
Non-controlling interests	7,248	7,362	6,638	7,256	6,576
Total equity	154,915	135,661	100,229	135,416	114,928
Total equity and liabilities	2,454,689	2,364,452	2,527,465	2,354,266	1,860,758
Five-year selected financial information					
Called up share capital	8,843	8,705	6,053	5,915	5,786
Capital resources ^{36,37}	167,555	155,729	131,460	152,640	127,074
Undated subordinated loan capital	2,781	2,785	2,843	2,922	3,219
Preferred securities and dated subordinated loan capital ³⁸	54,421	52,126	50,307	49,472	42,642
Risk weighted assets and capital ratios³⁶					
Risk weighted assets	1,103,113	1,133,168	1,147,974	1,123,782	938,678
	%	%	%	%	%
Tier 1 ratio	12.1	10.8	8.3	9.3	9.4
Total capital ratio	15.2	13.7	11.4	13.6	13.5
Financial statistics					
Loans and advances to customers as a percentage of customer accounts	78.1	77.3	83.6	89.5	96.8
Average total shareholders' equity to average total assets	5.53	4.72	4.87	5.69	5.97
Net asset value per ordinary share at year-end ³⁹ (US\$)	7.94	7.17	7.44	10.72	9.24
Number of US\$0.50 ordinary shares in issue (millions)	17,686	17,408	12,105	11,829	11,572
Closing foreign exchange translation rates to US\$:					
US\$1: £	0.644	0.616	0.686	0.498	0.509
US\$1: €	0.748	0.694	0.717	0.679	0.759

For footnotes, see page 83.

A more detailed consolidated balance sheet is contained in the Financial Statements on page 240.

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Financial summary > Balance sheet

Movement in 2010

Total assets amounted to US\$2.5 trillion, 4% higher than at 31 December 2009. Excluding the effect of currency movements, underlying total assets increased by 5%. This reflected higher mortgage lending in Hong Kong and the UK, strong demand for commercial loans and a rise in trading assets in North America and Asia as a result of customer demand, supported by improved liquidity generated by higher deposits and our debt issuance programme.

The Group's reported tier 1 ratio increased from 10.8% to 12.1% due to the contribution from profits attributable to shareholders for the year net of dividends paid, the issue of hybrid capital securities net of redemptions, and a reduction in the reported level of risk-weighted assets ('RWA's). The latter was driven by a decline in some retail portfolio exposures in North America as a result of run-off, partly offset by the effect of lending growth in Asia. Market risk RWAs decreased as a result of reduced volatility and continuing exposure management. For more details of capital and RWAs, see page 177.

The following commentary is on an underlying basis.

Assets

Cash and balances at central banks decreased by 4% as a result of lower year-end cash balances in North America as excess liquidity was redeployed into highly-rated government debt securities. This was partly offset by higher year-end cash balances in Europe.

Trading assets fell by 6%, due to the deconsolidation of the Constant Net Asset Value ('CNAV') funds totalling US\$44bn (see Note 43 on the Financial Statements). This was offset, in part, by higher issuance of and customer demand for government and government agency debt securities, particularly in North America and Asia, and an increase in holdings of equities to hedge derivative positions arising from a rise in client trading activity. Higher customer-driven trading volumes also resulted in an increase in reverse repo balances in North America; this was partly offset by a reduction in reverse repo balances in Europe due to market uncertainty.

Strong increase in loans and advances to customers and customer accounts, notably in Asia, drove balance sheet growth.

Financial assets designated at fair value grew by 3% due to an increase in volumes in equity funds and a rise in the fair value of equity securities held

within the insurance business, particularly in Europe and Hong Kong, as market values recovered and client risk appetite returned. This was partly offset by the sale of European government debt securities by Balance Sheet Management.

Derivative assets rose by 8%. This was driven by increases in the fair value of interest rate contracts as a result of downward shifts of major yield curves, offset by higher netting from increased trading with clearing houses. The notional value of outstanding contracts also rose, reflecting an increase in the number of open transactions compared with 2009.

Loans and advances to banks increased by 16% due to higher placements with commercial and central banks in Europe and Latin America.

Loans and advances to customers grew by 8% as we targeted commercial loans and, in the improved economic conditions, demand grew from customers, notably in Asia. The increase in demand for credit, along with competitive pricing, also drove continued growth in mortgage lending in Hong Kong and the UK, though mortgage balances declined in North America as the Consumer Lending and Mortgage Services portfolios continued to run off and credit card lending fell.

Financial investments rose by 9%, mainly in North America and Europe, as Balance Sheet Management redeployed cash into available-for-sale treasury bills and government agency debt securities. This was partly offset by a decline in financial investments in Asia, as a result of disposals and debt securities that matured and were not replaced to support growth in commercial lending.

Liabilities

Deposits by banks decreased by 8%, reflecting a notable decline in central bank deposits in Europe which was partly offset by an increase in central bank deposits in Asia.

Customer accounts were 7% higher, driven by an overall increase in savings and current accounts across most regions, particularly in Asia and Europe. Growth in Premier and online savings contributed to a significant increase in current account balances as customers responded well to targeted promotional campaigns.

Trading liabilities increased by 16%. Higher repo balances in North America were reported as a result of increased trading volumes of treasury and corporate bonds driven by market volatility in the bond market. In Europe, short bond and equity

positions used to hedge derivative transactions increased, reflecting higher client demand.

Financial liabilities designated at fair value rose by 12% due to debt issuances by HSBC entities in Europe during 2010.

Derivative businesses are managed within market risk limits and, as a consequence, the increase in the value of *derivative liabilities* broadly matched that of derivative assets.

Debt securities in issue were in line with 2009, as new issuances of medium-term notes by HSBC entities in Europe during 2010 were offset by lower funding requirements in North America as the consumer finance portfolios in run-off declined.

Liabilities under insurance contracts grew by 12%. This was driven by strong life insurance sales

in Hong Kong following the launch of several new products, and gains on unit-linked products as investment market values improved.

Other liabilities were 26% lower than at 31 December 2009 due to the deconsolidation of the CNAV funds (see 'Trading assets' above).

Equity

Total shareholders' equity increased by 17%, driven by profits generated during the year and the issue of Perpetual Subordinated Capital Securities, a form of tier 1 hybrid capital securities, in June 2010. In addition, the negative balance on the available-for-sale reserve declined from US\$10.0bn at 31 December 2009 to US\$4.1bn at 31 December 2010, largely reflecting improvements in the market value of assets.

Reconciliation of reported and underlying assets and liabilities

31 December 2010 compared with 31 December 2009							
	31 Dec 09 as reported US\$m	Currency Translation ⁴⁰ US\$m	31 Dec 09 at 31 Dec 10 exchange rates US\$m	Under- lying change US\$m	31 Dec 10 as reported US\$m	Reported change %	Under- lying change %
HSBC							
Cash and balances at							
central banks	60,655	(731)	59,924	(2,541)	57,383	(5)	(4)
Trading assets	421,381	(12,483)	408,898	(23,846)	385,052	(9)	(6)
Financial assets designated							
at fair value	37,181	(1,134)	36,047	964	37,011	—	3
Derivative assets	250,886	(9,285)	241,601	19,156	260,757	4	8
Loans and advances to banks	179,781	(5)	179,776	28,495	208,271	16	16
Loans and advances to							
customers	896,231	(10,788)	885,443	72,923	958,366	7	8
Financial investments	369,158	(268)	368,890	31,865	400,755	9	9
Other assets	149,179	(1,826)	147,353	(259)	147,094	(1)	—
Total assets	2,364,452	(36,520)	2,327,932	126,757	2,454,689	4	5
Deposits by banks	124,872	(4,182)	120,690	(10,106)	110,584	(11)	(8)
Customer accounts	1,159,034	(8,064)	1,150,970	76,755	1,227,725	6	7
Trading liabilities	268,130	(8,660)	259,470	41,233	300,703	12	16
Financial liabilities designated							
at fair value	80,092	(1,570)	78,522	9,611	88,133	10	12
Derivative liabilities	247,646	(9,262)	238,384	20,281	258,665	4	9
Debt securities in issue	146,896	(1,066)	145,830	(429)	145,401	(1)	—
Liabilities under insurance							
contracts	53,707	(1,593)	52,114	6,495	58,609	9	12
Other liabilities	148,414	(431)	147,983	(38,029)	109,954	(26)	(26)
Total liabilities	2,228,791	(34,828)	2,193,963	105,811	2,299,774	3	5
Total shareholders' equity	128,299	(1,679)	126,620	21,047	147,667	15	17
Non-controlling interests	7,362	(13)	7,349	(101)	7,248	(2)	(1)
Total equity	135,661	(1,692)	133,969	20,946	154,915	14	16
Total equity and liabilities	2,364,452	(36,520)	2,327,932	126,757	2,454,689	4	5

For footnote, see page 83.

In 2010, the effect of acquisitions was not material.

Report of the Directors: Operating and Financial Review (continued)

Financial summary > Economic profit / Critical accounting policies

Economic profit

Our internal performance measures include economic profit/(loss), a calculation which compares the return on financial capital invested in HSBC by our shareholders with the cost of that capital. We price our cost of capital internally and the difference between that cost and the post-tax profit attributable to ordinary shareholders represents the amount of economic profit/(loss) generated. Economic profit/(loss) generated is used by management as one input in deciding where to allocate capital and other resources.

In order to concentrate on external factors rather than measurement bases, we emphasise the trend in economic profit/(loss) ahead of absolute amounts within business units. Our long-term cost of capital is reviewed annually and for 2010 it was revised to 11% from the 10% used in 2009. We use a Capital Asset Pricing Model to determine our cost of capital. The main drivers of the increase were an increase in the risk free rate and an increase in the betas used in

the calculation. The following commentary is on a reported basis.

Our economic loss decreased by US\$4.7bn to US\$3.3bn as a result of an increase in profit attributable to shareholders. This was predominantly driven by lower loan impairment charges across all regions and customer groups, notably in the US due to lower balances and decreased delinquency rates in Card and Retail Services, and the run-off of the Consumer Lending and mortgage services portfolio.

The increase in average invested capital reflected higher retained earnings and a significant decrease in reserves representing unrealised losses on available-for-sale securities due to a slowing in the rate of anticipated losses in the underlying collateral pools.

The return on invested capital increased by 4.6 percentage points, although it remained below our benchmark cost of capital. The economic spread improved by 3.6 percentage points, the result of an increase in return on invested capital, partly offset by the rise in the cost of capital in 2010.

	2010		2009	
	US\$m	% ⁴¹	US\$m	% ⁴⁰
Average total shareholders' equity	138,224		115,431	
Adjusted by:				
Goodwill previously amortised or written off	8,123		8,123	
Property revaluation reserves	(813)		(799)	
Reserves representing unrealised losses on effective cash flow hedges	100		385	
Reserves representing unrealised losses on available-for-sale securities	6,129		16,189	
Preference shares and other equity instruments	(5,473)		(3,538)	
Average invested capital ⁴²	146,290		135,791	
Return on invested capital ⁴³	12,746	8.7	5,565	4.1
Benchmark cost of capital	(16,092)	(11.0)	(13,579)	(10.0)
Economic loss and spread	(3,346)	(2.3)	(8,014)	(5.9)

For footnotes, see page 83.

Critical accounting policies

(Audited)

Introduction

The results of HSBC are sensitive to the accounting policies, assumptions and estimates that underlie the preparation of our consolidated financial statements. The significant accounting policies are described in Note 2 on the Financial Statements.

When preparing the financial statements, it is the Directors' responsibility under UK company law to select suitable accounting policies and to make judgements and estimates that are reasonable and prudent. The accounting policies that are deemed critical to our results and financial position, in terms of the materiality of the items to which the policies are applied and the high degree of judgement involved, including the use of assumptions and estimation, are discussed below.

Impairment of loans and advances

Our accounting policy for losses arising from the impairment of customer loans and advances is described in Note 2g on the Financial Statements. Loan impairment allowances represent management's best estimate of losses incurred in the loan portfolios at the balance sheet date.

Management is required to exercise judgement in making assumptions and estimations when calculating loan impairment allowances on both individually and collectively assessed loans and advances. Of the Group's total loans and advances to customers before impairment allowances of US\$978bn (2009: US\$922bn), US\$15bn or 2% (2009: US\$15bn; 2%) were individually assessed for impairment, and US\$963bn or 98% (2009: US\$907bn; 98%) were collectively assessed for impairment.

The most significant judgemental area is the calculation of collective impairment allowances. The geographical area with most exposure to collectively assessed loans and advances is North America, which comprised US\$198bn or 21% (2009: US\$219bn; 24%) of the total. Collective impairment allowances in North America were US\$9bn, representing 64% (2009: US\$13bn; 68%) of the total collectively assessed loan impairment allowance.

The methods used to calculate collective impairment allowances on homogeneous groups of loans and advances that are not considered individually significant are disclosed in Note 2g on the Financial Statements. They are subject to estimation uncertainty, in part because it is not practicable to identify losses on an individual loan

basis because of the large number of individually insignificant loans in the portfolio.

The methods involve the use of statistically assessed historical information which is supplemented with significant management judgement to assess whether current economic and credit conditions are such that the actual level of inherent losses is likely to be greater or less than that suggested by historical experience. In normal circumstances, historical experience provides the most objective and relevant information from which to assess inherent loss within each portfolio, though sometimes it provides less relevant information about the inherent loss in a given portfolio at the balance sheet date, for example, when there have been changes in economic, regulatory or behavioural conditions which result in the most recent trends in portfolio risk factors being not fully reflected in the statistical models. In these circumstances, the risk factors are taken into account by adjusting the impairment allowances derived solely from historical loss experience.

Risk factors include loan portfolio growth, product mix, unemployment rates, bankruptcy trends, geographical concentrations, loan product features, economic conditions such as national and local trends in housing markets, the level of interest rates, portfolio seasoning, account management policies and practices, changes in laws and regulations, and other influences on customer payment patterns. Different factors are applied in different regions and countries to reflect local economic conditions, laws and regulations. The methodology and the assumptions used in calculating impairment losses are reviewed regularly in the light of differences between loss estimates and actual loss experience. For example, roll rates, loss rates and the expected timing of future recoveries are regularly benchmarked against actual outcomes to ensure they remain appropriate.

However, the exercise of judgement requires the use of assumptions which are highly subjective and very sensitive to the risk factors, in particular to changes in economic and credit conditions across a large number of geographical areas. Many of the factors have a high degree of interdependency and there is no single factor to which our loan impairment allowances as a whole are sensitive. They are particularly sensitive to general economic and credit conditions in North America, however. For example, a 10% increase in impairment allowances on collectively assessed loans and advances in North America would increase loan impairment allowances by US\$0.9bn at 31 December 2010 (2009: US\$1.3bn). It is possible that the outcomes within the next

Report of the Directors: Operating and Financial Review (continued)

Financial summary > Critical accounting policies

financial year could differ from the assumptions built into the models, resulting in a material adjustment to the carrying amount of loans and advances.

Goodwill impairment

Our accounting policy for goodwill is described in Note 2p on the Financial Statements. Note 24 on the Financial Statements lists our cash generating units ('CGU's) by geographical region and global business. HSBC's total goodwill amounted to US\$22bn at 31 December 2010 (2009: US\$23bn).

The review of goodwill impairment reflects management's best estimate of the following factors:

- the future cash flows of the CGUs are sensitive to the cash flows projected for the periods for which detailed forecasts are available and to assumptions regarding the long-term pattern of sustainable cash flows thereafter. Forecasts are compared with actual performance and verifiable economic data, but they necessarily and appropriately reflect management's view of future business prospects at the time of the assessment; and
- the rates used to discount future expected cash flows are based on the costs of capital assigned to individual CGUs and can have a significant effect on their valuation. The cost of capital percentage is generally derived from a Capital Asset Pricing Model, which incorporates inputs reflecting a number of financial and economic variables, including the risk-free interest rate in the country concerned and a premium for the inherent risk of the business being evaluated. These variables are subject to fluctuations in external market rates and economic conditions beyond our control and therefore require the exercise of significant judgement and are consequently subject to uncertainty.

A decline in a CGU's expected cash flows and/or an increase in its cost of capital reduces the CGU's estimated recoverable amount. If this is lower than the carrying value of the CGU, a charge for impairment of goodwill is recognised in our income statement for the year.

The accuracy of forecast cash flows is subject to a high degree of uncertainty in volatile market conditions. In such market conditions, management retests goodwill for impairment more frequently than annually to ensure that the assumptions on which the cash flow forecasts are based continue to reflect current market conditions and management's best estimate of future business prospects.

During 2010, no impairment of goodwill was identified (2009: nil). In addition to the annual impairment test which was performed as at 1 July 2010, management reviewed the current and expected performance of the CGUs as at 31 December 2010 and determined that there was no indication of potential impairment of the goodwill allocated to them. However, in the event of a significant deterioration in economic and credit conditions compared with those reflected by management in the cash flow forecasts for the CGUs, a material adjustment to a CGU's recoverable amount may occur which may result in the recognition of an impairment charge in the income statement.

Note 24 on the Financial Statements includes details of the CGU's with significant balances of goodwill, states the key assumptions used to assess the goodwill in each of those CGUs for impairment and provides a discussion of the sensitivity of the carrying value of goodwill to changes in key assumptions.

Valuation of financial instruments

Our accounting policy for determining the fair value of financial instruments is described in Note 2d on the Financial Statements.

The best evidence of fair value is a quoted price in an actively traded market. In the event that the market for a financial instrument is not active, a valuation technique is used. The majority of valuation techniques employ only observable market data and so the reliability of the fair value measurement is high. However, certain financial instruments are valued on the basis of valuation techniques that feature one or more significant market inputs that are unobservable. Valuation techniques that rely to a greater extent on unobservable inputs require a higher level of management judgement to calculate a fair value than those based wholly on observable inputs.

Valuation techniques used to calculate fair values are discussed in Note 16 on the Financial Statements. The main assumptions and estimates which management consider when applying a model with valuation techniques are:

- the likelihood and expected timing of future cash flows on the instrument. These cash flows are usually governed by the terms of the instrument, although judgement may be required when the ability of the counterparty to service the instrument in accordance with the contractual terms is in doubt. Future cash flows may be sensitive to changes in market rates;

- selecting an appropriate discount rate for the instrument. The determination of this rate is based on an assessment of what a market participant would regard as the appropriate spread of the rate for the instrument over the appropriate risk-free rate; and
- judgement to determine what model to use to calculate fair value in areas where the choice of valuation model is particularly subjective, for example, when valuing complex derivative products.

When applying a model with unobservable inputs, estimates are made to reflect uncertainties in fair values resulting from a lack of market data inputs, for example, as a result of illiquidity in the market. For these instruments, the fair value measurement is less reliable. Inputs into valuations based on unobservable data are inherently uncertain because there is little or no current market data available from which to determine the level at which an arm's length transaction would occur under normal business conditions. However, in most cases there is some market data available on which to base a determination of fair value, for example historical data, and the fair values of most financial instruments are based on some market observable inputs even when unobservable inputs are significant.

The value of financial assets and liabilities measured at fair value using a valuation technique was US\$599bn (2009: US\$599bn) and US\$499bn (2009: US\$447bn), respectively or 56% (2009: 56%) of total financial assets and 77% (2009: 75%) of total financial liabilities measured at fair value.

Disclosures of the types and amounts of adjustments made in determining the fair value of financial instruments measured at fair value using valuation techniques, and a sensitivity analysis of fair values for financial instruments with significant unobservable inputs to reasonably possible alternative assumptions can be found in Note 16 on the Financial Statements. Given the uncertainty and subjective nature of valuing financial instruments at fair value, it is possible that the outcomes in the next financial year could differ from the assumptions used, and this could result in a material adjustment to the carrying amount of financial instruments measured at fair value.

Impairment of available-for-sale financial assets

Our accounting policy for impairment of available-for-sale financial assets is described in Note 2j on the Financial Statements.

At 31 December 2010, our total available-for-sale financial assets amounted to US\$381bn (2009: US\$352bn), of which US\$373bn or 98% (2009: US\$342bn; 97%) were debt securities. The available-for-sale fair value reserve relating to debt securities amounted to a deficit of US\$6.2bn (2009: deficit of US\$11.4bn). A deficit in the available-for-sale fair value reserve occurs on debt securities when the fair value of a relevant security is less than its acquisition cost (net of any principal repayments and amortisation) after deducting any previous impairment loss recognised in the income statement, but where there is no evidence of any impairment or, if an impairment was previously recognised, any subsequent impairment.

Management is required to exercise judgement in determining whether there is objective evidence that an impairment loss has occurred. Once an impairment has been identified, the amount of impairment loss is measured with reference to the fair value of the asset. More information on assumptions and estimates requiring management judgement relating to the determination of fair values of financial instruments is provided above in 'Valuation of financial instruments'.

Deciding whether an available-for-sale debt security is impaired requires objective evidence of both the occurrence of a loss event and a related decrease in estimated future cash flows. The degree of judgement involved is less when cash flows are readily determinable, but increases when estimating future cash flows requires consideration of a number of variables, some of which may be unobservable in current market conditions.

There is no single factor to which the Group's charge for impairment of available-for-sale debt securities is particularly sensitive, because of the various types of securities we hold, the range of geographical areas in which those securities are held, and the wide range of factors which can affect the occurrence of loss events and the cash flows of securities, including different types of collateral.

The most significant judgements concern more complex instruments, such as ABSs, where it is necessary to consider factors such as the estimated future cash flows on underlying pools of collateral including prepayment speeds, the extent and depth of market price declines and changes in credit ratings. The review of estimated future cash flows on underlying collateral is subject to uncertainties when the assessment is based on historical information on pools of assets, and judgement is required to determine whether historical performance remains

Report of the Directors: Operating and Financial Review (continued)

Financial summary > Critical accounting policies // Customer groups and global businesses > Summary

representative of current economic and credit conditions.

Further details of the nature and extent of our exposures to ABSs classified as available-for-sale and a more detailed description of the assumptions and estimates used in assessing these securities for impairment, together with a discussion of those assets which are most sensitive to possible future impairment, are provided in 'Securitisation exposures and other structured products' on page 128.

It is possible that outcomes in the next financial year could be different from those modelled when seeking to identify impairment on available-for-sale debt securities. In this event, impairment may be identified in available-for-sale debt securities which had previously been determined not to be impaired, potentially resulting in the recognition of material impairment losses in the next financial year.

Deferred tax assets

Our accounting policy for the recognition of deferred tax assets is described in Note 2s on the Financial Statements. The recognition of a deferred tax asset relies on an assessment of the probability and sufficiency of future taxable profits, future reversals of existing taxable temporary differences and ongoing tax planning strategies.

The most significant judgements concern the US deferred tax assets, given the recent history of losses in our US operations. Net US deferred tax assets amounted to US\$4bn or 58% (2009: US\$5.1bn; 59%) of deferred tax assets recognised on the Group's balance sheet.

Recognition of US deferred tax assets is based on the evidence available about conditions at the balance sheet date, and requires significant judgements to be made regarding projections of loan impairment charges and the timing of recovery in the US economy. These judgements take into consideration the effect of both positive and negative

evidence, including historical financial performance, projections of future taxable income, future reversals of existing taxable temporary differences, tax planning strategies and the availability of loss carrybacks.

Projections of future taxable income in the US are based on business plans, future capital requirements and ongoing tax planning strategies. These projections include assumptions about future house prices, US economic conditions, including unemployment levels and their impact on loan impairment charges, and capital support from HSBC Holdings. These forecasts are consistent with the assumption that it is probable that the results of future operations will generate sufficient taxable income to support the deferred tax assets. In management's judgement, recent market conditions, which have resulted in losses being incurred in the US, will create significant downward pressure and volatility regarding the profit or loss before tax in the next few years. To reflect this, the assessment of recoverability of the deferred tax assets in the US significantly discounts any future expected taxable income and relies to a greater extent on capital support to the US operations from HSBC Holdings, including tax planning strategies implemented in relation to such support.

The most significant tax planning strategy is the investment of capital in our US operations to ensure the realisation of the deferred tax assets. The transfer of a subsidiary as part of an internal reorganisation on 31 January 2010 provided substantial support for the recoverability of the US deferred tax assets. Management expects that, with support, our US operations will continue to execute their business strategies and plans until they return to profitability. If HSBC Holdings were to decide not to provide ongoing support, the full recovery of the deferred tax asset may no longer be probable and could result in a significant reduction of the deferred tax asset which would be recognised as a charge in the income statement.

Customer groups and global businesses

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Summary

HSBC's senior management reviews operating activity on a number of bases, including by geographical region and by customer group and global business. Capital resources are allocated and performance is assessed primarily by geographical region, as presented on page 50.

The commentaries below present customer groups and global businesses followed by

Profit/(loss) before tax

	2010		2009		2008	
	US\$m	%	US\$m	%	US\$m	%
Personal Financial Services	3,518	18.5	(2,065)	(29.2)	(10,974)	(117.9)
Commercial Banking	6,090	32.0	4,275	60.4	7,194	77.3
Global Banking and Markets	9,536	50.1	10,481	148.1	3,483	37.4
Global Private Banking	1,054	5.5	1,108	15.6	1,447	15.6
Other ⁴⁴	(1,161)	(6.1)	(6,720)	(94.9)	8,157	87.6
	19,037	100.0	7,079	100.0	9,307	100.0

Total assets⁴⁵

	At 31 December			
	2010		2009	
	US\$m	%	US\$m	%
Personal Financial Services	527,698	21.5	554,074	23.4
Commercial Banking	296,797	12.1	251,143	10.6
Global Banking and Markets	1,758,315	71.6	1,683,672	71.2
Global Private Banking	116,846	4.8	116,148	4.9
Other	161,458	6.6	150,983	6.4
Intra-HSBC items	(406,425)	(16.6)	(391,568)	(16.5)
	2,454,689	100.0	2,364,452	100.0

For footnotes, see page 83.

Basis of preparation

The results are presented in accordance with the accounting policies used in the preparation of HSBC's consolidated financial statements. Our operations are closely integrated and, accordingly, the presentation of customer group and global business data includes internal allocations of certain items of income and expense. These allocations include the costs of certain support services and GMO functions, to the extent that these can be meaningfully attributed to operational business lines. While such allocations have been made on a systematic and consistent basis, they necessarily involve a degree of subjectivity.

Where relevant, income and expense amounts presented include the results of inter-segment funding as well as inter-company and inter-business line transactions. All such transactions are undertaken on arm's length terms.

geographical regions. Performance is discussed in this order because certain strategic themes, business initiatives and trends affect more than one geographical region. All commentaries are on an underlying basis (see page 14) unless stated otherwise. All references to HSBC Finance and HSBC Bank USA are also on a management basis as loans referred to HSBC Bank USA from HSBC Finance are managed by the latter and all costs and benefits accrue thereto.

Report of the Directors: Operating and Financial Review (continued)

Customer groups and global businesses > Products and services

Products and services

Personal Financial Services

PFS offers its products and services to customers based on their individual needs. Premier and Advance services are targeted at mass affluent and emerging affluent customers who value international connectivity and benefit from our global reach and scale. For customers who have simpler everyday banking needs, we offer a full range of banking products and services reflecting local requirements.

In addition, we are one of the largest card issuers in the world, offering HSBC branded cards, co-branded cards with selected partners and private label (store) cards.

Typically, customer offerings include personal banking products (current and savings accounts, mortgages and personal loans, credit cards, debit cards and local and international payment services) and wealth management services (insurance and investment products and financial planning services).

- **HSBC Premier** provides preferential banking services and global recognition to our high net worth customers and their immediate families with a dedicated relationship manager, specialist wealth advice and tailored solutions. Customers can access emergency travel assistance, priority telephone banking and an online 'global view' of their Premier accounts around the world with free money transfers between them.
- **HSBC Advance** provides a range of preferential products and services customised to meet local needs. With a dedicated telephone service, access to wealth advice and online tools to support financial planning, it gives customers an online 'global view' of their Advance accounts with money transfers between them.
- **Wealth Solutions & Financial Planning:** a financial planning process designed around individual customer needs to help our clients to protect, grow and manage their wealth through best-in-class investment and wealth insurance products manufactured by in-house partners (Global Asset Management, Global Markets and HSBC Insurance) and by selected third party providers.

Customers can transact with the bank via a range of channels such as internet banking and self-service terminals in addition to traditional and automated branches and telephone service centres.

Commercial Banking

We segment our CMB business into Corporate, to serve both Corporate and Mid-Market companies with more sophisticated financial needs and Business Banking, to serve the small and medium-sized enterprises ('SME's) sector. This enables the development of tailored customer propositions while adopting a broader view of the entire commercial banking sector, from sole proprietors to large corporations. This allows us to provide continuous support to companies as they expand both domestically and internationally, and ensures a clear focus on the business banking segments, which are typically the key to innovation and growth in market economies.

We place particular emphasis on international connectivity to meet our business customers' needs and aim to be recognised as the leading international bank in all our markets and the best bank for business in our largest markets.

- **Financing:** we offer a broad range of financing, both domestic and cross-border, including overdrafts, receivables finance, term loans and syndicated, leveraged, acquisition and project finance. Asset finance is offered in selected sites, focused on leasing and instalment finance for vehicles, plant and equipment.
- **Payments and cash management:** we are a leading provider of domestic and cross-border payments and collections, liquidity management and account services worldwide, delivered through our e-platform, HSBC net.
- **International trade:** we provide various international trade products and services, to both buyers and suppliers such as export finance, guarantees, documentary collections and forfeiting to improve efficiency and help mitigate risk throughout the supply chain.
- **Treasury:** CMB customers are volume users of our foreign exchange, derivatives and structured products.
- **Capital markets & advisory:** capital raising on debt and equity markets and advisory services are available as required.
- **Commercial cards:** card issuing helps customers enhance cash management, credit control and purchasing. Card acquiring services enable merchants to accept credit and debit card payments in person or remotely.
- **Insurance:** CMB offers key person, employee benefits and a variety of commercial risk insurance such as property, cargo and trade credit.
- **Direct channels:** these include online and direct banking offerings such as telephone banking, HSBCnet and Business Internet Banking.

Global Banking and Markets

GB&M provides tailored financial solutions to major government, corporate and institutional clients and private investors worldwide. Managed as a global business, GB&M operates a long-term relationship management approach to build a full understanding of clients' financial requirements. Sector-focused client service teams comprising relationship managers and product specialists develop financial solutions to meet individual client needs. With dedicated offices in over 65 countries and access to HSBC's worldwide presence and capabilities, this business serves subsidiaries and offices of our clients on a global basis.

GB&M is managed as four principal business lines: Global Markets, Global Banking, Global Asset Management and Principal Investments. This structure allows us to focus on relationships and sectors that best fit the Group's footprint and facilitate seamless delivery of our products and services to clients.

- **Global Markets** operations consist of treasury and capital markets services. Products include foreign exchange; currency, interest rate, bond, credit, equity and other derivatives; government and non-government fixed income and money market instruments; precious metals and exchange-traded futures; equity services; distribution of capital markets instruments; and securities services, including custody and clearing services and funds administration to both domestic and cross-border investors.
- **Global Banking** offers financing, advisory and transaction services. Products include:
 - capital raising, advisory services, bilateral and syndicated lending, leveraged and acquisition finance, structured and project finance, lease finance and non-retail deposit taking;
 - international, regional and domestic payments and cash management services; and trade services for large corporate clients.
- **Global Asset Management** offers investment solutions to institutions, financial intermediaries and individual investors globally.
- **Principal Investments** includes our strategic relationships with third-party private equity managers and other investments.

Global Private Banking

HSBC Private Bank is the principal marketing name of our international private banking business, Global Private Banking ('GPB'). Utilising the most suitable products from the marketplace, GPB works with its clients to offer both traditional and innovative ways to manage and preserve wealth while optimising returns.

GPB accesses expertise in six major advisory centres in Hong Kong, Singapore, Geneva, New York, Paris and London to identify opportunities which meet clients' needs and investment strategies.

- **Private Banking** services comprise multi-currency deposit accounts and fiduciary deposits, credit and specialist lending, treasury trading services, cash management, securities custody and clearing. GPB works to ensure that its clients have full access to other products and services available in HSBC such as credit cards, internet banking, corporate banking and investment banking.
- **Private Wealth Management** comprises both advisory and discretionary investment services. A wide range of investment vehicles is covered, including bonds, equities, derivatives, options, futures, structured products, mutual funds and alternatives (hedge funds, private equity and real estate).
 - Corporate Finance Solutions helps provide clients with cross border solutions for their companies, working in conjunction with GB&M.
- **Private Wealth Solutions** comprise inheritance planning, trustee and other fiduciary services designed to protect wealth and preserve it for future generations through structures tailored to meet the individual needs of each family. Areas of expertise include trusts, foundation and company administration, charitable trusts and foundations, insurance, family office advisory and philanthropy.

Report of the Directors: Operating and Financial Review (continued)

Customer groups and global businesses > PFS

Personal Financial Services

PFS provides 92 million individual and self-employed customers with financial services in over 60 markets worldwide.

	2010 US\$m	2009 US\$m	2008 US\$m
Net interest income	24,161	25,107	29,419
Net fee income	7,336	8,238	10,107
Other income	1,079	2,070	1,963
Net operating income⁴⁶ ..	32,576	35,415	41,489
Impairment charges ⁴⁷	(11,259)	(19,902)	(21,220)
Net operating income	21,317	15,513	20,269
Total operating expenses ..	(18,805)	(18,292)	(31,704)
Operating profit/(loss)	2,512	(2,779)	(11,435)
Income from associates ⁴⁸ ..	1,006	714	461
Profit/(loss) before tax	3,518	(2,065)	(10,974)

**Return to profitability in PFS
as credit quality
improved**

**HSBC Advance
launched in
34
markets in its first year**

**Significant increase
in mortgage lending
in Hong Kong and the UK**

Strategic direction

Our strategy for PFS is to use our global reach and scale to grow profitably in selected markets by providing relationship banking and wealth management services. PFS employs two globally consistent propositions in Premier and Advance and focuses on deepening customer relationships and increasing the penetration of wealth management services. In markets where we already have scale or where scale can be built over time, we provide services to all customer segments. In other markets, we participate more selectively, targeting mass affluent customers which have strong international connectivity or where our global scale is crucial.

For footnotes, see page 83.

Review of performance

- PFS reported a profit before tax of US\$3.5bn compared with a reported and underlying loss of US\$2.1bn in 2009. This was largely attributable to a decline in loan impairment charges in the US and the managed reduction of certain higher risk portfolios in Latin America, Asia and the Middle East. Performance improved in all regions as the credit quality of our lending portfolios generally rose and revenue grew in Asia and Europe, reflecting higher investment-related income, increased insurance revenue in Hong Kong and mortgage lending growth combined with wider spreads in the UK. Income from associates, particularly Ping An Insurance, increased, driven by strong sales growth.
- Revenue fell, largely in HSBC Finance, due to lower lending balances in both the run-off portfolio and in the Card and Retail Services business. Card fees also decreased in North America following the implementation of the CARD Act. Revenue was further affected by an adverse fair value movement related to the non-qualifying hedges recorded in HSBC Finance compared with a favourable movement in 2009, as long-term interest rates declined.
- We continued to invest in our business by hiring new relationship managers, investing in systems and infrastructure and developing our product offerings. Operating expenses remained broadly unchanged as a rise in costs in Asia from increased headcount and higher marketing expenditure in support of business expansion was broadly offset by strict cost control across the Group and lower costs associated with the reduced scope of the business in the US.
- Loan impairment charges and other credit risk provisions fell by 44% in the improved economic conditions, reflecting a decline in lending balances, enhanced collection processes and tighter lending criteria. The decline in lending was significant in the US as the run-off of the non-core portfolio continued and balances fell in the Card and Retail Services business, where there were fewer active accounts and customers reduced their credit card debt. In addition, certain higher risk portfolios in Latin America, Asia and the Middle East were managed down and repositioned to higher quality assets, resulting in an improvement in credit quality.
- In the UK, we increased our market share of mortgage lending, while maintaining a conservative loan to value ratio on new business. We grew mortgage lending in Asia,

significantly in Hong Kong, where the introduction of HIBOR-linked mortgages drove volume growth and enabled us to maintain our market leadership. In Australia, Singapore and Malaysia we were able to grow mortgage volumes through targeted marketing campaigns. Customer account balances also grew, largely on the back of increased customer numbers in Asia and the UK.

- HSBC Premier, our flagship global customer proposition, was available in 47 markets and had grown to 4.4m customers at the end of 2010. We attracted over 980,000 net new customers in 2010, of whom over 50% were new to HSBC.
- We made further progress in standardising our various offerings across the Group for emerging mass affluent customers with the continued transition of eligible customers to HSBC Advance, our second globally consistent proposition. At 31 December 2010, Advance had a customer base of 4.6m and was available in 34 markets.
- During 2010, HSBC's Global View and Global Transfer online capabilities were extended to our Advance customer base. These services allow Premier and Advance customers to access and manage all their accounts through one single logon and transfer funds between their overseas accounts online. Both the volume and the value of transfers increased strongly during the year as our target customer base and general awareness of these services grew.
- Our World Selection global investment offering continued to grow and is now available in 26 markets with total assets under management of US\$7.2bn at 31 December 2010.
- We further enhanced our services and made banking easier for our customers with initiatives such as increased Saturday branch opening in the UK, the launch of retail renminbi wealth management products, mobile banking and online real time bond trading in Hong Kong, and the upgrading of the US automatic teller machine ('ATM') network to accept deposits.

Report of the Directors: Operating and Financial Review (continued)

Customer groups and global businesses > CMB

Commercial Banking

CMB offers a full range of commercial financial services and tailored propositions to 3.6m customers ranging from sole proprietors to publicly quoted companies in 65 countries.

	2010 US\$m	2009 US\$m	2008 US\$m
Net interest income	8,487	7,883	9,494
Net fee income	3,964	3,702	4,097
Other income	1,383	1,268	1,726
Net operating income⁴⁶ ...	13,834	12,853	15,317
Impairment charges ⁴⁷	(1,805)	(3,282)	(2,173)
Net operating income	12,029	9,571	13,144
Total operating expenses ..	(6,831)	(5,963)	(6,581)
Operating profit	5,198	3,608	6,563
Income from associates ⁴⁸ ..	892	667	631
Profit before tax	6,090	4,275	7,194

**Strong balance sheet growth with
21%
rise in lending to US\$239bn**

**Significant pre-tax profit
contribution from
emerging markets at
67%**

**First international bank to
complete renminbi trade
settlements across six continents**

Strategic direction

CMB's core strategy is focused on two key initiatives:

- to be the leading international business bank in all our markets, leveraging HSBC's extensive geographical network together with its product expertise in payments, trade, receivables finance and foreign exchange to actively support customers who are trading and investing internationally; and
- to be the best bank for small- and medium-sized enterprises in our largest markets.

Review of performance

- In 2010, CMB reported profit before tax of US\$6.1bn, 42% higher than in 2009 with growth across all regions. Excluding the gains from the sales in 2010 of HSBC Insurance Brokers and our stake in the Wells Fargo HSBC Trade Bank, and similar non-recurring items in 2009, (see page 14), profit before tax increased by 48%. The rise in profit reflected an improvement in the credit environment and strong growth in world trade.
- Revenue grew by 8% to US\$13.7bn, mainly in Asia, where we expanded customer lending significantly and increased our fee income from remittances, trade and investments. Our insurance operations also performed strongly in Asia, with an increased uptake of our life insurance products in Hong Kong. In North America, repricing initiatives led to a notable increase in revenue.
- Loan impairment charges and other credit risk provisions declined by 46% to US\$1.8bn with favourable variances in all regions as the credit environment improved and our exposure to higher risk portfolios was managed down.
- Excluding CMB's share of the non-recurring accounting gains related to the change in the UK pension scheme, (see page 26), operating expenses increased by 11% to US\$6.8bn as we continued to invest for future revenue growth in those markets that we see as central to international connectivity. We hired more relationship managers in France, Brazil, Mexico and Hong Kong, and continued to invest in systems to improve our customer experience. As a result, our cost efficiency ratio rose to 49.8% in 2010.
- CMB's share of income from associates grew by 33% to US\$892m, notably in mainland China.
- Customer lending balances rose by 21% to US\$239bn, driven by increased demand in Asia as market sentiment improved, and growth in key developed markets such as France and the UK, where we actively supported corporates and SMEs in response to changes in the economy. Our corporate segment increased lending by 25% to US\$183bn, notably in Hong Kong and mainland China.
- CMB attracted over half a million new customers in 2010, taking the total to 3.6m, and we grew customer account balances by 8%, with significant growth in Asia where HSBC was

For footnotes, see page 83.

ranked as the best cash management bank in 2010 by *Euromoney*.

- In line with our strategy to be the leading international business bank, we continued to pursue opportunities to expand our customer base of businesses that trade and invest internationally. In 2010, we opened CMB's first corporate branch in Switzerland to enable our Swiss-based customers to access our international banking services, particularly in faster growing markets. In the UK, we recruited 139 new International Commercial Managers to support the international expansion plans of UK businesses.
- Our geographical presence across both developed and emerging markets allowed us to capitalise on the rising levels of international trade flows, notably in Asia and Europe, where we gained export market share in 2010. In the Middle East, we increased our lending to exporters in the region by 69%. In the United Arab Emirates ('UAE') specifically, our average lending to exporters more than doubled in 2010 to US\$700m.
- The number of successful cross-border referrals increased by 77% compared with 2009, with a total transaction value in 2010 of almost US\$15bn. Significantly, successful intra-Asia referrals doubled from 2009, while referrals from mainland China more than doubled reflecting the increased appetite of Chinese business to explore international opportunities.
- CMB continued to demonstrate connectivity with other customer groups within HSBC. Our partnership with GB&M allowed us to support our customers in accessing capital markets to help them grow and expand internationally. Successful referrals from CMB represented 51% of total net new money generated from internal referrals to GPB in 2010, while 5% of new Premier accounts were referred from CMB.
- CMB has a diverse suite of products to support businesses that trade internationally. We are the second largest export factor globally and, in

2010, we launched our Receivables Finance proposition in Germany, Europe's largest economy, which has rapidly growing export ties with Asia. In the UK, we increased international trade finance by 13%. In addition, we successfully piloted the Supplier Invoice Finance Scheme, a reverse factoring product, in India, mainland China and Hong Kong.

- We became the first international bank to provide renminbi-denominated trade settlements across six continents in 2010 and we are one of the largest international banks in Hong Kong to offer renminbi products, with total transactions exceeding US\$6.7bn in 2010.
- Our Business Banking propositions are focused on better serving SMEs, especially those that trade internationally. At the end of 2010, we had over 3.4m customers worldwide in the Business Banking segment, representing 55% of CMB's total deposit balances and providing an important source of funding for our Corporate segment.
- We continue to recognise the importance of SMEs to sustained economic recovery and provided working capital finance for this sector throughout 2010. In Hong Kong, we maintained our active participation in the Government Special Loan Guarantee Scheme, through which we provided US\$1.5bn in SME financing in 2010. In the UK, we increased new lending to SMEs by 19% in 2010, opened accounts for over 125,000 customers starting new businesses and added over 170 extra local business managers.
- We continued to develop and improve our direct channels through enhanced telephone-based relationship management services in key markets, including the launch of smartphone services in Hong Kong. In the UK, we also launched straight-through foreign exchange services. Notably, we are now the leading direct bank in Europe with over one million SME business customers using our Business Internet Banking platform.

Report of the Directors: Operating and Financial Review (continued)

Customer groups and global businesses > GB&M

Global Banking and Markets

GB&M is a global business which provides tailored financial solutions to major government, corporate and institutional clients worldwide.

	2010 US\$m	2009 US\$m	2008 US\$m
Net interest income	7,348	8,610	8,541
Net fee income	4,725	4,363	4,291
Net trading income ⁴⁹	5,831	6,875	481
Other income	2,043	1,972	205
Net operating income⁴⁶ ...	19,947	21,820	13,518
Impairment charges ⁴⁷	(990)	(3,168)	(1,471)
Net operating income	18,957	18,652	12,047
Total operating expenses ..	(9,962)	(8,537)	(9,092)
Operating profit	8,995	10,115	2,955
Income from associates ⁴⁸ ..	541	366	528
Profit before tax	9,536	10,481	3,483

Employee expenses (including payroll and bonus taxes) in operating expenses

US\$4,737m

(2009: US\$4,335m; 2008: US\$4,263m)

Strong contribution from emerging markets

Best Global Emerging Markets Bank

Best Global Emerging Markets Debt House Emerging Markets Bond House of the Year

Best Debt House in Asia

Euromoney Awards for Excellence 2010

International Financing Review Awards 2010

Strategic direction

In 2010, GB&M continued to pursue its now well-established 'emerging markets-led and financing-focused' strategy, encompassing HSBC's objective to be a leading wholesale bank by:

- utilising the Group's extensive distribution network;
- developing GB&M's hub-and-spoke business model; and
- continuing to build capabilities in major hubs to support the delivery of an advanced suite of services to major government, corporate and institutional clients across the HSBC network.

This combination of product depth and distribution strength is fundamental to meeting the needs of existing and new clients and allowing GB&M to achieve its strategic goals.

Review of performance

- GB&M reported profit before tax of US\$9.5bn, 9% lower than in 2009. On an underlying basis, which excludes the gains resulting from the sale of Eversholt Rail Group and HSBC Private Equity (Asia) Ltd in 2010, profit before tax declined by 14%, driven by lower income from Balance Sheet Management and Credit and Rates trading and higher operating costs. Profitability benefited from a significant reduction in loan impairment charges and other credit risk provisions. Operating results remained well diversified across our businesses with a strong contribution from emerging markets, where we continued to support existing and anticipated new business, including introducing a 'China desk' in the Middle East and a 'Latam desk' in Hong Kong.
- Net operating income before loan impairment charges and other credit risk provisions decreased by 11%, mainly due to lower net interest income in Balance Sheet Management from the maturing of higher yielding positions, low interest rates and flattening yield curves. Lower trading income largely reflected uncertainty in the eurozone, particularly in the second half of 2010. This was offset in part by a net release of US\$429m largely relating to legacy positions in Credit trading and monoline Credit exposures, compared with a reported write-down of US\$331m in 2009, following a general improvement in ABS prices. Trading income also benefited from a small favourable fair value movement on structured liabilities, compared with an adverse fair value movement in 2009, resulting in a reported favourable movement of US\$466m.
- Loan impairment charges and other credit risk provisions decreased by US\$2.2bn. A US\$1.2bn reduction in loan impairment charges to US\$500m was driven by a general improvement in the credit environment and the non-recurrence of significant charges taken in relation to a small number of clients in 2009. Credit risk provisions on the available-for-sale portfolio decreased by US\$981m to US\$490m, of which US\$444m related to ABSs, significantly lower than the US\$1.5bn impairment reported in 2009, due to a slowing in the rate of anticipated losses in the underlying collateral pools.
- Higher operating expenses in 2010 reflected the one-off payroll and bonus taxes in the UK and France on certain bonuses paid in respect of 2009 totalling US\$309m, the non-recurrence of an accounting gain related to a change in the

For footnotes, see page 83.

Management view of total operating income

	2010 US\$m	2009 US\$m	2008 US\$m
Global Markets ⁵⁰	9,173	10,364	2,676
Credit	1,649	2,330	(5,502)
Rates	2,052	2,648	2,033
Foreign Exchange	2,752	2,979	3,842
Equities	755	641	(64)
Securities Services ⁵¹	1,511	1,420	2,116
Asset and Structured Finance	454	346	251
Global Banking	4,621	4,630	5,718
Financing and Equity Capital Markets	2,852	3,070	3,572
Payments and Cash Management ⁵²	1,133	1,053	1,665
Other transaction services ⁵³	636	507	481
Balance Sheet Management ⁵⁴	4,102	5,390	3,618
Global Asset Management	1,077	939	934
Principal Investments	319	42	(415)
Other ⁵⁵	655	455	987
Total operating income	19,947	21,820	13,518

Comparative information has been adjusted to reflect the current management view.

For footnotes, see page 83.

delivery of certain staff benefits in the main UK pension scheme in 2009, higher support costs and continued investment in strategic initiatives being undertaken to drive future revenue growth. These included the development of Prime Services and equity market capabilities and the expansion of the Rates and Foreign Exchange e-commerce platforms. The percentage of total reported compensation pool allocated in respect of performance in 2010 to revenues net of loan impairment charges (excluding payroll taxes levied on 2009 bonuses) remained consistent with 2009 on a reported basis.

- Global Markets' revenues were second only to the results recorded in 2009, demonstrating the continuing strength of our client-facing businesses. Trading income declined, driven by increased competition and reduced margins across core products. Credit and Rates were adversely affected by less favourable market conditions as European sovereign debt concerns resulted in increased economic uncertainty in the eurozone. Foreign Exchange revenues were lower, reflecting spread compression in the more competitive trading environment and a decline in market volatility. Investment in the Equities business, particularly the enhancement

of the sales and trading platforms, led to increased market share in our target markets despite lower market volumes and increased competition. Securities Services income grew by 4%, with particularly strong performances in Asia driven by increasing market values and Latin America due to higher interest income. Asset and Structured Finance reported higher revenues from increased deal activity during the year.

- Global Banking produced a robust performance as it continued the strategy of focusing on key client relationships to drive market share growth in event-driven and other ancillary businesses. A decrease in revenues from Financing and Equity Capital Markets was due to the adverse effect of continued spread compression. Higher project and export finance revenues were driven by increased deal volumes, while growth in revenue and market share was achieved in the advisory business. Equity Capital Markets revenues fell as total deal values declined due to a reduction in client activity. Despite the adverse effect of the continued low interest rate environment, Payments and Cash Management delivered a 6% increase in revenue driven by strong growth in transaction-driven fee income and customer account balances in Asia.
- Revenues in Balance Sheet Management remained high by historical standards but, as expected, declined in 2010 as higher-yielding positions matured and the opportunity for reinvestment was limited by the prevailing low interest rate environment and flatter yield curves.
- Robust revenue growth was reported in Global Asset Management. Higher management fee income was recorded across all regions, most notably in our emerging markets businesses. Funds under management ('FuM') reached a year-end high of US\$439bn at 31 December 2010 of which emerging markets FuM, in countries outside North America, Western Europe, Japan and Australia, were US\$145bn. Total FuM grew by 4% compared with 2009, benefiting from positive net inflows of US\$16bn and strengthening market performance. New funds launched in the year included the Global High Income Fund and the MultiAlpha Global High Yield Bond Fund.
- Principal Investments reported an increase in revenues as improved market conditions resulted in higher gains on sale and a reduction in impairments.

Report of the Directors: Operating and Financial Review (continued)

Customer groups and global businesses > GPB / Other

Global Private Banking

GPB works with our high net worth clients to offer both traditional and innovative ways to manage and preserve wealth while optimising returns.

	2010 US\$m	2009 US\$m	2008 US\$m
Net interest income	1,345	1,474	1,612
Net fee income	1,299	1,236	1,476
Other income	449	402	543
Net operating income⁴⁶ ..	3,093	3,112	3,631
Impairment (charges)/ recoveries ⁴⁷	12	(128)	(68)
Net operating income	3,105	2,984	3,563
Total operating expenses ..	(2,035)	(1,884)	(2,116)
Operating profit	1,070	1,100	1,447
Income from associates ⁴⁸ ..	(16)	8	—
Profit before tax	1,054	1,108	1,447

Client assets over 6% up at

US\$390bn

2009: US\$367bn; 2008: US\$352bn

**Higher investment in GPB
operations in Asia,
Latin America and the Middle East**

Best Global Wealth Manager

Euromoney Awards for Excellence 2010

**Best Private Bank in
Asia**

*Euromoney 2011 Private
Banking Survey*

**Outstanding Private
Bank – Middle East**

*Private Banker International
Awards 2010*

Strategic direction

GPB strives to be the world's leading international private bank, recognised for excellent client experience and global connections.

Our brand, capital strength, extensive global network and positioning provide a strong foundation from which GPB continues to attract and retain clients. Product and service leadership in areas such as alternative investments, foreign exchange, estate planning, credit and investment advice helps us meet the complex international financial needs of individuals and families.

We are well-positioned for sustainable long-term growth through continuing investment in our people, integrated IT solutions and emerging markets-focused domestic operations, along with ensuring our cross-border business meets high standards in the evolving regulatory environment.

For footnotes, see page 83.

Review of performance

- Reported profit before tax was US\$1.1bn, 5% below 2009 on a reported and an underlying basis, driven by lower net interest income as the persistent low interest rate environment continued to affect deposit spreads and higher operating expenses. Loan impairment charges fell following the non-recurrence of a single specific impairment charge in North America in 2009 and the release of several charges made in previous years as markets recovered.
- Net fee income and trading income rose, notably in Asia, as improved client risk appetite led to higher levels of activity, an increase in transaction volumes and positive net inflows of client assets.
- Operating expenses increased, reflecting the hiring of front-line staff to cover emerging markets as part of a long-term strategy to further strengthen our international network to better serve clients, along with investment in systems and higher compliance costs resulting from the evolving regulatory environment.

Client assets

	2010 US\$b	2009 US\$b
At 1 January	367	352
Net new money	13	(7)
Value change	13	27
Exchange and other	(3)	(5)
At 31 December	390	367

- Reported client assets, which include funds under management and cash deposits, increased by US\$23bn due to net new money inflows compared with outflows in 2009, and favourable market movements. Net inflows benefited from our strength in emerging markets, newly recruited key relationship managers, and cross-business referrals which generated US\$8bn in 2010. This also resulted in an increase in 'total client assets', the equivalent to many industry definitions of assets under management which includes some non-financial assets held in client trusts, from US\$460bn to US\$499bn. Investor demand for alternatives, including real estate investments, also attracted strong inflows into HSBC Alternative Investments Limited.
- The Family Office Partnership had a number of successes in its first full year, producing a complete range of corporate and personal solutions for top tier clients and strengthening its links with GB&M.

Other

'Other' contains the results of certain property transactions, unallocated investment activities, centrally held investment companies, movements in fair value of own debt, HSBC's holding company and financing operations.

	2010 US\$m	2009 US\$m	2008 US\$m
Net interest expense	(998)	(1,035)	(956)
Net trading income/ (expense)	(311)	279	(530)
Net income/(expense) from financial instruments designated at fair value ..	(216)	(6,443)	7,426
Other income	6,185	5,176	6,355
Net operating income/ (expense)⁴⁶	4,660	(2,023)	12,295
Impairment (charges)/ recoveries ⁴⁷	3	(8)	(5)
Net operating income/ (expense)	4,663	(2,031)	12,290
Total operating expenses ..	(5,918)	(4,715)	(4,174)
Operating profit/(loss)	(1,255)	(6,746)	8,116
Income from associates ⁴⁸ ..	94	26	41
Profit/(loss) before tax	(1,161)	(6,720)	8,157

US\$250m

**gain on sale and leaseback of Paris
and New York headquarters buildings**

US\$6.5bn

**reduction in adverse fair value
movements on own debt**

**Investment in
Group Service Centres
as migrated activities increase**

Notes

- Reported loss before tax of US\$1.2bn compared with a loss before tax of US\$6.7bn in 2009. This included adverse movements of US\$63m on the fair value of our own debt attributable to movements in credit spreads in 2010, compared with adverse movements of US\$6.5bn in 2009. In addition, 2010 included gains of US\$188m following the dilution of our holding in Ping An Insurance and US\$62m on the reclassification of Bao Viet to an associate following the purchase of an additional 8% stake. On an underlying basis, the loss before tax increased by US\$1.2bn to US\$1.3bn. The main items reported under 'Other', are described in footnote 44 on page 85.
- Net trading expense of US\$311m compared with income of US\$276m in 2009. This change was largely attributable to fair value movements on cross-currency swaps used to economically hedge fixed rate long-term debt issued by HSBC Holdings. The adverse fair value movements of US\$304m, which were driven by a decline in long-term US interest rates relative to sterling and euro rates, compared with favourable fair value movements of US\$748m on these instruments in 2009. This was partly offset by the non-recurrence of fair value losses arising from the implied contingent forward contract entered into with the underwriters of our rights issue in 2009 and forward foreign exchange contracts associated with the rights issue, which were accounted as derivatives with fair value taken to profit or loss in 2009.
- We recognised gains of US\$194m and US\$56m, respectively, from the sale and leaseback of our headquarters buildings in Paris and New York. These compared with more substantial underlying gains totalling US\$667m (US\$686m as reported) on the sale and leaseback of 8 Canada Square, London and the sale of a property in Hong Kong in 2009.
- Operating expenses rose by 24% to US\$5.9bn as an increasing number of operational activities were centralised, notably in the US. These costs were previously incurred directly by customer groups, but are now recorded in 'Other' and charged to customer groups through a recharge mechanism with income reported as 'Other operating income'. In addition, costs at our Group Service Centres rose by 6% as the number of migrated activities increased in line with our Global Resourcing model.

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Report of the Directors: Operating and Financial Review (continued)

Customer groups and global businesses > Analysis

Analysis by customer group and global business

HSBC profit/(loss) before tax and balance sheet data

	2010						
	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other ⁴⁴ US\$m	Inter- segment elimination ⁵⁶ US\$m	Total US\$m
<i>Profit/(loss) before tax</i>							
Net interest income/(expense) ...	24,161	8,487	7,348	1,345	(998)	(902)	39,441
Net fee income	7,336	3,964	4,725	1,299	31	–	17,355
Trading income/(expense) excluding net interest income	(107)	427	4,327	391	(358)	–	4,680
Net interest income on trading activities	28	28	1,504	21	47	902	2,530
Net trading income/(expense) ⁴⁹ ..	(79)	455	5,831	412	(311)	902	7,210
Changes in fair value of long- term debt issued and related derivatives	–	–	–	–	(258)	–	(258)
Net income from other financial instruments designated at fair value	1,210	190	36	–	42	–	1,478
Net income/(expense) from financial instruments designated at fair value	1,210	190	36	–	(216)	–	1,220
Gains less losses from financial investments	42	(1)	797	(6)	136	–	968
Dividend income	27	12	48	5	20	–	112
Net earned insurance premiums ..	9,737	1,379	41	–	(11)	–	11,146
Other operating income	650	585	1,147	38	6,005	(5,863)	2,562
Total operating income	43,084	15,071	19,973	3,093	4,656	(5,863)	80,014
Net insurance claims ⁵⁷	(10,508)	(1,237)	(26)	–	4	–	(11,767)
Net operating income ⁴⁶	32,576	13,834	19,947	3,093	4,660	(5,863)	68,247
Loan impairment (charges)/ recoveries and other credit risk provisions	(11,259)	(1,805)	(990)	12	3	–	(14,039)
Net operating income	21,317	12,029	18,957	3,105	4,663	(5,863)	54,208
Employee expenses ⁵⁸	(5,388)	(2,153)	(4,735)	(1,237)	(6,323)	–	(19,836)
Other operating expenses	(13,417)	(4,678)	(5,227)	(798)	405	5,863	(17,852)
Total operating expenses	(18,805)	(6,831)	(9,962)	(2,035)	(5,918)	5,863	(37,688)
Operating profit/(loss)	2,512	5,198	8,995	1,070	(1,255)	–	16,520
Share of profit/(loss) in associates and joint ventures ..	1,006	892	541	(16)	94	–	2,517
Profit/(loss) before tax	3,518	6,090	9,536	1,054	(1,161)	–	19,037
	%	%	%	%	%		%
Share of HSBC's profit before tax	18.5	32.0	50.1	5.5	(6.1)		100.0
Cost efficiency ratio	57.7	49.4	49.9	65.8	127.0		55.2
<i>Balance sheet data</i> ⁴⁵							
	US\$m	US\$m	US\$m	US\$m	US\$m		US\$m
Loans and advances to customers (net)	390,957	239,286	284,503	40,665	2,955		958,366
Total assets	527,698	296,797	1,758,315	116,846	161,458	(406,425)	2,454,689
Customer accounts	525,184	286,007	308,453	107,130	951		1,227,725

	2009						
	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other ⁴⁴ US\$m	Inter- segment elimination ⁵⁶ US\$m	Total US\$m
<i>Profit/(loss) before tax</i>							
Net interest income/(expense)	25,107	7,883	8,610	1,474	(1,035)	(1,309)	40,730
Net fee income	8,238	3,702	4,363	1,236	125	–	17,664
Trading income excluding net interest income	637	332	4,701	322	244	–	6,236
Net interest income on trading activities	65	22	2,174	22	35	1,309	3,627
Net trading income ⁴⁹	702	354	6,875	344	279	1,309	9,863
Changes in fair value of long- term debt issued and related derivatives	–	–	–	–	(6,247)	–	(6,247)
Net income/(expense) from other financial instruments designated at fair value	2,339	100	473	–	(196)	–	2,716
Net income/(expense) from financial instruments designated at fair value	2,339	100	473	–	(6,443)	–	(3,531)
Gains less losses from financial investments	224	23	265	5	3	–	520
Dividend income	33	8	68	5	12	–	126
Net earned insurance premiums ..	9,534	886	54	–	(3)	–	10,471
Other operating income	809	739	1,146	48	5,042	(4,996)	2,788
Total operating income/ (expense)	46,986	13,695	21,854	3,112	(2,020)	(4,996)	78,631
Net insurance claims ⁵⁷	(11,571)	(842)	(34)	–	(3)	–	(12,450)
Net operating income/ (expense) ⁴⁶	35,415	12,853	21,820	3,112	(2,023)	(4,996)	66,181
Loan impairment charges and other credit risk provisions	(19,902)	(3,282)	(3,168)	(128)	(8)	–	(26,488)
Net operating income/ (expense)	15,513	9,571	18,652	2,984	(2,031)	(4,996)	39,693
Employee expenses ⁵⁸	(6,069)	(2,072)	(4,335)	(1,198)	(4,790)	–	(18,464)
Other operating expenses	(12,223)	(3,891)	(4,202)	(686)	75	4,996	(15,931)
Total operating expenses	(18,292)	(5,963)	(8,537)	(1,884)	(4,715)	4,996	(34,395)
Operating profit/(loss)	(2,779)	3,608	10,115	1,100	(6,746)	–	5,298
Share of profit in associates and joint ventures	714	667	366	8	26	–	1,781
Profit/(loss) before tax	(2,065)	4,275	10,481	1,108	(6,720)	–	7,079
	%	%	%	%	%		%
Share of HSBC's profit before tax	(29.2)	60.4	148.1	15.6	(94.9)		100.0
Cost efficiency ratio	51.7	46.4	39.1	60.5	(233.1)		52.0
<i>Balance sheet data⁴⁵</i>							
	US\$m	US\$m	US\$m	US\$m	US\$m		US\$m
Loans and advances to customers (net)	399,460	199,674	256,956	37,031	3,110		896,231
Total assets	554,074	251,143	1,683,672	116,148	150,983	(391,568)	2,364,452
Customer accounts	499,109	267,388	284,727	106,533	1,277		1,159,034

For footnotes, see page 83.

Report of the Directors: Operating and Financial Review (continued)

Geographical regions > Summary / Europe

Geographical regions

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Summary

Additional information on results in 2010 may be found in the 'Financial Summary' on pages 14 to 36.

In the analysis of profit by geographical regions that follows, operating income and operating expenses include intra-HSBC items of US\$3,125m (2009: US\$2,756m; 2008: US\$2,492m).

Profit/(loss) before tax

	2010		2009		2008	
	US\$m	%	US\$m	%	US\$m	%
Europe	4,302	22.6	4,009	56.7	10,869	116.7
Hong Kong	5,692	29.9	5,029	71.0	5,461	58.7
Rest of Asia-Pacific	5,902	31.0	4,200	59.3	4,722	50.7
Middle East	892	4.7	455	6.4	1,746	18.8
North America	454	2.4	(7,738)	(109.3)	(15,528)	(166.8)
Latin America	1,795	9.4	1,124	15.9	2,037	21.9
	19,037	100.0	7,079	100.0	9,307	100.0

Total assets⁴⁵

	At 31 December			
	2010		2009	
	US\$m	%	US\$m	%
Europe	1,249,527	50.9	1,268,600	53.7
Hong Kong	429,565	17.5	399,243	16.9
Rest of Asia-Pacific	278,062	11.3	222,139	9.4
Middle East	52,757	2.1	48,107	2.0
North America	492,487	20.1	475,014	20.1
Latin America	139,938	5.7	115,967	4.9
Intra-HSBC items	(187,647)	(7.6)	(164,618)	(7.0)
	2,454,689	100.0	2,364,452	100.0

Risk-weighted assets⁵⁹

	At 31 December			
	2010		2009	
	US\$bn	%	US\$bn	%
Total	1,103.1		1,133.2	
Europe	301.6	27.2	339.7	29.8
Hong Kong	106.9	9.7	119.5	10.5
Rest of Asia-Pacific	217.5	19.6	173.9	15.3
Middle East	54.1	4.9	54.3	4.8
North America	330.7	29.9	369.2	32.4
Latin America	95.9	8.7	81.7	7.2

For footnotes, see page 83.

Europe

Our principal banking operations in Europe are HSBC Bank plc in the UK, HSBC France, HSBC Bank A.S. in Turkey, HSBC Bank Malta p.l.c., HSBC Private Bank (Suisse) S.A. and HSBC Trinkaus & Burkhardt AG. Through these operations we provide a wide range of banking, treasury and financial services to personal, commercial and corporate customers across Europe.

	2010 US\$m	2009 US\$m	2008 US\$m
Net interest income	11,250	12,268	9,696
Net fee income	6,371	6,267	7,492
Net trading income	2,863	5,459	5,357
Other income/(expense)	2,266	(450)	8,134
Net operating income⁴⁶ ..	22,750	23,544	30,679
Impairment charges ⁴⁷	(3,020)	(5,568)	(3,754)
Net operating income	19,730	17,976	26,925
Total operating expenses ..	(15,445)	(13,988)	(16,072)
Operating profit	4,285	3,988	10,853
Income from associates ⁴⁸ ..	17	21	16
Profit before tax	4,302	4,009	10,869
Cost efficiency ratio	67.9%	59.4%	52.4%
Year-end staff numbers	75,698	76,703	82,093

**Reduction in
underlying impairment charges⁴⁷**
45%

**Total UK mortgage
market share**
5.2%
2009: 4.8%

**Strong trade
revenue growth**

For footnotes, see page 83.

The commentary on Europe is on an underlying basis unless stated otherwise.

Economic background

After falling by 4.9% in 2009, UK Gross Domestic Product ('GDP') only partially recovered in 2010, rising 1.4%. This revival in activity was not reflected in a corresponding rise in employment, and the unemployment rate remained at 7.9% in the three months to November. Despite the general economic weakness, the annual rate of Consumer Price Index ('CPI') inflation rose during 2010, reaching 3.7% in December, partly because of the rise in value added tax to 17.5% in January, and increases in the price of food and energy following rapid gains in global commodity prices. Wage growth remained subdued, however, with average earnings rising just 2.0% in the year to December. The Bank of England chose to maintain Bank Rate at 0.5% throughout 2010.

The eurozone economy also partially recovered during the year, with GDP rising 1.7% in 2010 compared to 2009. The region benefited from the pick-up in the world economy and some improvement in domestic demand. Within the region, Germany recorded the strongest growth rate with its GDP rising 3.5% in the year as a whole. The unemployment rate in the eurozone increased slightly to 10.0% by the end of 2010. The large increases in government debt that emerged in certain parts of the region in recent years began to put upward pressure on government bond yields during 2010, and some governments encountered funding difficulties. In response, a temporary European support fund, the €440bn European Financial Stability Facility was created, and the EU set aside €60bn in a package named the European Financial Stabilisation Mechanism. Greece received a €110bn aid package provided jointly by the International Monetary Fund and eurozone governments. Ireland also drew on international assistance in December. The European Central Bank left its key interest rate at 1.0% throughout the year.

Review of performance

Our European operations reported a pre-tax profit of US\$4.3bn, compared with US\$4.0bn in 2009, an increase of 7%. In 2010, this included adverse fair value movements of US\$198m due to the change in credit spreads on the Group's own debt held at fair value, compared with adverse fair value movements of US\$2.8bn in 2009. In addition, we made gains of US\$107m on the disposal of the HSBC Insurance Brokers business and US\$255m on the sale of Eversholt Rail Group. In 2009, we recorded a gain on the sale of the residual stake in our UK card merchant acquiring business. Excluding these items, underlying pre-tax profits decreased by 35%,

Report of the Directors: Operating and Financial Review (continued)

Geographical regions > Europe

Profit/(loss) before tax by country within customer groups and global businesses

	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Total US\$m
2010						
UK	1,223	827	1,730	223	(1,605)	2,398
France ⁶⁰	109	135	405	18	26	693
Germany	—	32	267	30	4	333
Malta	35	56	19	—	—	110
Switzerland	—	(5)	—	265	—	260
Turkey	64	80	105	1	—	250
Other	(142)	80	200	103	17	258
	1,289	1,205	2,726	640	(1,558)	4,302
2009						
UK	364	1,026	3,045	252	(2,561)	2,126
France ⁶⁰	54	102	894	3	(429)	624
Germany	—	21	255	32	(18)	290
Malta	33	58	9	—	—	100
Switzerland	—	—	5	448	(3)	450
Turkey	43	97	119	2	—	261
Other	(182)	(12)	218	117	17	158
	312	1,292	4,545	854	(2,994)	4,009
2008						
UK	1,546	2,361	(469)	250	2,997	6,685
France ⁶⁰	139	176	273	10	2,242	2,840
Germany	—	31	184	32	(22)	225
Malta	59	67	16	—	—	142
Switzerland	—	—	—	553	—	553
Turkey	3	91	130	—	—	224
Other	(89)	(4)	61	153	79	200
	1,658	2,722	195	998	5,296	10,869

For footnote, see page 83.

largely due to lower income from GB&M, whose exceptional results of 2009 were not repeated, and an unfavourable year on year movement in certain non-qualifying hedges of US\$1.1bn.

GB&M results remained strong by historical standards. However, revenues decreased in 2010 due to less favourable market conditions caused by the impact of the European sovereign debt crisis, particularly in the second half of the year, and lower revenues, as forecast, in Balance Sheet Management.

In PFS, we continued to build long-term relationships through our Premier and Advance offerings, focusing on wealth management and secured lending. We increased our total UK mortgage market share to 5.2%, while maintaining a conservative new lending loan to value ratio of 54%.

In CMB, we made further progress on our strategy of becoming the leading international business bank. We also expanded our business in Germany and launched in Switzerland. In the UK, we increased new lending to SMEs by 19% in 2010.

Net interest income decreased by 7%. Balance Sheet Management revenues declined, as higher-yielding positions matured, interest rates remained low and yield curves flattened in 2010. In Global Banking, tighter spreads in the lending business and lower average lending balances as customers reduced their debt also contributed to the decrease. Customer deposit spreads were adversely affected by the low interest rate environment and competition for deposits. These reductions were offset in part by growth in mortgage lending in the UK and improved asset spreads in both PFS and CMB.

Net fee income increased by 7%, reflecting higher management fees due to an increase in the average value of funds under management, which arose from net inflows and higher market performance. Fees were also received for management services we provided to certain of our Structured Investment Conduits. Partly offsetting these increases were reductions in the levels of debt and equity issuance in the market, compared with the significant volumes seen in 2009.

Net trading income decreased by 47% to US\$2.9bn. Less favourable market conditions caused by the impact of the European sovereign debt crisis adversely affected Credit and Rates income. Spread compression from increased competition similarly affected foreign exchange revenues. In addition, net interest income earned on trading activities decreased, driven by reduced holdings of debt securities. These decreases were offset in part by lower net adverse fair value movements on structured liabilities.

Net trading income also included adverse fair value movements of US\$304m on non-qualifying hedges used to economically hedge fixed-rate long-term debt issued by HSBC Holdings. These movements were driven by the decline in long-term US dollar interest rates relative to sterling and euro rates in 2010, and compared with favourable fair value movements of US\$748m on these instruments in 2009.

Within our legacy Credit book, a net release of previous write-downs on ABSs and monoline exposures as asset prices improved was more than offset by the non-recurrence of gains in other parts of the business.

Net income from financial instruments designated at fair value fell by US\$808m. The growth in equity markets in 2010 was lower than in 2009, resulting in lower investment gains recognised on the fair value of assets held to meet liabilities under insurance and investment contracts. To the extent that these gains accrued to policyholders holding unit-linked insurance policies and insurance or investment contracts with DPF, there was a corresponding decrease in 'Net insurance claims incurred and movement in liabilities to policyholders'. In addition, adverse foreign exchange movements were reported in the year on foreign currency debt designated at fair value, issued as part of our overall funding strategy with an offset from trading assets held as economic hedges reported in 'Net trading income'.

Gains less losses from financial investments increased by US\$455m as improved market conditions led to gains on sale of private equity investments and lower impairment charges on certain available-for-sale investments.

Net earned insurance premiums were in line with 2009. The decision in 2009 to place our UK motor insurance business into run-off resulted in no new premiums being written in 2010. In addition, a decision was taken during 2010 not to renew certain contracts in the Irish business. By contrast, we

generated strong sales activity in the UK life and French insurance businesses.

Other operating income decreased by US\$193m because the gain on the sale and leaseback of our Paris headquarters building in 2010 was exceeded by the gain on the sale and leaseback of the Group's London headquarters building in 2009.

Net insurance claims incurred and movement in liabilities to policyholders decreased by 11%. This was driven by lower investment gains compared with 2009 and by the non-recurrence of the strengthening of reserves in 2009 on the now-closed UK motor insurance book which reflected the rising incidence and severity of claims at that time. The decision not to renew certain contracts in the Irish business resulted in a further decrease in claims.

Loan impairment charges and other credit risk provisions decreased by 45% to US\$3.0bn, reflecting the more stable credit environment and helped by mitigating actions taken by management. In GB&M, the improved credit outlook, loan restructuring activity, a release of previous collective impairments and lower specific impairment charges in 2010 contributed to a decline in loan impairment charges and other credit risk provisions. Credit risk provisions on certain available-for-sale ABSs also reduced due to a slowing in the rate of anticipated losses in the underlying collateral pools.

In CMB, the reduction in loan impairment charges and other credit risk provisions was largely due to an improvement in the UK property, retail and services sectors, with reductions also seen in our Continental European businesses. The improvement in economic conditions across the region and the effect of low interest rates also resulted in lower delinquencies in the PFS portfolios.

Operating expenses in 2010 included one-off payroll and bonus taxes in the UK and France on certain bonuses paid in respect of 2009 totalling US\$324m, primarily in GB&M. Operating expenses in 2009 included an accounting gain of US\$480m (US\$499m as reported) related to a change in the delivery of certain staff benefits in the main UK pension scheme. Excluding these items, operating expenses were 8% higher than in 2009. This was driven by continued strategic investments in people and infrastructure to support our customers, drive future growth and deliver sustainable long-term reductions in our cost base by re-engineering business processes. In addition, rental expenses increased following the sale and leaseback of our headquarters buildings in London and Paris.

Report of the Directors: Operating and Financial Review (continued)

Geographical regions > Europe

Profit/(loss) before tax and balance sheet data – Europe

	2010						
	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Inter- segment elimination ⁵⁶ US\$m	Total US\$m
<i>Profit/(loss) before tax</i>							
Net interest income/(expense)	5,536	2,774	2,936	871	(654)	(213)	11,250
Net fee income	2,016	1,570	1,863	883	39	–	6,371
Trading income/(expense) excluding net interest income	(7)	3	1,542	185	(262)	–	1,461
Net interest income/(expense) on trading activities	(1)	19	1,127	21	23	213	1,402
Net trading income/(expense) ⁴⁹ ..	(8)	22	2,669	206	(239)	213	2,863
Changes in fair value of long- term debt issued and related derivatives	–	–	–	–	(365)	–	(365)
Net income/(expense) from other financial instruments designated at fair value	496	113	(23)	–	61	–	647
Net income/(expense) from financial instruments designated at fair value	496	113	(23)	–	(304)	–	282
Gains less losses from financial investments	29	–	460	(7)	4	–	486
Dividend income	–	1	16	2	1	–	20
Net earned insurance premiums ..	3,800	278	–	–	(11)	–	4,067
Other operating income	165	163	839	7	754	189	2,117
Total operating income/ (expense)	12,034	4,921	8,760	1,962	(410)	189	27,456
Net insurance claims ⁵⁷	(4,364)	(342)	–	–	–	–	(4,706)
Net operating income/ (expense) ⁴⁶	7,670	4,579	8,760	1,962	(410)	189	22,750
Loan impairment (charges)/ recoveries and other credit risk provisions	(1,217)	(997)	(783)	(26)	3	–	(3,020)
Net operating income/ (expense)	6,453	3,582	7,977	1,936	(407)	189	19,730
Total operating expenses	(5,166)	(2,378)	(5,265)	(1,296)	(1,151)	(189)	(15,445)
Operating profit/(loss)	1,287	1,204	2,712	640	(1,558)	–	4,285
Share of profit in associates and joint ventures	2	1	14	–	–	–	17
Profit/(loss) before tax	1,289	1,205	2,726	640	(1,558)	–	4,302
	%	%	%	%	%		%
Share of HSBC's profit before tax	6.8	6.3	14.3	3.4	(8.2)		22.6
Cost efficiency ratio	67.4	51.9	60.1	66.1	(280.7)		67.9
<i>Balance sheet data</i> ⁴⁵							
	US\$m	US\$m	US\$m	US\$m	US\$m		US\$m
Loans and advances to customers (net)	145,063	91,744	170,375	27,629	988		435,799
Total assets	202,431	111,356	965,462	76,631	65,824	(172,177)	1,249,527
Customer accounts	168,979	96,597	169,873	56,114	–		491,563

	2009						
	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Inter- segment elimination ⁵⁶ US\$m	Total US\$m
<i>Profit/(loss) before tax</i>							
Net interest income/(expense)	5,413	2,739	4,367	949	(525)	(675)	12,268
Net fee income	1,949	1,679	1,670	883	86	–	6,267
Trading income excluding net interest income	34	3	2,267	175	382	–	2,861
Net interest income/(expense) on trading activities	(1)	17	1,869	23	15	675	2,598
Net trading income ⁴⁹	33	20	4,136	198	397	675	5,459
Changes in fair value of long- term debt issued and related derivatives	–	–	–	–	(2,746)	–	(2,746)
Net income/(expense) from other financial instruments designated at fair value	1,012	133	375	–	(199)	–	1,321
Net income/(expense) from financial instruments designated at fair value	1,012	133	375	–	(2,945)	–	(1,425)
Gains less losses from financial investments	20	2	25	5	(2)	–	50
Dividend income	2	1	26	3	(3)	–	29
Net earned insurance premiums ..	3,975	253	(2)	–	(3)	–	4,223
Other operating income	182	373	670	28	914	95	2,262
Total operating income/ (expense)	12,586	5,200	11,267	2,066	(2,081)	95	29,133
Net insurance claims ⁵⁷	(5,221)	(365)	–	–	(3)	–	(5,589)
Net operating income/ (expense) ⁴⁶	7,365	4,835	11,267	2,066	(2,084)	95	23,544
Loan impairment charges and other credit risk provisions	(1,992)	(1,267)	(2,277)	(29)	(3)	–	(5,568)
Net operating income/ (expense)	5,373	3,568	8,990	2,037	(2,087)	95	17,976
Total operating expenses	(5,062)	(2,294)	(4,447)	(1,183)	(907)	(95)	(13,988)
Operating profit/(loss)	311	1,274	4,543	854	(2,994)	–	3,988
Share of profit in associates and joint ventures	1	18	2	–	–	–	21
Profit/(loss) before tax	312	1,292	4,545	854	(2,994)	–	4,009
	%	%	%	%	%		%
Share of HSBC's profit before tax	4.4	18.3	64.2	12.1	(42.3)		56.7
Cost efficiency ratio	68.7	47.4	39.5	57.3	(43.5)		59.4
<i>Balance sheet data⁴⁵</i>							
	US\$m	US\$m	US\$m	US\$m	US\$m		US\$m
Loans and advances to customers (net)	147,760	89,084	176,123	25,541	973		439,481
Total assets	208,669	111,874	981,831	76,871	84,010	(194,655)	1,268,600
Customer accounts	165,161	102,249	169,390	58,213	6		495,019

For footnotes, see page 83.

Report of the Directors: Operating and Financial Review (continued)

Geographical regions > Hong Kong

Hong Kong

HSBC's principal banking subsidiaries in Hong Kong are The Hongkong and Shanghai Banking Corporation Limited and Hang Seng Bank Limited. The former is the largest bank incorporated in Hong Kong and is our flagship bank in the Asia-Pacific region. It is one of Hong Kong's three note-issuing banks, accounting for more than 65% by value of banknotes in circulation in 2010.

	2010 US\$m	2009 US\$m	2008 US\$m
Net interest income	4,246	4,195	5,698
Net fee income	2,962	2,669	2,580
Net trading income	1,312	1,225	1,193
Other income	1,682	1,378	683
Net operating income⁴⁶ ..	10,202	9,467	10,154
Impairment charges ⁴⁷	(114)	(500)	(765)
Net operating income	10,088	8,967	9,389
Total operating expenses ..	(4,431)	(3,946)	(3,943)
Operating profit	5,657	5,021	5,446
Income from associates ⁴⁸ ..	35	8	15
Profit before tax	5,692	5,029	5,461
Cost efficiency ratio	43.4%	41.7%	38.8%
Year-end staff numbers	29,171	27,614	29,330

Best Bank in Hong Kong

(Euromoney Awards for Excellence 2010)

**Market leadership in mortgages,
cards, life insurance
and deposits**

64%
**growth in
commercial lending balances**

For footnotes, see page 83.

The commentary on Hong Kong is on an underlying basis unless stated otherwise.

Economic background

Relatively low interest rates and rapid growth in demand from mainland China contributed to Hong Kong's economic recovery in 2010. GDP in the year was 6.8% higher than in 2009. A revival in both employment and wage growth helped to boost consumer demand. Inflationary pressures began to emerge in the second half of the year with the annual rate of CPI inflation rising to 3.1% in December. The government initiated a number of measures in November aimed at restricting the pace of price increases in the property market.

Review of performance

Our operations in Hong Kong reported pre-tax profits of US\$5.7bn compared with US\$5.0bn in 2009, an increase of 13%. On an underlying basis, excluding accounting gains arising from the reclassification of Bao Viet as an associate and following the sale of HSBC Private Equity (Asia) Ltd, profit before tax increased by 11%.

The increase in profitability was driven by strong revenue growth, particularly in investment and insurance product sales and trade-related fees, as we capitalised on the improved economic conditions. Lending balances rose, most notably in CMB and GB&M following a recovery in trade flows and strong economic growth. Customer deposit balances increased, reflecting growth in customer numbers in PFS and CMB. Loan impairment charges were significantly lower than in 2009 across all customer groups, reflecting an improvement in credit conditions. Revenue growth was in part offset by an increase in staff and IT costs driven by business expansion to maintain our strong market position.

We retained our market leadership in residential mortgages, credit cards, life insurance and deposits. The Premier customer base increased by 31% compared with 31 December 2009 to more than 500,000 customers. The Advance proposition, which was launched in early 2010, had a customer base of over 670,000 by the end of the year. In life insurance, we retained the number one market share position for new business annualised premiums as a result of successful sales activity and customer demand and a strategy targeted towards the high net worth customer segment. CMB's cross-border referrals more than doubled with the increase in trade flows from mainland China. We continued the development of offshore renminbi-related products and maintained our position as a market leader for renminbi products in Hong Kong.

Profit/(loss) before tax by customer group and global business

	2010 US\$m	2009 US\$m	2008 US\$m
Personal Financial Services	2,918	2,728	3,428
Commercial Banking	1,352	956	1,315
Global Banking and Markets	1,430	1,507	1,436
Global Private Banking	227	197	237
Other	(235)	(359)	(955)
	5,692	5,029	5,461

Net interest income was broadly in line with 2009, as strong loan growth was partly offset by lower spreads resulting from competitive pressures and the low interest rate environment. In Balance Sheet Management, net interest income decreased as yield curves flattened, higher yielding positions matured and funds were reinvested at lower rates.

The recovery in trade volumes in 2010 and the pursuit of CMB's leading international bank for business strategy resulted in significant growth in commercial lending, notably in commercial, industrial and trade related lending. To a lesser extent, growth was also noted in commercial real estate, supported by a buoyant property market. Average personal lending balances also rose, driven by strong growth in residential mortgage lending, where we continued to lend conservatively with average loan-to-value ratios of 55% on new mortgage drawdowns and an estimated 38% on the overall portfolio.

Asset spreads narrowed as a result of competitive pressures, particularly in trade-related lending and HIBOR-linked residential mortgages.

The growth in customer numbers in the Premier proposition in PFS and new-to-bank customers in CMB resulted in increased customer deposits. The benefit of the higher average deposit balances was limited by narrower deposit spreads as interest rates remained at historically low levels.

Net fee income increased by 11%, primarily due to an increase in sales of investment products driven by improved market sentiment and successful sales campaigns, and growth in trade-related fees and income from Payments and Cash Management as volumes improved. Fees from funds under management also grew as a result of higher net inflows and improved fund performance, while underwriting fees rose due to several significant initial public offerings ('IPO's) and loan syndications concluded in 2010.

Net trading income was 7% higher than in 2009. Increased holdings of debt securities led to a rise in net interest income from trading activities. Foreign exchange revenues benefited from increased turnover due to high levels of client demand. This

was partly offset by lower revenues from Credit trading, following the strong results achieved in 2009 as credit spreads narrowed, and from Rates trading as market volatility reduced in 2010.

Net income from financial instruments designated at fair value was US\$384m compared with US\$784m in 2009. The movement was primarily due to lower revaluation gains in 2010 on assets held to support linked insurance liabilities, where the value of our liabilities to policyholders is determined in line with the value of supporting assets. To the extent that these lower investment gains were attributed to policyholders, there was a corresponding decrease in *Net insurance claims incurred and movement in liabilities to policyholders*.

Net earned insurance premiums grew by 18% to US\$4.3bn as successful sales campaigns drove strong growth, particularly in deferred annuity and unit-linked products. A life insurance product targeted at high net worth individuals also performed well. Growth in the insurance business resulted in a related increase in 'Net insurance claims incurred and movement in liabilities to policyholders'.

Other operating income increased by 21% to US\$1.5bn due to an increase in PVIF reflecting higher life insurance sales, partly offset by the non-recurrence of a gain on sale of a property in 2009.

Loan impairment charges and other credit risk provisions decreased by 77% to US\$114m, reflecting the recovery in economic conditions. Lower specific impairment charges in CMB and GB&M were incurred as credit conditions improved and loan impairment charges fell in PFS, mainly on unsecured lending as unemployment and bankruptcy levels fell.

Operating expenses rose by 12% as the business grew and the economy recovered. Staff costs grew as we recruited in a competitive market and from general wage increases, while bonuses rose in line with the strong business performance. Marketing costs rose notably in PFS due to the launch of several large campaigns, including Advance and credit cards promotions and rising transaction volumes led to higher back office and support costs.

Report of the Directors: Operating and Financial Review (continued)

Geographical regions > Hong Kong

Profit/(loss) before tax and balance sheet data – Hong Kong

	2010						
	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Inter- segment elimination ⁵⁶ US\$m	Total US\$m
<i>Profit/(loss) before tax</i>							
Net interest income/(expense)	2,604	1,106	915	173	(463)	(89)	4,246
Net fee income	1,521	634	630	163	14	–	2,962
Trading income/(expense) excluding net interest income	197	121	681	120	(12)	–	1,107
Net interest income on trading activities	4	–	100	–	12	89	205
Net trading income ⁴⁹	201	121	781	120	–	89	1,312
Changes in fair value of long- term debt issued and related derivatives	–	–	–	–	(2)	–	(2)
Net income/(expense) from other financial instruments designated at fair value	328	(10)	61	–	1	–	380
Net income/(expense) from financial instruments designated at fair value	328	(10)	61	–	(1)	–	378
Gains less losses from financial investments	–	–	56	1	41	–	98
Dividend income	–	1	12	–	17	–	30
Net earned insurance premiums ..	3,655	665	12	–	–	–	4,332
Other operating income	503	68	166	12	1,140	(283)	1,606
Total operating income	8,812	2,585	2,633	469	748	(283)	14,964
Net insurance claims ⁵⁷	(4,193)	(559)	(10)	–	–	–	(4,762)
Net operating income ⁴⁶	4,619	2,026	2,623	469	748	(283)	10,202
Loan impairment charges and other credit risk provisions	(76)	(28)	(10)	–	–	–	(114)
Net operating income	4,543	1,998	2,613	469	748	(283)	10,088
Total operating expenses	(1,630)	(653)	(1,187)	(242)	(1,002)	283	(4,431)
Operating profit/(loss)	2,913	1,345	1,426	227	(254)	–	5,657
Share of profit in associates and joint ventures	5	7	4	–	19	–	35
Profit/(loss) before tax	2,918	1,352	1,430	227	(235)	–	5,692
	%	%	%	%	%		%
Share of HSBC's profit before tax	15.3	7.1	7.5	1.2	(1.2)		29.9
Cost efficiency ratio	35.3	32.2	45.3	51.6	134.0		43.4
<i>Balance sheet data</i> ⁴⁵							
	US\$m	US\$m	US\$m	US\$m	US\$m		US\$m
Loans and advances to customers (net)	50,983	48,670	34,491	4,760	1,787		140,691
Total assets ⁶¹	76,665	55,030	223,492	20,598	62,486	(8,706)	429,565
Customer accounts	176,960	71,209	29,388	19,241	686		297,484

	2009						
	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Inter- segment elimination ⁵⁶ US\$m	Total US\$m
<i>Profit/(loss) before tax</i>							
Net interest income/(expense).....	2,577	938	1,150	212	(558)	(124)	4,195
Net fee income	1,410	530	563	125	41	–	2,669
Trading income/(expense) excluding net interest income	186	92	792	91	(93)	–	1,068
Net interest income on trading activities	3	–	16	–	14	124	157
Net trading income/(expense) ⁴⁹ ..	189	92	808	91	(79)	124	1,225
Changes in fair value of long- term debt issued and related derivatives	–	–	–	–	(3)	–	(3)
Net income/(expense) from other financial instruments designated at fair value	707	(46)	138	–	(11)	–	788
Net income/(expense) from financial instruments designated at fair value	707	(46)	138	–	(14)	–	785
Gains less losses from financial investments	80	18	(108)	–	19	–	9
Dividend income	1	1	10	–	16	–	28
Net earned insurance premiums	3,161	500	13	–	–	–	3,674
Other operating income	346	64	59	10	1,062	(267)	1,274
Total operating income	8,471	2,097	2,633	438	487	(267)	13,859
Net insurance claims ⁵⁷	(3,979)	(404)	(9)	–	–	–	(4,392)
Net operating income ⁴⁶	4,492	1,693	2,624	438	487	(267)	9,467
Loan impairment (charges)/ recoveries and other credit risk provisions	(203)	(168)	(131)	1	1	–	(500)
Net operating income	4,289	1,525	2,493	439	488	(267)	8,967
Total operating expenses	(1,566)	(570)	(987)	(242)	(848)	267	(3,946)
Operating profit/(loss)	2,723	955	1,506	197	(360)	–	5,021
Share of profit in associates and joint ventures	5	1	1	–	1	–	8
Profit/(loss) before tax	2,728	956	1,507	197	(359)	–	5,029
	%	%	%	%	%		%
Share of HSBC's profit before tax	38.5	13.5	21.3	2.8	(5.1)		71.0
Cost efficiency ratio	34.9	33.7	37.6	55.3	174.1		41.7
<i>Balance sheet data⁴⁵</i>	US\$m	US\$m	US\$m	US\$m	US\$m		US\$m
Loans and advances to customers (net)	43,869	28,217	21,991	3,361	1,943		99,381
Total assets ⁶¹	83,497	34,743	217,146	20,353	52,508	(9,004)	399,243
Customer accounts	166,445	62,146	26,650	19,474	726		275,441

For footnotes, see page 83.

Report of the Directors: Operating and Financial Review (continued)

Geographical regions > Rest of Asia-Pacific

Rest of Asia-Pacific

We offer a full suite of banking and financial services in mainland China, mainly through our local subsidiary, HSBC Bank (China) Company Limited. We also participate indirectly in mainland China through our four associates.

Outside Hong Kong and mainland China, we conduct business in 22 countries and territories in the Rest of Asia-Pacific region, primarily through branches and subsidiaries of The Hongkong and Shanghai Banking Corporation, with particularly strong coverage in Australia, India, Indonesia, Malaysia and Singapore.

	2010 US\$m	2009 US\$m	2008 US\$m
Net interest income	3,828	3,539	3,937
Net fee income	1,932	1,557	1,867
Net trading income	1,618	1,606	2,042
Other income	1,854	1,301	1,135
Net operating income⁴⁶ ..	9,232	8,003	8,981
Impairment charges ⁴⁷	(439)	(896)	(852)
Net operating income	8,793	7,107	8,129
Total operating expenses ..	(5,143)	(4,450)	(4,704)
Operating profit	3,650	2,657	3,425
Income from associates ⁴⁸ ..	2,252	1,543	1,297
Profit before tax	5,902	4,200	4,722
Cost efficiency ratio	55.7%	55.6%	52.4%
Year-end staff numbers	91,607	87,141	89,706

41%

growth in reported pre-tax profit

**Leadership in renminbi
product development**

**Significant and growing presence
in mainland China**

For footnotes, see page 83.

The commentary on Rest of Asia-Pacific is on an underlying basis unless stated otherwise.

Economic background

Economic activity accelerated in **mainland China**, building on the recovery which began in 2009. Annual GDP growth peaked at 11.9% in the first quarter of the year, as resilient domestic demand coincided with an acceleration in export growth as world demand recovered. Investment growth remained strong amid large scale government infrastructure projects and construction of public housing. Meanwhile, consumer spending was boosted by robust growth in employment and wages. In the final months of 2010, inflation became more of a concern, with the annual rate of CPI inflation rising to 4.6% in December. The People's Bank of China increased the commercial banking sector's required Statutory Deposit Ratio by 4.5 percentage points to 19.5% (for major banks) and 17.0% (for the rest) and raised the policy rate by 50 basis points over the course of the year. The renminbi exchange rate rose by 3% against the US dollar throughout the course of the year.

Japan's economic conditions improved in 2010, led mainly by a recovery in world trade, though unemployment remained at about 5% throughout the year. The Bank of Japan introduced a new programme of monetary stimulus in October 2010, aimed at curbing yen appreciation and reducing the deflationary pressures evident in the economy.

Elsewhere in the region, economies rebounded strongly, with growth in external demand a common feature. Comparing the third quarter of 2010 with the same period in 2009, GDP in **Taiwan** grew by 9.8%, in **South Korea** by 4.4% and in **India** by 8.9%. In the last, concerns emerged over the rate of wholesale price inflation, which rose to 8.4% in December. In **Singapore**, GDP growth was volatile as activity in the pharmaceutical sector fluctuated, contracting at an annualised rate of nearly 19% in the third quarter but rising 6.9% in the fourth quarter. **Malaysian** GDP, boosted by private consumption and exports, rose by 5.3% year on year in the third quarter, after surging 10.1% in the first quarter and 8.9% in the second quarter. In **Thailand**, the re-emergence of political risks in the second quarter of 2010 appeared not to dent household consumption or foreign direct investment. Foreign direct investment into **Indonesia** underpinned GDP growth of 5.8% in the third quarter. The economies of the **Philippines** and **Vietnam** also grew strongly. In **Australia** growth was more modest, in part because of a rise in the Reserve Bank of Australia's interest rate to 4.75% in the second half of the year. Activity in the mining sector continued to grow rapidly.

Profit/(loss) before tax by country within customer groups and global businesses

	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Total US\$m
2010						
Australia	59	96	95	–	8	258
India	(82)	71	507	4	179	679
Indonesia	12	94	116	–	(3)	219
Japan	(76)	–	119	(1)	(6)	36
Mainland China	839	833	683	(7)	217	2,565
Associates	973	746	443	–	188	2,350
Other mainland China	(134)	87	240	(7)	29	215
Malaysia	120	88	194	–	(1)	401
Singapore	126	87	143	84	84	524
South Korea	2	(4)	305	–	50	353
Taiwan	19	36	99	–	(7)	147
Vietnam	(7)	50	61	–	7	111
Other	54	205	262	1	87	609
	1,066	1,556	2,584	81	615	5,902
2009						
Australia	30	32	140	–	(4)	198
India	(219)	(41)	393	1	240	374
Indonesia	(24)	60	129	–	(11)	154
Japan	(79)	–	65	(4)	1	(17)
Mainland China	494	616	479	(7)	50	1,632
Associates	678	558	285	–	–	1,521
Other mainland China	(184)	58	194	(7)	50	111
Malaysia	88	53	140	–	5	286
Singapore	129	77	247	98	(9)	542
South Korea	(3)	(5)	342	–	25	359
Taiwan	(3)	65	96	–	2	160
Vietnam	(8)	40	63	–	6	101
Other	58	167	225	2	(41)	411
	463	1,064	2,319	90	264	4,200
2008						
Australia	19	68	102	–	(13)	176
India	(155)	118	578	2	123	666
Indonesia	(22)	17	126	–	–	121
Japan	(88)	(1)	88	1	4	4
Mainland China	284	622	688	(5)	16	1,605
Associates	393	558	335	–	–	1,286
Other mainland China	(109)	64	353	(5)	16	319
Malaysia	94	96	171	–	8	369
Singapore	104	83	337	110	(37)	597
South Korea	(16)	(13)	304	–	38	313
Taiwan	(41)	45	179	–	(8)	175
Vietnam	(16)	32	63	–	(14)	65
Other	48	168	334	1	80	631
	211	1,235	2,970	109	197	4,722

Report of the Directors: Operating and Financial Review (continued)

Geographical regions > Rest of Asia-Pacific

Review of performance

Our operations in the Rest of Asia-Pacific region reported pre-tax profits of US\$5.9bn compared with US\$4.2bn in 2009, an increase of 41%. Reported profits included an accounting gain of US\$188m arising from the dilution of HSBC's shareholding in Ping An Insurance following its issue of share capital to a third party in 2010. On an underlying basis, which excludes this dilution gain, pre-tax profit rose by 29% as business volumes increased across many countries and all customer groups as the economic environment in the region improved.

The economic performance of the region was reflected in a recovery in trade volumes, an increase in our customers' appetite for investment-related products, strong growth in lending balances and a significant decline in loan impairment charges. All these factors contributed to an increase in our profitability, as did a rise in our share of profit from associates in mainland China. Operating expenses increased to support this business growth.

During 2010 we continued to target growth, particularly in the key regional markets of mainland China, India, Indonesia, Singapore, Malaysia and Australia. We consolidated our position as the leading foreign bank in mainland China with 106 outlets in 27 cities, 16 rural bank outlets and 38 Hang Seng Bank outlets in 13 cities. We maintained our leadership in the development of renminbi products and now have renminbi capabilities in 36 countries across all six continents. In July 2010 we agreed to acquire a substantial part of The Royal Bank of Scotland Group plc's commercial and retail businesses in India. In Malaysia, four additional Amanah branches were opened.

Our focus on higher value segments was reflected in the Premier customer base in the region which grew by 33% while the Advance proposition was launched in nine markets, exceeding 660,000 customers by the year end. In CMB, we continued to build on our international connectivity, with cross-regional referrals nearly doubling as we pursued our objective to be the leading international business bank.

Net interest income was broadly in line with 2009 as strong loan growth was offset by narrower asset spreads in the face of strong competition. Higher average lending balances resulted from business growth in GB&M and CMB across the region, reflecting the recovery in trade activity. Average PFS lending balances also rose, mainly in the mortgage book, most notably in Australia,

Singapore and Malaysia, as well as in Taiwan and mainland China, supported by successful marketing campaigns.

The narrower asset spreads were also the consequence of a shift to lower risk customers following the managed reduction of certain unsecured lending portfolios, particularly in India.

Average customer deposit balances grew, primarily in mainland China, Australia and Singapore as a result of a targeted strategy to expand the customer base.

Balance Sheet Management income declined from 2009 as higher yielding trades matured, interest rates generally remained low and yield curves flattened.

Net fee income was 16% higher. An improvement in equity markets and inflows of funds under management drove a significant increase in fee income in GB&M while, in CMB, the recovery in trade activity led to higher trade-related fees and credit facilities. In PFS, fee income also rose from the increased sales of investment and insurance products.

Net trading income declined by 7%, as reduced market volatility led to lower Rates trading income. In India, trading income further declined as gains achieved in 2009 from narrowing bond yields did not recur while in South Korea, lower trading revenues reflected the non-recurrence of one-off gains recognised in 2009. These were partly offset by higher foreign exchange income in mainland China and wider margins in India as a result of strong client volumes in the growing economies and a rise in interest income from trading activities resulting from increased holdings of debt securities.

Net income from financial instruments designated at fair value fell by US\$95m. The movement was due to lower revaluation gains in 2010 than in 2009 on assets held to support insurance contracts. To the extent that these lower investment gains were attributed to policyholders, there was a corresponding decrease in 'Net insurance claims incurred and movement in liabilities to policyholders'.

Gains less losses from financial investments were US\$141m compared with losses of US\$15m in 2009, as a result of a gain on disposal of an equity investment in a Singaporean property company and gains on sales of other available-for-sale investments. Impairments reported in 2009 did not recur in 2010.

Other operating income increased by 8% to US\$1.4bn, largely due to an increase in PVIF, reflecting higher life insurance sales in the region and recoveries against initial fair value on loan portfolios acquired with Bank Ekonomi in Indonesia and from The Chinese Bank Co., Ltd in Taiwan.

Net earned insurance premiums increased by 15% to US\$448m, largely due to higher sales in Malaysia, Taiwan and mainland China, primarily from successful product launches and marketing campaigns.

Growth in the insurance business resulted in a related increase in *Net insurance claims incurred and movement in liabilities to policyholders* which was more than offset by the decrease corresponding to the lower investment gains reported above in 'Net income from financial instruments designated at fair value'.

Loan impairment charges and other credit risk provisions decreased by 55% to US\$439m. As economic and credit conditions improved across the region, loan impairment charges fell in PFS, most notably in India as certain unsecured lending portfolios were managed down, and fewer specific impairments

were recognised in CMB. Partly offsetting this improvement were specific impairment charges booked in GB&M.

Operating expenses increased by 8% to US\$5.1bn in support of business growth and to capitalise on the region's economic recovery. Examples were the continuing expansion of the branch network in mainland China and the opening of the new headquarters building in Shanghai, as well as local incorporation and expansion of the Taiwan operations. Staff numbers rose to support business expansion, particularly in the key regional markets of mainland China, Australia, Singapore and Indonesia. Business initiatives were supported by marketing campaigns in most markets and higher transaction volumes which led to increased processing costs.

Share of profit from associates and joint ventures in the region increased by 45%, with a higher contribution from Ping An Insurance driven by strong sales growth. The share of profit from Bank of Communications also increased due to growth in lending and higher fee income from cards, wealth management and settlement activity. Growth in lending and an increase in fee income led to a higher contribution from Industrial Bank.

Report of the Directors: Operating and Financial Review (continued)

Geographical regions > Rest of Asia-Pacific

Profit before tax and balance sheet data – Rest of Asia-Pacific

	2010						
	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Inter- segment elimination ⁵⁶ US\$m	Total US\$m
<i>Profit before tax</i>							
Net interest income	1,581	938	1,435	91	55	(272)	3,828
Net fee income/(expense)	668	442	777	55	(10)	–	1,932
Trading income/(expense) excluding net interest income	81	129	966	69	(38)	–	1,207
Net interest income on trading activities	–	–	138	–	1	272	411
Net trading income/(expense) ⁴⁹ ..	81	129	1,104	69	(37)	272	1,618
Changes in fair value of long- term debt issued and related derivatives	–	–	–	–	(2)	–	(2)
Net income/(expense) from other financial instruments designated at fair value	41	2	(1)	–	(16)	–	26
Net income/(expense) from financial instruments designated at fair value	41	2	(1)	–	(18)	–	24
Gains less losses from financial investments	1	3	50	–	92	–	146
Dividend income	–	–	1	–	–	–	1
Net earned insurance premiums ..	386	62	–	–	–	–	448
Other operating income	108	86	56	1	1,499	(152)	1,598
Total operating income	2,866	1,662	3,422	216	1,581	(152)	9,595
Net insurance claims ⁵⁷	(324)	(39)	–	–	–	–	(363)
Net operating income ⁴⁶	2,542	1,623	3,422	216	1,581	(152)	9,232
Loan impairment charges and other credit risk provisions	(298)	(19)	(122)	–	–	–	(439)
Net operating income	2,244	1,604	3,300	216	1,581	(152)	8,793
Total operating expenses	(2,164)	(799)	(1,163)	(135)	(1,034)	152	(5,143)
Operating profit	80	805	2,137	81	547	–	3,650
Share of profit in associates and joint ventures	986	751	447	–	68	–	2,252
Profit before tax	1,066	1,556	2,584	81	615	–	5,902
	%	%	%	%	%		%
Share of HSBC's profit before tax	5.6	8.2	13.6	0.4	3.2		31.0
Cost efficiency ratio	85.1	49.2	34.0	62.5	65.4		55.7
<i>Balance sheet data</i> ⁴⁵							
	US\$m	US\$m	US\$m	US\$m	US\$m		US\$m
Loans and advances to customers (net)	37,831	31,423	35,810	3,489	178		108,731
Total assets	49,508	41,588	166,960	12,126	19,450	(11,570)	278,062
Customer accounts	54,741	36,943	53,752	12,620	99		158,155

	2009						
	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Inter- segment elimination ⁵⁶ US\$m	Total US\$m
<i>Profit before tax</i>							
Net interest income	1,493	807	1,174	115	91	(141)	3,539
Net fee income/(expense)	554	331	636	55	(19)	–	1,557
Trading income/(expense) excluding net interest income	80	134	1,013	55	(18)	–	1,264
Net interest income/(expense) on trading activities	(1)	–	202	–	–	141	342
Net trading income/(expense) ⁴⁹ ..	79	134	1,215	55	(18)	141	1,606
Changes in fair value of long- term debt issued and related derivatives	–	–	–	–	(1)	–	(1)
Net income/(expense) from other financial instruments designated at fair value	110	1	(2)	–	2	–	111
Net income/(expense) from financial instruments designated at fair value	110	1	(2)	–	1	–	110
Gains less losses from financial investments	5	2	(7)	–	(19)	–	(19)
Dividend income	–	–	1	–	1	–	2
Net earned insurance premiums ..	337	28	–	–	–	–	365
Other operating income/ (expense)	67	66	41	(2)	1,200	(134)	1,238
Total operating income	2,645	1,369	3,058	223	1,237	(134)	8,398
Net insurance claims ⁵⁷	(380)	(15)	–	–	–	–	(395)
Net operating income ⁴⁶	2,265	1,354	3,058	223	1,237	(134)	8,003
Loan impairment charges and other credit risk provisions	(649)	(221)	(23)	(2)	(1)	–	(896)
Net operating income	1,616	1,133	3,035	221	1,236	(134)	7,107
Total operating expenses	(1,839)	(636)	(1,006)	(131)	(972)	134	(4,450)
Operating profit/(loss)	(223)	497	2,029	90	264	–	2,657
Share of profit in associates and joint ventures	686	567	290	–	–	–	1,543
Profit before tax	463	1,064	2,319	90	264	–	4,200
	%	%	%	%	%		%
Share of HSBC's profit before tax	6.5	15.0	32.8	1.3	3.7		59.3
Cost efficiency ratio	81.2	47.0	32.9	58.7	78.6		55.6
<i>Balance sheet data⁴⁵</i>							
	US\$m	US\$m	US\$m	US\$m	US\$m		US\$m
Loans and advances to customers (net)	30,433	22,595	23,989	2,834	192		80,043
Total assets	40,266	31,221	138,884	11,928	7,160	(7,320)	222,139
Customer accounts	47,573	30,196	43,698	12,496	36		133,999

For footnotes, see page 83.

Report of the Directors: Operating and Financial Review (continued)

Geographical regions > Middle East

Middle East

In the Middle East, the network of branches of HSBC Bank Middle East Limited, together with HSBC's subsidiaries and associates, gives us the widest coverage in the region. Our associate in Saudi Arabia, The Saudi British Bank (40% owned), is the Kingdom's fifth largest bank by total assets.

	2010 US\$m	2009 US\$m	2008 US\$m
Net interest income	1,367	1,485	1,556
Net fee income	677	625	691
Net trading income	370	394	402
Other income	(4)	90	19
Net operating income⁴⁶ ..	2,410	2,594	2,668
Impairment charges ⁴⁷	(627)	(1,334)	(279)
Net operating income	1,783	1,260	2,389
Total operating expenses ..	(1,078)	(1,001)	(959)
Operating profit	705	259	1,430
Income from associates ⁴⁸ ..	187	196	316
Profit before tax	892	455	1,746
Cost efficiency ratio	44.7%	38.6%	35.9%
Year-end staff numbers	8,676	8,281	8,453

**Underlying pre-tax
profit doubled**

**Leading provider of
traditional trade services
in the UAE**

**PFS in the Middle East
returns to profitability**

Economic background

Economic activity in much of the Middle East showed signs of stabilising during 2010. A 30% year on year rise in average oil prices led to a marked strengthening of public finances in the Gulf states, allowing governments such as **Saudi Arabia** to boost public current and capital spending. The high and stable average oil prices also improved external account positions in the Gulf, leading to an increase in reserves and overall net foreign asset accumulation following the modest drawdowns in 2009.

As well as receiving support from rising public spending, non-oil goods and service exporters in the region also benefited from rising external demand, particularly from Asia. The **UAE** was a leading beneficiary, most notably in its transport and logistics sectors. Banking sector activity remained relatively subdued, with rates of credit growth flat or negative in real terms across much of the region. This contributed to subdued consumer and asset price inflation. Although there was some evidence in **Saudi Arabia**, **Oman** and **Kuwait** that stronger growth and higher commodity prices were putting pressure on prices in late 2010, the pace of increase remained below that seen in other emerging markets. Inflation was largely absent in the UAE.

Dubai had another challenging year in 2010, as it continued to struggle with high levels of debt, falling real estate prices and a stagnant credit market. Although no figures have been released, officials estimated in October that real GDP was likely to have grown by 2.3% in 2010, mostly from global trade as exports rose 35% in the year to the third quarter. The domestic economy was considerably weaker through most of the year although there were signs of an improvement by the year end.

In **Egypt**, GDP growth returned to 6% by the end of 2010, driven primarily by domestic demand. Egypt's structural economic strengths leave us positive on the medium-term outlook, although recent political turmoil might overshadow its near-term prospects.

Review of performance

Our operations in the Middle East reported pre-tax profits of US\$892m, an increase of US\$437m compared with 2009.

In October 2010, we completed the sale of our investment in the British Arab Commercial Bank, on which a loss of US\$42m was recorded. On an underlying basis and excluding this loss, pre-tax profits increased by US\$481m.

For footnotes, see page 83.

The commentary on the Middle East is on an underlying basis unless stated otherwise.

Profit/(loss) before tax by country within customer groups and global businesses

	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Total US\$m
2010						
Egypt	38	82	77	–	(2)	195
Qatar	19	52	67	–	–	138
United Arab Emirates	17	186	121	1	(1)	324
Other	19	57	(19)	–	–	57
Middle East (excluding Saudi Arabia)	93	377	246	1	(3)	714
Saudi Arabia	7	107	71	(16)	9	178
	100	484	317	(15)	6	892
2009						
Egypt	18	51	97	–	58	224
Qatar	10	60	66	–	–	136
United Arab Emirates	(177)	(136)	307	(2)	5	(3)
Other	3	(15)	(80)	–	(3)	(95)
Middle East (excluding Saudi Arabia)	(146)	(40)	390	(2)	60	262
Saudi Arabia	20	61	77	8	27	193
	(126)	21	467	6	87	455
2008						
Egypt	16	68	90	–	49	223
Qatar	23	33	57	–	–	113
United Arab Emirates	133	330	388	4	6	861
Other	57	92	104	–	1	254
Middle East (excluding Saudi Arabia)	229	523	639	4	56	1,451
Saudi Arabia	60	35	177	–	23	295
	289	558	816	4	79	1,746

Profits increased strongly in the second half of 2010 compared with the first half of the year, reflecting increased stability in the regional economy and growing momentum in several of the key markets.

The improvement in the credit environment and our risk management actions combined to contribute to significantly lower loan impairment charges and other credit risk provisions. The benefit was partly offset by lower revenues from the run-off of higher yielding unsecured loans, mainly in the UAE.

Our Premier and Advance customer base continued to grow in line with our strategy to build a sustainable wealth-driven, premium-based PFS business, with Premier attracting 35,000 net new customers in the year, of whom 19,000 were new to the Group. During 2010, we launched the Advance proposition across most of the region and the number of customers reached 152,000 at 31 December 2010. The opening of our 100th branch in Egypt is an example of initiatives to expand our regional presence.

In CMB, we continued to build on our competitive advantage in international connectivity.

The increased opportunities to support business and trade flows between the region and the rest of the world, particularly mainland China and India, led to strong trade-related revenues and supported our market-leading position in this business. As a result, we gained market share in our key markets and received several awards for trade services including ‘Leading Trade Services Bank in the Middle East and North Africa’ which was awarded by *Global Trade Review* for the fourth consecutive year.

As part of our continued support to local internationally-focused businesses, we fully allocated the pledged US\$100m fund to UAE SME customers engaged in international cross-border business.

In GB&M we continued to invest in the region to support existing and anticipated new business and we now have a fully functional dealing room in Abu Dhabi and a ‘China desk’ in the UAE to support ‘East-East’ business. We continued to be recognised as the dominant player in regional bond markets and won several awards, including ‘Best Investment Bank in the Middle East’ awarded by *Euromoney*.

Report of the Directors: Operating and Financial Review (continued)

Geographical regions > Middle East

Net interest income decreased by 8% as average lending balances declined in both PFS and CMB, the proportion of higher yielding assets fell and the cost of liquidity remained high.

In PFS, spreads narrowed as we focused new lending on Premier and Advance customers, while concurrently managing down higher risk unsecured lending balances, mostly in the UAE.

In CMB, asset balances and net interest income rose throughout the second half of 2010 as increasing trade finance balances contributed to growing revenues.

Average customer accounts declined as corporate customers reduced their deposits in response to tighter liquidity in the local markets. This was partly offset by an increase in average liability balances in PFS, which was driven by successful deposit campaigns launched in 2010 and by the acquisition of Premier and Advance customers. Our overall liquidity position improved although the market returns on the deployment of liquidity remained low.

Net fee income increased by 8%, primarily driven by higher volumes of credit facilities related to trade, guarantees and remittances in CMB. The benefit was partly offset by lower advisory revenues from equity capital markets in GB&M as a result of limited issuances in the regional equity markets.

Net trading income fell by 6% to US\$370m. Subdued trading conditions and the non-recurrence of gains which had resulted from the tightening of credit spreads on certain positions in early 2009 resulted in lower Credit trading income. Foreign exchange income decreased with the easing in market volatility as speculation regarding the unpegging of Gulf currencies from the US dollar receded.

Other operating income declined by US\$37m as gains arising in 2009 from the buy-back and extinguishment of own debt did not recur.

Loan impairment charges and other credit risk provisions decreased by 53%. An overall improvement in credit conditions in the region along with enhanced collections processes, improvements in the quality of our customer base and a reduction in unsecured lending resulted in significantly lower net collective impairment provisions, notably in the UAE, and lower requirements for specific corporate provisions.

In PFS, strengthened collections processes and a repositioning of the loan book contributed to lower delinquency rates. In CMB, loan impairment charges and other credit risk provisions decreased due to significantly lower net collectively assessed impairment charges and fewer specific loan impairment charges, with the majority of the charge in 2010 relating to a small number of large corporate customers.

Loan impairment charges and other credit risk provisions in GB&M rose, mainly from restructuring activity which drove UAE-related loan impairments for a small number of large corporate customers in the first half of 2010. The improvement in economic conditions during the latter part of 2010 resulted in lower loan impairment charges in the second half of the year.

Operating expenses increased by 8%, driven by increased investment in marketing and advertising, including key sponsorship deals and the promotion of the HSBC brand through strategic messaging in the Abu Dhabi and Dubai airports, together with an increase in premises and people costs, mainly from the investment in the branch network expansion in Egypt.

Profit from associates and joint ventures decreased by 5%. The contribution from The Saudi British Bank was lower as revenue fell in challenging operating conditions.

Profit/(loss) before tax and balance sheet data – Middle East

	2010						
	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Inter- segment elimination ⁵⁶ US\$m	Total US\$m
<i>Profit/(loss) before tax</i>							
Net interest income	553	473	334	–	14	(7)	1,367
Net fee income	200	258	202	17	–	–	677
Trading income/(expense) excluding net interest income	59	85	205	1	(7)	–	343
Net interest income/(expense) on trading activities	1	7	18	–	(6)	7	27
Net trading income/(expense) ⁴⁹ ..	60	92	223	1	(13)	7	370
Gains less losses from financial investments	1	–	(3)	–	(1)	–	(3)
Dividend income	2	1	4	–	–	–	7
Other operating income/ (expense)	27	(8)	(1)	1	40	(67)	(8)
Total operating income	843	816	759	19	40	(67)	2,410
Net insurance claims ⁵⁷	–	–	–	–	–	–	–
Net operating income ⁴⁶	843	816	759	19	40	(67)	2,410
Loan impairment charges and other credit risk provisions	(227)	(145)	(255)	–	–	–	(627)
Net operating income	616	671	504	19	40	(67)	1,783
Total operating expenses	(524)	(297)	(263)	(18)	(43)	67	(1,078)
Operating profit/(loss)	92	374	241	1	(3)	–	705
Share of profit/(loss) in associates and joint ventures ..	8	110	76	(16)	9	–	187
Profit/(loss) before tax	100	484	317	(15)	6	–	892
	%	%	%	%	%		%
Share of HSBC's profit before tax	0.5	2.6	1.7	(0.1)	–		4.7
Cost efficiency ratio	62.2	36.4	34.7	94.7	107.5		44.7
<i>Balance sheet data</i> ⁴⁵							
	US\$m	US\$m	US\$m	US\$m	US\$m		US\$m
Loans and advances to customers (net)	5,063	12,293	7,247	21	2		24,626
Total assets	6,244	13,991	31,295	59	4,129	(2,961)	52,757
Customer accounts	17,538	10,319	5,306	290	58		33,511

Report of the Directors: Operating and Financial Review (continued)

Geographical regions > Middle East / North America

Profit/(loss) before tax and balance sheet data – Middle East (continued)

	2009						
	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Inter- segment elimination ⁵⁶ US\$m	Total US\$m
<i>Profit/(loss) before tax</i>							
Net interest income	644	464	330	1	46	–	1,485
Net fee income	203	219	198	3	2	–	625
Trading income excluding net interest income	55	75	235	1	3	–	369
Net interest income on trading activities	–	–	20	–	5	–	25
Net trading income ⁴⁹	55	75	255	1	8	–	394
Gains less losses from financial investments	12	(2)	1	–	5	–	16
Dividend income	–	–	3	–	–	–	3
Other operating income/ (expense)	35	39	35	(1)	39	(76)	71
Total operating income	949	795	822	4	100	(76)	2,594
Net insurance claims ⁵⁷	–	–	–	–	–	–	–
Net operating income ⁴⁶	949	795	822	4	100	(76)	2,594
Loan impairment charges and other credit risk provisions	(588)	(573)	(173)	–	–	–	(1,334)
Net operating income	361	222	649	4	100	(76)	1,260
Total operating expenses	(508)	(269)	(255)	(6)	(39)	76	(1,001)
Operating profit/(loss)	(147)	(47)	394	(2)	61	–	259
Share of profit in associates and joint ventures	21	68	73	8	26	–	196
Profit/(loss) before tax	(126)	21	467	6	87	–	455
	%	%	%	%	%		%
Share of HSBC's profit before tax	(1.8)	0.3	6.6	0.1	1.2		6.4
Cost efficiency ratio	53.5	33.8	31.0	150.0	39.0		38.6
<i>Balance sheet data⁴⁵</i>							
	US\$m	US\$m	US\$m	US\$m	US\$m		US\$m
Loans and advances to customers (net)	5,979	10,281	6,554	28	2		22,844
Total assets	6,810	11,861	28,189	96	4,952	(3,801)	48,107
Customer accounts	15,074	10,122	5,752	1,172	409		32,529

For footnotes, see page 83.

North America

Our North American businesses are located in the US, Canada and Bermuda. Operations in the US are primarily conducted through HSBC Bank USA, N.A., which is concentrated in New York State, and HSBC Finance, a national consumer finance company based near Chicago. HSBC Markets (USA) Inc. is the intermediate holding company of, inter alia, HSBC Securities (USA) Inc. HSBC Bank Canada and HSBC Bank Bermuda operate in their respective countries.

	2010 US\$m	2009 US\$m	2008 US\$m
Net interest income	12,439	13,670	15,218
Net fee income	3,664	4,817	5,227
Net trading income/ (expense)	314	331	(3,135)
Other income/(expense)	630	(2,513)	3,869
Net operating income⁴⁶ ...	17,047	16,305	21,179
Impairment charges ⁴⁷	(8,295)	(15,664)	(16,795)
Net operating income	8,752	641	4,384
Total operating expenses ..	(8,322)	(8,391)	(19,923)
Operating profit/(loss)	430	(7,750)	(15,539)
Income from associates ⁴⁸ ..	24	12	11
Profit/(loss) before tax	454	(7,738)	(15,528)
Cost efficiency ratio	48.8%	51.5%	94.1%
Year-end staff numbers	33,865	35,458	44,725

Pre-tax profit for the first time since 2006

Impairment charges at lowest levels since 2006

Card and Retail Services pre-tax profit US\$2.0bn

2009: US\$641m; 2008: US\$837m

For footnotes, see page 83.

The commentary on North America is on an underlying basis unless stated otherwise.

Economic background

The economic recession in the US officially ended in the middle of 2009 but, given its depth and duration, the subsequent recovery was disappointing. In 2010, GDP expanded by 2.9%. The initial stage of the recovery was helped by tax reductions and direct subsidies for home purchases, but the growth momentum faded as their impact waned. In addition, fiscal tightening by state and local governments intensified, leading to spending cutbacks and job cuts that adversely affected consumer confidence and the rate of growth of consumer spending. Unemployment fell from 10.0% in the fourth quarter of 2009 to 9.4% by the end of 2010. The annual rate of 'core' inflation (excluding food and energy products) fell steadily during the year to 0.8% in December, the smallest rate of annual increase in the 50 year history of the series.

In the fourth quarter of 2010, the Federal Reserve launched a US\$600bn programme of large scale asset purchases to ease monetary conditions. Asset prices rebounded and consumer spending picked up sharply, helping to renew economic activity.

In the year ended November 2010, **Canadian** GDP rose by 3%, compared with a decline of 1.2% in the year to November 2009, driven by housing construction, consumer spending and inventory restocking. Employment growth in the first half of 2010 was strong and the unemployment rate fell to 7.6% in December 2010 from the high of 8.7% in 2009. CPI inflation remained close to the Bank of Canada's 2% target through much of 2010 but the recovery in economic activity prompted the central bank to begin normalising the policy rate from a low of 0.25% to 1% by October.

Review of performance

In North America, a reported profit before tax of US\$454m in 2010 compared with a loss of US\$7.7bn in 2009. On an underlying basis, the pre-tax profit of US\$246m compared with a pre-tax loss of US\$4.0bn. The improved performance was largely due to a marked decline in loan impairment charges in our Card and Retail Services business and run-off portfolios, partly offset by lower revenue reflecting a reduction in lending balances, the effects of the CARD Act (see page 19) and adverse fair value movements on non-qualifying hedges.

Our results in 2011 will continue to be affected in general terms by the strength of the US economy and the impact of proposed regulatory changes on

Report of the Directors: Operating and Financial Review (continued)**Geographical regions > North America***Profit/(loss) before tax by country within customer groups and global businesses*

	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Total US\$m
2010						
US	(2,306)	402	1,285	113	(39)	(545)
Canada	110	505	248	–	4	867
Bermuda	47	32	49	(3)	7	132
Other	–	–	–	1	(1)	–
	(2,149)	939	1,582	111	(29)	454
2009						
US	(5,292)	158	505	(49)	(3,626)	(8,304)
Canada	17	347	159	–	(100)	423
Bermuda	49	37	47	(2)	10	141
Other	–	1	1	1	(1)	2
	(5,226)	543	712	(50)	(3,717)	(7,738)
2008						
US ⁶²	(17,364)	226	(2,899)	67	3,427	(16,543)
Canada	106	380	252	5	96	839
Bermuda	31	51	72	11	9	174
Other	(1)	1	–	–	2	2
	(17,228)	658	(2,575)	83	3,534	(15,528)

For footnote, see page 83.

our business and, specifically, by the extent to which unemployment rates improve and the recovery in the housing market is sustained.

In 2010, we continued to reposition our core businesses and we remained focused on managing down our run-off assets. In addition, we made progress with the changes required to conform with new regulatory frameworks and policies.

In our core PFS business, we continued to grow our Premier proposition, with customer numbers increasing by 37% to over 700,000, and we expanded our branch network, opening five new branches in the states of California, Maryland and Virginia. Our Card and Retail Services business continued to be profitable, despite a decline in lending balances as customers reduced their outstanding credit card debt.

In CMB, we increased pre-tax profits by 51% to US\$873m as credit quality improved and we grew our revenue through repricing. In line with our global strategy to be the leading international business bank, CMB actively targeted the growing number of companies with international banking requirements achieving a 28% increase in referral volumes to other HSBC sites, and GB&M drove cross-regional and cross-customer group connectivity. GB&M and GPB also continued to appeal to internationally focused customers, attracted by the Group's presence in both emerging and developed markets.

Net interest income fell by 10% to US\$12.4bn as customer lending balances declined, mainly in HSBC

Finance, due to the run-off of the residual balances in our Mortgage Services, Consumer Lending and vehicle finance portfolios. We took additional steps during 2010 to accelerate this process, selling US\$1.0bn in vehicle finance loans in March and the remainder of the portfolio (US\$4.3bn) in August to the same purchaser. Lower balances in our Card and Retail Services business reflected a decline in active accounts, actions taken to mitigate risk and an increased focus by our customers on reducing their credit card debt.

Asset spreads in Mortgage Services and Consumer Lending widened, reflecting lower funding costs and higher yields resulting from lower levels of modified loans and delinquent balances. In our Card and Retail Services portfolio asset spreads also widened due to lower funding costs, re-pricing initiatives and contract re-negotiation with certain merchants, partly offset by the effects of the CARD Act.

Average customer deposit balances increased in PFS and CMB as we continued to grow our customer base. In GB&M, our increased deposit base reflected a rise in repurchase transactions. Deposit spreads improved, despite falling interest rates, mainly due to repricing as competitive pressures eased.

Lower net interest income from Balance Sheet Management reflected the sales and maturities of higher yielding assets and the reinvestment of the proceeds into lower yielding, lower risk assets.

Net fee income fell by 25% to US\$3.7bn. Lower transaction volumes, a reduction in customer spending and customers actively seeking to reduce credit card debt improved delinquency trends, and the effects of changes required by the CARD Act led to lower late and overlimit fees in our Card and Retail Services business.

Net trading income of US\$314m was 8% lower than in 2009, primarily because of US\$353m adverse fair value movements in non-qualifying hedges due to the decrease in long-term US interest rates. This compared with US\$184m in favourable fair value movements on these instruments in 2009. The majority of these instruments were interest rate swaps used to economically hedge floating rate debt issued by HSBC Finance. The debt was issued to offset the increase in the duration of the company's mortgage portfolio resulting from lower prepayment rates and the corresponding rise in interest rate risk.

In 2010, we increased our estimates of exposure on repurchase obligations associated with loans previously sold, primarily to Government-sponsored enterprises ('GSE's'), which reduced our trading income by US\$341m compared with US\$65m in 2009. This related mainly to mortgages originated through broker channels. These trading losses were partly offset by a rise in GB&M, despite lower revenue from Rates, as write-backs on legacy positions in Credit trading compared with write-downs in 2009.

Net expense from financial instruments designated at fair value of US\$31m compared with net income of US\$192m in 2009. This was due to adverse fair value movements from interest rate ineffectiveness in the economic hedging of our long-term debt. In 2009, fair value movements on economic hedges resulted in net income.

Gains less losses from financial investments declined by 52% due to lower gains from asset sales in the available-for-sale portfolio, undertaken to reduce the overall level of balance sheet risk.

Net earned insurance premiums and Net insurance claims incurred and movement in liabilities to policyholders both declined. Lower premiums reflected a fall in sales of payment protection products following the discontinuance of mortgage originations in HSBC Finance. Claims and reserves declined as the lending balances and associated in-force insurance contracts reduced.

Other operating income declined by 70% to US\$167m as we recognised a loss of US\$207m on the sale of our vehicle finance loan portfolio and loan servicing platform. In addition, gains in 2009

from the sale of residential mortgages and the refinement of the income recognition methodology of long-term insurance contracts did not recur. This was partly offset by a gain on the sale of our New York headquarters building in 2010.

Loan impairment charges and other credit risk provisions decreased by 47% to US\$8.3bn, the lowest level since 2006. Although most significant in PFS, the decline was across all businesses as the economy generally improved in 2010.

Loan impairment charges in Card and Retail Services declined by 57%, reflecting lower lending balances and an increased focus by our customers on reducing outstanding credit card debt. There was also an overall improvement in the credit quality of the portfolio, with lower delinquency levels and better delinquency roll rates.

Loan impairment charges in our Mortgage Services and Consumer Lending businesses fell by 29% as balances continued to run-off and delinquent balances reduced. Loss severity also improved reflecting an increase in deed-in-lieu and short sales agreements, both of which result in lower losses than foreclosed loans.

As a result of investigations into the foreclosure practices of certain mortgage service providers, there could be additional delays in the processing of foreclosures. See page 83 for more information.

In GB&M, a net release of loan impairment charges and other credit risk provisions of US\$184m compared with a reported net charge of US\$621m in 2009. This reflected an improvement in the credit environment and a release of impairments on available-for-sale ABSs. In CMB, loan impairment charges declined as the improved economic conditions resulted in credit upgrades on certain accounts and fewer downgrades across all business lines. Further commentary on delinquency trends in the US PFS portfolios is provided on page 110.

Operating expenses fell by 2% to US\$8.3bn, reflecting the non-recurrence of restructuring costs following the closure of the Consumer Lending branch network in 2009 and the reduced scope of our business operations in the US as we ran off the legacy portfolios in HSBC Finance. In addition, we recorded a pension curtailment gain in 2010 and deposit insurance costs declined as a 2009 special assessment did not recur. These reductions were partly offset by a rise in marketing expenses in Card and Retail Services, an increase in litigation provisions and higher regulatory and compliance costs.

Report of the Directors: Operating and Financial Review (continued)

Geographical regions > North America

Profit/(loss) before tax and balance sheet data – North America

	2010						
	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Inter- segment elimination ⁵⁶ US\$m	Total US\$m
<i>Profit/(loss) before tax</i>							
Net interest income/(expense)	9,912	1,525	952	190	(71)	(69)	12,439
Net fee income/(expense)	2,032	534	955	149	(6)	–	3,664
Trading income/(expense) excluding net interest income	(472)	17	563	13	(12)	–	109
Net interest income on trading activities	24	2	93	–	17	69	205
Net trading income/(expense) ⁴⁹ ..	(448)	19	656	13	5	69	314
Changes in fair value of long- term debt issued and related derivatives	–	–	–	–	111	–	111
Net income/(expense) from other financial instruments designated at fair value	6	–	(2)	–	(4)	–	–
Net income/(expense) from financial instruments designated at fair value	6	–	(2)	–	107	–	111
Gains less losses from financial investments	5	(6)	141	–	3	–	143
Dividend income	18	7	12	3	2	–	42
Net earned insurance premiums ..	245	–	–	–	–	–	245
Other operating income	(243)	242	64	15	2,351	(2,196)	233
Total operating income	11,527	2,321	2,778	370	2,391	(2,196)	17,191
Net insurance claims ⁵⁷	(148)	–	–	–	4	–	(144)
Net operating income ⁴⁶	11,379	2,321	2,778	370	2,395	(2,196)	17,047
Loan impairment (charges)/ recoveries and other credit risk provisions	(8,194)	(323)	184	38	–	–	(8,295)
Net operating income	3,185	1,998	2,962	408	2,395	(2,196)	8,752
Total operating expenses	(5,338)	(1,081)	(1,380)	(297)	(2,422)	2,196	(8,322)
Operating profit/(loss)	(2,153)	917	1,582	111	(27)	–	430
Share of profit/(loss) in associates and joint ventures ..	4	22	–	–	(2)	–	24
Profit/(loss) before tax	(2,149)	939	1,582	111	(29)	–	454
	%	%	%	%	%		%
Share of HSBC's profit before tax	(11.3)	5.0	8.3	0.6	(0.2)		2.4
Cost efficiency ratio	46.9	46.6	49.7	80.3	101.1		48.8
<i>Balance sheet data</i> ⁴⁵							
	US\$m	US\$m	US\$m	US\$m	US\$m		US\$m
Loans and advances to customers (net)	131,194	30,277	24,338	4,723	–		190,532
Total assets	154,086	39,213	306,416	5,824	9,373	(22,425)	492,487
Customer accounts	76,817	46,425	22,324	12,812	108		158,486

	2009						
	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Inter- segment elimination ⁵⁶ US\$m	Total US\$m
<i>Profit/(loss) before tax</i>							
Net interest income/(expense)	11,244	1,391	999	178	(84)	(58)	13,670
Net fee income	3,174	453	1,045	142	3	–	4,817
Trading income/(expense) excluding net interest income	257	(10)	(179)	(3)	(30)	–	35
Net interest income/(expense) on trading activities	60	3	175	(1)	1	58	296
Net trading income/(expense) ⁴⁹ ..	317	(7)	(4)	(4)	(29)	58	331
Changes in fair value of long- term debt issued and related derivatives	–	–	–	–	(3,497)	–	(3,497)
Net income from other financial instruments designated at fair value	–	–	–	–	1	–	1
Net expense from financial instruments designated at fair value	–	–	–	–	(3,496)	–	(3,496)
Gains less losses from financial investments	16	3	277	–	–	–	296
Dividend income	21	5	27	2	(2)	–	53
Net earned insurance premiums ..	309	–	–	–	–	–	309
Other operating income	9	162	317	11	1,828	(1,761)	566
Total operating income/(expense)	15,090	2,007	2,661	329	(1,780)	(1,761)	16,546
Net insurance claims ⁵⁷	(241)	–	–	–	–	–	(241)
Net operating income/ (expense) ⁴⁶	14,849	2,007	2,661	329	(1,780)	(1,761)	16,305
Loan impairment charges and other credit risk provisions	(14,424)	(519)	(621)	(98)	(2)	–	(15,664)
Net operating income/ (expense)	425	1,488	2,040	231	(1,782)	(1,761)	641
Total operating expenses	(5,651)	(958)	(1,328)	(281)	(1,934)	1,761	(8,391)
Operating profit/(loss)	(5,226)	530	712	(50)	(3,716)	–	(7,750)
Share of profit/(loss) in associates and joint ventures ..	–	13	–	–	(1)	–	12
Profit/(loss) before tax	(5,226)	543	712	(50)	(3,717)	–	(7,738)
	%	%	%	%	%		%
Share of HSBC's profit before tax	(73.8)	7.7	10.1	(0.7)	(52.6)		(109.3)
Cost efficiency ratio	38.1	47.7	49.9	85.4	(108.7)		51.5
<i>Balance sheet data⁴⁵</i>							
	US\$m	US\$m	US\$m	US\$m	US\$m		US\$m
Loans and advances to customers (net)	151,671	31,292	18,654	5,236	–		206,853
Total assets	179,597	38,232	260,131	6,572	2,071	(11,589)	475,014
Customer accounts	74,228	42,900	19,095	12,834	100		149,157

For footnotes, see page 83.

Report of the Directors: Operating and Financial Review (continued)

Geographical regions > Latin America

Latin America

Our operations in Latin America principally comprise HSBC Bank Brasil S.A.-Banco Múltiplo, HSBC México, S.A., HSBC Bank Argentina S.A. and HSBC Bank (Panama) S.A. In addition to banking services, we operate insurance businesses in Brazil, Mexico, Argentina, Panama and a range of smaller markets.

	2010 US\$m	2009 US\$m	2008 US\$m
Net interest income	6,311	5,573	6,458
Net fee income	1,749	1,729	2,167
Net trading income	733	848	701
Other income	938	874	1,187
Net operating income⁴⁶ ..	9,731	9,024	10,513
Impairment charges ⁴⁷	(1,544)	(2,526)	(2,492)
Net operating income	8,187	6,498	8,021
Total operating expenses ..	(6,394)	(5,375)	(5,990)
Operating profit	1,793	1,123	2,031
Income from associates ⁴⁸ ..	2	1	6
Profit before tax	1,795	1,124	2,037
Cost efficiency ratio	65.7%	59.6%	57.0%
Year-end staff numbers	56,044	54,288	58,559

**Higher pre-tax profits
driven by an improvement
in credit quality**

**Record pre-tax profits
in Brazil of over
US\$1bn**

**New sales desks established
to promote trade with
mainland China**

For footnotes, see page 83.

The commentary on Latin America is on an underlying basis unless stated otherwise.

Economic background

The **Brazilian** economy expanded at its fastest rate in three decades in 2010, with GDP growing 7.5% on an annual basis in the third quarter. Consumer demand played a major role supported by a rapid expansion of credit, which rose by 20.5% in 2010, and robust labour market conditions, as the unemployment rate fell to an all-time low of 5.3% in December. The growth of domestic demand led to a rapid rise in import growth and a widening of Brazil's current account deficit and contributed, along with a rise in food prices during the year, to an increase in CPI inflation to 5.9% in December compared with 4.3% at the end of 2009. The Central Bank tightened monetary policy by 2 percentage points between April and July 2010 and raised commercial banks' reserve requirements and capital adequacy ratios on certain consumer loans in December.

Mexico's economy continued to recover in 2010, and GDP rose by 5.5% in the year. Strong external demand was the main driver of the recovery, leading to robust growth in the production of Mexican manufactured goods. By contrast, domestic demand was lacklustre, reflecting high unemployment, restricted credit availability and low levels of consumer confidence. This weak domestic demand and the rise in the peso kept inflation subdued during 2010 and the Central Bank of Mexico maintained its policy rate at 4.5% throughout the year.

In **Argentina**, third quarter GDP was 7.5% higher than for the comparable period in 2009. This improvement was led by a strong rebound in industrial production, which expanded by 12.7% in the year to November 2010. The manufacture of motor vehicles recovered particularly strongly, rising by 35% during the year, with many being exported to Brazil. Inflation remained high, in part due to rapid growth in the price of food and beverages.

Review of performance

Our operations in Latin America reported pre-tax profits of US\$1.8bn compared with US\$1.1bn in 2009, largely reflecting the strong performance in Brazil, which recorded pre-tax profits in excess of US\$1bn for the first time. On an underlying basis, pre-tax profits increased by 49% as loan impairment charges declined, reflecting better economic conditions and actions taken to improve asset quality by managing down riskier portfolios and enhancing risk management processes. Revenue was marginally lower as trading income declined from the strong performance recorded in 2009 and fee income fell

Profit/(loss) before tax by country within customer groups and global businesses

	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Total US\$m
2010						
Argentina	88	90	106	–	–	284
Brazil	93	382	488	6	64	1,033
Mexico	165	24	219	4	(11)	401
Panama	48	57	33	2	–	140
Other	(100)	1	51	(2)	(13)	(63)
	294	554	897	10	40	1,795
2009						
Argentina	24	86	122	–	–	232
Brazil	(224)	211	515	5	3	510
Mexico	(31)	66	230	7	–	272
Panama	69	55	24	–	–	148
Other	(54)	(19)	40	(1)	(4)	(38)
	(216)	399	931	11	(1)	1,124
2008						
Argentina	–	111	113	–	–	224
Brazil	250	348	298	8	6	910
Mexico	360	157	190	7	–	714
Panama	51	37	33	–	–	121
Other	7	53	7	1	–	68
	668	706	641	16	6	2,037

due to reduced transaction volumes, although this was largely offset by increased income from Balance Sheet Management.

In PFS, spreads tightened in Mexico as lending was refocused from higher-yielding consumer loans to higher quality assets. The managing down of certain portfolios in Brazil and Mexico and the strengthening of underwriting and collections processes resulted in an overall increase in pre-tax profit in PFS. Across the region we continued to focus on new customer acquisition in the mass affluent market segment through our Premier and Advance propositions. The number of Premier customers increased to over 790,000 at 31 December 2010. Advance was launched in Brazil, Mexico, Argentina, Panama and Chile in 2010 and customer numbers exceeded 425,000 at the end of the year. The insurance business continued to perform strongly, with revenue growing in Brazil, Mexico and Argentina due to the improving economic conditions.

The regional economic recovery and our focus on growing the CMB business drove increased domestic lending in our major markets. GB&M and CMB both benefited from our global connectivity by increasing intra-regional and inter-regional business, with GB&M in particular contributing to other regions and customer groups through increased cross-referrals. Our operations in Brazil and

mainland China worked closely together on a number of initiatives, including the completion of the first renminbi-denominated trade settlement in the region. Dedicated sales desks were established in mainland China and Hong Kong to support our Latin America customers and promote trade with Brazil.

Net interest income increased by 4% to US\$6.3bn. Increased volumes of financial investments, a decline in the cost of funding trading positions as market interest rates fell and a change in the portfolio mix to higher-yielding longer-term assets drove a rise in revenue from Balance Sheet Management.

Average customer lending balances fell in PFS, as certain portfolios were managed down, notably in credit cards in Mexico and other higher-risk personal loan balances in Mexico and Brazil. However, year-end balances were higher than in 2009 as we reversed the decline in customer lending by selectively growing certain portfolios. Demand-driven lending increased in CMB and GB&M in Brazil and Argentina while, in Mexico, increased average lending balances in CMB were attributable to the continued strategy of targeting state and municipal customers.

Our operations in Brazil actively grew customer account balances to fund loan growth and meet higher liquidity requirements following regulatory

Report of the Directors: Operating and Financial Review (continued)

Geographical regions > Latin America

changes. In Mexico and Argentina, sales and marketing initiatives supported by product and channel enhancements resulted in an increase in current and savings account balances. However, the benefit was partly offset by tighter spreads on customer accounts as a result of decreased market interest rates in Mexico and Argentina.

Fee income fell by 7% to US\$1.7bn, driven by lower transaction volumes in credit cards and account services in Mexico and reduced account services income in Brazil. Regulatory restrictions in Brazil and Mexico also reduced the fees that could be charged for certain banking services.

Net trading income of US\$733m was 23% lower than in 2009. A decline in market volatility which resulted in fewer trading opportunities meant that the strong performances in Foreign Exchange and Rates in 2009 were not repeated.

Net income on financial instruments designated at fair value declined by 21% to US\$425m, primarily due to lower investment returns experienced on assets held in support of the pension-linked portfolio in Brazil and annuity products in Argentina. An offsetting decrease was recorded in 'Net insurance claims incurred and movement in liabilities to policyholders'.

Gains less losses from financial investments declined by US\$93m, largely because the gains on the sale of Visa Inc. shares in 2009 did not recur.

Net earned insurance premiums increased marginally to US\$2.1bn, driven by improved economic conditions which resulted in higher sales of policies in Brazil and Argentina through the branch network and a rise in premiums in Mexico. This, combined with repricing initiatives in Argentina and higher contributions in the pension-linked product in Brazil from PFS and CMB customers, resulted in increased premiums.

Net insurance claims incurred and movement in liabilities to policyholders of US\$1.8bn declined by 9%, mainly in pension-linked products in Brazil as lower investment gains were allocated to policyholders. This was partly offset by an increase related to higher premiums in Argentina and Mexico.

Loan impairment charges and other credit risk provisions declined by 44% in 2010 to US\$1.5bn. In PFS, the reduction in loan impairment charges reflected a significant decline in the size of the credit card portfolio in Mexico and an improvement in its quality as a result of repositioning the portfolio towards higher quality customers, tighter origination criteria and improved collection practices. Loan impairment charges also declined in Brazil, primarily in consumer finance portfolios including motor vehicle finance and payroll loans, as economic conditions improved and these portfolios were managed down. In CMB, loan impairment charges fell, largely in Brazil, as improved economic conditions and better credit quality resulted in lower specific impairment charges, while in Mexico loan impairment charges remained broadly unchanged.

Operating expenses increased by 10% to US\$6.4bn, driven largely by inflationary pressures and investment in infrastructure and technology projects across the region in support of improved operational efficiency and business growth. Staff costs increased in Brazil and Argentina due to union-agreed wage increases, although this was partly offset by a decline in average headcount as costs continued to be managed carefully. Non-staff expenditure also rose, driven mainly by higher marketing and advertising costs in Brazil as we positioned ourselves in this key growth market, and transactional taxes increased as sales grew.

Profit/(loss) before tax and balance sheet data – Latin America

	2010						
	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Inter- segment elimination ⁵⁶ US\$m	Total US\$m
<i>Profit/(loss) before tax</i>							
Net interest income	3,975	1,671	776	20	121	(252)	6,311
Net fee income/(expense)	899	526	298	32	(6)	–	1,749
Trading income/(expense) excluding net interest income	35	72	370	3	(27)	–	453
Net interest income on trading activities	–	–	28	–	–	252	280
Net trading income/(expense) ⁴⁹ ..	35	72	398	3	(27)	252	733
Changes in fair value of long- term debt issued and related derivatives	–	–	–	–	–	–	–
Net income from other financial instruments designated at fair value	339	85	1	–	–	–	425
Net income from financial instruments designated at fair value	339	85	1	–	–	–	425
Gains less losses from financial investments	6	2	93	–	(3)	–	98
Dividend income	7	2	3	–	–	–	12
Net earned insurance premiums ..	1,651	374	29	–	–	–	2,054
Other operating income	90	34	23	2	221	(229)	141
Total operating income	7,002	2,766	1,621	57	306	(229)	11,523
Net insurance claims ⁵⁷	(1,479)	(297)	(16)	–	–	–	(1,792)
Net operating income ⁴⁶	5,523	2,469	1,605	57	306	(229)	9,731
Loan impairment charges and other credit risk provisions	(1,247)	(293)	(4)	–	–	–	(1,544)
Net operating income	4,276	2,176	1,601	57	306	(229)	8,187
Total operating expenses	(3,983)	(1,623)	(704)	(47)	(266)	229	(6,394)
Operating profit	293	553	897	10	40	–	1,793
Share of profit in associates and joint ventures	1	1	–	–	–	–	2
Profit before tax	294	554	897	10	40	–	1,795
	%	%	%	%	%		%
Share of HSBC's profit before tax	1.5	2.9	4.7	0.1	0.2		9.4
Cost efficiency ratio	72.1	65.7	43.9	82.5	86.9		65.7
<i>Balance sheet data</i> ⁴⁵							
	US\$m	US\$m	US\$m	US\$m	US\$m		US\$m
Loans and advances to customers (net)	20,823	24,879	12,242	43	–		57,987
Total assets	38,764	35,619	64,690	1,608	196	(939)	139,938
Customer accounts	30,149	24,514	27,810	6,053	–		88,526

Report of the Directors: Operating and Financial Review (continued)

Geographical regions > Latin America // Other information > FUM and assets in custody / Property

Profit/(loss) before tax and balance sheet data – Latin America (continued)

	2009						
	Personal Financial Services US\$m	Commercial Banking US\$m	Global Banking & Markets US\$m	Global Private Banking US\$m	Other US\$m	Inter- segment elimination ⁵⁶ US\$m	Total US\$m
<i>Profit/(loss) before tax</i>							
Net interest income/(expense)	3,736	1,544	590	19	(5)	(311)	5,573
Net fee income	948	490	251	28	12	–	1,729
Trading income excluding net interest income	25	38	573	3	–	–	639
Net interest income/(expense) on trading activities	4	2	(108)	–	–	311	209
Net trading income ⁴⁹	29	40	465	3	–	311	848
Changes in fair value of long- term debt issued and related derivatives	–	–	–	–	–	–	–
Net income/(expense) from other financial instruments designated at fair value	510	12	(38)	–	11	–	495
Net income/(expense) from financial instruments designated at fair value	510	12	(38)	–	11	–	495
Gains less losses from financial investments	91	–	77	–	–	–	168
Dividend income	9	1	1	–	–	–	11
Net earned insurance premiums ..	1,752	105	43	–	–	–	1,900
Other operating income/ (expense)	170	35	24	2	(1)	(97)	133
Total operating income	7,245	2,227	1,413	52	17	(97)	10,857
Net insurance claims ⁵⁷	(1,750)	(58)	(25)	–	–	–	(1,833)
Net operating income ⁴⁶	5,495	2,169	1,388	52	17	(97)	9,024
Loan impairment (charges)/ recoveries and other credit risk provisions	(2,046)	(534)	57	–	(3)	–	(2,526)
Net operating income	3,449	1,635	1,445	52	14	(97)	6,498
Total operating expenses	(3,666)	(1,236)	(514)	(41)	(15)	97	(5,375)
Operating profit/(loss)	(217)	399	931	11	(1)	–	1,123
Share of profit in associates and joint ventures	1	–	–	–	–	–	1
Profit/(loss) before tax	(216)	399	931	11	(1)	–	1,124
	%	%	%	%	%		%
Share of HSBC's profit before tax	(3.1)	5.6	13.2	0.2	–		15.9
Cost efficiency ratio	66.7	57.0	37.0	78.8	88.2		59.6
<i>Balance sheet data⁴⁵</i>							
	US\$m	US\$m	US\$m	US\$m	US\$m		US\$m
Loans and advances to customers (net)	19,748	18,205	9,645	31	–		47,629
Total assets	35,236	23,212	57,491	328	281	(581)	115,967
Customer accounts	30,628	19,775	20,142	2,344	–		72,889

For footnotes, see page 83.

Other information

Funds under management and assets held in custody

Funds under management

	2010 US\$bn	2009 US\$bn
Funds under management		
At 1 January	857	735
Net new money	42	36
Value change	33	76
Exchange and other	(7)	10
At 31 December	925	857

	At 31 December	
	2010 US\$bn	2009 US\$bn
Funds under management by business		
Global Asset Management	439	423
Global Private Banking	277	251
Affiliates	3	3
Other	206	180
	925	857

Funds under management at 31 December 2010 amounted to US\$925bn, an increase of 8% when compared with 2009. Both Global Asset Management and GPB fund holdings increased, reflecting an improvement in equity market performance and strong net inflows.

Global Asset Management funds, including emerging market funds, increased by 4% to US\$439bn as a result of market performance gains and strong net inflows, particularly in Europe and Asia, partly offset by adverse foreign exchange movements. We remain one of the world's largest emerging market asset managers with funds under management of US\$145bn at 31 December 2010 in countries outside North America, Western Europe, Japan and Australia.

GPB funds increased by 10% in 2010 to US\$277bn, driven by an improvement in equity market performance and strong net inflows which benefited from our strength in emerging markets, hiring of key relationship managers and cross-business referrals. Client assets, which include funds under management and cash deposits and provide an indicator of the scale of GPB, increased by US\$23bn to US\$390bn due to the increase in funds under management.

Other funds under management, which are mainly held by a corporate trust business in Asia, increased by 14% to US\$206bn.

We announced in November 2010 that, with effect from 1 March 2011, Retail Banking and Wealth Management will be managed as a single global business from Hong Kong. Global Asset Management will become part of this business and will be transferred from GB&M.

Assets held in custody and under administration

Custody is the safekeeping and servicing of securities and other financial assets on behalf of clients. At 31 December 2010, we held assets as custodian of US\$5.7 trillion, 9% higher than the US\$5.2 trillion held at 31 December 2009. This was mainly driven by an increase in the market value of assets and favourable foreign exchange movements.

Our assets under administration business, which includes the provision of various support function activities including the valuation of portfolios of securities and other financial assets on behalf of clients, complements the custody business. At 31 December 2010, the value of assets held under administration by the Group amounted to US\$2.7 trillion, compared with US\$2.8 trillion in 2009.

Property

At 31 December 2010, we operated from some 9,950 operational properties worldwide, of which approximately 2,500 were located in Europe, 3,100 in Hong Kong and Rest of Asia-Pacific, 800 in North America, 3,350 in Latin America and 200 in the Middle East. These properties had an area of approximately 71.3m square feet (2009: 70.8m square feet).

Our freehold and long leasehold properties, together with all our leasehold land in Hong Kong, were valued in 2010. The value of these properties was US\$7.1bn (2009: US\$4.1bn) in excess of their carrying amount in the consolidated balance sheet. In addition, properties with a net book value of US\$1,133m were held for investment purposes.

HSBC's operational properties are stated at cost, being historical cost or fair value at the date of transition to IFRSs (their deemed cost) less any impairment losses, and are depreciated on a basis calculated to write off the assets over their estimated useful lives. Properties owned as a consequence of an acquisition are recognised initially at fair value.

Further details are included in Note 25 on the Financial Statements.

Report of the Directors: Operating and Financial Review (continued)

Other information > Legal proceedings/ Foreclosures / Data security / Footnotes to Overview and OFR

Legal proceedings, investigations and regulatory matters

As a result of an August 2002 restatement of previously reported consolidated financial statements and other corporate events, including the 2002 settlement with 46 State Attorneys General relating to real estate lending practices, Household International (now HSBC Finance) and certain former officers were named as defendants in a class action law suit, *Jaffe v Household International Inc, et al* No 2. C 5893 (N.D.Ill, filed 19 August 2002). Following a jury trial concluded in April 2009, the Court issued a ruling on 22 November 2010, within the second phase of the case to determine actual damages, that claim forms should be mailed to class members and also set out a method for calculating damages for class members who filed claims. Despite the jury verdict and the November 2010 ruling, HSBC continues to believe that it has meritorious defences and intends to seek an appeal of the Court's ruling. The timing and outcome of the resolution of this matter is uncertain. Given the complexity and uncertainties associated with the actual determination of damages, including but not limited to the number of class members that may file valid claims, the number of claims that can be substantiated by class members providing adequate documentation, the reduction of trading losses by any trading gains made over the relevant period, the determination of reliance by class members on the financial statements, and whether any given class member was the beneficial owner of the shares, HSBC is unable at this time to estimate reliably the amount of any damages or range of possible damages that could arise, but they could be significant.

In December 2008, Bernard L Madoff ('Madoff') was arrested for running a Ponzi scheme and a trustee was appointed for the liquidation of his firm, Bernard L Madoff Investment Securities LLC ('Madoff Securities'), a Securities and Exchange Commission ('SEC') registered broker-dealer and investment adviser. Madoff subsequently pleaded guilty to various charges and is serving a 150-year prison sentence. Various non-US HSBC companies provide custodial, administration and similar services to a number of funds incorporated outside the US whose assets were invested with Madoff Securities and have been named as defendants in suits in the US, Ireland, Luxembourg and other jurisdictions. There are many factors which may affect the range of possible outcomes including, but not limited to, the circumstances of the fraud, the multiple jurisdictions in which the proceedings have been brought, and the number of different plaintiffs

and defendants in such proceedings. The cases are at an early stage. For these reasons, among others, it is not practicable at this time for HSBC to estimate reliably the aggregate liabilities or ranges of liabilities that may arise as a result of all such claims but they could be significant. In any event, HSBC considers that it has good defences to these claims and will continue to defend them vigorously.

HSBC Bank USA entered into a consent cease and desist order with the Office of the Comptroller of the Currency and the indirect parent of that company, HSBC North America, entered into a consent cease and desist order with the Federal Reserve Board in the first week of October 2010. These actions require improvements for an effective compliance risk management programme across the Group's US businesses, including US Bank Secrecy Act ('BSA') and Anti Money Laundering ('AML') compliance. Steps continue to be taken to address the requirements of these Orders and to ensure that compliance and effective policies and procedures are maintained.

Various HSBC Group companies are the subject of ongoing investigations, including Grand Jury subpoenas and other requests for information, by US Government agencies, including the US Attorney's Office, the US Department of Justice and the New York County District Attorney's Office. These investigations pertain to, among other matters, HSBC Bank USA's bank note and foreign correspondent banking businesses and its compliance with BSA and AML controls, as well as various HSBC companies' compliance with Office of Foreign Asset Control ('OFAC') requirements, and adherence by certain customers to US tax reporting requirements.

The consent cease and desist orders do not preclude additional enforcement actions against HSBC Bank USA or HSBC North America by bank regulatory or law enforcement agencies, including actions to recover civil money penalties, fines and other financial penalties relating to activities which were the subject of the cease and desist orders. In addition, it is likely that there could be some form of formal enforcement action in respect of some or all of the ongoing investigations. Actual or threatened enforcement actions against other financial institutions for breaches of BSA, AML and OFAC requirements have resulted in settlements involving fines and penalties, some of which have been significant depending on the individual circumstances of each action. The ongoing investigations are at an early stage. Based on the facts currently known, it is not practicable at this time for HSBC to determine the terms on which the ongoing investigations will be resolved or the timing of such resolution or for HSBC

to estimate reliably the amounts, or range of possible amounts, of any fines and/or penalties. As matters progress, it is possible that any fines and/or penalties could be significant.

For further information see Note 44 on the Financial Statements.

Foreclosures

US State and federal officials recently announced investigations into the procedures followed by mortgage servicing companies and banks, including HSBC Finance and HSBC Bank USA, relating to foreclosures. We have responded to all related inquiries and co-operated with all applicable investigations, including a joint examination by staffs of the Federal Reserve Board and the Office of the Comptroller of the Currency as part of their broad review of industry foreclosure practices. Following the examination, our examiners issued supervisory letters noting certain deficiencies in our processing, preparation and signing of affidavits and other documents supporting foreclosures, and in the governance of and resources devoted to our foreclosure processes, including the evaluation and monitoring of third party law firms retained to effect our foreclosures. Certain other processes were deemed adequate. Management is reviewing foreclosures where judgement has not yet been entered and will correct deficient documentation and re-file affidavits where necessary. We have suspended foreclosures until such time as we have substantially addressed noted deficiencies in our processes. We are engaged in discussions with the Federal Reserve Board and the Office of the Comptroller of the Currency regarding the terms of consent cease and desist orders, which will prescribe actions to address the deficiencies noted in the joint examination. We expect the consent orders will be

finalised shortly. While the impact of the consent orders depends on the final terms, we believe they have the potential to increase our operational, reputational and legal risk profiles and expect implementation of their provisions will require significant and managerial resources. In addition, the consent orders will not preclude further actions against HSBC Bank USA or HSBC Finance by bank regulatory or other agencies, including the imposition of fines and civil money penalties. We are unable at this time, however, to determine the likelihood of any further action or the amount of fines or penalties, if any, that may be imposed by the regulators or agencies.

Data security

In March 2010 HSBC Private Bank (Suisse) SA announced that it had been the victim of a significant data theft. In 2010, HSBC Private Bank (Suisse) SA conducted a comprehensive review of its information security procedures, formulated and implemented major security upgrade programmes and continued a multi-million franc investment programme in systems to ensure industry-leading security standards. It also reviewed and strengthened risk management and operational controls and will continue to invest in these areas. In March 2010, the Swiss Financial Market Supervisory Authority ('FINMA') launched an investigation into the circumstances of the data theft. On 22 February 2011 a notice of decision with a declaratory ruling was received from FINMA following such investigation which found that, because of deficiencies in its internal organisation and oversight of its IT activities, HSBC Private Bank (Suisse) SA had breached various regulatory provisions. HSBC Private Bank (Suisse) SA is currently considering the details of the notice of decision and actions required by FINMA.

Footnotes to Overview and Operating and Financial Review

Financial highlights

- Dividends recorded in the financial statements are dividends per ordinary share declared in a year and are not dividends in respect of, or for, that year. The third interim dividend for 2009 of US\$0.08 was paid on 13 January 2010. The fourth interim dividend for 2009 of US\$0.10 was paid on 5 May 2010. First, second and third interim dividends for 2010, each of US\$0.08 per ordinary share, were paid on 7 July 2010, 6 October 2010 and 12 January 2011, respectively. Note 11 on the Financial Statements provides more information on the dividends declared in 2010. On 28 February 2011 the Directors declared a fourth interim dividend for 2010 of US\$0.12 per ordinary share in lieu of a final dividend, which will be payable to ordinary shareholders on 5 May 2011 in cash in US dollars, or in pounds sterling or Hong Kong dollars at exchange rates to be determined on 27 April 2011, with a scrip dividend alternative. The reserves available for distribution at 31 December 2010 were US\$36,013m. Quarterly dividends of US\$15.50 per 6.2% non-cumulative Series A US dollar preference share, equivalent to a dividend of US\$0.3875 per Series A ADS, each of which represents one-fortieth of a Series A US dollar preference share, were paid on 15 March 2010, 15 June 2010, 15 September 2010 and 15 December 2010. Quarterly coupons of US\$0.508 per security were paid with respect to 8.125% capital securities on 15 January 2010, 15 April 2010, 15 July 2010 and 15 October 2010. Quarterly coupons of US\$0.45 and US\$0.50 per security were paid with respect to 8% capital securities on 15 September 2010 and on 15 December 2010, respectively.*
- Return on invested capital is based on the profit attributable to ordinary shareholders. Average invested capital is measured as average*

Report of the Directors: Operating and Financial Review (continued)

Other information > Footnotes to Overview and OFR

total shareholders' equity after adding back goodwill previously written-off directly to reserves, deducting average equity preference shares issued by HSBC Holdings and deducting/(adding) average reserves for unrealised gains/(losses) on effective cash flow hedges and available-for-sale securities. This measure reflects capital initially invested and subsequent profit.

- 3 The return on average total shareholders' equity is defined as profit attributable to shareholders of the parent company divided by average total shareholders' equity.
- 4 The cost efficiency ratio is defined as total operating expenses divided by net operating income before loan impairment charges and other credit risk provisions.
- 5 Each ADS represents five ordinary shares.
- 6 Total shareholder return is defined as the growth in share value and declared dividend income during the relevant period.
- 7 The Financial Times Stock Exchange 100 Index, the Morgan Stanley Capital International World Index and the Morgan Stanley Capital International World Bank Index.
- 8 HBEU is HSBC Bank plc; HBAP is The Hongkong and Shanghai Banking Corporation; and HBUS is HSBC Bank USA. Figures provided for HSBC Bank plc and The Hongkong and Shanghai Banking Corporation incorporate the major overseas branches of these entities. Subsidiaries of these entities are not included unless there is unrestricted transferability of liquidity between the subsidiaries and the parent.
- 9 This comprises our other main banking subsidiaries and, as such, includes businesses spread across a range of locations, in many of which we may require a higher ratio of net liquid assets to customer liabilities to reflect local market conditions.

Reconciliations of reported and underlying profit/(loss) before tax

- 10 These columns comprise the net increments or decrements in profits in the current year compared with the previous year which are attributable to acquisitions or disposals of subsidiaries and/or movements in fair value of own debt attributable to credit spread. The inclusion of acquisitions and disposals is determined in the light of events each year.
- 11 'Currency translation' is the effect of translating the results of subsidiaries and associates for the previous year at the average rates of exchange applicable in the current year.
- 12 Excluding adjustments in 2009.
- 13 Positive numbers are favourable; negative numbers are unfavourable.
- 14 Changes in fair value due to movements in own credit spread on long-term debt issued. This does not include the fair value changes due to own credit spread on structured notes issued and other hybrid instruments included within trading liabilities.
- 15 Net operating income before loan impairment charges and other credit risk provisions.
- 16 Excluding adjustments in 2008.

Financial summary

- 17 In 2008 an impairment charge of US\$10,564m to fully write off goodwill in PFS in North America was reported in total operating expenses. This amount is excluded from total operating expenses in calculating the ratio.
- 18 The effect of the bonus element of the rights issue in 2009 has been included within the basic and diluted earnings per share.
- 19 Dividends per ordinary share expressed as a percentage of earnings per ordinary share.
- 20 Net interest income includes the cost of funding trading assets, while the related external revenues are reported in trading income. In our customer group results, the cost of funding trading assets is included with GB&M's net trading income as interest expense.
- 21 Gross interest yield is the average annualised interest rate earned on average interest-earning assets ('AIEA').
- 22 Net interest spread is the difference between the average annualised interest rate earned on AIEA, net of amortised premiums and loan fees, and the average annualised interest rate paid on average interest-bearing funds.
- 23 Net interest margin is net interest income expressed as an annualised percentage of AIEA.
- 24 Other interest-earning assets includes intercompany eliminations.
- 25 Interest income on trading assets is reported as 'Net trading income' in the consolidated income statement.
- 26 Interest income on financial assets designated at fair value is reported as 'Net income from financial instruments designated at fair value' in the consolidated income statement.
- 27 This includes interest-bearing bank deposits only.
- 28 Interest expense on financial liabilities designated at fair value is reported as 'Net income on financial instruments designated at fair value' in the consolidated income statement, other than interest on own debt which is reported in 'Interest Expense'.
- 29 This includes interest-bearing customer accounts only.
- 30 The cost of internal funding of trading assets was US\$902m (2009: US\$1,309m; 2008: US\$5,547m) and is excluded from the reported 'Net trading income' line and included in 'Net interest income'. However, this cost is reinstated in 'Net trading income' in HSBC's customer group and global business reporting.
- 31 Net trading income includes income of US\$23m (2009: expense of US\$444m; 2008: income of US\$529m), associated with changes in the fair value of issued structured notes and other hybrid instrument liabilities derived from movements in HSBC issuance spreads.
- 32 Other changes in fair value include gains and losses arising from changes in the fair value of derivatives that are managed in conjunction with HSBC's long-term debt issued.
- 33 Discretionary participation features.
- 34 Net insurance claims incurred and movement in liabilities to policyholders arise from both life and non-life insurance business. For non-life business, amounts reported represent the cost of claims paid during the year and the estimated cost of notified claims. For life business, the main element of claims is the liability to policyholders created on the initial underwriting of the policy and any subsequent movement in the liability that arises, primarily from the attribution of investment performance to savings-related policies. Consequently, claims rise in line with increases in sales of savings-related business and with investment market growth.

Consolidated balance sheet

- 35 Net of impairment allowances.
- 36 The calculation of capital resources, capital ratios and risk-weighted assets for 2008 to 2010 is on a Basel II basis. 2006 and 2007 comparatives are on a Basel I basis.
- 37 Capital resources are total regulatory capital, the calculation of which is set out on page 180.
- 38 Includes perpetual preferred securities, details of which can be found in Note 34 on the Financial Statements.

- 39 The definition of net asset value per share is total shareholders' equity, less non-cumulative preference shares and capital securities, divided by the number of ordinary shares in issue.
- 40 'Currency translation' is the effect of translating the assets and liabilities of subsidiaries and associates for the previous year-end at the rates of exchange applicable at the current year-end.

Economic profit

- 41 Expressed as a percentage of average invested capital.
- 42 Average invested capital is measured as average total shareholders' equity after:
- adding back the average balance of goodwill amortised pre-transition to IFRSs or subsequently written-off, directly to reserves (less goodwill previously amortised in respect of the French regional banks sold in 2008);
 - deducting the average balance of HSBC's revaluation surplus relating to property held for own use. This reserve was generated when determining the deemed carrying cost of such properties on transition to IFRSs and will run down over time as the properties are sold;
 - deducting average preference shares and other equity instruments issued by HSBC Holdings; and
 - deducting average reserves for unrealised gains/(losses) on effective cash flow hedges and available-for-sale securities.
- 43 Return on invested capital is profit attributable to ordinary shareholders of the parent company, which can be found in Note 12 on the Financial Statements on page 296.

Customer groups and global businesses and Geographical regions

- 44 The main items reported under 'Other' are certain property activities, unallocated investment activities, centrally held investment companies, gains arising from the dilution of interests in associates, movements in the fair value of own debt designated at fair value (the remainder of the Group's gain on own debt is included in GB&M) and HSBC's holding company and financing operations. The results also include net interest earned on free capital held centrally, operating costs incurred by the head office operations in providing stewardship and central management services to HSBC, and costs incurred by the Group Service Centres and Shared Service Organisations and associated recoveries. At 31 December 2010, there was a US\$188m gain arising from the dilution of interests in associates (2009: nil; 2008: nil) and adverse fair value movements on HSBC's own debt designated at fair value were US\$0.1bn (2009: US\$6.5bn adverse; 2008: US\$6.6bn favourable).
- 45 Assets by geographical region and customer group include intra-HSBC items. These items are eliminated, where appropriate, under the heading 'Intra-HSBC items'.
- 46 Net operating income before loan impairment charges and other credit risk provisions.
- 47 Loan impairment charges and other credit risk provisions.
- 48 Share of profit in associates and joint ventures.
- 49 In the analyses of customer groups and global businesses, net trading income comprises all gains and losses from changes in the fair value of financial assets and financial liabilities classified as held for trading, together with related external and internal interest income and interest expense, and dividends received; in the statutory presentation internal interest income and expense are eliminated.
- 50 In 2010, Global Markets included a favourable fair value movement of US\$23m on the widening of credit spreads on structured liabilities (2009: adverse fair value movement of US\$444m; 2008: favourable fair value movement of US\$529m).
- 51 Total income earned on securities services products in the Group amounted to US\$1.5bn (2009: US\$1.4bn; 2008: US\$2.2bn), of which US\$1.5bn was in GB&M (2009: US\$1.4bn; 2008: US\$2.1bn) and US\$29m was in CMB (2009: US\$19m; 2008: US\$45m).
- 52 Total income earned on payments and cash management products in the Group amounted to US\$4.4bn (2009: US\$4.1bn; 2008: US\$5.8bn), of which US\$3.3bn was in CMB (2009: US\$3.1bn; 2008: US\$4.1bn) and US\$1.1bn was in GB&M (2009: US\$1.1bn; 2008: US\$1.7bn).
- 53 Total income earned on other transaction services in the Group amounted to US\$2.3bn (2009: US\$1.8bn; 2008: US\$1.8bn), of which US\$1.6bn was in CMB relating to trade and supply chain (2009: US\$1.3bn; 2008: US\$1.3bn) and US\$636m was in GB&M of which US\$523m related to trade and supply chain (2009: US\$382m; 2008: US\$355m) and US\$113m related to banknotes and other (2009: US\$125m; 2008: US\$126m).
- 54 In each Group entity, Balance Sheet Management is responsible for managing liquidity and funding under the supervision of the local ALCO. Balance Sheet Management also manages the structural interest rate position of the entity within a Global Markets limit structure.
- 55 'Other' in GB&M includes net interest earned on free capital held in the global business not assigned to products.
- 56 Inter-segment elimination comprises (i) the costs of shared services and Group Service Centres included within 'Other' which are recovered from customer groups, and (ii) the intra-segment funding costs of trading activities undertaken within GB&M. HSBC's Balance Sheet Management business, reported within GB&M, provides funding to the trading businesses. To report GB&M's 'Net trading income' on a fully funded basis, 'Net interest income' and 'Net interest income/(expense) on trading activities' are grossed up to reflect internal funding transactions prior to their elimination in the inter-segment column.
- 57 Net insurance claims incurred and movement in liabilities to policyholders.
- 58 'Employee expenses' comprises costs directly incurred by each customer group. The reallocation and recharging of employee and other expenses directly incurred in the 'Other' customer group is shown in 'Other operating expenses'.
- 59 RWAs are non-additive across geographical regions due to market risk diversification effects within the Group.
- 60 France primarily comprises the domestic operations of HSBC France, HSBC Assurances Vie and the Paris branch of HSBC Bank plc.
- 61 Hong Kong Government certificates of indebtedness were reclassified from PFS to 'Other' at 1 January 2010.
- 62 US includes the impairment of goodwill in respect of PFS – North America.

Report of the Directors: Operating and Financial Review (continued)

Risk > Risk profile / Managing risk / Risk governance

Risk

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1 Unaudited 2 Audited 3 Audited where indicated

Risk Profile

(Unaudited)

Managing our risk profile

- A strong balance sheet remains core to our philosophy.
- We have reduced our exposure to higher risk asset classes while achieving controlled balance sheet growth.
- We have ensured that our portfolio remains diversified across regions, client sectors and risk types.

Maintaining capital strength and strong liquidity position

- Our tier 1 capital ratio remains strong at 12.1%.
- We have sustained our strong liquidity position throughout 2010.
- The ratio of customer advances to deposits remains below 80%.

Strong governance

- Our Global Risk function is independent of our commercial and operational functions.
- Robust risk governance and accountability is embedded across the Group.
- The Board, advised by the Group Risk Committee, approves our risk appetite.
- A global risk operating model provides consistent and effective oversight across all six regions and our customer groups and global businesses.

Our top and emerging risks

- Challenges to our business operations.
- Challenges to our governance and internal control systems.
- Macro-economic and geopolitical risk.
- Macro-prudential and regulatory risks to our business model.

Managing risk

(Unaudited)

The continued growth in our business in 2010 was achieved while ensuring risks were assumed in a measured manner and in line with our appetite for such risks. This approach is encapsulated within our risk appetite framework. It is approved by the Group Risk Committee and the Board.

The framework is maintained at Group, regional, global business and customer group levels, operating through governance bodies, processes and metrics designed to assist in risk management. Risk appetite statements define, at various levels of the business, the qualitative and quantitative expressions of the risks which HSBC is prepared to embrace in alignment with its strategy and business plans. Quantitative metrics are assigned to five key categories: earnings, capital and liquidity, impairments and expected losses, risk category and diversification and scenario stress testing. Measurement against the metrics serves to:

- guide underlying business activity, ensuring it is aligned to risk appetite statements;
- determine risk-adjusted remuneration;
- enable the key underlying assumptions to be monitored and, where necessary, adjusted through subsequent business planning cycles; and
- promptly identify business decisions needed to mitigate risk.

Report of the Group Risk Committee

Further commentary on risk appetite, risk governance and stress testing can be found within the Report of the Group Risk Committee, on pages 197 to 201 of the Governance section.

The diversification of our lending portfolio across our regions, together with our broad range of customer groups and products, ensure that we are not dependent on a few countries or markets to generate income and growth. Our geographical diversification also provides impetus to our strategies for growth in faster-growing markets and those with international connectivity.

During 2010, the financial markets were dominated by concerns over sovereign debt. In addition, the perception that the world economic recovery remained fragile created volatility in certain financial markets. Further quantitative easing from the US temporarily boosted market confidence, but inflationary pressures remained an issue, especially in the UK and some emerging markets.

With an ever-changing economic and financial environment, we pro-actively review our risk profile and, where appropriate, introduce new risk

measures. Stress testing will continue to evolve to ensure that it considers prevailing concerns.

Our insurance operations are managed with regard to the effects on financial markets of prevailing economic conditions such as the low yields available on fixed-interest investments and continuing high unemployment rates, particularly in the US and Europe.

Capital and liquidity

We maintained a strong balance sheet during 2010 while reducing the overall risk in our portfolio. Our balance sheet assets grew by 4% during the year while our credit risk-weighted assets fell by 1.4%. This was achieved, in part, by concentrating on our growth in core portfolios and running off those that were not core to our business.

In addition, we reduced our loan impairment charges and other credit risk provisions from US\$26.5bn in 2009 to US\$14.0bn in 2010, reflecting the general improvement in the credit quality of our portfolio.

Preserving our strong capital position has long been, and will remain, a key priority for HSBC. We are equipped to respond to the capital requirements imposed by Basel III, which are discussed further on pages 181 and 182, and to sustain future growth. We have adopted a holistic approach to testing the sensitivities of our capital plans against a number of scenarios; our approach to scenario stress testing analysis is discussed below.

We continue to maintain a strong liquidity position and are well positioned for the new regulatory landscape. The run-off of the HSBC Finance portfolio and the continuing moderation of market conditions in 2010 contributed to our strong liquidity position.

Risk governance

(Unaudited)

Our strong risk governance reflects the importance placed by the Board on shaping the Group's risk strategy and managing risks effectively. It is supported by a clear policy framework of risk ownership, by the cascading from the GMB of balanced scorecards that align business and risk objectives, and by the accountability of all officers for identifying, assessing and managing risks within the scope of their assigned responsibilities. This personal accountability, reinforced by the governance structure, experience and mandatory learning, helps to foster throughout HSBC a disciplined and constructive culture of risk management and control.

Report of the Directors: Operating and Financial Review (continued)

Risk > Challenges and uncertainties > Business operations / Macro-economic and geopolitical

Scenario stress testing

We conduct a range of Group stress testing scenarios including, but not limited to, severe global economic downturn, country, sector and counterparty failures, and a variety of projected major operational risk events. The outcomes of the stress scenarios are used to assess the potential impact on demand for regulatory capital against its supply. We also participate, where appropriate, in scenario analyses requested by regulatory bodies.

In addition to the suite of risk scenarios considered for the Group, each major HSBC subsidiary conducts regular macro-economic and event-driven scenario analyses specific to its region.

Stress testing is also used by the market risk discipline to evaluate the potential impact on portfolio values of events or movements in a set of financial variables.

Challenges and uncertainties

(Unaudited)

The top and emerging risks identified through our risk management processes and outlined in the Report of the Group Risk Committee on page 199, present challenges and uncertainties as we carry out our activities. These are considered in further detail below.

Business operations, governance and control

Operational risks are inherent in our business

We are exposed to many types of operational risk, including fraudulent and other criminal activities (both internal and external), breakdowns in processes or procedures, or systems failure or unavailability. We are also subject to the risk of disruption to our business arising from events that are wholly or partially beyond our control (for example: natural disasters, acts of terrorism, epidemics and transport or utility failures) which may give rise to losses in service to customers and/or economic loss to HSBC. All of these risks are also applicable where we rely on external suppliers or vendors to provide services to us and our customers.

The reliability and security of our information and technology infrastructure and its customer databases, for example to combat internet fraud, are crucial to maintaining our banking applications and processes and to protecting the HSBC brand. Critical system failure, any prolonged loss of service availability or any material breach of data security, particularly involving confidential customer data,

could cause serious damage to our ability to serve our clients, could breach regulations under which we operate and could cause long-term damage to our business and brand. Information security and the management of increasing operational complexity are two of the key emerging operational risks that we face.

We are subject to legal and compliance risks, which could have an adverse effect on the Group

Legal and compliance risks arise from a variety of sources with the potential to cause harm to HSBC and our ability to operate. These issues require us to deal appropriately with potential conflicts of interest; regulatory requirements; ethical issues; anti-money laundering laws and regulations; privacy laws; information security policies; sales and trading practices; and the conduct of companies with which we are associated. Failure to address these issues appropriately may give rise to additional legal and compliance risk to HSBC, with an increase in the number of litigation claims and the amount of damages asserted against us, or subject us to regulatory enforcement actions, fines or penalties or reputational damage.

We are subject to tax-related risks in the countries in which we operate

We are subject to the substance and interpretation of tax laws in all countries in which we operate. Failure to respond to changes in tax rates and comply with procedures required by tax authorities could lead to increased tax charges, including financial or operating penalties.

Liquidity and funding risks are inherent in our business

HSBC's business model is founded upon having ready access to financial resources whenever required to meet our obligations and grow our business. To this end, our entities seek to maintain a diversified and stable funding base comprising core retail and corporate customer deposits and institutional balances, and certain entities augment this with amounts of long-term wholesale funding. In addition, we hold portfolios of highly liquid assets to enable us to respond to unusual liquidity requirements. We continue to maintain a strong liquidity position, moving into the new regulatory landscape.

Where markets become illiquid, the value at which financial instruments can be realised is highly uncertain, and capital resources may shrink as valuations decline. Rating agency downgrades of

instruments to which we have exposure, or threats of downgrades, can exacerbate the effect. The liquidity of those HSBC entities that utilise long-term wholesale markets could be constrained by an inability to access them due to a variety of unforeseen market dislocations or interruptions.

The market conditions that the financial services industry experienced during the recent financial crisis highlighted the significant benefits of a diversified core deposit base, leading to increased competition for such deposits and the greater risk of deposit migration between competitors.

Our GB&M business operates in many markets affected by illiquidity and is subject to the threat of extreme price volatility, either directly or indirectly, through exposures to securities, loans, derivatives and other commitments. Although market conditions continued to moderate in 2010, it is difficult to predict if this trend will continue and, if conditions worsen, which of our markets, products and other businesses will be affected. Any repeat of these factors could have an adverse effect on our results.

Macro-economic and geopolitical

Prevailing economic and market conditions may adversely affect our results

Our earnings are affected by global and local economic and market conditions. Following the problems experienced in financial markets in 2007-8, concerted government action in 2009 paved the way for a general improvement in the economic environment in 2010, though recovery was variable between regions. The eurozone economies came under greater pressure, the dominant concern being over sovereign debt. The financial services industry continued to face an unusually high degree of uncertainty.

With unemployment remaining high, consumer confidence weak in developed markets and amid signs of emerging inflationary pressures, economic conditions remain fragile and volatile. Some countries may recover only slowly to past levels of growth, with the possibility of a return to recessionary conditions in more sluggish economies, while others which are growing rapidly may need to undertake major adjustments to counter the formation of asset bubbles. This could have an adverse effect on our operating results. In particular, we may face the following challenges in connection with these events to our operations and operating model:

- the demand for borrowing from creditworthy customers may diminish if economic activity slows;

- trade and capital flows may contract as a result of protectionist measures being introduced in certain markets, or on the emergence of geopolitical risks;
- a prolonged period of low interest rates will constrain, for example through margin compression and low returns on assets, net interest income we earn on our excess deposits;
- our ability to borrow from other financial institutions or to engage in funding transactions could be adversely affected by market disruption, for example in the event of contagion from stress in the eurozone sovereign and financial sectors;
- market developments may depress consumer and business confidence, for example if growth in the US or the UK were to be poor, adversely affecting both asset prices and payment patterns and leading to increases in delinquencies and default rates, write-offs and loan impairment charges beyond our expectations. The effect of such conditions in 2010 and previous years on our North American retail business is described on page 110.

We are subject to political and economic risks in the countries in which we operate

We responded effectively to the financial crisis and, more recently, the sovereign debt problems within the eurozone, where we continued during 2010 to support our operations and carry out wider market functions.

As an organisation which operates in 87 countries and territories, however, our results are subject to the risk of loss from unfavourable political developments, currency fluctuations, social instability and changes in government policies on such matters as expropriation, authorisations, international ownership, interest-rate caps, foreign exchange transferability and tax in the jurisdictions in which we operate.

The ability of HSBC's subsidiaries and affiliates to pay dividends could be restricted by changes in official banking measures, exchange controls and other requirements. We prepare our accounts in US dollars, but because a substantial portion of our assets, liabilities, funds under management, revenues and expenses are denominated in other currencies, changes in foreign exchange rates have an effect on our reported income, cash flows and shareholders' equity.

Report of the Directors: Operating and Financial Review (continued)

Risk > Challenges and uncertainties > Macro-prudential and regulatory

We have significant exposure to counterparty risk within our portfolio

We have exposure to virtually all major industries and counterparties, and we routinely execute transactions with counterparties in financial services, including brokers and dealers, commercial banks, investment banks, mutual and hedge funds, and other institutional clients. Many of these transactions expose us to credit risk in the event of default by our counterparty or client. Financial institutions are necessarily interdependent because of trading, clearing, counterparty or other relationships. As a consequence, a default by, or decline in market confidence in, individual institutions, or anxiety about the financial services industry generally, can lead to further individual and/or systemic losses. Our credit risk may remain high if the collateral taken to mitigate counterparty risk cannot be realised or has to be liquidated at prices which are insufficient to recover the full amount of our loan or derivative exposure. For further information relating to the major risk areas, see 'Areas of Special Interest' on page 103.

Macro-prudential and regulatory

We face a number of challenges in regulation and supervision

Financial services providers face increased regulation and supervision, with more stringent and costly requirements in the areas of capital and liquidity management and of compliance relating to conduct of business and the integrity of financial services delivery. Increased government intervention and control over financial institutions, together with measures to reduce systemic risk, could significantly alter the competitive landscape.

Recent regulatory and supervisory developments have largely been shaped by the leaders, Finance Ministers and Central Bank Governors of the Group of Twenty nations ('the G20'), who delegated the development and issuance of standards to the Basel Committee of Banking Supervisors ('the Basel Committee'). The G20 also established the Financial Stability Board ('FSB') to assess vulnerabilities affecting the financial system as a whole, as well as to monitor and advise on market developments and best practice in meeting regulatory standards.

In looking to address the systemic failures that caused the financial crisis of 2007-8, the authorities asserted two primary objectives: to establish a resilient system to reduce substantially the risks of failure of financial institutions and, in case failure in the end proved unavoidable, to have in place

measures to achieve orderly resolution without cost to taxpayers. Governments and regulators have embarked on significant change in the regulation of the financial system, highlighting the following priorities:

- a stronger international framework for prudential regulation, ensuring significantly increased liquidity and regulatory capital buffers and enhanced quality of capital;
- convergence towards a single set of high-quality, global, independent accounting standards, with particular focus on accounting for financial instruments and off-balance sheet exposures;
- strengthening the regulation of hedge funds and credit rating agencies, and improving the infrastructure for derivative transactions, including central counterparty clearing of over-the-counter derivatives;
- design and implementation of a system which will allow for the restructuring or resolution of financial institutions, without taxpayers ultimately bearing the burden;
- an increased role for colleges of supervisors to coordinate oversight of systemically significant institutions such as HSBC, and effective coordination of resolution regimes for failed banks;
- measures on financial sector compensation arrangements to prevent excessive short-term risk taking and mitigate systemic risk on a globally consistent basis; and
- a fair and substantial contribution by the financial sector towards paying for any burden associated with government interventions, where they occur, to repair and reduce risks from the financial system or to fund the resolution of problems.

Measures proposed by the Basel Committee to increase resilience in the financial system

The Basel Committee, following consultation, impact analyses and draft proposals during 2010, issued final proposals in December 2010, known as Basel III, on the twin areas of capital and liquidity, the key aspects of which are set out below.

- *Risk weightings*: increased weightings for the trading book and re-securitisations are planned for implementation by the end of 2011. A fundamental review of the trading book will continue during 2011.

- *Quality of capital:* there is renewed emphasis on common equity as the principal component of tier 1 capital, with increased deductions from shareholders' equity (calculated on an accounting basis) to determine the level of regulatory capital. The phasing-in periods for these new deductions will start in 2014, to be fully implemented by 2018.
- *Minimum ratios:* a new minimum common equity requirement of 4.5% is to be implemented in full by 1 January 2015. An additional capital conservation buffer of 2.5% in common equity effectively acts as a trigger for restrictions on management actions (such as the payment of dividends or bonuses) so that the capital structure can be rebuilt. This will be phased in between 1 January 2016 and 1 January 2019. In addition to these core tier 1 levels, additional requirements from the Basel Committee for tier 1 capital of 1.5% and tier 2 capital of 2.0%, by 2019, will lift the minimum total capital requirement for banks to around 10.5%.
- *Countercyclical capital buffer:* the Basel Committee has finalised its proposals for a countercyclical capital buffer of 2.5% in common equity, to be built up in periods of excess credit growth compared with GDP growth. It is not clear how these may operate in practice and there is doubt that either supervisors or the market would support release of a buffer again as the economic cycle turned.
- *Total leverage:* the Committee has proposed a leverage ratio of 3% of total assets to constrain aggregate size relative to the capital base. It is intended that an observation period of parallel running from 2013 to 2017 should enable a minimum standard to become mandatory in 2018.
- *Liquidity and funding:* a new minimum standard, the Liquidity Coverage Ratio, has been developed to promote the short-term resilience of a bank's liquidity risk profile. A Net Stable Funding Ratio has also been introduced to provide a sustainable maturity structure of assets and liabilities. As it is not yet clear what unintended consequences these measures may have, they will be phased in after observation periods in 2015 and 2018, respectively.
- The Basel Committee is also developing an approach, due by the end of 2011, to defining Global Systemically Important Financial Institutions ('G-SIFI's) to introduce more

rigorous oversight and co-ordinated assessment of their risks through international supervisory colleges, provide for higher levels of capital and liquidity resilience, and require mandatory recovery and resolution plans with institution-specific crisis cooperation agreements between cross-border crisis management groups.

A strong capital position has long been, and will remain, a key priority for HSBC. We are equipped to respond to the capital requirement standards of Basel III, as discussed further on pages 181 and 182, and to sustain future growth.

Other measures

- *Remuneration:* the FSB has issued principles on remuneration designed to guide regional and national authorities in establishing appropriate regimes to align remuneration in a risk-based manner with the long-term interests of stakeholders. The EU has implemented rule changes in the Capital Requirements Directive which impact the balance between fixed and variable remuneration, establishing limits on the percentage of bonus which can be paid in cash. Approaches to the issue remain divergent globally, however.
- *Bank levies:* a number of levies are being raised on banks, notably by the UK, Germany and France. There is a renewed US proposal to raise a financial crisis responsibility fee on certain financial companies with assets over US\$50bn. The European levies are calculated with reference to measures of stability of funding, in order to encourage more stable structures. In the UK, for example, the levy is to be charged at a rate of 0.075% on all liabilities excluding insured deposits and certain other elements, but with a lower rate for longer-term liabilities and uninsured deposits. Germany will hypothecate levy income to create resolution funds to support failing banks, while in other jurisdictions it will accrue to general tax revenues. Under the draft legislation, the UK levy is not tax deductible and does not meet the definition of an income tax for income statement purposes. For indicative purposes only, the UK levy that would be payable based on the closing 2010 balance sheet, after taking into account announced changes to deposit protection schemes in 2011, is estimated at US\$0.6bn.
- *Other taxes:* other areas of financial sector taxation being considered by the authorities are a Financial Activities Tax ('FAT'), a tax on profit and remuneration, and a Financial

Report of the Directors: Operating and Financial Review (continued)

Risk > Challenges and uncertainties > Macro-prudential and regulatory // Credit risk > Credit risk management

Transaction Tax ('FTT') applied to a specified range of financial transactions. An IMF report for the G20 in 2010 saw merit in an FAT but did not recommend an FTT as it was felt not to address the key issues within the G20 mandate and might have unintended economic and regulatory consequences. In its Seoul 2010 communique the G20 did not promote any one approach for adoption. Both the European Commission and the UK Government are considering an FAT, which the former believes can work at EU level. The EU also sees merit in an FTT but, recognising the dependency on an international consensus, will continue to work within the G20 for its adoption.

- *The 'Volcker Rule':* under the Dodd-Frank Act, banking organisations with operations in the US face limits on their ability to sponsor or invest in private equity or hedge funds and are prohibited from engaging in certain types of 'proprietary trading' in the US, subject to a number of exceptions allowing an entity significant leeway to engage in client-serving trading, such as market-making and underwriting, and risk-mitigating hedging activities. The ultimate impact of these restrictions will depend on how US regulators implement them in rulemaking.
- *Derivatives and central counterparties regulation:* as agreed by the G20, the authorities are seeking to reduce systemic risk and volatility relating to derivatives trading. In the US, the Dodd-Frank Act provides for an extensive regulatory framework for over the counter ('OTC') derivatives. In addition to the mandatory clearing, exchange trading and reporting of certain swaps and security-based swaps, it also requires the registration of swap dealers and major swap participants, making them subject to capital, margin, business conduct and record-keeping regulations. In September 2010, the EU Commission presented proposals, currently in negotiation, for all standardised OTC derivatives to be reported to trade repositories and centrally cleared by the end of 2012. The proposal disincentivises derivative contracts which are not eligible for central clearing by proposing higher capital requirements. Exemptions for foreign exchange swaps and forwards are currently being considered.
- *Markets in financial instruments:* the European Commission is conducting a major Review of the Markets in Financial Instruments Directive, potentially to extend its scope beyond equities to other asset classes including bonds, exchange-

traded funds and other equity-like and non-equity instruments, and to promote their trading on exchanges and other markets that will be subject to regulation. It also proposes giving additional power to regulators to ban trading in products that are eligible to be cleared but for which no clearing solution is currently available.

- *The UK Independent Commission on Banking:* this Commission was established to examine issues of banking activity and competition, including the potential impact on financial markets of a number of options to separate the retail and wholesale activities of universal banks. Responses to the opening consultation have been published and the Commission intends to publish an interim report in April 2011, with further consultation prior to a final report in September 2011. The UK Government is not bound to adopt the Commission's recommendations.
- *Recovery and resolution plans:* such plans are considered a key element in improving the ability of regulators to rescue (or 'resolve') firms when they get into difficulties without putting taxpayer monies at risk. Studies and pilots have been initiated by various official bodies on the resolution of financial firms and the international coordination of such exercises; the UK authorities have been at the forefront of work to develop approaches to this subject. The EU has consulted on a new framework for crisis management, including so-called 'bail-in' creditor write-down resolution. Legislative proposals are expected mid-2011. In the US, the Dodd-Frank Act established the Orderly Liquidation Authority which will ultimately provide a bank-like receivership process for large financial companies; resolution plans will be required of large financial institutions and rules for 'early remediation' will be forthcoming. There is currently no consistent approach and a number of key areas need to be addressed, including an international legal framework for addressing competing creditor claims and the application of collateral.

Restructuring of regulatory bodies

In addition to the significant volume of new regulation emanating from the Basel Committee and others, the landscape of financial sector regulation itself in a number of major Western countries is undergoing significant change, presenting its own challenges to the industry and its implementation of proposed reforms.

- In the EU, new authorities for segments of the financial services sector took up their powers with effect from 1 January 2011: the European Banking Authority, the European Securities Markets Authority and the European Insurance and Occupational Pension Authority. In addition, a European Systemic Risk Board will consider emerging macro-prudential risks.
- In the UK, the Financial Services Authority's ('FSA') prudential supervisory responsibilities will be transferred in 2012 to a Bank of England agency, the Prudential Regulatory Authority, while the Financial Conduct Authority will act as a single regulator of conduct of business for both retail and wholesale firms.
- In the US, the Dodd-Frank Act re-assigns responsibilities of existing agencies, demising the Office of Thrift Supervision and creating others, including a Financial Stability Oversight Council to address systemic matters and a Bureau of Consumer Protection.

Implementation risks

The extensive programme of regulatory change carries significant implementation risks for authorities and industry participants alike, including:

- *Disparities in implementation:* many official measures are proposals in development and negotiation, and have yet to be enacted into regional and national legislation. These processes could result in differing, fragmented and overlapping implementation around the world, leading to risks of regulatory arbitrage, a far from level competitive playing-field and increased compliance costs, especially for large, global financial institutions such as HSBC.
- *Timetable and market expectations:* while the Basel Committee has announced the timetable for its core proposals in Basel III, it remains uncertain how these and other measures will play out in practice, for instance with regard to differences in approach between Basel III and the Dodd-Frank Act in the US. Meanwhile, market expectations will exert pressure on institutions to assess and effect compliance well in advance of official timetables.
- *Wider economic impact and unforeseen consequences:* while the conclusions of official and industry studies have diverged, the measures proposed will clearly impact on financial and economic activity in ways that cannot yet be clearly foreseen. For example, higher capital requirements may seriously

constrain the availability of funds for lending to support economic recovery.

Credit Risk

Credit risk management

(Audited)

Credit risk is the risk of financial loss if a customer or counterparty fails to meet a payment obligation under a contract. It arises principally from direct lending, trade finance and leasing business, but also from off-balance sheet products such as counterparty risk guarantees and credit derivatives, and from our holdings of debt securities. Of the risks in which we engage, credit risk generates the largest regulatory capital requirement.

Principal objectives of our credit risk management

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

The Credit Risk department fulfils the role of an independent credit control unit as part of the Global Risk function in our Group Management Office ('GMO'). Credit approval authorities are delegated by the Board to the most senior Chief Executive Officers, who receive commensurate authorities from their own boards. In each major subsidiary, a Chief Risk Officer reports to the local Chief Executive Officer on credit-related issues, while maintaining a direct functional reporting line to the Group Chief Risk Officer in GMO.

Credit quality

(Audited)

Our credit risk rating systems and processes differentiate exposures in order to highlight those with greater risk factors and higher potential severity of loss. In the case of individually significant accounts, risk ratings are reviewed regularly and any amendments are implemented promptly. Within our retail businesses, risk is assessed and managed using a wide range of risk and pricing models to generate portfolio data.

Our risk rating system facilitates the internal ratings-based ('IRB') approach under Basel II adopted by the Group to support calculation of our minimum credit regulatory capital requirement. For further details, see 'Credit quality of financial instruments' on page 114.

Report of the Directors: Operating and Financial Review (continued)

Risk > Credit risk > Credit risk management / Credit exposure

Special attention is paid to problem exposures in order to accelerate remedial action. Where appropriate, our operating companies use specialist units to provide customers with support in order to help them avoid default wherever possible.

The high-level oversight and management of credit risk provided globally by the Credit Risk function within GMO

- to formulate Group credit policy. Compliance, subject to approved dispensations, is mandatory for all operating companies which must develop local credit policies consistent with Group policies;
- to guide operating companies on our appetite for credit risk exposure to specified market sectors, activities and banking products and controlling exposures to certain higher-risk sectors;
- to undertake an independent review and objective assessment of risk. Global Risk assesses all commercial non-bank credit facilities and exposures over designated limits, prior to the facilities being committed to customers or transactions being undertaken;
- to monitor the performance and management of portfolios across the Group;
- to control exposure to sovereign entities, banks and other financial institutions, as well as debt securities which are not held solely for the purpose of trading;
- to set our policy on large credit exposures, ensuring that concentrations of exposure by counterparty, sector or geography do not become excessive in relation to our capital base, and remain within internal and regulatory limits;
- to control our cross-border exposures (see page 102);
- to maintain and develop our risk rating framework and systems. The Group Chief Risk Officer chairs the Credit Risk Analytics Oversight Committee, which reports to the Risk Management Meeting and oversees risk rating model governance for both wholesale and retail business;
- to report on retail portfolio performance, high risk portfolios, risk concentrations, country limits and cross-border exposures, large impaired accounts, impairment allowances and stress testing results and recommendations to the Risk Management Meeting, the Group Risk Committee and the Board; and
- to act on behalf of HSBC Holdings as the primary interface, for credit-related issues, with the Bank of England, the FSA, local regulators, rating agencies, analysts and counterparts in major banks and non-bank financial institutions.

Group and regional Credit Review and Risk Identification teams regularly review exposures and processes in order to provide an independent, rigorous assessment of credit risk across the HSBC Group, reinforce secondary risk management controls and share best practice. Internal audit, as a tertiary control function, focuses on risks with a global perspective and on the design and effectiveness of primary and secondary controls, carrying out oversight audits via sampling of global/regional control frameworks, themed audits of key or emerging risks and project audits to assess major change initiatives.

Impairment assessment

(Audited)

It is HSBC's policy that each operating company creates allowances for impaired loans promptly and consistently.

Impairment allowances may be assessed and created either for individually significant accounts or, on a collective basis, for groups of individually significant accounts for which no evidence of impairment has been individually identified or for high-volume groups of homogeneous loans that are not considered individually significant.

When impairment losses occur, we reduce the carrying amount of loans and advances through the use of an allowance account. When impairment of available-for-sale financial assets and held-to-maturity financial investments occurs, we reduce the carrying amount of the asset directly. For further details, see 'Critical accounting policies' on page 33.

Write-off of loans and advances

Loans are normally written off, either partially or in full, when there is no realistic prospect of further recovery. For secured loans, write-off generally occurs after receipt of any proceeds from the realisation of security. Write-off may occur earlier when the net realisable value of any collateral has been determined and there is no reasonable expectation of further recovery.

In HSBC Finance, the carrying amounts of residential mortgage and second lien loans in excess of net realisable value are written off at or before the time foreclosure is completed or settlement is reached with the borrower. If there is no reasonable expectation of recovery, and foreclosure is pursued, the loan is normally written off no later than the end of the month in which the loan becomes 180 days contractually past due.

Unsecured personal facilities, including credit cards, are generally written off at between 150 and 210 days past due, the standard period being the end of the month in which the account becomes 180 days contractually delinquent. Write-off periods may be extended, generally to no more than 360 days past due but in very exceptional circumstances exceeding that figure, in a few countries where local regulation or legislation constrain earlier write-off, or where the realisation of collateral for secured real estate lending extends to this time.

In the event of bankruptcy or analogous proceedings, write-off may occur earlier than at the

periods stated above. Collections procedures may continue after write-off.

Cross-border exposures

We assess the vulnerability of countries to foreign currency payment restrictions, including economic and political factors, when considering impairment allowances on cross-border exposures. Impairment allowances are assessed in respect of all qualifying exposures within vulnerable countries unless these exposures and the inherent risks are:

- performing, trade-related and of less than one year's maturity;
- mitigated by acceptable security cover which is, other than in exceptional cases, held outside the country concerned;
- in the form of securities held for trading purposes for which a liquid and active market exists, and which are measured at fair value daily; and
- performing facilities with a principal (excluding security) of US\$1m or below and/or with maturity dates shorter than three months.

Credit exposure

Maximum exposure to credit risk

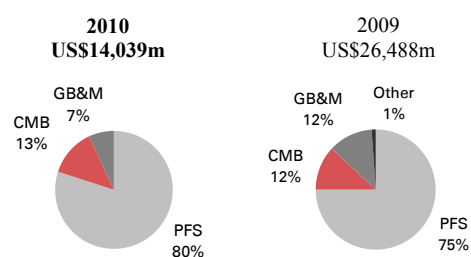
(Audited)

Our credit exposure is spread across a broad range of asset classes, including derivatives, trading assets, loans and advances to customers, loans and advances to banks and financial investments. In 2010, exposure to credit risk remained diversified across classes. However, the balance changed compared with the end of 2009, reflecting growth in loans and advances to both customers and banks, and a reduction in trading assets due to the deconsolidation of the Constant Net Asset Value funds.

Residential mortgage lending continued to represent a significant portion of our overall credit exposure. In 2010, the credit quality of our mortgage portfolios generally improved, reflecting economic conditions and a stabilisation of unemployment and house prices in most of our key markets. Despite

some improvement, economic and housing market conditions remain difficult across the US and we remain focused on running off the residual balances in our Consumer Lending and Mortgage Services portfolio. In the UK, we grew our residential mortgage lending exposure as a result of successful promotional campaigns and competitive pricing. The consistent application of conservative underwriting criteria ensured the credit quality of our residential mortgage exposure in the UK remained satisfactory and well secured. Our exposure to the Hong Kong residential mortgage market also grew during 2010; we continued to lend conservatively with an average loan-to-value ratio of 55% on new mortgage sales. For further commentary on personal lending, see 'Areas of special interest – Personal Lending' on page 106.

Loss experience: percentage of total loan impairment charges and other credit risk provisions (Unaudited)



The following table presents the maximum exposure to credit risk from balance sheet and off-balance sheet financial instruments, before taking account of any collateral held or other credit enhancements (unless such credit enhancements meet accounting offsetting requirements). For financial assets recognised on the balance sheet, the maximum exposure to credit risk equals their carrying amount; for financial guarantees and similar contracts granted, it is the maximum amount that we would have to pay if the guarantees were called upon. For loan commitments and other credit-related commitments that are irrevocable over the life of the respective facilities, it is generally the full amount of the committed facilities.

Report of the Directors: Operating and Financial Review (continued)

Risk > Credit risk > Credit exposure

Maximum exposure to credit risk (Audited)

	At 31 December 2010			At 31 December 2009		
	Maximum exposure US\$m	Offset US\$m	Exposure to credit risk (net) US\$m	Maximum exposure US\$m	Offset US\$m	Exposure to credit risk (net) US\$m
Cash and balances at central banks	57,383	–	57,383	60,655	–	60,655
Items in the course of collection from other banks	6,072	–	6,072	6,395	–	6,395
Hong Kong Government certificates of indebtedness	19,057	–	19,057	17,463	–	17,463
Trading assets	343,966	(4,189)	339,777	386,070	(8,496)	377,574
Treasury and other eligible bills	25,620	–	25,620	22,346	–	22,346
Debt securities	168,268	–	168,268	201,598	–	201,598
Loans and advances to banks	70,456	–	70,456	78,126	–	78,126
Loans and advances to customers	79,622	(4,189)	75,433	84,000	(8,496)	75,504
Financial assets designated at fair value	19,593	–	19,593	22,198	–	22,198
Treasury and other eligible bills	159	–	159	223	–	223
Debt securities	18,248	–	18,248	20,718	–	20,718
Loans and advances to banks	315	–	315	354	–	354
Loans and advances to customers	871	–	871	903	–	903
Derivatives	260,757	(197,501)	63,256	250,886	(189,606)	61,280
Loans and advances held at amortised cost	1,166,637	(91,966)	1,074,671	1,076,012	(91,127)	984,885
– to banks	208,271	(3,099)	205,172	179,781	(116)	179,665
– to customers	958,366	(88,867)	869,499	896,231	(91,011)	805,220
Financial investments	392,772	–	392,772	360,034	–	360,034
Treasury and other similar bills	57,129	–	57,129	58,434	–	58,434
Debt securities	335,643	–	335,643	301,600	–	301,600
Other assets	30,371	(29)	30,342	36,373	(4)	36,369
Endorsements and acceptances	10,116	(29)	10,087	9,311	(4)	9,307
Other	20,255	–	20,255	27,062	–	27,062
Financial guarantees and similar contracts	49,436	–	49,436	53,251	–	53,251
Loan and other credit-related commitments ¹	602,513	–	602,513	558,050	–	558,050
	2,948,557	(293,685)	2,654,872	2,827,387	(289,233)	2,538,154

For footnote, see page 174.

Collateral and other credit enhancements (Audited)

Collateral held against financial instruments presented in the above table is described in more detail below.

Loans and advances

Although collateral can be an important mitigant of credit risk, it is our policy to lend on the basis of the customer's capacity to repay rather than to rely on the value of security offered. Depending on the customer's standing and the type of product, facilities may be provided unsecured.

We employ the following principal collateral types:

- in the personal sector, mortgages over residential properties;
- in the commercial and industrial sector, charges over business assets such as premises, stock and debtors;

- in the commercial real estate sector, charges over the properties being financed; and
- in the financial sector, charges over financial instruments such as cash, debt securities and equities in support of trading facilities.

In addition, credit derivatives and securitisation structures are used to hedge or transfer credit risk within our loan portfolio.

The loans and advances offset adjustment in the table above primarily relates to customer loans and deposits, and balances arising from repo and reverse repo transactions. The offset relates to balances where there is a legally enforceable right of offset in the event of counterparty default, and where, as a result, there is a net exposure for credit risk management purposes. However, as there is no intention to settle these balances on a net basis under normal circumstances, they do not qualify for net presentation for accounting purposes.

We do not disclose the fair value of collateral held as security or other credit enhancements on loans and advances past due but not impaired, or on individually assessed impaired loans and advances, as it is not practicable to do so.

Derivatives

The International Swaps and Derivatives Association ('ISDA') Master Agreement is our preferred agreement for documenting derivatives activity. It provides the contractual framework within which dealing activity across a full range of OTC products is conducted, and contractually binds both parties to apply close-out netting across all outstanding transactions covered by an agreement if either party defaults or another pre-agreed termination event occurs. It is common, and our preferred practice, for the parties to execute a Credit Support Annex ('CSA') in conjunction with the ISDA Master Agreement. Under a CSA, collateral is passed between the parties to mitigate the counterparty risk inherent in outstanding positions. The majority of our CSAs are with financial institutional clients.

The derivative offset amount in the above table relates to exposures where the counterparty has an offsetting derivative exposure with HSBC, a master netting arrangement is in place and the credit risk exposure is managed on a net basis, or the position is specifically collateralised, normally in the form of cash. At 31 December 2010, the total amount of such offsets was US\$197.5bn (2009: US\$189.6bn), of which US\$178.3bn (2009: US\$168.5bn) were offsets under a master netting arrangement, US\$19.0bn (2009: US\$21.0bn) were collateral received in cash and US\$0.2bn (2009: US\$0.1bn) were other collateral. These amounts do not qualify for net presentation for accounting purposes, as settlement may not actually be made on a net basis.

Treasury, other eligible bills and debt securities

Debt securities, treasury and other eligible bills are generally unsecured except for asset-backed securities ('ABS') and similar instruments, which are secured by pools of financial assets.

Items in the course of collection from other banks

Settlement risk arises in any situation where a payment in cash, securities or equities is made in the expectation of a corresponding receipt of cash, securities or equities. Daily settlement limits are established for counterparties to cover the aggregate of our transactions with each one on any single day.

We substantially mitigate settlement risk on many transactions, particularly those involving

securities and equities, by settling through assured payment systems or on a delivery-versus-payment basis.

Concentration of exposure

(Audited)

Concentrations of credit risk arise when a number of counterparties or exposures have comparable economic characteristics, or such counterparties are engaged in similar activities or operate in the same geographical areas or industry sectors, so that their collective ability to meet contractual obligations is uniformly affected by changes in economic, political or other conditions. We use a number of controls and measures to minimise undue concentration of exposure in our portfolios across industry, country and customer groups. These include portfolio and counterparty limits, approval and review controls, and stress testing.

Wrong-way risk is an aggravated form of concentration risk and arises when there is a strong correlation between the counterparty's probability of default and the mark-to-market value of the underlying transaction. We use a range of procedures to monitor and control wrong-way risk, including requiring entities to obtain prior approval before undertaking wrong-way risk transactions outside pre-agreed guidelines.

Securities held for trading

(Unaudited)

A detailed analysis of securities held for trading is set out in Note 15 on the Financial Statements and an analysis of credit quality is provided on page 114.

Debt securities, treasury and other eligible bills

(Unaudited)

HSBC's holdings of corporate debt, ABS and other securities were spread across a wide range of issuers and geographical regions, with 25% invested in securities issued by banks and other financial institutions. A more detailed analysis of financial investments is set out in Note 21 on the Financial Statements and an analysis by credit quality is provided on page 114.

At 31 December 2010, our insurance businesses held diversified portfolios of debt and equity securities designated at fair value (2010: US\$28bn; 2009: US\$25bn) and debt securities classified as financial investments (2010: US\$38bn; 2009: US\$35bn). A more detailed analysis of securities held by the insurance businesses is set out on page 162.

Report of the Directors: Operating and Financial Review (continued)

Risk > Credit risk > Credit exposure

Derivatives

(Unaudited)

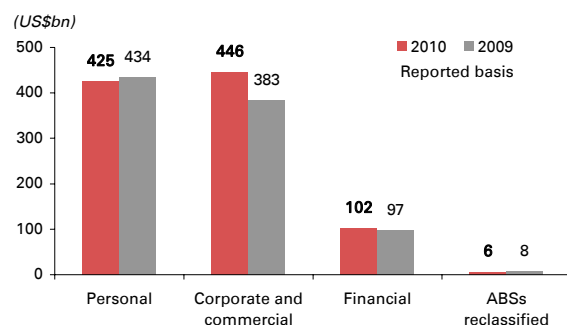
Derivative assets at 31 December 2010 were US\$261bn, a rise of 4% from 31 December 2009. Our single largest exposure was to interest rate derivatives, and this balance increased in 2010 reflecting downward shifts in yield curves, partly offset by higher netting from increased trading with clearing houses. The notional value of outstanding contracts also rose, reflecting an increase in the number of open transactions compared with 2009. In addition our exposure to exchange rate derivatives rose as a result of increased volatility.

Loans and advances

(Unaudited)

On a reported basis, gross loans and advances to customers (excluding the financial sector) at 31 December 2010 increased by US\$52bn or 6% from 31 December 2009. On a constant currency basis the increase was 7%. The rise was primarily due to growth in Asia, mainly in trade-related lending and, to a lesser extent, our commercial real estate and personal lending portfolios, as the region prospered.

Summary of gross loans and advances to customers (Unaudited)



The following commentary is on a constant currency basis:

Personal lending was US\$425bn, a decline of 2% compared with the end of 2009 as growth in residential mortgage lending was more than offset by lower other personal lending balances. Personal lending represented 43% of our total lending to customers. At US\$269bn, residential mortgage lending constituted the Group's largest concentration in a single exposure type. In 2010, residential mortgage lending increased by 4%, reflecting strong growth in new mortgage sales in Hong Kong and the UK. This was partly offset by a 12% decline in the US, mainly due to the continued run-off of our Consumer Lending and Mortgage Services portfolios.

Corporate and commercial lending was 46% of gross lending to customers at 31 December 2010, comprising our largest lending category. Commercial, industrial and international trade represented the largest portion of this category and this increased by 23% in the year, reflecting the growth in trade activity, particularly in Asia. Commercial real estate lending, which represented 7% of total gross lending to customers, increased by 5% due to strong growth in Hong Kong.

In the financial category, our largest exposure was to non-bank financial institutions; this largely comprised secured lending on trading accounts, mainly repo facilities.

Loans and advances to banks were widely distributed across major institutions in 2010 and increased by 16% as placements with central and commercial banks in Europe, Asia and Latin America rose.

The following tables analyse loans by industry sector and by the location of the principal operations of the lending subsidiary or, in the case of the operations of The Hongkong and Shanghai Banking Corporation, HSBC Bank, HSBC Bank Middle East and HSBC Bank USA, by the location of the lending branch.

Gross loans and advances by industry sector
(Audited)

	2010 US\$m	Currency effect US\$m	Move- ment US\$m	2009 US\$m	2008 US\$m	2007 US\$m	2006 US\$m
Personal ²	425,320	(2,026)	(6,860)	434,206	440,227	500,834	476,146
Residential mortgages ^{2,3}	268,681	(1,707)	9,719	260,669	243,337	269,068	265,337
Other personal ^{2,4}	156,639	(319)	(16,579)	173,537	196,890	231,766	210,809
Corporate and commercial	445,512	(5,297)	67,719	383,090	407,474	400,771	343,107
Commercial, industrial and international trade	237,694	(2,948)	44,514	196,128	209,840	202,038	162,109
Commercial real estate	71,880	(773)	3,264	69,389	70,969	72,345	60,366
Other property-related	34,838	222	4,096	30,520	30,739	33,907	27,165
Government	8,594	(14)	1,919	6,689	6,544	5,708	8,990
Other commercial ⁵	92,506	(1,784)	13,926	80,364	89,382	86,773	84,477
Financial	101,725	(3,540)	8,615	96,650	101,085	99,148	62,458
Non-bank financial institutions	100,163	(3,544)	8,470	95,237	99,536	96,781	59,204
Settlement accounts	1,562	4	145	1,413	1,549	2,367	3,254
Asset-backed securities reclassified	5,892	(319)	(1,616)	7,827	7,991	—	—
Total gross loans and advances to customers ('TGLAC') ⁶	978,449	(11,182)	67,858	921,773	956,777	1,000,753	881,711
Gross loans and advances to banks	208,429	(8)	28,549	179,888	153,829	237,373	185,212
Total gross loans and advances	1,186,878	(11,190)	96,407	1,101,661	1,110,606	1,238,126	1,066,923
Impaired loans and advances to customers	28,091	(254)	(2,261)	30,606	25,352	19,582	15,071
— as a percentage of TGLAC	2.9%			3.3%	2.6%	2.0%	1.7%
Impairment allowances on loans and advances to customers	20,083	(75)	(5,384)	25,542	23,909	19,205	13,578
— as a percentage of TGLAC	2.1%			2.8%	2.5%	1.9%	1.5%
Charge for impairment losses	13,548	321	(11,715)	24,942	24,131	17,177	10,547
New allowances net of allowance releases ..	14,568	353	(11,617)	25,832	24,965	18,182	11,326
Recoveries	(1,020)	(32)	(98)	(890)	(834)	(1,005)	(779)

For footnotes, see page 174.

Report of the Directors: Operating and Financial Review (continued)

Risk > Credit risk > Credit exposure

Gross loans and advances to customers by industry sector and by geographical region
(Audited)

	Gross loans and advances to customers							
	Europe US\$m	Hong Kong US\$m	Rest of Asia- Pacific US\$m	Middle East US\$m	North America US\$m	Latin America US\$m	Total US\$m	As a % of total gross loans %
At 31 December 2010								
Personal	161,717	57,308	40,184	5,371	139,117	21,623	425,320	43.4
Residential mortgages ³	111,618	42,488	28,724	1,751	78,842	5,258	268,681	27.4
Other personal ⁴	50,099	14,820	11,460	3,620	60,275	16,365	156,639	16.0
Corporate and commercial	203,804	80,823	67,247	19,560	38,707	35,371	445,512	45.6
Commercial, industrial and international trade	111,980	33,451	41,274	11,173	16,737	23,079	237,694	24.3
Commercial real estate	30,629	19,678	8,732	1,085	8,768	2,988	71,880	7.3
Other property-related	6,401	15,232	5,426	1,785	5,109	885	34,838	3.6
Government	2,289	2,339	415	1,345	89	2,117	8,594	0.9
Other commercial ⁵	52,505	10,123	11,400	4,172	8,004	6,302	92,506	9.5
Financial	70,725	3,189	2,259	1,347	21,202	3,003	101,725	10.4
Non-bank financial institutions	70,019	2,824	2,058	1,335	21,109	2,818	100,163	10.2
Settlement accounts	706	365	201	12	93	185	1,562	0.2
Asset-backed securities reclassified ..	5,216	—	—	—	676	—	5,892	0.6
TGLAC ⁶	441,462	141,320	109,690	26,278	199,702	59,997	978,449	100.0
Percentage of TGLAC by geographical region	45.2%	14.4%	11.2%	2.7%	20.4%	6.1%	100.0%	
Impaired loans	10,557	660	1,324	2,433	10,727	2,390	28,091	
— as a percentage of TGLAC	2.4%	0.5%	1.2%	9.3%	5.4%	4.0%	2.9%	
Total impairment allowances	5,663	629	959	1,652	9,170	2,010	20,083	
— as a percentage of TGLAC	1.3%	0.4%	0.9%	6.3%	4.6%	3.4%	2.1%	
At 31 December 2009								
Personal	162,562	47,946	32,514	6,405	163,934	20,845	434,206	47.2
Residential mortgages ³	109,872	35,292	21,983	1,898	86,591	5,033	260,669	28.3
Other personal ⁴	52,690	12,654	10,531	4,507	77,343	15,812	173,537	18.9
Corporate and commercial ⁷	202,919	49,340	46,175	16,604	40,902	27,150	383,090	41.5
Commercial, industrial and international trade	112,374	17,728	28,228	9,336	11,528	16,934	196,128	21.3
Commercial real estate	33,853	13,782	6,475	1,309	11,527	2,443	69,389	7.5
Other property-related	6,231	10,062	3,863	1,357	8,452	555	30,520	3.3
Government	2,216	441	595	1,356	208	1,873	6,689	0.7
Other commercial ⁵	48,245	7,327	7,014	3,246	9,187	5,345	80,364	8.7
Financial	73,851	2,899	2,350	1,213	14,150	2,187	96,650	10.5
Non-bank financial institutions	73,225	2,462	2,246	1,206	13,963	2,135	95,237	10.3
Settlement accounts	626	437	104	7	187	52	1,413	0.2
Asset-backed securities reclassified ..	6,284	—	—	—	1,543	—	7,827	0.8
TGLAC ⁶	445,616	100,185	81,039	24,222	220,529	50,182	921,773	100.0
Percentage of TGLAC by geographical region	48.3%	10.9%	8.8%	2.6%	23.9%	5.5%	100.0%	
Impaired loans	10,722	841	1,200	1,646	13,246	2,951	30,606	
— as a percentage of TGLAC	2.4%	0.8%	1.5%	6.8%	6.0%	5.9%	3.3%	
Total impairment allowances	6,135	804	996	1,378	13,676	2,553	25,542	
— as a percentage of TGLAC	1.4%	0.8%	1.2%	5.7%	6.2%	5.1%	2.8%	

For footnotes, see page 174.

Loans and advances to banks by geographical region
(Audited)

	Europe US\$m	Hong Kong US\$m	Rest of Asia- Pacific US\$m	Middle East US\$m	North America US\$m	Latin America US\$m	Loans and advances to banks US\$m	Impair- ment allowances US\$m
At 31 December 2010⁸	78,239	33,585	40,437	9,335	19,479	27,354	208,429	(158)
At 31 December 2009	65,614	36,197	35,648	8,435	15,386	18,608	179,888	(107)
At 31 December 2008	62,012	29,646	28,665	7,476	11,458	14,572	153,829	(63)
At 31 December 2007	104,534	63,737	32,373	7,488	16,566	12,675	237,373	(7)
At 31 December 2006	76,837	50,359	19,716	7,801	17,865	12,634	185,212	(7)

Gross loans and advances to customers by country
(Audited)

	Residential mortgages US\$m	Other personal US\$m	Property- related US\$m	Commercial, international trade and other US\$m	Total US\$m
At 31 December 2010					
Europe	111,618	50,099	37,030	242,715	441,462
UK	103,037	25,636	26,002	165,283	319,958
France	3,749	9,550	8,737	56,613	78,649
Germany	11	356	79	4,015	4,461
Malta	1,656	599	563	1,643	4,461
Switzerland	1,358	10,708	114	1,837	14,017
Turkey	809	2,817	210	2,783	6,619
Other	998	433	1,325	10,541	13,297
Hong Kong	42,488	14,820	34,910	49,102	141,320
Rest of Asia-Pacific	28,724	11,460	14,158	55,348	109,690
Australia	8,405	1,267	2,346	4,867	16,885
India	920	526	680	4,583	6,709
Indonesia	74	531	115	3,374	4,094
Japan	226	199	1,214	2,503	4,142
Mainland China	2,046	310	3,836	12,932	19,124
Malaysia	3,833	2,053	1,361	4,845	12,092
Singapore	6,571	3,661	3,262	7,846	21,340
South Korea	2,295	248	58	2,494	5,095
Taiwan	3,002	527	135	2,832	6,496
Vietnam	35	162	59	1,255	1,511
Other	1,317	1,976	1,092	7,817	12,202
Middle East (excluding Saudi Arabia)	1,751	3,620	2,870	18,037	26,278
Egypt	3	396	111	2,484	2,994
Qatar	8	491	404	918	1,821
United Arab Emirates	1,477	2,099	1,359	11,043	15,978
Other	263	634	996	3,592	5,485
North America	78,842	60,275	13,877	46,708	199,702
US	57,630	51,686	8,269	31,496	149,081
Canada	19,505	8,070	5,079	14,711	47,365
Bermuda	1,707	519	529	501	3,256
Latin America	5,258	16,365	3,873	34,501	59,997
Argentina	30	918	103	2,172	3,223
Brazil	1,111	10,979	1,816	17,093	30,999
Mexico	2,097	2,365	1,146	8,622	14,230
Panama	1,155	982	489	3,794	6,420
Other	865	1,121	319	2,820	5,125
Total	268,681	156,639	106,718	446,411	978,449

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Risk > Credit risk > Credit exposure / Areas of special interest > Wholesale lending

Gross loans and advances to customers by country (continued)

	Residential mortgages US\$m	Other personal US\$m	Property- related US\$m	Commercial, international trade and other US\$m	Total US\$m
At 31 December 2009					
Europe	109,872	52,690	40,084	242,970	445,616
UK	100,667	29,018	28,339	175,513	333,537
France	4,326	10,224	9,429	48,570	72,549
Germany	10	404	90	3,689	4,193
Malta	1,730	612	660	1,689	4,691
Switzerland	1,301	9,197	175	1,413	12,086
Turkey	843	2,778	150	2,490	6,261
Other	995	457	1,241	9,606	12,299
Hong Kong	35,292	12,654	23,844	28,395	100,185
Rest of Asia-Pacific	21,983	10,531	10,338	38,187	81,039
Australia	5,919	993	1,785	3,496	12,193
India	883	864	458	3,002	5,207
Indonesia	59	571	71	2,114	2,815
Japan	109	149	796	1,444	2,498
Mainland China	1,503	319	2,633	8,915	13,370
Malaysia	2,925	1,717	1,085	3,548	9,275
Singapore	5,149	3,041	2,407	4,251	14,848
South Korea	2,093	407	30	1,932	4,462
Taiwan	2,205	503	53	1,578	4,339
Vietnam	23	132	51	1,042	1,248
Other	1,115	1,835	969	6,865	10,784
Middle East (excluding Saudi Arabia)	1,898	4,507	2,666	15,151	24,222
Egypt	4	326	126	2,132	2,588
Qatar	9	624	416	841	1,890
United Arab Emirates	1,650	2,881	1,395	8,848	14,774
Other	235	676	729	3,330	4,970
North America	86,591	77,343	19,979	36,616	220,529
US	65,784	69,275	8,922	25,747	169,728
Canada	19,228	7,526	10,641	10,339	47,734
Bermuda	1,579	542	416	530	3,067
Latin America	5,033	15,812	2,998	26,339	50,182
Argentina	31	628	49	1,689	2,397
Brazil	717	10,494	1,076	12,111	24,398
Mexico	2,259	2,702	995	6,762	12,718
Panama	1,151	973	475	3,464	6,063
Other	875	1,015	403	2,313	4,606
Total	260,669	173,537	99,909	387,658	921,773

Country distribution of outstandings and cross-border exposures*(Unaudited)*

We control the risk associated with cross-border lending through a centralised structure of internal country limits. Exposures to individual countries and cross-border exposure in the aggregate are kept under continual review.

The following table summarises the aggregate of in-country foreign currency and cross-border outstandings by type of borrower to countries which individually represent in excess of 0.75% of our total

assets. The classification is based on the country of residence of the borrower but also recognises the transfer of country risk in respect of third-party guarantees, eligible collateral held and residence of the head office when the borrower is a branch. In accordance with the Bank of England Country Exposure Report (Form CE) guidelines, outstandings comprise loans and advances (excluding settlement accounts), amounts receivable under finance leases, acceptances, commercial bills, certificates of deposit ('CD's) and debt and equity securities (net of short positions), and exclude accrued interest and intra-HSBC exposures.

*In-country foreign currency and cross-border amounts outstanding
(Unaudited)*

	Banks US\$bn	Government and official institutions US\$bn	Other US\$bn	Total US\$bn
At 31 December 2010				
UK	27.6	6.3	51.6	85.5
US	13.6	37.6	17.6	68.8
France	23.8	11.1	11.2	46.1
Hong Kong	15.4	1.6	17.2	34.2
Mainland China	21.5	1.2	9.1	31.8
Japan	14.0	16.2	1.3	31.5
Germany	17.8	4.2	9.4	31.4
At 31 December 2009				
UK	37.5	7.0	38.0	82.5
US	10.7	29.3	25.7	65.7
France	27.0	10.7	7.7	45.4
Germany	21.9	15.0	4.5	41.4
The Netherlands ⁹	10.3	1.7	7.6	19.6
At 31 December 2008				
UK	38.4	7.1	33.8	79.3
US	13.6	26.4	34.1	74.1
France	19.9	12.1	7.9	39.9
Germany	18.9	8.0	6.7	33.6
The Netherlands	14.1	1.9	10.3	26.3
Japan ⁹	2.6	19.4	2.3	24.3

For footnote, see page 174.

Areas of special interest

Wholesale lending

(Unaudited)

Wholesale lending covers the range of credit facilities granted to sovereign borrowers, banks, non-bank financial institutions and corporate entities. Our wholesale portfolios are well diversified across geographical and industry sectors, with certain exposures subject to specific portfolio controls. Overall credit quality improved during 2010, as economies generally demonstrated signs of recovery.

Exposures to countries in the eurozone

(Unaudited)

Intervention by governments to stabilise and re-capitalise banks and other financial intermediaries during the financial crisis helped to reduce the possibility of a systemic threat to financial markets by transferring risk from the private sector to sovereign bodies. In 2010, this contributed to the creation of large fiscal imbalances in some industrialised economies and as a result, market concerns about sovereign credit risk in these countries intensified. Credit spreads for the affected sovereign and bank credit markets remained volatile during most of 2010. Risk aversion resurfaced, and the assumption of higher

sovereign credit risk premia in private securities prices triggered portfolio reallocation to safer assets and a tightening of market liquidity. Initial concerns over liquidity and funding spread to doubts about solvency in a number of cases. The table below summarises our exposures to governments and central banks of selected eurozone countries, and near/quasi government agencies and banks domiciled in those countries. An analysis of loans and advances to customers by significant countries is provided on page 101.

Our exposure to eurozone countries under pressure in 2010 was US\$25.4bn.

Sovereign debt

As a result of the disruption in global financial markets, the eurozone experienced a severe recession, followed by a sovereign debt crisis in some member countries, where the high level of government deficits, banking system problems, fiscal imbalances and low or declining GDP growth increased their perceived vulnerability to a future downturn. Various financial and political stresses forced Greece and Ireland to seek a bailout by the ECB and the International Monetary Fund ('IMF') in May and November 2010, respectively, and contagion risk to peripheral countries, notably Italy, Portugal and Spain persisted. Belgium was also

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Risk > Credit risk > Areas of special interest > Wholesale lending

Exposures to selected eurozone countries¹⁰
(Unaudited)

At 31 December 2010							
	Not held for trading			Held for trading			Total US\$bn
	Cash and lending to banks ¹¹ US\$bn	Financial investments US\$bn	Total balances US\$bn	Net debt securities and loans US\$bn	Derivatives ¹² US\$bn	Total balances US\$bn	
Belgium							
Sovereign and agencies	0.2	0.7	0.9	0.6	–	0.6	1.5
Banks	5.8	0.3	6.1	1.5	1.2	2.7	8.8
	6.0	1.0	7.0	2.1	1.2	3.3	10.3
Greece							
Sovereign and agencies	–	0.3	0.3	0.8	–	0.8	1.1
Banks	–	–	–	0.6	–	0.6	0.6
	–	0.3	0.3	1.4	–	1.4	1.7
Ireland							
Sovereign and agencies	–	0.2	0.2	0.1	0.1	0.2	0.4
Banks	0.2	0.5	0.7	1.1	0.4	1.5	2.2
	0.2	0.7	0.9	1.2	0.5	1.7	2.6
Italy							
Sovereign and agencies	–	1.7	1.7	1.8	–	1.8	3.5
Banks	1.9	0.4	2.3	0.2	–	0.2	2.5
	1.9	2.1	4.0	2.0	–	2.0	6.0
Portugal							
Sovereign and agencies	–	0.1	0.1	–	–	–	0.1
Banks	0.3	0.1	0.4	0.1	–	0.1	0.5
	0.3	0.2	0.5	0.1	–	0.1	0.6
Spain							
Sovereign and agencies	0.1	0.9	1.0	0.7	0.1	0.8	1.8
Banks	0.8	0.2	1.0	1.4	–	1.4	2.4
	0.9	1.1	2.0	2.1	0.1	2.2	4.2
Total							
Sovereign and agencies	0.3	3.9	4.2	4.0	0.2	4.2	8.4
Banks	9.0	1.5	10.5	4.9	1.6	6.5	17.0
	9.3	5.4	14.7	8.9	1.8	10.7	25.4

For footnotes, see page 174.

under pressure, but for its specific political situation. Rating agencies downgraded the debt of a number of eurozone countries during 2010 and put some on review for possible downgrades. While the ECB continues to provide broad access to liquidity support for eurozone sovereign borrowers and banks, the availability of longer-term fiscal support from the EU for sovereigns is less certain and may lead to debt restructuring and increased private sector participation.

The eurozone as a whole retained substantial economic and financial strength despite the stresses from the financial crisis. However, concerns remained over the refinancing risks for sovereign borrowers and banks posed by the problems with market liquidity and the uncertainty surrounding support arrangements in the longer term. Eurozone policymakers have created two major facilities to counter short-term financing problems, the European Financial Stability Facility and the European

Financial Stability Mechanism. This has been viewed as a positive development by the market and rating agencies, though implementation awaits disclosure of further details by the policymakers. We expect the ECB and eurozone countries will focus in 2011 on resolving intra-eurozone imbalances, rebuilding public finances, improving fiscal discipline, strengthening the banking system and managing cross-border risk.

We have closely managed our exposure to sovereign debt during 2010. At the end of the year, our exposure to the sovereign debt of Belgium, Greece, Ireland, Italy, Portugal and Spain was US\$8.4bn and the overall quality of the portfolio was strong with most in-country and cross-border limits extended to countries with high-grade internal credit risk ratings. We regularly update our assessment of higher risk countries and adjust our risk appetite to reflect such changes.

European banks

In May 2010, an FSB review indicated that European banks would have to make additional loan impairment charges of up to US\$143bn in 2011. Following the publication of this report, bond spreads on both European and US banks widened. The size of the financial sector's exposure to sovereign debt and doubts about economic conditions in parts of the eurozone raised fresh concerns about banks' credit ratings. In addition, uncertainty over liquidity, solvency, funding, changing regulation, capital requirements and taxation, and speculation over the stability of the euro, continued to cloud the future for European banking.

The banking sector in the eurozone remains under stress, mainly as a consequence of governments having to finance large budget deficits, troubles in property markets and weak credit growth. The Ireland bailout was a direct consequence of the failure of the Irish banking sector, largely driven by the domestic property price crash. Worries about the size and quality of eurozone banks' exposure to weaker eurozone countries are entwined with concerns about their ability to fund themselves. European banks share nearly three quarters of the public and private sector debt in Belgium, Greece, Ireland, Italy, Portugal and Spain. The regional and local banks in the eurozone are considered more vulnerable than well-diversified global banks.

During 2010, we were subject to the Committee of European Banking Supervisors (now the European Banking Authority) coordinated stress test of 91 EU financial institutions. Banks were required to meet a 6% minimum tier 1 target under stress. We passed the test satisfactorily, with a post-stress tier 1 ratio of 10.2% placing us in the top quartile of the institutions tested. Further stress testing is due to take place in 2011.

We expect that the pace of reforms outlined by various policymakers will gather speed in 2011, most notably the Basel III proposals. These regulations will require banks to hold more capital and a higher quality of capital and implement new liquidity rules, and are likely to result in a rise in the cost of funding and put pressure on credit pricing.

We continue to closely monitor and manage eurozone bank exposures, and are cautious in lending to this sector. We regularly update our assessment of higher-risk eurozone banks and adjust our risk appetite accordingly. We also, where possible, seek to play a positive role in maintaining credit and liquidity supply.

Middle East and North Africa

In 2009, Dubai World requested a standstill agreement with creditors in respect of the indebtedness of certain Dubai World group companies. The market disruption that ensued cut would-be borrowers off from the capital markets, although continued restructuring efforts throughout 2010 saw the return of significant positive sentiment from investors. As one of the long-term bankers to Dubai World and the various entities related to the Government of Dubai, the Group has worked closely during 2010 to address the prevailing issues. In October 2010, Dubai World obtained an agreement to restructure US\$25bn of its debt subject to final documentation expected to be signed in the first half of 2011. The arrangement extends loan maturities for five to eight years at discounted rates, allowing Dubai World time to sell off its non-core assets while focusing on its core earnings. The Group's exposure to Dubai is primarily spread across operating companies within the emirate.

Political developments in the region are being monitored closely and action taken to mitigate their impact. It is too early to foresee how events may unfold; hitherto, our business in the region has for the most part operated without serious disruption. In the medium term, economic growth in the region may be adversely affected, with wider implications if the prices of oil, food and commodities rise significantly.

Commercial real estate

Our exposure in the commercial real estate sectors is concentrated in the UK, North America and Hong Kong. While there were some positive signs of recovery in markets in the UK and the US, in part supported by the low levels of interest rates, the slow speed of the recovery meant that financing and re-financing activity in the sector remained subdued. In Hong Kong, the economy recovered robustly and the market was relatively buoyant in 2010, characterised by strong demand and continuing credit appetite.

On a constant currency basis, the aggregate of our commercial real estate and other property-related lending of US\$107bn at 31 December 2010 was 7% higher than at 31 December 2009 and represented 11% of total loans and advances to customers. The increase in exposure was largely in Hong Kong, offset by a reduction in North America. In 2010, credit quality across this sector generally showed signs of stabilising but remained under stress in certain markets.

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Risk > Credit risk > Areas of special interest > Personal lending

Across our portfolios, credit risk is mitigated by long-standing and conservative policies on asset origination which focus on relationships with long-term customers and limited initial leverage. We also set and monitor sector risk appetite limits at Group and regional levels to detect and prevent higher risk concentrations. While individual regions differ in their approach, typically origination loan to value ratios would be less than 65% across the Group.

Personal lending

(Unaudited)

We provide a broad range of secured and unsecured personal lending products to meet customer needs. Given the diverse nature of the markets in which we operate, the range is not standard across all countries but is tailored to meet the demands of individual markets while using appropriate distribution channels and, wherever possible, global IT platforms.

Personal lending includes advances to customers for asset purchases, such as residential property and motor vehicles, where the loans are typically secured by the assets being acquired. We also offer loans secured on existing assets, such as first and second liens on residential property; unsecured lending products such as overdrafts, credit cards and payroll loans; and debt consolidation loans which may be secured or unsecured.

In 2010, credit quality in our personal lending portfolios improved, reflecting a recovery of economic conditions in most markets. Delinquency levels and loan impairment charges declined, particularly in those countries which had previously been most affected by rising unemployment and house price depreciation.

The commentary that follows is on an underlying basis.

At 31 December 2010, total personal lending was US\$425bn, a decline of 2% from 31 December 2009 as the reduction in our US run-off portfolios continued, partly offset by notable growth in Hong Kong and the UK. Within our PFS business, total loan impairment charges and other credit risk provisions of US\$11.3bn were 44% lower than in 2009, and were concentrated in North America (US\$8.2bn) and, to a lesser extent, Europe (US\$1.2bn) and Latin America (US\$1.2bn).

In the UK, total personal lending was US\$129bn, an increase of 4% compared with the end of 2009. The increase was due to growth in mortgage lending as a result of the enhancement of our product offerings, successful marketing and competitive

pricing (UK mortgage lending is discussed in greater detail on page 108). This was partly offset by an 8% fall in other personal lending balances, reflecting a reduction in unsecured lending products as we tightened our underwriting criteria and some consumers reduced their indebtedness.

Total personal lending balances in the US at 31 December 2010 were US\$109bn, a decrease of 19% compared with the end of 2009, reflecting the continued reduction in balances in our consumer finance run-off portfolios and lower balances in our Card and Retail Services business.

US residential mortgage lending balances fell by 12% to US\$58bn, driven by the decisions taken in 2007 to close the Mortgage Services business and in March 2009 to close all Consumer Lending branches and run off the residual consumer finance balances. US mortgage lending is discussed in greater detail on page 108.

In PFS, total loan impairment charges and other credit risk provisions were 44% down on 2009.

Other personal lending balances in the US were US\$52bn at 31 December 2010, 25% lower than at the end of 2009. Credit card balances declined by 14% reflecting a reduction in active customer accounts and an increased focus by our customers on reducing outstanding credit card debt.

In March we sold US\$1.0bn of vehicle finance loans. This was followed in August by the sale of the residual vehicle finance loans (US\$4.3bn) to the same purchaser.

In Hong Kong, total personal lending grew by 20% to US\$57bn as a result of strong growth in residential mortgage lending. In the Rest of Asia-Pacific region, personal lending also grew strongly across many countries, notably Australia, Singapore and Malaysia, through successful marketing. This growth was partly offset by a managed reduction in unsecured personal lending balances in India.

In Latin America, total personal lending was broadly flat at US\$22bn as moderate growth in residential mortgage lending, particularly in Brazil, was more than offset by a decline in other personal lending. The latter reflected falls in credit card lending in Mexico and other higher-risk portfolios in Mexico and Brazil as we continued to reduce higher-risk portfolios in the region and tighten our underwriting criteria.

For an analysis of loan impairment allowances and impaired loans, see page 119.

Total personal lending
(Unaudited)

	UK US\$m	Rest of Europe US\$m	US ¹³ US\$m	Rest of North America US\$m	Other regions ¹⁴ US\$m	Total US\$m
At 31 December 2010						
Residential mortgages	103,037	8,581	57,630	21,212	78,221	268,681
Other personal lending	25,636	24,463	51,686	8,589	46,265	156,639
– motor vehicle finance	–	35	72	55	5,886	6,048
– credit cards	11,612	1,916	33,744	1,334	13,778	62,384
– second lien mortgages	846	2	9,322	578	422	11,170
– other	13,178	22,510	8,548	6,622	26,179	77,037
Total personal lending	128,673	33,044	109,316	29,801	124,486	425,320
Impairment allowances						
Residential mortgages	(275)	(58)	(3,592)	(25)	(297)	(4,247)
Other personal lending	(1,348)	(467)	(4,436)	(179)	(1,616)	(8,046)
– motor vehicle finance	–	(5)	–	–	(244)	(249)
– credit cards	(506)	(216)	(2,256)	(62)	(483)	(3,523)
– second lien mortgages	(58)	–	(889)	(19)	–	(966)
– other	(784)	(246)	(1,291)	(98)	(889)	(3,308)
Total impairment allowances on personal lending	(1,623)	(525)	(8,028)	(204)	(1,913)	(12,293)
– as a percentage of total personal lending	1.3%	1.6%	7.3%	0.7%	1.5%	2.9%
	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m
At 31 December 2009						
Residential mortgages	100,667	9,205	65,784	20,807	64,206	260,669
Other personal lending	29,018	23,672	69,275	8,068	43,504	173,537
– motor vehicle finance	–	65	5,771	99	6,378	12,313
– credit cards	12,427	1,820	39,374	1,118	13,319	68,058
– second lien mortgages	1,068	2	11,786	695	472	14,023
– other	15,523	21,785	12,344	6,156	23,335	79,143
Total personal lending	129,685	32,877	135,059	28,875	107,710	434,206
Impairment allowances						
Residential mortgages	(151)	(41)	(4,416)	(7)	(233)	(4,848)
Other personal lending	(1,443)	(552)	(7,691)	(206)	(2,349)	(12,241)
– motor vehicle finance	–	(7)	(211)	(1)	(351)	(570)
– credit cards	(524)	(233)	(3,895)	(42)	(854)	(5,548)
– second lien mortgages	(79)	–	(1,608)	(56)	–	(1,743)
– other	(840)	(312)	(1,977)	(107)	(1,144)	(4,380)
Total impairment allowances on personal lending	(1,594)	(593)	(12,107)	(213)	(2,582)	(17,089)
– as a percentage of total personal lending	1.2%	1.8%	9.0%	0.7%	2.4%	3.9%

For footnotes, see page 174.

Mortgage lending

We offer a wide range of mortgage products designed to meet customer needs, including capital repayment mortgages subject to fixed or variable interest rates and products designed to meet demand for housing loans with more flexible payment structures. We underwrite both first lien residential mortgages and loans secured on second lien mortgages.

Interest-only mortgages are those for which customers make regular payments of interest during the life of the loan and repay the principal from the sale of their home or alternative sources of funds. Typically, with introductory interest-only mortgages, the interest-only element is for a fixed term at the start of the loan, after which principal repayments commence.

Affordability mortgages include all products where the customers' monthly payments are set at

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Risk > Credit risk > Areas of special interest > Personal lending

a low initial rate, either variable or fixed, before resetting to a higher rate once the introductory period is over. Offset mortgages are products linked to a current or savings account, where interest earned is used to repay mortgage debt.

UK mortgage lending

On a constant currency basis, total mortgage lending in the UK, comprising residential and second lien lending, increased by 7% to US\$104bn at 31 December 2010. Growth was achieved largely through the enhancement of our product offerings, successful marketing and competitive pricing. Nonetheless, mortgage lending was constrained by the decline in re-mortgage activity due to the low interest rate environment and consumer concerns over future employment and higher interest rates.

Our UK mortgage portfolio remained of high quality, consisting primarily of lending to owner-occupiers. We restricted lending to purchase residential property for the purpose of rental and almost all new business was originated through our own salesforce, with the self-certification of income not permitted. The majority of mortgage lending was to existing customers holding current or savings accounts with HSBC; this facilitated and strengthened the underwriting process.

Loan impairment charges and delinquency levels in our UK mortgage book declined despite unemployment remaining high, mainly due to improving economic conditions and low interest rates, which helped make mortgages more affordable for customers. Our continuing enhancements in credit underwriting, credit policies and collection processes contributed to the reduction in delinquencies.

The percentage of loans that were 30 days or more delinquent declined from 1.6% at 31 December 2009 to 1.4% in 2010 in the HSBC Bank mortgage portfolio and remained at less than 1.0% in the First Direct portfolio.

In 2010, the average loan-to-value ratio for new business in the UK was 54%, an increase of a single percentage point on the previous year.

Interest-only mortgage balances increased by 4% to US\$45bn compared with 2009. The majority of these mortgages were offset mortgages at First Direct for which delinquency rates remained at very low levels.

US mortgage lending

US mortgage lending balances, comprising residential and second lien lending, were US\$67bn at

31 December 2010, a decline of 14% compared with the end of 2009.

Mortgage lending in HSBC Finance fell by 17% to US\$51bn with declines in both the Consumer Lending and Mortgage Services portfolios from their planned run-off. See table on page 110 for a breakdown of mortgage lending in HSBC Finance.

Mortgage lending in the UK rose by 7% to US\$104bn, while in the US balances declined by 14% to US\$67bn.

Mortgage lending balances in HSBC Bank USA remained broadly unchanged at US\$16bn. We continue to sell the majority of new origination to the secondary markets as a means of managing our interest rate risk and improving structural liquidity. This reduction was partly offset by an increase in originations to Premier customers with whom we already held a banking relationship. At 31 December 2010, approximately 32% of the HSBC Bank USA mortgage portfolio were fixed rate loans and 77% were first lien.

During 2010, state and federal officials announced investigations into the procedures followed by mortgage servicing companies and banks, including HSBC Finance and its affiliates, in relation to foreclosures. This included a joint examination by the Federal Reserve and the Office of the Comptroller of the Currency. Following the examination, our examiners issued supervisory letters noting deficiencies in our processing, preparation and signing of affidavits and other documents supporting foreclosures, and in the governance of and resources devoted to our foreclosure process. We have suspended foreclosures pending correction of the weaknesses. Management is reviewing all foreclosures which have not yet been completed, and will correct deficient documentation and refile documents where required.

As a result of the investigations, we expect that the scrutiny of documents will increase, and in some states additional verification of information may be required. If these trends continue after we reinstitute foreclosure, there could be additional delays in the process.

A discussion of credit trends in the US mortgage lending portfolio and the steps taken to mitigate risk is provided in 'US personal lending – credit quality' on page 110.

The following table shows the levels of mortgage lending products in the various portfolios in the US, the UK and the rest of the HSBC Group.

Mortgage lending products
(Unaudited)

	UK US\$m	Rest of Europe US\$m	US ¹³ US\$m	Rest of North America US\$m	Other regions ¹⁴ US\$m	Total US\$m
At 31 December 2010						
Residential mortgages	103,037	8,581	57,630	21,212	78,221	268,681
Second lien mortgages	846	2	9,322	578	422	11,170
Total mortgage lending	103,883	8,583	66,952	21,790	78,643	279,851
Second lien as a percentage of total mortgage lending ..	0.8%	0.0%	13.9%	2.7%	0.5%	4.0%
Impairment allowances						
Residential mortgages	(275)	(58)	(3,592)	(25)	(297)	(4,247)
Second lien mortgages	(58)	–	(889)	(19)	–	(966)
Total impairment allowances on mortgage lending	(333)	(58)	(4,481)	(44)	(297)	(5,213)
Interest-only (including endowment) mortgages	45,039	51	–	908	1,282	47,280
Affordability mortgages, including ARMs	1,089	326	18,494	274	7,855	28,038
Other	102	–	–	–	183	285
Total interest-only and affordability mortgages	46,230	377	18,494	1,182	9,320	75,603
– as a percentage of total mortgage lending	44.5%	4.4%	27.6%	5.4%	11.9%	27.0%
Negative equity mortgages ¹⁵	2,436	–	15,199	103	291	18,029
Other loan-to-value ratios greater than 90% ¹⁶	5,802	263	10,460	1,698	1,348	19,571
Total negative equity and other mortgages	8,238	263	25,659	1,801	1,639	37,600
– as a percentage of total mortgage lending	7.9%	3.1%	38.3%	8.3%	2.1%	13.4%
At 31 December 2009						
Residential mortgages	100,667	9,205	65,784	20,807	64,206	260,669
Second lien mortgages	1,068	2	11,786	695	472	14,023
Total mortgage lending	101,735	9,207	77,570	21,502	64,678	274,692
Second lien as a percentage of total mortgage lending ..	1.0%	–	15.2%	3.2%	0.7%	5.1%
Impairment allowances						
Residential mortgages	(151)	(41)	(4,416)	(7)	(233)	(4,848)
Second lien mortgages	(79)	–	(1,608)	(56)	–	(1,743)
Total impairment allowances on mortgage lending	(230)	(41)	(6,024)	(63)	(233)	(6,591)
Interest-only (including endowment) mortgages	45,471	–	–	1,154	1,127	47,752
Affordability mortgages, including ARMs	2,681	1,084	21,024	232	5,921	30,942
Other	144	–	–	–	147	291
Total interest-only and affordability mortgages	48,296	1,084	21,024	1,386	7,195	78,985
– as a percentage of total mortgage lending	47.5%	11.8%	27.1%	6.4%	11.1%	28.8%
Negative equity mortgages ¹⁵	6,412	–	20,229	163	488	27,292
Other loan-to-value ratios greater than 90% ¹⁶	10,522	–	13,695	1,887	1,451	27,555
Total negative equity and other mortgages	16,934	–	33,924	2,050	1,939	54,847
– as a percentage of total mortgage lending	16.6%	–	43.7%	9.5%	3.0%	20.0%

For footnotes, see page 174.

HSBC Finance held approximately US\$51bn of residential mortgage and second lien loans and advances to personal customers secured on real

estate at 31 December 2010, 12% of the Group's gross loans and advances to personal customers.

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Risk > Credit risk > Areas of special interest > US personal lending

HSBC Finance US mortgage lending¹⁷

(Unaudited)

	At 31 December 2010				At 31 December 2009			
	Mortgage Services US\$m	Consumer Lending US\$m	Other mortgage lending US\$m	Total US\$m	Mortgage Services US\$m	Consumer Lending US\$m	Other mortgage lending US\$m	Total US\$m
Fixed-rate	11,447	31,759	87	43,293	13,596	37,639	98	51,333
Other	6,122	1,517	2	7,641	8,168	1,867	6	10,041
Adjustable-rate	5,042	1,517	2	6,561	7,070	1,867	–	8,937
Interest-only (affordability mortgages) ¹⁸	1,080	–	–	1,080	1,098	–	6	1,104
	17,569	33,276	89	50,934	21,764	39,506	104	61,374
First lien	15,300	29,950	66	45,316	18,710	34,913	77	53,700
Second lien	2,269	3,326	23	5,618	3,054	4,593	27	7,674
	17,569	33,276	89	50,934	21,764	39,506	104	61,374
Stated income ¹⁹	2,905	–	–	2,905	3,905	–	–	3,905
Negative equity mortgages ¹⁵	5,161	8,910	–	14,071	6,770	12,031	–	18,801
Impairment allowances	1,837	2,474	–	4,311	2,419	3,167	1	5,587
– as a percentage of total mortgage lending	10.5%	7.4%	–	8.5%	11.1%	8.0%	1.0%	9.1%

For footnotes, see page 174.

US personal lending

(Unaudited)

Credit quality

During 2010, economic conditions in the US generally improved, although the pace of improvement continued to be slow.

In the first half of 2010, house prices stabilised in many markets and began to recover in others, as the first time homebuyer tax credit and continued low interest rates favourably affected the housing market. However, in the second half of the year, house prices declined in many markets as the homebuyer tax credit ended and foreclosure levels rose.

Unemployment rates, which have been a major factor in the deterioration of credit quality, were 9.4% in December 2010, a decrease of 60 basis points since December 2009. Unemployment rates in 18 states were at or above the US national average and unemployment rates in 5 states were at or above 11%, including California and Florida, where more than 5% of HSBC Finance's total loan balances are based.

Ongoing improvement in the US economy will be dependent on a sustained recovery in the housing market and unemployment rates, as well as the continuation of low interest rates. Renewed weakening in these factors and in consumer confidence may adversely affect consumer payment patterns and credit quality.

HSBC Finance: geographical concentration of US lending^{17, 20}

(Unaudited)

	Mortgage lending as a percentage of:		Other personal lending as a percentage of:		percentage of total lending
	total lending %	total mortgage lending %	total lending %	total other personal lending %	
California	6	10	4	10	10
New York	4	7	3	7	7
Florida	4	6	2	5	6
Pennsylvania	3	6	2	5	6
Texas	2	4	3	7	5
Ohio	3	6	2	5	5

For footnotes, see page 174.

Mortgage lending

In 2010, we reduced our non-prime mortgage exposure as balances continued to run-off in our Consumer Lending and Mortgage Services portfolios in HSBC Finance. At 31 December 2010, residential mortgage lending balances were US\$58bn, a decline of 12% compared with the end of 2009.

In both our Consumer Lending and Mortgage Services *mortgage portfolios*, two months or more delinquent balances declined as balances ran-off and economic conditions improved. In addition, written-off balances were replaced with lower levels of new delinquency volumes as the portfolios continue to season. First lien two months or more delinquent balances in our Consumer Lending portfolio declined from US\$5.4bn at 31 December 2009 to US\$4.9bn at 31 December 2010 and, in our Mortgage Services portfolio, from US\$3.1bn at 31 December 2009 to US\$2.8bn at 31 December 2010. In each case, lending balances liquidated at a faster pace than delinquency. As a result, two months or more delinquency rates on first lien loans in our Consumer Lending portfolio increased from 15.4% at 31 December 2009 to 16.2%, while in our Mortgage Services portfolio, two months or more delinquency rates increased from 16.5% to 18.0%.

At HSBC Bank USA, we continued to sell the majority of new mortgage loan originations to the secondary markets. These decreases were partly offset by increases to the portfolio from new lending to our Premier relationship customers. Two months or more delinquency rates decreased from 8.6% to 7.9% at 31 December 2010, while delinquent balances remained flat at US\$1.0bn.

Second lien mortgage loans have a risk profile characterised by higher loan-to-value ratios because, in the majority of cases, the loans were taken out to complete the refinancing or purchase of properties. Loss experience on default of second lien loans has typically approached 100% of the amount owed, as any equity in the property is initially applied to the first lien loan. In the Mortgage Services second lien portfolio, outstanding balances declined by 26% to US\$2.3bn and two months or more delinquency rates decreased to 10.8% at 31 December 2010. In the Consumer Lending second lien portfolio, outstanding balances declined by 28% to US\$3.3bn, and two months or more delinquency rates decreased to 12.7% at 31 December 2010.

At HSBC Bank USA, second lien balances declined by 10% to US\$3.7bn, and two months or more delinquency rates increased from 4.0% at 31 December 2009 to 4.8% at 31 December 2010 due to the effects of high unemployment levels.

Stated-income mortgages are underwritten on the basis of borrowers' representations of annual income and are not verified by supporting documents and, as a result, represent a higher than average level of risk. Stated income balances in HSBC Finance declined from US\$3.9bn to US\$2.9bn as the portfolio continued to run off. Two months or more delinquency rates increased to 24.0% at 31 December 2010. In HSBC Bank USA, stated-income balances were unchanged at US\$2.1bn while delinquency rates decreased from 11.1% at 31 December 2009 to 10.6% at 31 December 2010.

At 31 December 2010, HSBC Finance had US\$7.6bn of *affordability mortgages*, a decline of 24% compared with 31 December 2009, as the portfolio continued to run off. At HSBC Bank USA, affordability mortgage balances of US\$10.9bn at 31 December 2010 compared with US\$11.1bn at 31 December 2009.

Real estate markets in the majority of the US have been and will continue to be, affected by stagnation or declines in property values. As a result, loan-to-value ratios for our real estate secured loans have generally deteriorated since origination. Loans with a loan-to-value of 100% or more have historically had a greater likelihood of becoming delinquent. At 31 December 2010 loans in negative equity were US\$14bn, compared with US\$19bn at the end of 2009.

At HSBC Finance, the number of *foreclosed properties* at 31 December 2010 increased compared with the end of 2009. The rise reflected the improvement in the processing of foreclosures as backlogs and action taken by local governments and certain states had lengthened proceedings in previous years. The average loss on sale of foreclosed properties decreased compared with 2009 though the average loss increased in the second half of 2010, as house prices in many markets showed signs of deterioration due to a rise in the number of foreclosed properties and the expiration of the homebuyer tax credit. We continued to assist customers in restructuring their debts to avoid foreclosure, including by modifying their loans when it was decided that they could be serviced on revised terms. For more details on the investigation into US foreclosure practices, see page 83.

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Risk > Credit risk > Areas of special interest > US personal lending / Forbearance strategies

*HSBC Finance foreclosed properties in the US**(Unaudited)*

	2010	Quarter ended				2009
		31 Dec 2010	30 Sep 2010	30 Jun 2010	31 Mar 2010	
Number of foreclosed properties at end of period	10,940	10,940	9,798	8,394	6,961	6,188
Number of properties added to foreclosed inventory in the year/quarter	20,489	5,763	5,413	5,096	4,217	14,845
Average loss on sale of foreclosed properties ²¹	9%	15%	10%	4%	4%	12%
Average total loss on foreclosed properties ²²	51%	54%	52%	49%	49%	51%
Average time to sell foreclosed properties (days)	161	165	158	156	170	193

For footnotes, see page 174.

Credit cards

In our credit card and private label portfolios two months or more delinquency balances declined markedly, reflecting actions taken to improve credit quality, and our customer payment rates benefited from an increased focus by consumers on reducing outstanding credit card debt. Two months or more delinquent balances in our credit card portfolio declined from US\$1.8bn to US\$1.0bn, while in percentage terms they declined from 7.4% at 31 December 2009 to 4.7% at 31 December 2010. In the private label cards portfolio, two months or more delinquent balances declined from US\$622m to US\$404m while in percentage terms delinquency decreased from 4.1% at 31 December 2009 to 3.0% at 31 December 2010.

Loan delinquency*Trends in two months and over contractual delinquency in the US**(Unaudited)*

					Quarter ended				
	31 Dec 2010	30 Sep 2010	30 Jun 2010	31 Mar 2010	As reported 31 Dec 2009	Ex. period change 31 Dec 2009	30 Sep 2009	30 Jun 2009	31 Mar 2009
	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m
In Personal Financial Services in the US									
Residential mortgages	8,632	8,885	8,591	8,960	9,551	11,519	10,834	10,070	9,892
Second lien mortgage lending	847	907	930	1,011	1,194	1,628	1,631	1,676	1,772
Vehicle finance	—	—	152	194	267	267	295	310	269
Credit card	957	1,066	1,201	1,511	1,798	1,798	1,834	1,864	1,992
Private label	404	445	478	510	622	622	639	636	659
Personal non-credit card	811	953	987	1,194	1,548	2,619	2,680	2,709	2,855
Total	11,651	12,256	12,339	13,380	14,980	18,453	17,913	17,265	17,439
	% ²³	% ²³	% ²³	% ²³	% ²³	% ²³	% ²³	% ²³	% ²³
Residential mortgages	15.00	14.97	14.02	14.12	14.54	17.03	15.39	13.89	12.82
Second lien mortgage lending	9.10	9.23	8.98	9.17	10.14	13.35	12.71	12.35	12.59
Vehicle finance	—	—	3.59	3.96	4.63	4.63	4.61	3.97	2.79
Credit card	4.69	5.23	5.65	6.84	7.38	7.38	7.28	7.25	7.14
Private label	3.03	3.56	3.80	3.78	4.12	4.12	4.38	4.08	4.28
Personal non-credit card	9.49	10.15	9.60	10.75	12.55	19.77	18.73	18.02	18.30
Total	10.67	10.99	10.28	10.61	11.09	13.34	12.47	11.49	10.92

	Quarter ended				As reported	Ex. period change			
	31 Dec 2010	30 Sep 2010	30 Jun 2010	31 Mar 2010	31 Dec 2009	31 Dec 2009	30 Sep 2009	30 Jun 2009	31 Mar 2009
	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m
Mortgage Services and Consumer Lending²⁴									
Mortgage Services:	3,002	3,117	3,067	3,236	3,477	4,456	4,250	4,257	4,535
– first lien	2,757	2,850	2,788	2,928	3,093	3,900	3,688	3,642	3,824
– second lien	245	267	279	308	384	556	562	615	711
Consumer Lending: ...	5,284	5,495	5,278	5,493	6,022	7,445	7,131	6,514	6,203
– first lien	4,861	5,022	4,795	4,970	5,380	6,541	6,241	5,640	5,322
– second lien	423	473	483	523	642	904	890	874	881
	% ²³	% ²³	% ²³	% ²³	% ²³	% ²³	% ²³	% ²³	% ²³
Mortgage Services:									
– first lien	18.02	17.73	16.50	16.38	16.53	20.00	18.09	17.13	17.24
– second lien	10.80	10.93	10.63	10.87	12.57	17.25	16.36	16.35	17.44
– total	17.09	16.83	15.71	15.62	15.98	19.61	17.84	17.01	17.27
Consumer Lending:									
– first lien	16.23	16.16	14.85	14.79	15.41	18.15	16.75	14.72	13.52
– second lien	12.72	13.16	12.44	12.25	13.98	18.64	17.49	16.17	15.43
– total	15.88	15.85	14.59	14.51	15.24	18.21	16.84	14.90	13.76

For footnotes, see page 174.

Forbearance strategies and renegotiated loans

(Audited)

A range of forbearance strategies are employed in order to improve the management of customer relationships, maximise collection opportunities and, if possible, avoid foreclosure or repossession. Our policies and practices are based on criteria which, in the judgement of local management, indicate that repayment is likely to continue.

Forbearance arrangements include extended payment terms, a reduction in interest or principal repayments, approved external debt management plans, the deferral of foreclosures, other modifications, and loan restructures. These management policies and practices typically provide the customer with terms and conditions that are more favourable than those provided initially. Such arrangements could include cases where an account is brought up-to-date without full repayment of all the arrears.

Our most common forbearance arrangements are loan restructures applied to real estate loans within consumer finance portfolios in the US. Our credit risk management policy sets out restrictions on the number and frequency of restructures, the minimum period an account must have been opened before any restructure can be considered, and the number of qualifying payments that must be received before an account may be considered restructured and up-to-date. The application of this policy varies according to the nature of the market,

the product and the management of customer relationships through the occurrence of exceptional events.

Loans that are subject to restructuring may only be classified as restructured and up-to-date once a specified number and/or amount of qualifying payments have been received. These qualifying payments are set at a level appropriate to the nature of the loan and the customer's ability to make the repayment going forward. Typically the receipt of two or more qualifying payments is required within a certain period, generally 60 days (in the case of HSBC Finance, in certain circumstances, for example where debt has been restructured in bankruptcy proceedings, fewer or no payments may be required). Loans that have been restructured and would otherwise have been past due or impaired are classified as renegotiated.

Renegotiated loans are segregated from other parts of the loan portfolio for collective impairment assessment, to reflect the higher rates of losses often encountered in this segment of the portfolio. When empirical evidence indicates an increased propensity to default and higher losses on such accounts, the use of roll rate methodology ensures these factors are taken into account when calculating impairment allowances. The carrying amount of loans that have been classified as renegotiated retain this classification until maturity or derecognition. Interest is recorded on renegotiated loans on the basis of new contractual terms following renegotiation.

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Risk > Credit risk > Areas of special interest > Forbearance strategies / Collateral // Credit quality > Financial instruments

Renegotiated loans totalled US\$35bn at 31 December 2010 (2009: US\$39bn). The largest concentration was in the US and amounted to US\$28bn (2009: US\$33bn) or 82% (2009: 86%) of our total renegotiated loans, substantially all of which was held by HSBC Finance.

HSBC Finance loan modifications and re-ageing (Unaudited)

HSBC Finance continued to refine its customer account management policies and practices, including account modification and re-age programmes. Modification occurs when the terms of a loan are modified either temporarily or permanently. Modification may also lead to a re-ageing of the account. In 2010, HSBC Finance modified 42,500 loans with an aggregate balance of US\$6.0bn in Consumer Lending and Mortgage Services through the foreclosure avoidance and account modification programmes.

At 31 December 2010, the total balance outstanding on HSBC Finance real estate secured accounts which have been re-aged or modified was US\$26.7bn, compared with US\$30.2bn at the end of 2009. US\$10.6bn relates to loans that had been re-aged without modification to the terms (2009: US\$11.1bn), and US\$13.9bn relates to loans whose terms have been modified and have been re-aged (2009: US\$15.7bn). These amounts are included in the renegotiated loans balance disclosed above. In addition, US\$2.2bn of loans have been modified but not re-aged (2009: US\$3.4bn) and as such do not meet the definition of a renegotiated loan as the impairment or past-due status of the loans did not change on modification. At 31 December 2010, 62% of modified or re-aged real estate loans remained up-to-date or past due less than 30 days (2009: 61%) and 26% were two or more months delinquent (2009: 26%).

Risk rating scales

Credit quality classification (Unaudited)

Quality classification	Debt securities and other bills	Wholesale lending and derivatives		Retail lending	
	External credit rating	Internal credit rating	Probability of default %	Internal credit rating ²⁵	Expected loss %
Strong	A- and above	CRR1 to CRR2	0 – 0.169	EL1 to EL2	0 – 0.999
Good	BBB+ to BBB-	CRR3	0.170 – 0.740	EL3	1.000 – 4.999
Satisfactory	BB+ to B+ and unrated	CRR4 to CRR5	0.741 – 4.914	EL4 to EL5	5.000 – 19.999
Sub-standard	B and below	CRR6 to CRR8	4.915 – 99.999	EL6 to EL8	20.000 – 99.999
Impaired	Impaired	CRR9 to CRR10	100	EL9 to EL10	100+ or defaulted ²⁶

For footnotes, see page 174.

Collateral and other credit enhancements obtained (Audited)

We obtained assets by taking possession of collateral held as security, or calling upon other credit enhancements, as follows:

Nature of assets	Carrying amount obtained in:	
	2010 US\$m	2009 US\$m
Residential property	2,052	1,587
Commercial and industrial property	61	93
Other	119	355
	2,232	2,035

We make repossessed properties available for sale in an orderly fashion, with the proceeds used to reduce or repay the outstanding indebtedness. If excess funds arise after the debt has been repaid, they are made available either to repay other secured lenders with lower priority or are returned to the customer. We do not generally occupy repossessed properties for our business use.

Credit quality of financial instruments (Audited)

The five credit quality classifications defined below each encompass a range of more granular internal credit rating grades assigned to wholesale and retail lending business, as well as the external ratings attributed by external agencies to debt securities. There is no direct correlation between the internal and external ratings at a granular level, except to the extent each falls within a single quality classification.

Quality classification definitions

- **'Strong'**: exposures demonstrate a strong capacity to meet financial commitments, with negligible or low probability of default and/or low levels of expected loss. Retail accounts operate within product parameters and only exceptionally show any period of delinquency.
- **'Good'**: exposures require closer monitoring and demonstrate a good capacity to meet financial commitments, with low default risk. Retail accounts typically show only short periods of delinquency, with any losses expected to be minimal following the adoption of recovery processes.
- **'Satisfactory'**: exposures require closer monitoring and demonstrate an average to fair capacity to meet financial commitments, with moderate default risk. Retail accounts typically show only short periods of delinquency, with any losses expected to be minor following the adoption of recovery processes.
- **'Sub-standard'**: exposures require varying degrees of special attention and default risk is of greater concern. Retail portfolio segments show longer delinquency periods of generally up to 90 days past due and/or expected losses are higher due to a reduced ability to mitigate these through security realisation or other recovery processes.
- **'Impaired'**: exposures have been assessed, individually or collectively, as impaired.

The Customer Risk Rating ('CRR') 10-grade scale above summarises a more granular underlying 23-grade scale (2009: 22-grade scale) of obligor probability of default ('PD'). The 23-grade scale was introduced in September 2010 following the harmonisation of PDs for three asset classes (banks, sovereigns and corporates) into one scale which required an additional PD band. All distinct HSBC customers are rated using the 10 or 23-grade scale, depending on the degree of sophistication of the Basel II approach adopted for the exposure.

The Expected Loss ('EL') 10-grade scale for retail business summarises a more granular underlying EL scale for these customer segments; this combines obligor and facility/product risk factors in a composite measure.

For debt securities and certain other financial instruments, external ratings have been aligned to the five quality classifications. The ratings of Standard and Poor's are cited, with those of other agencies being treated equivalently. Debt securities with short-term issue ratings are reported against the long-term rating of the issuer of those securities. If major rating agencies have different ratings for the same debt securities, a prudent rating selection is made in line with regulatory requirements.

Additional credit quality information in respect of our consolidated holdings of ABSs is provided on pages 134 and 135.

For the purpose of the following disclosure, retail loans which are past due up to 89 days and are not otherwise classified as EL9 or EL10, are not disclosed within the EL grade to which they relate, but are separately classified as past due but not impaired.

Financial instruments by credit quality

2010 compared with 2009

Financial instruments on which credit quality has been assessed increased by 4% to US\$2,297bn due to strong growth in lending, mainly in Asia. At December 2010, US\$1,550bn or 67% was classified as 'strong' in line with the end of 2009, reflecting the continued actions by management to mitigate the Group's exposure to credit risk. The proportion of financial instruments classified as 'good' and 'satisfactory' were broadly unchanged at 16% and 12% respectively. The proportion of 'sub-standard' financial instruments was 2%.

Loans and advances on which credit quality has been assessed increased by 8% to US\$1,167bn, driven by growth in commercial and personal lending in Asia as generally economic conditions improved, while loans and advances to banks also rose. The growth was in balances classified as 'strong' and 'good', while balances classified as 'sub-standard' and 'past due but not impaired' declined.

Derivative assets on which credit quality has been assessed grew by 4% to US\$261bn from 31 December 2009, with growth in balances being classified as 'strong'. The increase was mainly in interest rate derivatives, reflecting a downward shift in yield curves.

At 31 December 2010, financial investments on which credit quality has been assessed increased by 9% compared with the end of 2009, to US\$393bn. Substantially all this growth was in assets classified as 'strong', reflecting increased investment of excess liquidity into low-risk government issued or government guaranteed bonds.

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Risk > Credit risk > Credit quality > Financial instruments / Past due but not impaired

Trading assets on which credit quality has been assessed decreased by 11%, with the decline being in assets rated as 'strong'. This reflected the de-consolidation of the Constant Net Asset Value funds.

The following tables set out our distribution of financial instruments by measures of credit quality:

Distribution of financial instruments by credit quality (Audited)

	Neither past due nor impaired				Past due but not impaired US\$m	Impaired US\$m	Impairment allowances ²⁷ US\$m	Total US\$m
	Strong US\$m	Good US\$m	Satisfactory US\$m	Sub-standard US\$m				
At 31 December 2010								
Cash and balances at central banks	51,682	3,100	2,461	140				57,383
Items in the course of collection from other banks	5,631	101	340	–				6,072
Hong Kong Government certificates of indebtedness ...	19,057	–	–	–				19,057
Trading assets ²⁸	256,576	41,620	43,278	2,492				343,966
– treasury and other eligible bills	23,663	1,000	957	–				25,620
– debt securities	141,837	8,254	17,222	955				168,268
– loans and advances to banks	55,534	9,980	4,865	77				70,456
– loans and advances to customers	35,542	22,386	20,234	1,460				79,622
Financial assets designated at fair value ²⁸	8,377	4,640	6,536	40				19,593
– treasury and other eligible bills	158	–	1	–				159
– debt securities	7,310	4,368	6,530	40				18,248
– loans and advances to banks	38	272	5	–				315
– loans and advances to customers	871	–	–	–				871
Derivatives ²⁸	199,920	45,042	13,980	1,815				260,757
Loans and advances held at amortised cost	653,248	251,265	186,704	37,057	30,320	28,284	(20,241)	1,166,637
– loans and advances to banks	166,943	33,051	6,982	1,152	108	193	(158)	208,271
– loans and advances to customers ²⁹	486,305	218,214	179,722	35,905	30,212	28,091	(20,083)	958,366
Financial investments	345,265	23,253	17,168	4,479	16	2,591		392,772
– treasury and other similar bills	52,423	2,702	1,882	115	–	7		57,129
– debt securities	292,842	20,551	15,286	4,364	16	2,584		335,643
Other assets	9,752	6,067	12,212	1,510	513	317		30,371
– endorsements and acceptances	2,074	3,305	4,227	493	9	8		10,116
– accrued income and other ..	7,678	2,762	7,985	1,017	504	309		20,255
Total financial instruments	1,549,508	375,088	282,679	47,533	30,849	31,192	(20,241)	2,296,608

	Neither past due nor impaired				Past due but not impaired US\$m	Impaired US\$m	Impairment allowances ²⁷ US\$m	Total US\$m
	Strong US\$m	Good US\$m	Satisfactory US\$m	Sub-standard US\$m				
At 31 December 2009								
Cash and balances at central banks	55,355	3,414	1,589	297				60,655
Items in the course of collection from other banks	5,922	20	453	–				6,395
Hong Kong Government certificates of indebtedness	17,463	–	–	–				17,463
Trading assets ²⁸	306,481	37,911	39,457	2,221				386,070
– treasury and other eligible bills	21,747	315	169	115				22,346
– debt securities	180,876	7,499	12,360	863				201,598
– loans and advances to banks	59,152	14,213	4,572	189				78,126
– loans and advances to customers	44,706	15,884	22,356	1,054				84,000
Financial assets designated at fair value ²⁸	11,163	3,834	7,122	79				22,198
– treasury and other eligible bills	223	–	–	–				223
– debt securities	9,701	3,834	7,104	79				20,718
– loans and advances to banks	336	–	18	–				354
– loans and advances to customers	903	–	–	–				903
Derivatives ²⁸	169,430	60,759	15,688	5,009				250,886
Loans and advances held at amortised cost	570,357	231,394	185,167	43,820	40,078	30,845	(25,649)	1,076,012
– loans and advances to banks	130,403	34,646	13,154	1,434	12	239	(107)	179,781
– loans and advances to customers ²⁹	439,954	196,748	172,013	42,386	40,066	30,606	(25,542)	896,231
Financial investments	316,604	20,080	15,359	5,602	–	2,389		360,034
– treasury and other similar bills	54,158	1,458	2,315	498	–	5		58,434
– debt securities	262,446	18,622	13,044	5,104	–	2,384		301,600
Other assets	13,454	6,968	12,477	1,718	908	848		36,373
– endorsements and acceptances	1,349	3,200	4,161	512	12	77		9,311
– accrued income and other ...	12,105	3,768	8,316	1,206	896	771		27,062
Total financial instruments	1,466,229	364,380	277,312	58,746	40,986	34,082	(25,649)	2,216,086

For footnotes, see page 174.

Past due but not impaired gross financial instruments

(Audited)

Examples of exposures past due but not impaired include overdue loans fully secured by cash collateral; mortgages that are individually assessed for impairment, and that are in arrears more than

90 days, but where the value of collateral is sufficient to repay both the principal debt and all potential interest for at least one year; and short-term trade facilities past due more than 90 days for technical reasons such as delays in documentation, but where there is no concern over the creditworthiness of the counterparty.

Past due but not impaired loans and advances to customers and banks by geographical region

(Audited)

	Europe US\$m	Hong Kong US\$m	Rest of Asia-Pacific US\$m	Middle East US\$m	North America US\$m	Latin America US\$m	Total US\$m
At 31 December 2010	2,518	1,158	2,092	1,351	20,227	2,974	30,320
At 31 December 2009	3,759	1,165	1,996	1,661	27,989	3,508	40,078

Report of the Directors: Operating and Financial Review (continued)**Risk > Credit risk > Credit quality > Past due but not impaired / Impaired loans / Impairment allowances***Past due but not impaired loans and advances to customers and banks by industry sector**(Audited)*

		At 31 December	
		2010	2009
		US\$m	US\$m
Banks		108	12
Customers		30,212	40,066
Personal		24,824	34,306
Corporate and commercial		5,292	5,522
Financial		96	238
		30,320	40,078

*Ageing analysis of days past due but not impaired gross financial instruments**(Audited)*

		Up to 29 days	30-59 days	60-89 days	90-179 days	180 days and over	Total
		US\$m	US\$m	US\$m	US\$m	US\$m	US\$m
At 31 December 2010							
Loans and advances held at amortised cost		19,481	6,915	3,281	482	161	30,320
– loans and advances to banks		108	–	–	–	–	108
– loans and advances to customers		19,373	6,915	3,281	482	161	30,212
Financial investments							
– debt securities		16	–	–	–	–	16
Other assets		262	123	57	26	45	513
– endorsements and acceptances		7	–	–	1	1	9
– other		255	123	57	25	44	504
		19,759	7,038	3,338	508	206	30,849
At 31 December 2009							
Loans and advances held at amortised cost		24,330	9,920	5,259	355	214	40,078
– loans and advances to banks		12	–	–	–	–	12
– loans and advances to customers		24,318	9,920	5,259	355	214	40,066
Other assets		609	130	63	24	82	908
– endorsements and acceptances		9	1	–	1	1	12
– other		600	129	63	23	81	896
		24,939	10,050	5,322	379	296	40,986

Impaired loans and advances*Impaired loans and advances to customers and banks by industry sector**(Audited)*

		Impaired loans and advances at 31 December 2010			Impaired loans and advances at 31 December 2009		
		Individually assessed	Collectively assessed	Total	Individually assessed	Collectively assessed	Total
		US\$m	US\$m	US\$m	US\$m	US\$m	US\$m
Banks		193	–	193	239	–	239
Customers		15,201	12,890	28,091	14,767	15,839	30,606
Personal		2,121	12,592	14,713	1,977	15,451	17,428
Corporate and commercial		11,964	298	12,262	11,839	387	12,226
Financial		1,116	–	1,116	951	1	952
		15,394	12,890	28,284	15,006	15,839	30,845

Impairment allowances on loans and advances to customers and banks
(Audited)

The tables below analyse by geographical region the impairment allowances recognised for impaired

loans and advances that are either individually assessed or collectively assessed, and collective impairment allowances on loans and advances classified as not impaired.

Impairment allowances on loans and advances to customers by geographical region
(Audited)

	Europe US\$m	Hong Kong US\$m	Rest of Asia- Pacific US\$m	Middle East US\$m	North America US\$m	Latin America US\$m	Total US\$m
At 31 December 2010							
Gross loans and advances							
Individually assessed impaired loans ³⁰	8,831	637	1,185	2,137	1,632	779	15,201
Collectively assessed ³¹	432,631	140,683	108,505	24,141	198,070	59,218	963,248
Impaired loans ³⁰	1,726	23	139	296	9,095	1,611	12,890
Non-impaired loans ³²	430,905	140,660	108,366	23,845	188,975	57,607	950,358
Total gross loans and advances	441,462	141,320	109,690	26,278	199,702	59,997	978,449
Impairment allowances							
Individually assessed	3,563	345	629	1,163	390	367	6,457
Collectively assessed	2,100	284	330	489	8,780	1,643	13,626
Total impairment allowances	5,663	629	959	1,652	9,170	2,010	20,083
Net loans and advances	435,799	140,691	108,731	24,626	190,532	57,987	958,366
	%	%	%	%	%	%	%
Individually assessed allowances as a percentage of individually assessed loans and advances	40.3	54.2	53.1	54.4	23.9	47.1	42.5
Collectively assessed allowances as a percentage of collectively assessed loans and advances	0.5	0.2	0.3	2.0	4.4	2.8	1.4
Total allowances as a percentage of total gross loans and advances	1.3	0.4	0.9	6.3	4.6	3.4	2.1
	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m
At 31 December 2009							
Gross loans and advances							
Individually assessed impaired loans ³⁰	8,800	823	1,006	1,310	1,990	838	14,767
Collectively assessed ³¹	436,816	99,362	80,033	22,912	218,539	49,344	907,006
Impaired loans ³⁰	1,922	18	194	336	11,256	2,113	15,839
Non-impaired loans ³²	434,894	99,344	79,839	22,576	207,283	47,231	891,167
Total gross loans and advances	445,616	100,185	81,039	24,222	220,529	50,182	921,773
Impairment allowances							
Individually assessed	3,742	490	508	688	650	416	6,494
Collectively assessed	2,393	314	488	690	13,026	2,137	19,048
Total impairment allowances	6,135	804	996	1,378	13,676	2,553	25,542
Net loans and advances	439,481	99,381	80,043	22,844	206,853	47,629	896,231
	%	%	%	%	%	%	%
Individually assessed allowances as a percentage of individually assessed loans and advances	42.5	59.5	50.5	52.5	32.7	49.7	44.0
Collectively assessed allowances as a percentage of collectively assessed loans and advances	0.5	0.3	0.6	3.0	6.0	4.3	2.1
Total allowances as a percentage of total gross loans and advances	1.4	0.8	1.2	5.7	6.2	5.1	2.8

For footnotes, see page 174.

Report of the Directors: Operating and Financial Review (continued)

Risk > Credit risk > Credit quality > Impairment allowances

Movement in impairment allowances on loans and advances to customers and banks
(Audited)

	Banks	Customers		
	Individually assessed⁸ US\$m	Individually assessed US\$m	Collectively assessed US\$m	Total US\$m
2010				
At 1 January	107	6,494	19,048	25,649
Amounts written off	(9)	(2,441)	(16,850)	(19,300)
Recoveries of loans and advances written off in previous years	2	143	875	1,020
Charge to income statement	12	2,613	10,923	13,548
Exchange and other movements	46	(352)	(370)	(676)
At 31 December	158	6,457	13,626	20,241
Customers				
Personal		615	11,678	12,293
Corporate and commercial		5,274	1,863	7,137
Financial		568	85	653
	%	%	%	%
Impairment allowances as a percentage of loans and advances ^{33,34}	0.11	0.70	1.49	1.91
	US\$m	US\$m	US\$m	US\$m
2009				
At 1 January	63	3,284	20,625	23,972
Amounts written off	(35)	(1,563)	(23,242)	(24,840)
Recoveries of loans and advances written off in previous years	6	128	756	890
Charge to income statement	70	4,388	20,484	24,942
Exchange and other movements	3	257	425	685
At 31 December	107	6,494	19,048	25,649
Customers				
Personal		572	16,517	17,089
Corporate and commercial		5,528	2,354	7,882
Financial		394	177	571
	%	%	%	%
Impairment allowances as a percentage of loans and advances ^{33,34}	0.09	0.75	2.21	2.63

For footnotes, see page 174.

Movement in impairment allowances by industry sector
(Audited)

	2010 US\$m	2009 US\$m	2008 US\$m	2007 US\$m	2006 US\$m
Impairment allowances at 1 January	25,649	23,972	19,212	13,585	11,366
Amounts written off	(19,300)	(24,840)	(17,955)	(12,844)	(9,473)
Personal ²	(16,458)	(22,703)	(16,625)	(11,670)	(8,281)
– residential mortgages ²	(4,163)	(4,704)	(2,110)	(930)	(628)
– other personal ²	(12,295)	(17,999)	(14,515)	(10,740)	(7,653)
Corporate and commercial	(2,789)	(1,984)	(1,294)	(1,163)	(1,153)
– commercial, industrial and international trade	(1,050)	(1,093)	(789)	(897)	(782)
– commercial real estate and other property-related	(1,280)	(327)	(115)	(98)	(111)
– other commercial	(459)	(564)	(390)	(168)	(260)
Financial ³⁵	(53)	(153)	(36)	(11)	(39)
Recoveries of amounts written off in previous years	1,020	890	834	1,005	779
Personal	846	712	686	837	605
– residential mortgages	93	61	19	19	19
– other personal	753	651	667	818	586
Corporate and commercial	156	170	142	157	163
– commercial, industrial and international trade	92	123	76	74	88
– commercial real estate and other property-related	21	9	6	29	21
– other commercial	43	38	60	54	54
Financial ³⁵	18	8	6	11	11
Charge to income statement ³⁶	13,548	24,942	24,131	17,177	10,547
Personal	11,187	19,781	20,950	15,968	9,929
– residential mortgages	3,461	4,185	5,000	1,840	1,096
– other personal	7,726	15,596	15,950	14,128	8,833
Corporate and commercial	2,198	4,711	2,879	1,176	664
– commercial, industrial and international trade	909	2,392	1,573	897	503
– commercial real estate and other property-related	660	1,492	755	152	75
– other commercial	629	827	551	127	86
Financial ³⁵	163	450	302	36	(9)
Governments	–	–	–	(3)	(37)
Exchange and other movements	(676)	685	(2,250)	289	366
At 31 December²	20,241	25,649	23,972	19,212	13,585
Impairment allowances against banks:					
– individually assessed	158	107	63	7	7
Impairment allowances against customers:					
– individually assessed	6,457	6,494	3,284	2,699	2,565
– collectively assessed ²	13,626	19,048	20,625	16,506	11,013
At 31 December²	20,241	25,649	23,972	19,212	13,585
	%	%	%	%	%
Impairment allowances against customers as a percentage of loans and advances to customers:					
– individually assessed	0.66	0.70	0.34	0.27	0.29
– collectively assessed	1.39	2.07	2.16	1.65	1.25
At 31 December	2.05	2.77	2.50	1.92	1.54

For footnotes, see page 174.

Report of the Directors: Operating and Financial Review (continued)

Risk > Credit risk > Credit quality > Impairment allowances

Movement in impairment allowances by industry sector and by geographical region (Audited)

	2010						
	Europe US\$m	Hong Kong US\$m	Rest of Asia- Pacific US\$m	Middle East US\$m	North America US\$m	Latin America US\$m	Total US\$m
Impairment allowances at 1 January	6,227	804	996	1,393	13,676	2,553	25,649
Amounts written off	(3,001)	(265)	(678)	(386)	(12,601)	(2,369)	(19,300)
Personal	(1,447)	(150)	(561)	(375)	(12,070)	(1,855)	(16,458)
– residential mortgages	(49)	(1)	(10)	–	(4,027)	(76)	(4,163)
– other personal	(1,398)	(149)	(551)	(375)	(8,043)	(1,779)	(12,295)
Corporate and commercial	(1,539)	(109)	(110)	(11)	(507)	(513)	(2,789)
– commercial, industrial and international trade	(385)	(90)	(46)	(10)	(174)	(345)	(1,050)
– commercial real estate and other property- related	(1,022)	(18)	(18)	–	(194)	(28)	(1,280)
– other commercial	(132)	(1)	(46)	(1)	(139)	(140)	(459)
Financial ³⁵	(15)	(6)	(7)	–	(24)	(1)	(53)
Recoveries of amounts written off in previous years	287	39	188	57	182	267	1,020
Personal	251	32	168	53	134	208	846
– residential mortgages	29	4	3	–	30	27	93
– other personal	222	28	165	53	104	181	753
Corporate and commercial	33	7	7	4	46	59	156
– commercial, industrial and international trade	16	7	5	2	19	43	92
– commercial real estate and other property- related	6	–	–	–	11	4	21
– other commercial	11	–	2	2	16	12	43
Financial ³⁵	3	–	13	–	2	–	18
Charge to income statement ³⁶	2,532	137	428	623	8,304	1,524	13,548
Personal	1,263	78	297	226	8,138	1,185	11,187
– residential mortgages	153	(17)	11	46	3,189	79	3,461
– other personal	1,110	95	286	180	4,949	1,106	7,726
Corporate and commercial	1,080	72	146	304	269	327	2,198
– commercial, industrial and international trade	395	21	100	165	25	203	909
– commercial real estate and other property- related	360	(7)	12	117	178	–	660
– other commercial	325	58	34	22	66	124	629
Financial ³⁵	189	(13)	(15)	93	(103)	12	163
Exchange and other movements	(305)	(86)	25	(18)	(327)	35	(676)
At 31 December	5,740	629	959	1,669	9,234	2,010	20,241
Impairment allowances against banks: – individually assessed	77	–	–	17	64	–	158
Impairment allowances against customers: – individually assessed	3,563	345	629	1,163	390	367	6,457
– collectively assessed ³⁷	2,100	284	330	489	8,780	1,643	13,626
At 31 December	5,740	629	959	1,669	9,234	2,010	20,241
	%	%	%	%	%	%	%
Impairment allowances against customers as a percentage of loans and advances to customers: – individually assessed	0.81	0.24	0.57	4.43	0.20	0.61	0.66
– collectively assessed ³⁷	0.48	0.20	0.30	1.86	4.40	2.74	1.39
At 31 December	1.29	0.44	0.87	6.29	4.60	3.35	2.05

	2009						
	Europe US\$m	Hong Kong US\$m	Rest of Asia- Pacific US\$m	Middle East US\$m	North America US\$m	Latin America US\$m	Total US\$m
Impairment allowances at 1 January	3,922	733	813	414	16,090	2,000	23,972
Amounts written off	(2,781)	(357)	(850)	(384)	(17,792)	(2,676)	(24,840)
Personal	(1,876)	(240)	(787)	(376)	(17,204)	(2,220)	(22,703)
– residential mortgages	(41)	(1)	(9)	–	(4,610)	(43)	(4,704)
– other personal	(1,835)	(239)	(778)	(376)	(12,594)	(2,177)	(17,999)
Corporate and commercial	(810)	(117)	(63)	(8)	(534)	(452)	(1,984)
– commercial, industrial and international trade	(438)	(114)	(50)	(8)	(228)	(255)	(1,093)
– commercial real estate and other property- related	(148)	(1)	(3)	–	(163)	(12)	(327)
– other commercial	(224)	(2)	(10)	–	(143)	(185)	(564)
Financial ³⁵	(95)	–	–	–	(54)	(4)	(153)
Recoveries of amounts written off in previous years	265	34	132	27	93	339	890
Personal	200	32	123	25	60	272	712
– residential mortgages	28	6	1	–	7	19	61
– other personal	172	26	122	25	53	253	651
Corporate and commercial	57	2	9	2	33	67	170
– commercial, industrial and international trade	52	2	7	2	16	44	123
– commercial real estate and other property- related	5	–	1	–	2	1	9
– other commercial	–	–	1	–	15	22	38
Financial ³⁵	8	–	–	–	–	–	8
Charge to income statement ³⁶	4,409	450	874	1,333	15,372	2,504	24,942
Personal	1,995	206	654	593	14,390	1,943	19,781
– residential mortgages	158	(16)	14	20	3,955	54	4,185
– other personal	1,837	222	640	573	10,435	1,889	15,596
Corporate and commercial	2,163	244	220	706	818	560	4,711
– commercial, industrial and international trade	963	164	154	413	309	389	2,392
– commercial real estate and other property- related	958	70	29	106	288	41	1,492
– other commercial	242	10	37	187	221	130	827
Financial ³⁵	251	–	–	34	164	1	450
Exchange and other movements	412	(56)	27	3	(87)	386	685
At 31 December	<u>6,227</u>	<u>804</u>	<u>996</u>	<u>1,393</u>	<u>13,676</u>	<u>2,553</u>	<u>25,649</u>
Impairment allowances against banks: – individually assessed	92	–	–	15	–	–	107
Impairment allowances against customers: – individually assessed	3,742	490	508	688	650	416	6,494
– collectively assessed ³⁷	2,393	314	488	690	13,026	2,137	19,048
At 31 December	<u>6,227</u>	<u>804</u>	<u>996</u>	<u>1,393</u>	<u>13,676</u>	<u>2,553</u>	<u>25,649</u>
	%	%	%	%	%	%	%
Impairment allowances against customers as a percentage of loans and advances to customers: – individually assessed	0.84	0.49	0.63	2.84	0.29	0.83	0.70
– collectively assessed ³⁷	0.54	0.31	0.60	2.85	5.91	4.26	2.07
At 31 December	<u>1.38</u>	<u>0.80</u>	<u>1.23</u>	<u>5.69</u>	<u>6.20</u>	<u>5.09</u>	<u>2.77</u>

For footnotes, see page 174.

Report of the Directors: Operating and Financial Review (continued)**Risk > Credit risk > Impairment charge****Impairment charge to the income statement**

Individually and collectively assessed impairment charge to income statement by industry segment
(Unaudited)

	2010			2009		
	Individually assessed US\$m	Collectively assessed US\$m	Total US\$m	Individually assessed US\$m	Collectively assessed US\$m	Total US\$m
Banks	12	–	12	70	–	70
Personal	180	11,007	11,187	316	19,465	19,781
Residential mortgages	137	3,324	3,461	171	4,014	4,185
Other personal	43	7,683	7,726	145	15,451	15,596
Corporate and commercial	2,190	8	2,198	3,699	1,012	4,711
Commercial, industrial and international trade	997	(88)	909	1,681	711	2,392
Commercial real estate and other property-related	680	(20)	660	1,330	162	1,492
Other commercial	513	116	629	688	139	827
Financial	243	(92)	151	373	7	380
Total charge to income statement	2,625	10,923	13,548	4,458	20,484	24,942

Net loan impairment charge to the income statement
(Unaudited)

	2010 US\$m	2009 US\$m	2008 US\$m	2007 US\$m	2006 US\$m
Individually assessed impairment allowances	2,625	4,458	2,064	796	458
New allowances	3,617	5,173	2,742	1,533	1,297
Release of allowances no longer required	(847)	(581)	(565)	(608)	(711)
Recoveries of amounts previously written off	(145)	(134)	(113)	(129)	(128)
Collectively assessed impairment allowances	10,923	20,484	22,067	16,381	10,089
New allowances net of allowance releases	11,798	21,240	22,788	17,257	10,740
Recoveries of amounts previously written off	(875)	(756)	(721)	(876)	(651)
Total charge for impairment losses	13,548	24,942	24,131	17,177	10,547
Banks	12	70	54	–	(3)
Customers	13,536	24,872	24,077	17,177	10,550
	%	%	%	%	%
Charge for impairment losses as a percentage of closing gross loans and advances	1.14	2.26	2.17	1.39	0.99
	US\$m	US\$m	US\$m	US\$m	US\$m
At 31 December					
Impaired loans ²	28,284	30,845	25,422	19,594	15,086
Impairment allowances ²	20,241	25,649	23,972	19,212	13,585

For footnote, see page 174.

Net loan impairment charge to the income statement by geographical region
(Unaudited)

	Europe US\$m	Hong Kong US\$m	Rest of Asia- Pacific US\$m	Middle East US\$m	North America US\$m	Latin America US\$m	Total US\$m
2010							
Individually assessed impairment allowances	1,445	45	198	502	348	87	2,625
New allowances	1,874	111	311	561	580	180	3,617
Release of allowances no longer required	(394)	(54)	(84)	(55)	(196)	(64)	(847)
Recoveries of amounts previously written off	(35)	(12)	(29)	(4)	(36)	(29)	(145)
Collectively assessed impairment allowances	1,087	92	230	121	7,956	1,437	10,923
New allowances net of allowance releases	1,339	119	389	174	8,102	1,675	11,798
Recoveries of amounts previously written off	(252)	(27)	(159)	(53)	(146)	(238)	(875)
Total charge for impairment losses	2,532	137	428	623	8,304	1,524	13,548
Banks	2	–	–	2	8	–	12
Customers	2,530	137	428	621	8,296	1,524	13,536
	%	%	%	%	%	%	%
Charge for impairment losses as a percentage of closing gross loans and advances	0.49	0.08	0.29	1.75	3.79	1.74	1.14
	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m
At 31 December 2010							
Impaired loans	10,663	665	1,324	2,453	10,789	2,390	28,284
Impairment allowances	5,740	629	959	1,669	9,234	2,010	20,241
2009							
Individually assessed impairment allowances	2,248	242	244	580	916	228	4,458
New allowances	2,573	315	341	598	1,052	294	5,173
Release of allowances no longer required	(255)	(64)	(82)	(16)	(112)	(52)	(581)
Recoveries of amounts previously written off	(70)	(9)	(15)	(2)	(24)	(14)	(134)
Collectively assessed impairment allowances	2,161	208	630	753	14,456	2,276	20,484
New allowances net of allowance releases	2,356	233	747	778	14,525	2,601	21,240
Recoveries of amounts previously written off	(195)	(25)	(117)	(25)	(69)	(325)	(756)
Total charge for impairment losses	4,409	450	874	1,333	15,372	2,504	24,942
Banks	55	–	–	15	–	–	70
Customers	4,354	450	874	1,318	15,372	2,504	24,872
	%	%	%	%	%	%	%
Charge for impairment losses as a percentage of closing gross loans and advances	0.86	0.33	0.75	4.08	6.52	3.64	2.26
	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m
At 31 December 2009							
Impaired loans	10,873	846	1,201	1,666	13,308	2,951	30,845
Impairment allowances	6,227	804	996	1,393	13,676	2,553	25,649

Charge for impairment losses as a percentage of average gross loans and advances to customers²
(Unaudited)

	2010 %	2009 %	2008 %	2007 %	2006 %
New allowances net of allowance releases	1.65	2.92	2.54	2.09	1.49
Recoveries	(0.12)	(0.10)	(0.09)	(0.12)	(0.10)
Total charge for impairment losses	1.53	2.82	2.45	1.97	1.39
Amount written off net of recoveries	2.08	2.71	1.75	1.36	1.15

For footnote, see page 174.

Report of the Directors: Operating and Financial Review (continued)

Risk > Credit risk > Impairment charge / HSBC Holdings

Charge for impairment losses as a percentage of average gross loans and advances to customers by geographical region
(Unaudited)

	Europe %	Hong Kong %	Rest of Asia- Pacific %	Middle East %	North America %	Latin America %	Total %
2010							
New allowances net of allowance releases	0.74	0.15	0.66	2.71	4.02	3.41	1.65
Recoveries	(0.07)	(0.03)	(0.20)	(0.23)	(0.09)	(0.51)	(0.12)
Total charge for impairment losses	0.67	0.12	0.46	2.48	3.93	2.90	1.53
Amount written off net of recoveries	0.71	0.19	0.53	1.32	5.89	4.01	2.08
2009							
New allowances net of allowance releases	1.19	0.49	1.31	5.25	6.24	6.11	2.92
Recoveries	(0.07)	(0.03)	(0.17)	(0.11)	(0.04)	(0.73)	(0.10)
Total charge for impairment losses	1.12	0.46	1.14	5.14	6.20	5.38	2.82
Amount written off net of recoveries	0.63	0.33	0.94	1.40	7.14	5.03	2.71

2010 compared with 2009

(Unaudited)

Loan impairment charges of US\$13.5bn declined by 46% on both a reported and an underlying basis compared with 2009. Reported impaired loans were US\$28.3bn at 31 December 2010, a decrease of 8% on both bases. The following commentary is on a constant currency basis.

New allowances for loan impairment charges were US\$15.4bn, a decline of 42% compared with 2009, while releases and recoveries of US\$1.9bn were 23% higher.

Impaired loans were 2.4% of total gross loans and advances at 31 December 2010, compared with 2.8% at 31 December 2009.

In **Europe**, new loan impairment allowances were US\$3.2bn, 34% lower than in 2009, reflecting a more stable credit environment across many countries in the region. Individually assessed loan impairment allowances declined, mainly in the UK, reflecting an improvement in credit conditions. Significantly, impairment charges in 2009 against specific customers in the property sector did not recur. Collectively assessed loan impairment allowances also declined due to a fall in delinquency levels as our customers continued to benefit from the low interest rate environment and the general improvement in economic conditions. In our personal lending portfolios, new collectively assessed loan impairment allowances declined, reflecting lower levels of unsecured lending and tightened underwriting criteria. Impaired loans of US\$10.7bn were 3% higher than at the end of 2009.

In Europe, releases and recoveries increased by 32% to US\$681m.

In **Hong Kong**, new loan impairment allowances declined by 58% to US\$230m and impaired loans fell by 21% from the end of 2009 to US\$665m. New loan impairment allowances declined in both the personal and commercial lending portfolios, reflecting the economic recovery and improvement in credit conditions in the territory and fewer customer downgrades, partly offset by an increase in lending balances.

Releases and recoveries in Hong Kong were US\$93m, 5% lower than in 2009.

New loan impairment allowances in **Rest of Asia-Pacific** declined by 40% to US\$700m. The decline reflected lower new collective impairment allowances in India due to improved delinquency rates and lower balances as certain unsecured portfolios and higher risk elements of the credit card portfolio were managed down. In addition, new individually assessed impairment allowances also declined, mainly in India, due to the non-recurrence of large impairments, notably on certain technology-related exposures. These were partly offset by a significant loan impairment charge against a single customer. Impaired loans in the region increased by 3% to US\$1.3bn at the end of 2010.

Releases and recoveries in the region rose by 19% due to releases in the construction and software industries in India and higher recoveries of amounts previously written off, notably in Australia.

In the **Middle East**, new loan impairment allowances were US\$735m, 47% lower than in 2009. The decrease was largely due to a decline in new collectively assessed loan impairment allowances net of allowance releases against the personal and commercial lending portfolios as delinquency rates improved, with a decline in personal balances in line

with the managing down of our exposure to higher risk unsecured personal lending. The lower allowances also reflected an overall improvement in economic conditions across the region. There were also declines in new individually assessed loan impairment charges as new charges for 2010 were restricted to a small number of large corporate exposures. Impaired loans rose by 47% from 31 December 2009 to US\$2.5bn due to credit deterioration in a small number of specific exposures, and debt restructuring in the UAE.

Releases and recoveries in the Middle East more than doubled from 2009 to US\$112m due to the release of judgemental impairment allowances reflecting improved economic conditions during 2010.

In **North America**, new loan impairment allowances declined markedly, reducing by 44% to US\$8.7bn. In our HSBC Finance portfolios, lower new loan impairment allowances in Card and Retail Services reflected a reduction in lending balances and an improvement in delinquency rates. In our Consumer Lending and Mortgage Services portfolios, new loan impairment allowances also fell as the portfolio continued to run-off. In addition, total loss severities on foreclosed loans improved compared with 2009 reflecting the increase in the number of properties for which we accepted a deed-in-lieu of foreclosure, or a short sale, both of which result in lower losses compared with loans which are subjected to a formal foreclosure process.

In our corporate and commercial portfolios in North America, new loan impairment allowances declined, reflecting lower balances due to customer deleveraging and improved credit quality which, along with the improved economy, resulted in credit upgrades on certain accounts and fewer customer downgrades.

In North America, impaired loans decreased by 19% from the end of 2009 to US\$10.8bn, while

releases and recoveries rose by 80% compared with 2009 to US\$378m.

In **Latin America**, new loan impairment allowances declined by 42% to US\$1.9bn, while impaired loans declined by 23% to US\$2.4bn as economic conditions in the region improved. Lower new loan impairment allowances in the personal lending portfolios were due to lower credit card balances in Mexico as we repositioned the portfolio to target higher quality customers and, to a lesser extent, in Brazil, due to the managed reduction in consumer finance balances. In addition, in the commercial lending portfolios in Brazil lower new impairment allowances reflected an improvement in economic conditions.

Releases and recoveries in Latin America declined by 21% from 2009 to US\$331m.

For an analysis of loan impairment charges and other credit risk provisions by customer group, see page 48.

HSBC Holdings (Audited)

Credit risk in HSBC Holdings primarily arises from transactions with Group subsidiaries and from guarantees issued in support of obligations assumed by certain Group operations in the normal conduct of their business.

These risks are reviewed and managed within regulatory and internal limits for exposures by our Global Risk function, which provides high-level centralised oversight and management of our credit risks worldwide.

HSBC Holdings' maximum exposure to credit risk at 31 December 2010 is shown below. Its financial assets principally represent claims on Group subsidiaries in Europe and North America. No collateral or other credit enhancements were held by HSBC Holdings in respect of its transactions with subsidiaries.

HSBC Holdings – maximum exposure to credit risk (Audited)

Cash at bank and in hand:

– balances with HSBC undertakings	459	224
Derivatives	2,327	2,981
Loans and advances to HSBC undertakings	21,238	23,212
Financial investments	2,025	2,455
Financial guarantees and similar contracts	46,988	35,073
Loan and other credit-related commitments	2,720	3,240

2010 US\$m	2009 US\$m
459	224
2,327	2,981
21,238	23,212
2,025	2,455
46,988	35,073
2,720	3,240
75,757	67,185

Report of the Directors: Operating and Financial Review (continued)

Risk > Credit risk > Securitisation exposures and other structured products

All of the derivative transactions are with HSBC undertakings which are banking counterparties (2009: 100%).

The credit quality of the loans and advances to HSBC undertakings is assessed as strong/good, with 100% of the exposure being neither past due nor impaired (2009: 100%).

The credit ratings of the financial investments held by HSBC Holdings are within the Standard and Poor's ('S&P') ratings range of A to BBB+ (2009: A+ to A-).

Securitisation exposures and other structured products

(Audited)

The financial impact of the recent market disruption is lessening with net write-downs to the income statement of nil (2009: US\$1.9bn net write-downs) and a reduction in the available-for-sale ABSs reserve deficit by US\$5.8bn to US\$6.4bn.

Following the dislocation in markets which began in 2007, there was a modest recovery in the risk appetite of investors in 2009. However, the first half of 2010 saw renewed uncertainty and concerns over sovereign credit risk. As a result, the prices of many assets perceived to be of higher risk fell. In addition, the widespread downgrading of securitised assets continued in the first half of 2010 as rating agencies changed their methodologies, reducing the appetite for securitised assets among institutions subject to the Basel II framework.

Increased stability returned in the second half of 2010 following the interventions of the EU and the International Monetary Fund. A modest increase in house prices in some areas and the continued low

interest rate environment contributed to a rise in the price of some securitised assets. As a result, the levels of write-downs and losses on our holdings of structured assets remained modest. Unrealised losses in our available-for-sale reserve continued to reduce due to increases in fair value and the principal amortisation of ABSs as repayments were received at par. Expectations of cash losses on available-for-sale ABSs remained consistent with our previous estimates.

Overview of exposure

(Audited)

Accounting policies

Our accounting policies for the classification and valuation of financial instruments are in accordance with the requirements of IAS 32 'Financial Instruments: Presentation' and IAS 39 'Financial Instruments: Recognition and Measurement', as described in Note 2 on the Financial Statements, and the use of assumptions and estimates in respect of valuation of financial instruments as described in Note 16 on the Financial Statements.

This section contains information about our exposure to the following:

- ABSs, including mortgage-backed securities ('MBS's) and related collateralised debt obligations ('CDO's);
- direct lending held at fair value through profit or loss;
- monolines;
- credit derivative product companies ('CDPC's);
- leveraged finance transactions; and
- representations and warranties related to mortgage sales and securitisation activities.

The following table summarises our exposure to these products.

*Overall exposure of HSBC
(Audited)*

	At 31 December 2010		At 31 December 2009	
	Carrying amount US\$bn	Including sub-prime and Alt-A US\$bn	Carrying amount US\$bn	Including sub-prime and Alt-A US\$bn
Asset-backed securities ('ABS's')	73.9	8.5	70.6	10.8
– fair value through profit or loss	10.8	0.3	12.1	0.7
– available for sale ³⁸	54.7	7.1	48.1	8.2
– held to maturity ³⁸	2.2	0.2	2.5	0.2
– loans and receivables	6.2	0.9	7.9	1.7
Loans at fair value through profit or loss	1.6	1.2	2.0	1.6
Total ABS and direct lending at fair value through profit or loss	75.5	9.7	72.6	12.4
Less securities mitigated by credit derivatives with monolines and other financial institutions	(8.3)	(0.4)	(10.2)	(1.0)
	67.2	9.3	62.4	11.4
Leveraged finance loans	4.9	–	6.2	–
– fair value through profit or loss	0.3	–	0.2	–
– loans and receivables	4.6	–	6.0	–
	72.1	9.3	68.6	11.4
Exposure including securities mitigated by credit derivatives with monolines and other financial institutions	80.4	9.7	78.8	12.4

For footnote, see page 174.

**Asset-backed securities and leveraged
finance**
(Audited)

We are or have been involved in the following activities involving ABSs and leveraged finance:

- purchasing US mortgage loans with the intention of structuring and placing securitisations into the market;
- trading in ABSs, including MBSs, in secondary markets;
- holding MBSs and other ABSs in balance sheet management activities, with the intention of earning net interest income over the life of the securities;
- holding MBSs and other ABSs as part of investment portfolios, including securities investment conduits ('SIC's) and money market funds, as described in Note 43 on the Financial Statements, with the intention of earning net interest income and management fees;
- holding MBSs or other ABSs in the trading portfolio hedged through credit derivative protection, typically purchased from monolines, with the intention of earning the spread differential over the life of the instruments; and
- originating leveraged finance loans for the purposes of syndicating or selling them down in order to generate a trading profit or holding them in order to earn interest margin over their lives.

These activities are not a significant part of GB&M's on-going business, and GB&M is not reliant on them for any material aspect of its business operations or profitability. The purchase and securitisation of US mortgage loans and the secondary trading of US MBSs, which was conducted in our US MBS business, was discontinued in 2007.

Nature of HSBC's exposures

MBSs are securities that represent interests in groups of mortgages and provide investors with the right to receive cash from future mortgage payments (interest and/or principal). An MBS which references mortgages with different risk profiles is classified according to the highest risk class.

CDOs are securities backed by a pool of bonds, loans or other assets such as ABSs. CDOs may include exposure to sub-prime or Alt-A mortgage assets where these are part of the underlying assets or reference assets. As there is often uncertainty surrounding the precise nature of the underlying collateral supporting CDOs, all CDOs supported by residential mortgage-related assets are classified as sub-prime. Our holdings of ABSs and CDOs and direct lending positions, and the categories of mortgage collateral and lending activity, are described below.

Report of the Directors: Operating and Financial Review (continued)

Risk > Credit risk > Securitisation exposures and other structured products

Categories of ABSs and CDOs	Definition	Classification
Sub-prime	Loans to customers who have limited credit histories, modest incomes or high debt-to-income ratios or have experienced credit problems caused by occasional delinquencies, prior charge-offs, bankruptcy or other credit-related actions.	For US mortgages, standard US credit scores are primarily used to determine whether a loan is sub-prime; for non-US mortgages, management judgement is used.
US Home Equity Lines of Credit ('HELoC's')	A form of revolving credit facility provided to customers, which is supported by a first or second lien charge over residential property.	Holdings of HELoCs are classified as sub-prime.
US Alt-A	Lower risk loans than sub-prime, but they share higher risk characteristics than lending under fully conforming standard criteria.	US credit scores and the completeness of documentation held (such as proof of income), are considered when determining whether an Alt-A classification is appropriate. Non sub-prime mortgages in the US are classified as Alt-A if they are not eligible for sale to the major US Government sponsored mortgage agencies.
US Government agency and sponsored enterprises mortgage-related assets	Securities that are guaranteed by US Government agencies such as the Government National Mortgage Association ('Ginnie Mae'), or by US Government sponsored entities including the Federal National Mortgage Association ('Fannie Mae') and the Federal Home Loan Mortgage Corporation ('Freddie Mac').	Holdings of US Government agency and US Government sponsored enterprises' mortgage-related assets are classified as prime exposures.
UK non-conforming mortgages	UK mortgages that do not meet normal lending criteria. Examples include mortgages where the expected level of documentation is not provided (such as income with self-certification), or where poor credit history increases risk and results in pricing at a higher than normal lending rate.	UK non-conforming mortgages are treated as sub-prime exposures.
Other mortgages	Residential mortgages, including prime mortgages, that do not meet any of the classifications described above.	Prime residential mortgage-related assets are included in this category.

Our exposure to non-residential mortgage-related ABSs and direct lending includes securities with collateral relating to:

- commercial property mortgages;
- leveraged finance loans;
- student loans; and
- other assets, such as securities with other receivable-related collateral.

ABSs classified as available for sale

Our principal holdings of available-for-sale ABSs (see table below) are in GB&M through special purpose entities ('SPE's) which were established from the outset with the benefit of external investor first loss protection support, together with positions held directly and by Solitaire Funding Limited ('Solitaire'), where we have first loss risk.

The following table summarises our exposure to ABS's classified as available for sale:

Available-for-sale ABSs exposure (Audited)

	At 31 December 2010			At 31 December 2009		
	Directly held/ Solitaire ³⁹ US\$m	SPEs US\$m	Total US\$m	Directly held/ Solitaire ³⁹ US\$m	SPEs US\$m	Total US\$m
Total carrying amount of net principal exposure	41,106	13,586	54,692	34,040	14,021	48,061
Notional principal value of impaired securities	3,015	2,399	5,414	2,641	1,565	4,206
Carrying value of capital notes liability	–	(254)	(254)	–	(740)	(740)

Movement in the available-for-sale ('AFS') ABSs reserve
(Audited)

	2010			2009		
	Directly held/ Solitaire ³⁹ US\$m	SPEs US\$m	Total US\$m	Directly held/ Solitaire ³⁹ US\$m	SPEs US\$m	Total US\$m
AFS reserve at 1 January	(7,349)	(4,864)	(12,213)	(11,528)	(7,204)	(18,732)
Increase in fair value of securities	2,175	1,543	3,718	3,419	704	4,123
Impairment charge:						
– borne by HSBC	444	–	444	1,422	–	1,422
– allocated to capital note holders ⁴⁰	–	531	531	–	666	666
Repayment of capital	540	187	727	431	668	1,099
Other movements	88	297	385	(1,093)	302	(791)
AFS reserve at 31 December	(4,102)	(2,306)	(6,408)	(7,349)	(4,864)	(12,213)

For footnotes, see page 174.

Securities investment conduits
(Audited)

The total carrying amount of ABSs held through SPEs in the above table represents holdings in which significant first loss protection is provided through capital notes issued by SICs, excluding Solitaire.

At each reporting date, we assess whether there is any objective evidence of impairment in the value of the ABSs held by SPEs. Impairment charges incurred on these assets are offset by a credit to the impairment line for the amount of the loss allocated to capital note holders.

The economic first loss protection remaining at 31 December 2010 amounted to US\$2.2bn (2009: US\$2.2bn). On an IFRSs accounting basis, the carrying value of the liability for the capital notes at 31 December 2010 amounted to US\$0.3bn (2009: US\$0.7bn). The impairment charge recognised during 2010 amounted to US\$531m (2009: US\$666m).

At 31 December 2010, the available-for-sale reserve in respect of securities held by the SICs was a deficit of US\$2.7bn (2009: US\$5.2bn). Of this, US\$2.3bn related to ABSs (2009: US\$4.9bn).

Impairments recognised during 2010 from assets held directly or within Solitaire, in recognition of the first loss protection of US\$1.2bn we provide through credit enhancement and from drawings against the liquidity facility we provide, were US\$444m (2009: US\$1.4bn). The reduction in impairment charges compared with 2009 was due to the stabilising of loss severities and delinquency roll rates which have resulted in lower losses in the underlying collateral pools. The level of impairment recognised in comparison with the deficit in the available-for-sale reserve was a

reflection of the credit quality and seniority of the assets held.

Sub-prime and Alt-A residential mortgage-backed securities
(Audited)

The assets which are most sensitive to possible future impairment are sub-prime and Alt-A residential MBSs. Available-for-sale holdings in these higher risk categories where HSBC does not benefit from significant first loss protection amounted to US\$3.8bn at 31 December 2010 (2009: US\$4.9bn). For these securities the cumulative fair value losses not recognised in the income statement at 31 December 2010 was US\$1.6bn (2009: losses of US\$3.2bn). Other holdings in these higher risk categories classified as available-for-sale are held in vehicles where third party first loss protection exists, as described in the section on securities investment conduits, above.

During 2010, the credit ratings on certain ABSs held directly by HSBC, Solitaire and the SICs were downgraded. A downgrade of a security's credit rating is not, of itself, evidence of impairment. Consequently, the actions of the rating agencies alone have no direct impact on the measurement of impairment losses. The impairment losses recognised on these securities at 31 December 2010 are set out above.

Impairment methodologies
(Audited)

The accounting policy for impairment and indicators of impairment is set out in Note 2j on the Financial Statements.

For available-for-sale ABSs, to identify objective evidence of impairment, an industry standard valuation model is normally applied which uses data with reference to the underlying asset

Report of the Directors: Operating and Financial Review (continued)

Risk > Credit risk > Securitisation exposures and other structured products

pools and models their projected future cash flows. The estimated future cash flows of the securities are assessed at the specific financial asset level to determine whether any of them are unlikely to be recovered as a result of loss events occurring on or before the reporting date.

The principal assumptions and inputs to the models are typically the delinquency status of the underlying loans, the probability of delinquent loans progressing to default, the prepayment profiles of the underlying assets and the loss severity in the event of default. However, the models utilise other variables relevant to specific classes of collateral to forecast future defaults and recovery rates. Management uses externally available data and applies judgement when determining the appropriate assumptions in respect of these factors. HSBC uses a modelling approach which incorporates historically observed progression rates to default, to determine if the decline in aggregate projected cash flows from the underlying collateral will lead to a shortfall in contractual cash flows. In such cases the security is considered to be impaired.

In respect of CDOs, expected future cash flows for the underlying collateral are assessed to determine whether there is likely to be a shortfall in the contractual cash flows of the CDO.

When a security benefits from a contract provided by a monoline insurer that insures payments of principal and interest, the expected recovery on the contract is assessed in determining the total expected credit support available to the ABS.

Impairment and cash loss projections (Unaudited)

At 31 December 2009, management undertook an analysis to estimate further potential impairments and expected cash losses on the available-for-sale ABS portfolio. This exercise comprised a shift of projections of future loss severities, default rates and prepayment rates. The results of the analysis indicated that further impairment charges of some US\$1.1bn and expected cash losses of some US\$450m could arise over the next two to three years.

At 31 December 2010, management re-performed the stress test. After taking into account the cash losses experienced during 2010, the remaining cash loss projections of US\$250m were consistent with those as at 31 December 2009. However, the impairment charge projections showed an additional charge of US\$300m arising over the next two years in relation to the SICs, after taking into account the impairments recognised in 2010, resulting in future impairment charges of US\$950m, including the US\$300m relating to the SICs. This additional charge reflects where the accounting impairments will exceed the carrying amount of the capital notes held by third parties.

For the purposes of identifying impairment at the reporting date, the future projected cash flows reflect the effect of loss events that have occurred at or prior to the reporting date. For the purposes of performing stress tests to estimate potential future impairment charges, the projected future cash flows reflect additional assumptions about future loss events after the balance sheet date.

This analysis makes assumptions in respect of the future behaviour of loss severities, default rates and prepayment rates. Movements in the parameters are not independent of each other. For example, increased default rates and increased loss severities, which would imply greater impairments, generally arise under economic conditions that give rise to reduced levels of prepayment, reducing the potential for impairment charges. Conversely, economic conditions which increase the rates of prepayment are generally associated with reduced default rates and decreased loss severities.

At 31 December 2010, the incurred and projected impairment charges, measured in accordance with accounting requirements, significantly exceeded the expected cash losses on the securities. Over the lives of the available-for-sale ABSs the cumulative impairment charges will converge towards the level of cash losses. In respect of the SICs, in particular, the capital notes held by third parties are expected to absorb the cash losses arising in the vehicles.

Carrying amount of HSBC's consolidated holdings of ABSs, and direct lending held at fair value through profit or loss (Audited)

	Trading US\$m	Available for sale US\$m	Held to maturity US\$m	Designated at fair value through profit US\$m	Loans and receivables US\$m	Total US\$m	Of which held through consolidated SPEs US\$m
At 31 December 2010							
Mortgage-related assets							
Sub-prime residential	1,297	2,565	–	–	652	4,514	2,763
Direct lending	1,078	–	–	–	–	1,078	632
MBSs and MBS CDOs ⁴¹ ..	219	2,565	–	–	652	3,436	2,131
US Alt-A residential	180	4,545	191	–	270	5,186	3,651
Direct lending	96	–	–	–	–	96	–
MBSs ⁴¹	84	4,545	191	–	270	5,090	3,651
US Government agency and sponsored enterprises							
MBSs ⁴¹	657	21,699	2,032	–	–	24,388	6
Other residential	1,075	4,024	–	–	1,111	6,210	2,669
Direct lending	417	–	–	–	–	417	–
MBSs ⁴¹	658	4,024	–	–	1,111	5,793	2,669
Commercial property							
MBSs and MBS CDOs ⁴¹ ..	546	8,160	–	111	1,942	10,759	6,441
	3,755	40,993	2,223	111	3,975	51,057	15,530
Leveraged finance-related assets							
ABSs and ABS CDOs ⁴¹	392	5,418	–	–	414	6,224	3,886
Student loan-related assets							
ABSs and ABS CDOs ⁴¹	163	5,178	–	–	150	5,491	4,251
Other assets							
ABSs and ABS CDOs ⁴¹	1,936	3,103	–	6,017	1,710	12,766	2,526
	6,246	54,692	2,223	6,128	6,249	75,538	26,193
At 31 December 2009							
Mortgage-related assets							
Sub-prime residential	2,063	2,782	–	–	837	5,682	3,213
Direct lending	1,439	–	–	–	–	1,439	913
MBSs and MBS CDOs ⁴¹ ..	624	2,782	–	–	837	4,243	2,300
US Alt-A residential	191	5,403	192	–	882	6,668	3,672
Direct lending	113	–	–	–	–	113	–
MBSs ⁴¹	78	5,403	192	–	882	6,555	3,672
US Government agency and sponsored enterprises							
MBSs ⁴¹	375	13,332	2,333	–	–	16,040	322
Other residential	1,646	4,582	–	335	1,401	7,964	3,160
Direct lending	452	–	–	–	–	452	–
MBSs ⁴¹	1,194	4,582	–	335	1,401	7,512	3,160
Commercial property							
MBSs and MBS CDOs ⁴¹ ..	414	7,535	–	103	2,143	10,195	5,730
	4,689	33,634	2,525	438	5,263	46,549	16,097
Leveraged finance-related assets							
ABSs and ABS CDOs ⁴¹	555	5,150	–	–	484	6,189	4,144
Student loan-related assets							
ABSs and ABS CDOs ⁴¹	141	4,948	–	–	145	5,234	4,127
Other assets							
ABSs and ABS CDOs ⁴¹	2,302	4,329	–	6,025	1,987	14,643	2,696
	7,687	48,061	2,525	6,463	7,879	72,615	27,064

For footnote, see page 174.

The above table excludes leveraged finance transactions, which are shown separately on page 139.

Report of the Directors: Operating and Financial Review (continued)

Risk > Credit risk > Securitisation exposures and other structured products

HSBC's consolidated holdings of ABSs, and direct lending held at fair value through profit or loss (Audited)

	2010				At 31 December 2010			
	Gross fair value movements		Realised gains/(losses) in the income statement ⁴⁵	Reclassified ⁴⁶	Gross principal ⁴⁷	Credit default swap gross protection ⁴⁸	Net principal exposure ⁴⁹	Carrying Amount ⁵⁰
	Income statement ⁴³	Other comprehensive income ⁴⁴						
	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m
Mortgage-related assets								
Sub-prime residential								
Direct lending	(35)	–	(20)	–	2,233	–	2,233	1,078
MBSs ⁴¹	58	313	14	385	5,104	336	4,768	3,135
– high grade ⁴²	6	151	5	52	1,996	292	1,704	1,458
– rated C to A	52	162	7	333	3,006	44	2,962	1,645
– not publicly rated	–	–	2	–	102	–	102	32
MBS CDOs ⁴¹	–	7	–	(3)	90	12	78	17
– high grade ⁴²	–	–	–	–	2	–	2	1
– rated C to A	–	6	–	(3)	86	12	74	14
– not publicly rated	–	1	–	–	2	–	2	2
	23	320	(6)	382	7,427	348	7,079	4,230
US Alt-A residential								
Direct lending	(1)	–	–	–	108	–	108	96
MBSs ⁴¹	4	575	3	1,564	9,957	100	9,857	5,013
– high grade ⁴²	–	35	3	45	660	100	560	473
– rated C to A	4	539	–	1,520	9,254	–	9,254	4,503
– not publicly rated	–	1	–	(1)	43	–	43	37
	3	575	3	1,564	10,065	100	9,965	5,109
US Government agency and sponsored enterprises								
MBSs ⁴¹								
– high grade ⁴²	3	226	(11)	(43)	23,739	–	23,739	24,388
Other residential								
Direct lending	63	–	35	–	424	–	424	417
MBSs ⁴¹	6	163	4	(7)	6,571	–	6,571	5,793
– high grade ⁴²	5	149	4	(7)	5,841	–	5,841	5,256
– rated C to A	1	14	–	–	648	–	648	450
– not publicly rated	–	–	–	–	82	–	82	87
	69	163	39	(7)	6,995	–	6,995	6,210
Commercial property								
MBS and MBS CDOs ⁴¹	45	1,366	6	112	12,625	421	12,204	10,493
– high grade ⁴²	5	540	4	71	6,341	15	6,326	5,791
– rated C to A	40	826	2	36	6,201	406	5,795	4,637
– not publicly rated	–	–	–	5	83	–	83	65
Leveraged finance-related assets								
ABSs and ABS CDOs ⁴¹	5	453	–	18	7,148	788	6,360	5,721
– high grade ⁴²	3	308	–	(8)	6,078	351	5,727	5,148
– rated C to A	2	145	–	26	971	437	534	472
– not publicly rated	–	–	–	–	99	–	99	101
Student loan-related assets								
ABSs and ABS CDOs ⁴¹	7	230	3	(6)	7,161	100	7,061	5,459
– high grade ⁴²	9	44	3	(4)	4,080	–	4,080	3,626
– rated C to A	(2)	157	–	(2)	2,620	100	2,520	1,663
– not publicly rated	–	29	–	–	461	–	461	170
Other assets								
ABS and ABS CDOs ⁴¹	2	385	1	67	15,497	7,765	7,732	5,622
– high grade ⁴²	–	188	–	1	10,947	7,447	3,500	2,884
– rated C to A	2	188	1	46	4,059	318	3,741	2,379
– not publicly rated	–	9	–	20	491	–	491	359
Total	157	3,718	35	2,087	90,657	9,522	81,135	67,232

	2009				At 31 December 2009			
	Gross fair value movements		Realised gains/(losses) in the income statement ⁴⁵	Reclassified ⁴⁶	Gross principal ⁴⁷	Credit default swap gross protection ⁴⁸	Net principal exposure ⁴⁹	Carrying Amount ⁵⁰
	Income statement ⁴³	Other comprehensive income ⁴⁴						
	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m	US\$m
Mortgage-related assets								
Sub-prime residential								
Direct lending	(227)	–	(40)	–	1,703	–	1,703	1,439
MBSS ⁴¹	(44)	187	(130)	795	7,483	1,248	6,235	3,419
– high grade ⁴²	(16)	177	1	134	2,762	603	2,159	1,719
– rated C to A	(25)	10	(131)	661	4,616	645	3,971	1,700
– not publicly rated	(3)	–	–	–	105	–	105	–
MBS CDOs ⁴¹	(2)	(9)	–	2	138	15	123	29
– high grade ⁴²	–	(1)	–	–	36	15	21	17
– rated C to A	(1)	(8)	–	2	89	–	89	10
– not publicly rated	(1)	–	–	–	13	–	13	2
	(273)	178	(170)	797	9,324	1,263	8,061	4,887
US Alt-A residential								
Direct lending	–	–	–	–	129	–	129	113
MBSS ⁴¹	95	661	(143)	1,693	13,546	491	13,055	6,427
– high grade ⁴²	(9)	361	1	317	1,625	428	1,197	1,237
– rated C to A	103	300	(144)	1,376	11,885	63	11,822	5,176
– not publicly rated	1	–	–	–	36	–	36	14
	95	661	(143)	1,693	13,675	491	13,184	6,540
US Government agency and sponsored enterprises								
MBSS ⁴¹								
– high grade ⁴²	116	252	(2)	(123)	15,827	–	15,827	16,040
Other residential								
Direct lending	79	–	70	–	463	–	463	452
MBSS ⁴¹	71	625	37	50	8,741	91	8,650	7,443
– high grade ⁴²	76	617	37	75	7,884	91	7,793	6,440
– rated C to A	(5)	10	–	(34)	773	–	773	941
– not publicly rated	–	(2)	–	9	84	–	84	62
	150	625	107	50	9,204	91	9,113	7,895
Commercial property								
MBS and MBS CDOs ⁴¹	35	702	(8)	(104)	13,734	395	13,339	9,954
– high grade ⁴²	72	683	(8)	(90)	9,805	264	9,541	7,537
– rated C to A	(37)	17	–	(12)	3,860	131	3,729	2,365
– not publicly rated	–	2	–	(2)	69	–	69	52
Leveraged finance-related assets								
ABSs and ABS CDOs ⁴¹	(1)	721	–	(40)	7,516	895	6,621	5,612
– high grade ⁴²	14	758	–	(41)	6,620	414	6,206	5,301
– rated C to A	(15)	(37)	–	1	881	481	400	295
– not publicly rated	–	–	–	–	15	–	15	16
Student loan-related assets								
ABSs and ABS CDOs ⁴¹	(6)	569	2	32	7,192	224	6,968	5,122
– high grade ⁴²	2	630	–	32	6,690	30	6,660	5,019
– rated C to A	(8)	(61)	2	–	477	194	283	76
– not publicly rated	–	–	–	–	25	–	25	27
Other assets								
ABS and ABS CDOs ⁴¹	74	415	(17)	91	17,608	8,797	8,811	6,327
– high grade ⁴²	18	288	10	31	12,846	8,607	4,239	3,564
– rated C to A	40	152	(29)	85	4,126	190	3,936	2,245
– not publicly rated	16	(25)	2	(25)	636	–	636	518
Total	190	4,123	(231)	2,396	94,080	12,156	81,924	62,377

For footnotes, see page 174.

Report of the Directors: Operating and Financial Review (continued)

Risk > Credit risk > Securitisation exposures and other structured products

Analysis of exposures and significant movements

(Audited)

Sub-prime residential mortgage-related assets

Sub-prime residential mortgage-related assets included US\$3.1bn (2009: US\$3.7bn) related to US-originated assets and US\$1.1bn (2009: US\$1.1bn) relating to UK non-conforming residential mortgage-related assets. Of the non-high grade assets held of US\$1.7bn (2009: US\$1.7bn), US\$1.5bn (2009: US\$1.6bn) related to US-originated assets, reflecting the higher quality of the UK-originated assets.

A modest increase in observable values of our sub-prime assets took place in 2010. Further net impairment of US\$48m on assets classified as available for sale was recognised in 2010 (2009: US\$559m) as losses were incurred under current accounting impairment rules. Our expectation of cash losses on the underlying assets did not increase from that at 31 December 2009. Of the above impairment, US\$54m (2009: US\$312m) occurred in the SICs and was borne by the capital note holders.

US Alt-A residential mortgage-related assets

During 2010, spreads on Alt-A mortgage-related assets tightened modestly from the levels seen in 2009. Further impairments of US\$884m (2009: US\$1,372m) were recorded in respect of Alt-A mortgage-related assets as losses were incurred under the accounting rules described in the paragraph above, without reference to the amount of expected loss. Our expectation of losses in the underlying assets did not increase from that at 31 December 2009. Of the impairment above, US\$450m (2009: US\$346m) occurred in the SICs and was borne by the capital note holders.

The downgrade of our US Alt-A residential MBSs is reflected in the disclosure of fair value movements in the above tables as if the downgrade had taken effect on 1 January 2010.

The following table shows the vintages of the collateral assets supporting our holdings of US sub-prime and Alt-A MBSs. Market prices for these instruments generally incorporate higher discounts for later vintages. The majority of our holdings of US sub-prime MBSs originated pre-2007; holdings of US Alt-A MBSs are more evenly distributed between pre-2007 vintages and those from 2007 onwards.

Vintages of US sub-prime and Alt-A mortgage-backed securities

(Audited)

	Gross principal ⁴⁷ of US sub-prime mortgage-backed securities at 31 December		Gross principal ⁴⁷ of US Alt-A mortgage-backed securities at 31 December	
	2010 US\$m	2009 US\$m	2010 US\$m	2009 US\$m
Mortgage vintage				
Pre-2006	1,061	1,748	1,159	2,108
2006	1,822	2,827	5,147	6,225
2007	979	1,187	3,651	5,213
	3,862	5,762	9,957	13,546

For footnote, see page 174.

US Government agency and sponsored enterprises mortgage-related assets

During 2010, we increased our holdings of US Government agency and sponsored enterprises mortgage-related assets by US\$8.3bn.

Other residential mortgage-related assets

The majority of our other residential mortgage-related assets were originated in the UK (2010: US\$3.9bn; 2009: US\$4.7bn). No impairments were recognised in respect of these UK originated assets in 2010 (2009: nil), reflecting credit support within the asset portfolio.

Commercial property mortgage-related assets

Of our total of US\$10.5bn (2009: US\$10.0bn) of commercial property mortgage-related assets, US\$5.2bn related to US originated assets (2009: US\$4.3bn). Spreads tightened on both US and non-US commercial property mortgage-related assets during 2010. Impairments of US\$5m (2009: US\$88m) were recognised in 2010.

Leveraged finance-related assets

The majority of these assets related to US-originated exposures; 90% (2009: 94%) were high grade with no impairments recorded in the year (2009: nil).

Student loan-related assets

Our holdings in student loan-related assets were US\$5.5bn (2009: US\$5.1bn). No impairments were recorded on student loan-related assets in 2010 (2009: nil).

Transactions with monoline insurers

(Audited)

HSBC's exposure to derivative transactions entered into directly with monolines

Our principal exposure to monolines is through a number of OTC derivative transactions, mainly credit default swaps ('CDS's). We entered into these CDSs primarily to purchase credit protection against securities held at the time within the trading portfolio.

During 2010, the notional value of derivative contracts with monolines and our overall credit exposure to monolines decreased as a number of transactions were commuted, others matured, and credit spreads narrowed. The table below sets out the fair value, essentially the replacement cost, of the

remaining derivative transactions at 31 December 2010, and hence the amount at risk if the CDS protection purchased were to be wholly ineffective because, for example, the monoline insurer was unable to meet its obligations. In order to further analyse that risk, the value of protection purchased is shown subdivided between those monolines that were rated by S&P at 'BBB- or above' at 31 December 2010, and those that were 'below BBB-' (BBB- is the S&P cut-off for an investment grade classification). The 'Credit risk adjustment' column indicates the valuation adjustment taken against the net exposures, and reflects our best estimate of the likely loss of value on purchased protection arising from the deterioration in creditworthiness of the monolines. These valuation adjustments, which reflect a measure of the irrecoverability of the protection purchased, have been charged to the income statement. During 2010, the credit risk adjustment on derivative contracts with monolines decreased as a number of transactions commuted and others matured.

HSBC's exposure to derivative transactions entered into directly with monoline insurers

(Audited)

At 31 December 2010

Derivative transactions with monoline counterparties			
Monoline – investment grade (BBB- or above)	5,179	876	(88)
Monoline – sub-investment grade (below BBB-)	2,290	648	(431)

Notional amount US\$m	Net exposure before credit risk adjustment ⁵¹ US\$m	Credit risk adjustment ⁵² US\$m	Net exposure after credit risk adjustment US\$m
5,179	876	(88)	788
2,290	648	(431)	217
7,469	1,524	(519)	1,005

At 31 December 2009

Derivative transactions with monoline counterparties			
Monoline – investment grade (BBB- or above)	5,623	997	(100)
Monoline – sub-investment grade (below BBB-)	4,400	1,317	(909)

5,623	997	(100)	897
4,400	1,317	(909)	408
10,023	2,314	(1,009)	1,305

For footnotes, see page 174.

The above table can be analysed as follows. HSBC has derivative transactions referenced to underlying securities with a notional value of US\$7.5bn (2009: US\$10.0bn), whose value at 31 December 2010 indicated a potential claim against the protection purchased from the monolines of some US\$1.5bn (2009: US\$2.3bn). On the basis of a credit assessment of the monolines, a provision of US\$519m has been taken (2009: US\$1.0bn), leaving US\$1.0bn exposed (2009: US\$1.3bn), of which US\$788m is recoverable from monolines rated investment grade at 31 December 2010 (2009: US\$897m). The provisions taken imply in aggregate that 90 cents in the dollar will be recoverable from investment

grade monolines and 33 cents in the dollar from non-investment grade monolines (2009: 90 cents and 31 cents, respectively).

For the CDSs, market prices are generally not readily available. Therefore the CDSs are valued on the basis of market prices of the referenced securities.

The credit risk adjustment against monolines is determined by one of a number of methodologies, dependent upon the internal credit rating of the monoline. Our assignment of internal credit ratings is based upon detailed credit analysis, and may differ from external ratings.

Report of the Directors: Operating and Financial Review (continued)

Risk > Credit risk > Securitisation exposures and other structured products

Credit risk adjustments for monolines

- For highly-rated monolines, the standard credit risk adjustment methodology (as described on page 312) applies, with the exception that the future exposure profile is deemed to be constant (equal to the current market value) over the weighted average life of the referenced security, and the credit risk adjustment cannot fall below 10% of the mark-to-market exposure.
- In respect of monolines, where default has either occurred or there is a strong possibility of default in the near term, the adjustment is determined based on the estimated probabilities of various potential scenarios, and the estimated recovery in each case.
- For other monoline exposures, the credit risk adjustment follows the methodology for highly-rated monolines, adjusted to include the probability of a claim arising in respect of the referenced security, and applies implied probabilities of default where the likelihood of a claim is believed to be high.

As described above, HSBC's monoline credit risk adjustment calculation utilises a range of approaches dependent upon the credit quality of the monoline. The net impact of utilising the methodology adopted for 'highly-rated' monolines across all monolines would be a reduction in credit risk adjustment of US\$94m. The net impact of utilising a methodology based on credit default swap spreads would be an increase in credit risk adjustment of US\$8m.

At 31 December 2010, US\$1.4bn (2009: US\$2.6bn) notional value of securities referenced by monoline CDS transactions with a market value of US\$1.0bn (2009: US\$1.9bn) were held in the loans and receivables category, having been included in the reclassification of financial assets described in Note 18 on the Financial Statements. At the date of reclassification, the market value of the remaining assets was US\$1.2bn. The reclassification resulted in an accounting asymmetry between the CDSs, which continue to be held at fair value through profit and loss, and the reclassified securities, which are accounted for on an amortised cost basis. If the reclassifications had not occurred, the impact on the income statement for 2010 would have been a decrease in profit of US\$3m (2009: increase in profit of US\$5m). This amount represents the difference between the increase in market value of the securities during 2010 and the accretion recognised under the amortised cost method in 2010.

HSBC's exposure to direct lending and irrevocable commitments to lend to monolines

HSBC had no liquidity facilities to monolines at 31 December 2010 (2009: minimal).

HSBC's exposure to debt securities which benefit from guarantees provided by monolines

Within both the trading and available-for-sale portfolios, we hold bonds that are 'wrapped' with a credit enhancement from a monoline. As the bonds are traded explicitly with the benefit of this enhancement, any deterioration in the credit profile of the monoline is reflected in market prices and, therefore, in the carrying amount of these securities at 31 December 2010. For wrapped bonds held in our trading portfolio, the mark-to-market movement has been reflected through the income statement. For wrapped bonds held in the available-for-sale portfolio, the mark-to-market movement is reflected in equity unless there is objective evidence of impairment, in which case the impairment loss is reflected in the income statement. No wrapped bonds were included in the reclassification of financial assets described in Note 18 on the Financial Statements.

HSBC's exposure to Credit Derivative Product Companies

(Audited)

Credit Derivative Product Companies ('CDPC's) are independent companies that specialise in selling credit default protection on corporate exposures. OTC derivative exposure to CDPCs became a focus during the second half of 2008 as the spreads widened, but these exposures reduced during 2009 as the spreads tightened again. At 31 December 2010, HSBC had purchased from CDPCs credit protection with a notional value of US\$4.9bn (2009: US\$5.0bn) which had a fair value of US\$0.2bn (2009: US\$0.3bn), against which a credit risk adjustment (a provision) of US\$0.1bn (2009: US\$0.1bn) was held. At 31 December 2010, none of the exposure was to CDPCs with investment grade ratings (2009: 83%). The deterioration reflects rating downgrades and withdrawals during 2010.

Leveraged finance transactions

(Audited)

Leveraged finance transactions include sub-investment grade acquisition or event-driven financing. The following table shows our exposure to leveraged finance transactions arising from primary transactions. Our additional exposure to leveraged finance loans through holdings of ABSs from our trading and investment activities is shown in the table on page 133.

HSBC's exposure to leveraged finance transactions
(Audited)

	At 31 December 2010			At 31 December 2009		
	Funded exposures ⁵³ US\$m	Unfunded exposures ⁵³ US\$m	Total exposures US\$m	Funded exposures ⁵³ US\$m	Unfunded exposures ⁵³ US\$m	Total exposures US\$m
Europe	3,337	298	3,635	3,790	368	4,158
Rest of Asia-Pacific	17	22	39	70	22	92
North America	1,066	185	1,251	1,713	188	1,901
	4,420	505	4,925	5,573	578	6,151
Held within:						
– loans and receivables	4,199	393	4,592	5,569	386	5,955
– fair value through profit or loss	221	112	333	4	192	196

For footnotes, see page 174.

We held leveraged finance commitments of US\$5.1bn at 31 December 2010 (2009: US\$6.5bn), of which US\$4.6bn (2009: US\$5.9bn) was funded.

As described in Note 18 on the Financial Statements, certain leveraged finance loans were reclassified from held for trading to loans and receivables. As a result, these loans are held at amortised cost subject to impairment and are not marked to market, and net gains of US\$0.1bn (2009: net gains of US\$1.2bn) were not taken to the income statement in 2010.

At 31 December 2010, our principal exposures were to companies in two sectors: US\$2.8bn to data processing (2009: US\$3.8bn) and US\$1.8bn to communications and infrastructure (2009: US\$1.9bn). During 2010, 99% of the total fair value movement not recognised was against exposures in these two sectors (2009: 99%).

Representations and warranties related to mortgage sales and securitisation activities
(Audited)

We have been involved in various activities related to the sale and securitisation of residential mortgages, which are not recognised on our balance sheet. These activities include:

- the purchase of US\$24bn of third party originated mortgages by HSBC Bank USA and securitisation of these by HSBC Securities (USA) Inc. ('HSI') between 2005 and 2007;
- HSI acting as underwriter for third party issuance of private label MBSs with an original issuance value of US\$37bn, most of which were sub-prime, as well as underwriting US\$6bn of MBSs issued by HSBC Finance; and
- the origination and sale by HSBC Bank USA of mortgage loans, primarily to government sponsored entities.

In sales and securitisations of mortgage loans, various representations and warranties regarding the loans may be made to purchasers of the mortgage loans and MBSs. In respect of the purchase and securitisation of third party originated mortgages and the underwriting of third party MBSs, the obligation to repurchase loans in the event of a breach of loan level representations and warranties resides predominantly with the organisation that originated the loan. While certain of these originators are or may become financially impaired, and therefore, unable to fulfil their repurchase obligations, we do not believe we have significant exposure for repurchases on these loans.

At 31 December 2010, a liability of US\$262m was recognised in respect of various representations and warranties, relating to the origination and sale by HSBC Bank USA of mortgage loans, primarily to government sponsored entities (2009: US\$66m). These relate to, among other things, the ownership of the loans, the validity of the liens, the loan selection and origination process, and the compliance to the origination criteria established by the agencies. In the event of a breach of our representations and warranties, HSBC Bank USA may be obliged to repurchase the loans with identified defects or to indemnify the buyers. The liability is estimated based on the level of outstanding repurchase demands, the level of outstanding requests for loan files and estimated future demands in respect of mortgages sold to date which are either two or more payments delinquent or expected to become delinquent at an estimated conversion rate. Repurchase demands of US\$115m were outstanding at 2010 (2009: US\$123m).

Report of the Directors: Operating and Financial Review (continued)

Risk > Liquidity and funding > Policies and procedures / Primary sources of funding

Liquidity and funding

(Audited)

HSBC expects its operating entities to manage liquidity and funding risk on a standalone basis employing a centrally imposed framework and limit structure which is adapted to variations in business mix and underlying markets. Our operating entities are required to maintain strong liquidity positions and to manage the liquidity profiles of their assets, liabilities and commitments with the objective of ensuring that their cash flows are balanced under various severe stress scenarios and that all their anticipated obligations can be met when due.

The objective of our liquidity framework is to be very conservative and adaptable to changing business models, markets and regulation.

The objective of our liquidity and funding management framework is to ensure that all foreseeable funding commitments can be met when due, and that access to the wholesale markets is co-ordinated and cost-effective. To this end, we maintain a diversified funding base comprising core retail and corporate customer deposits and institutional balances. We augment this with wholesale funding and portfolios of highly liquid assets diversified by currency and maturity which are held to enable us to respond quickly and smoothly to unforeseen liquidity requirements.

We adapt our liquidity and funding risk management framework in response to changes in the mix of business that we undertake, and to changes in the nature of the markets in which we operate. We also seek to continuously evolve and strengthen our liquidity and funding risk management framework. As part of this process, we have refined the way in which we characterise core deposits. The characterisation takes into account the activities and operating environment in the entity originating the deposit, the nature of the customer and the size and pricing of the deposit. This exercise has resulted in a revised internal calculation of advances to core funding ratio (discussed more fully below), and comparatives have been restated accordingly. While total core deposits at the Group consolidated level have not changed materially, there have been some revisions to individual entities.

We employ a number of measures to monitor liquidity risk. The emphasis on the 'ratio of net

liquid assets to customer deposits', as reported in the *Annual Report and Accounts 2009*, has been reduced and a 'stressed one month coverage ratio', an extension of our projected cash flow scenario analysis, is now used as a simple and more useful metric to express liquidity risk. The bank also manages its intra-day liquidity positions so that it is able to meet payment and settlement obligations on a timely basis. Payment flows in real time gross settlement systems, expected peak payment flows and large time-critical payments are monitored during the day and the intra-day collateral position is managed so that there is liquidity available to meet payments.

Policies and procedures

(Audited)

The management of liquidity and funding is primarily undertaken locally in our operating entities in compliance with practices and limits set by the Risk Management Meeting. These limits vary according to the depth and liquidity of the market in which the entities operate. It is our policy that each banking entity should be self-sufficient when funding its own operations. Exceptions are permitted for certain short-term treasury requirements and start-up operations or for branches which do not have access to local deposit markets. These entities are funded from our largest banking operations and within clearly defined internal and regulatory guidelines and limits. The limits place formal restrictions on the transfer of resources between our entities and reflect the broad range of currencies, markets and time zones within which we operate.

Elements of our liquidity and funding management process

- projecting cash flows by major currency under various stress scenarios and considering the level of liquid assets necessary in relation thereto;
- monitoring balance sheet liquidity and advances to core funding ratios against internal and regulatory requirements;
- maintaining a diverse range of funding sources with back-up facilities;
- managing the concentration and profile of debt maturities;
- managing contingent liquidity commitment exposures within pre-determined caps;
- maintaining debt financing plans;
- monitoring depositor concentration in order to avoid undue reliance on large individual depositors and ensure a satisfactory overall funding mix; and
- maintaining liquidity and funding contingency plans. These plans identify early indicators of stress conditions and describe actions to be taken in the event of difficulties arising from systemic or other crises, while minimising adverse long-term implications for the business.

Primary sources of funding

(Audited)

Current accounts and savings deposits payable on demand or at short notice form a significant part of our funding, and we place considerable importance on maintaining their stability. For deposits, stability depends upon preserving depositor confidence in our capital strength and liquidity, and on competitive and transparent pricing.

We also access professional markets in order to provide funding for non-banking subsidiaries that do not accept deposits, to align asset and liability maturities and currencies and to maintain a presence in local money markets. Market disruption continued to have adverse effects on the liquidity and funding risk profile of the banking system in 2010. Despite

these challenges, we have continued to have good access to debt capital markets. Group entities issued US\$26bn of term debt securities in the public capital markets in 2010.

In aggregate, our banking entities are liquidity providers to the interbank market, placing significantly more funds with other banks than they themselves borrow. Our main operating subsidiary that does not accept deposits is HSBC Finance, which is funded principally by taking term funding in the professional markets and securitising assets. At 31 December 2010, US\$65bn (2009: US\$82bn) of HSBC Finance's liabilities were drawn from professional markets, utilising a range of products, maturities and currencies.

Cash flows payable by HSBC under financial liabilities by remaining contractual maturities

(Audited)

	On demand US\$m	Due within 3 months US\$m	Due between 3 and 12 months US\$m	Due between 1 and 5 years US\$m	Due after 5 years US\$m
At 31 December 2010					
Deposits by banks	42,481	70,072	8,393	7,949	1,346
Customer accounts	881,575	244,501	89,557	23,209	3,483
Trading liabilities	300,703	—	—	—	—
Financial liabilities designated at fair value	7,421	3,786	7,825	35,583	61,575
Derivatives	255,046	531	1,143	2,065	942
Debt securities in issue	1,320	48,062	41,939	62,148	16,255
Subordinated liabilities	34	1,491	1,863	10,001	51,293
Other financial liabilities	24,834	24,378	7,944	2,184	824
	1,513,414	392,821	158,664	143,139	135,718
Loan and other credit-related commitments	524,394	51,732	14,023	11,964	400
Financial guarantees and similar contracts	18,491	9,233	12,231	7,082	2,399
	2,056,299	453,786	184,918	162,185	138,517
At 31 December 2009					
Deposits by banks	39,484	85,922	18,925	6,180	1,359
Customer accounts	800,199	277,071	71,243	45,561	7,911
Trading liabilities	268,130	—	—	—	—
Financial liabilities designated at fair value	6,628	1,050	5,976	36,185	67,209
Derivatives	245,027	300	1,002	467	320
Debt securities in issue	124	49,493	38,445	66,661	22,663
Subordinated liabilities	43	481	3,020	8,660	52,304
Other financial liabilities	22,500	25,123	5,732	2,354	1,103
	1,382,135	439,440	144,343	166,068	152,869
Loan and other credit-related commitments ⁵⁴	494,269	36,726	11,810	12,495	2,750
Financial guarantees and similar contracts ⁵⁴	16,561	11,169	12,737	9,096	3,688
	1,892,965	487,335	168,890	187,659	159,307

For footnote, see page 174.

The balances in the above table will not agree directly with those in our consolidated balance sheet as the table incorporates, on an undiscounted basis, all cash flows relating to principal and future coupon payments (except for trading liabilities and trading derivatives). In addition, loan and other credit-related commitments and financial guarantees and

similar contracts are generally not recognised on our balance sheet. Trading liabilities and trading derivatives are included in the 'On demand' time bucket, and not by contractual maturity, because trading liabilities are typically held for short periods of time. We classify the undiscounted cash flows payable under hedging derivative liabilities

Report of the Directors: Operating and Financial Review (continued)

Risk > Liquidity and funding > The management of liquidity risk / Contingent liquidity risk

according to their contractual maturities. The undiscounted cash flows potentially payable under financial guarantees and similar contracts are classified on the basis of the earliest date they can be called.

Cash flows payable in respect of customer accounts are primarily contractually repayable on demand or at short notice. However, in practice, short-term deposit balances remain stable as inflows and outflows broadly match and a significant portion of loan commitments expire without being drawn upon.

The management of liquidity risk

(Audited)

We use a number of principal measures to manage liquidity risk, as described below.

Advances to core funding ratio

We emphasise the importance of core customer deposits as a source of funds to finance lending to customers, and discourage reliance on short-term professional funding. This is achieved by placing limits on banking entities which restrict their ability to increase loans and advances to customers without

corresponding growth in their core customer deposits or long-term debt funding. This measure is referred to as the 'advances to core funding' ratio. Previously, we utilised the 'advances to deposits' ratio.

Advances to core funding ratio limits are set by the Risk Management Meeting and monitored by Group Finance. The ratio expresses current loans and advances to customers as a percentage of the total of core customer deposits and term funding with a remaining term to maturity in excess of one year. Loans and advances to customers which are part of reverse repurchase arrangements, and where we receive securities which are deemed to be liquid, are excluded from the advances to core funding ratio.

The three principal banking entities listed in the table below represented 62% of our total core deposits at 31 December 2010 (31 December 2009: 63%). The table shows that loans and advances to customers in our principal banking entities are overwhelmingly financed by reliable and stable sources of funding. We would meet any unexpected net cash outflows by selling securities and accessing additional funding sources such as interbank or collateralised lending markets.

HSBC's principal banking entities – the management of liquidity risk

(Audited)

	Advances to core funding ratio during:		Stressed one month coverage ratio during:	
	2010 %	2009 %	2010 %	2009 %
HSBC Bank plc ⁵⁵				
Year-end	103.0	105.0	111.1	103.2
Maximum	109.7	116.0	111.3	108.1
Minimum	102.6	105.0	103.2	101.3
Average	106.0	110.6	108.2	103.9
The Hongkong and Shanghai Banking Corporation ⁵⁵				
Year-end	70.3	55.5	144.6	153.2
Maximum	70.3	62.0	165.4	153.2
Minimum	55.5	55.5	132.6	134.3
Average	63.6	57.5	148.8	144.8
HSBC Bank USA				
Year-end	98.3	101.0	108.5	105.3
Maximum	104.3	111.1	118.5	128.0
Minimum	94.2	99.5	105.3	105.3
Average	98.0	106.1	112.3	118.7
Total of HSBC's other principal banking entities ⁵⁶				
Year-end	89.1	85.9	119.6	124.8
Maximum	89.1	89.2	126.5	124.8
Minimum	85.7	81.2	118.1	116.3
Average	87.0	85.9	122.2	120.5

For footnotes, see page 174.

Stressed one month coverage ratio

The stressed one month coverage ratios tabulated above are derived from these scenario analyses, and express the stressed cash inflows as a percentage of stressed cash outflows over a one month time

horizon. Our entities are required to target a ratio of 100% or greater.

Projected cash flow scenario analysis

We use a number of standard projected cash flow

scenarios designed to model combinations of both Group-specific and market-wide liquidity crises, in which the rate and timing of deposit withdrawals and drawdowns on committed lending facilities are varied, and the ability to access interbank funding and term debt markets and to generate funds from asset portfolios is restricted. The scenarios are modelled by all our banking entities and by HSBC Finance. The appropriateness of the assumptions under each scenario is regularly reviewed. In addition to our standard projected cash flow scenarios, individual entities are required to design their own scenarios to reflect specific local market conditions, products and funding bases.

Limits for cumulative net cash flows under stress scenarios are set for each banking entity and for HSBC Finance. Both ratio and cash flow limits reflect the local market place, the diversity of funding sources available and the concentration risk from large depositors. Compliance with entity level limits is monitored centrally by Group Finance and reported regularly to the Risk Management Meeting.

HSBC Finance

As HSBC Finance is unable to accept standard retail customer deposits, it takes funding from the professional markets. HSBC Finance uses a range of measures to monitor funding risk, including projected cash flow scenario analysis and caps placed on the amount of unsecured term funding that can mature in any rolling three-month and rolling 12-month periods. HSBC Finance also maintains access to committed sources of secured funding and has in place committed backstop lines for short-term refinancing commercial paper ('CP') programmes. A CP programme is a short-term, unsecured funding tool used to manage day to day cash flow needs. In agreement with the rating agencies, issuance under this programme will not exceed 100% of committed bank backstop lines.

The need for HSBC Finance to refinance maturing term funding is mitigated by the continued run-down of its balance sheet.

HSBC Finance – funding (Audited)

	At 31 December	
	2010 US\$bn	2009 US\$bn
Maximum amounts of unsecured term funding maturing in any rolling:		
– 3 month period	5.1	5.2
– 12 month period	10.8	12.3
Unused committed sources of secured funding ⁵⁷	0.5	0.4
Committed backstop lines from non-Group entities in support of CP programmes	4.3	5.3

For footnote, see page 174.

Contingent liquidity risk (Audited)

In the normal course of business, we provide customers with committed facilities, including committed backstop lines to conduit vehicles sponsored by HSBC and standby facilities to corporate customers. These facilities increase our funding requirements when customers choose to raise drawdown levels over and above their normal utilisation rates. The liquidity risk consequences of increased levels of drawdown are analysed in the form of projected cash flows under different stress scenarios. The Risk Management Meeting also sets limits for non-cancellable contingent funding commitments by Group entity after due consideration of each entity's ability to fund them. The limits are split according to the borrower, the liquidity of the underlying assets and the size of the committed line.

The Group's contractual exposures at 31 December monitored under the contingent liquidity risk limit structure (Audited)

	HSBC Bank		HSBC Bank USA		HSBC Bank Canada		The Hongkong and Shanghai Banking Corporation	
	2010 US\$bn	2009 US\$bn	2010 US\$bn	2009 US\$bn	2010 US\$bn	2009 US\$bn	2010 US\$bn	2009 US\$bn
Conduits								
Client-originated assets ⁵⁸								
– total lines	7.8	7.4	4.0	6.4	0.2	0.3	–	0.3
– largest individual lines	0.7	0.8	0.4	0.4	0.1	0.1	–	0.3
HSBC-managed assets ⁵⁹	25.6	29.1	–	–	–	–	–	–
Other conduits ⁶⁰	–	–	1.4	1.3	–	–	–	–
Single-issuer liquidity facilities								
Five largest ⁶¹	4.2	4.3	5.3	6.1	2.0	2.0	1.4	1.2
Largest market sector ⁶²	8.4	7.9	4.9	4.7	3.8	2.9	2.4	1.5

For footnotes, see page 174.

Report of the Directors: Operating and Financial Review (continued)

Risk > Liquidity and funding > HSBC Holdings // Market risk > Monitoring exposure / Sensitivity analysis

HSBC Holdings*(Audited)*

HSBC Holdings' primary sources of cash are dividends received from subsidiaries, interest on and repayment of intra-group loans and interest earned on its own liquid funds. HSBC Holdings also raises ancillary funds in the debt capital markets through subordinated and senior debt issuance. Cash is primarily used for the provision of capital to subsidiaries, interest payments to debt holders and dividend payments to shareholders.

HSBC Holdings is also subject to contingent liquidity risk by virtue of loan and other credit-related commitments and guarantees and similar contracts issued. Such commitments and guarantees are only issued after due consideration of HSBC

Holdings' ability to finance the commitments and guarantees and the likelihood of the need arising.

HSBC Holdings actively manages the cash flows from its subsidiaries to optimise the amount of cash held at the holding company level. The ability of subsidiaries to pay dividends or advance monies to HSBC Holdings depends on, among other things, their respective regulatory capital requirements, statutory reserves, and financial and operating performance. The wide range of our activities means that HSBC Holdings is not dependent on a single source of profits to fund its dividend payments to shareholders. During 2010, HSBC Holdings continued to have full access to debt capital markets at market rates and issued US\$5.0bn of capital instruments (2009: US\$5.3bn).

*Cash flows payable by HSBC Holdings under financial liabilities by remaining contractual maturities**(Audited)*

	On demand US\$m	Due within 3 months US\$m	Due between 3 and 12 months US\$m	Due between 1 and 5 years US\$m	Due after 5 years US\$m
At 31 December 2010					
Amounts owed to HSBC undertakings	—	163	1,332	1,453	—
Financial liabilities designated at fair value	—	219	658	5,810	24,215
Derivatives	827	—	—	—	—
Debt securities in issue	—	35	106	2,110	1,559
Subordinated liabilities	—	219	657	3,504	28,670
Other financial liabilities	—	1,782	—	—	—
	827	2,418	2,753	12,877	54,444
Loan commitments	2,720	—	—	—	—
Financial guarantees and similar contracts	46,988	—	—	—	—
	50,535	2,418	2,753	12,877	54,444
At 31 December 2009					
Amounts owed to HSBC undertakings	—	292	25	3,477	—
Financial liabilities designated at fair value	—	229	687	6,205	26,152
Derivatives	362	—	—	—	—
Debt securities in issue	—	37	112	2,346	1,698
Subordinated liabilities	—	243	728	3,881	32,232
Other financial liabilities	—	1,239	—	—	—
	362	2,040	1,552	15,909	60,082
Loan commitments	3,240	—	—	—	—
Financial guarantees and similar contracts	35,073	—	—	—	—
	38,675	2,040	1,552	15,909	60,082

The balances in the above table will not agree directly with those in the balance sheet of HSBC Holdings as the table incorporates, on an undiscounted basis, all cash flows relating to principal and future coupon payments (except for trading derivatives).

In addition, loan and other credit-related commitments and financial guarantees and similar

contracts are generally not recognised on the balance sheet. Trading derivatives are included in the 'On demand' time bucket, and not by contractual maturity, because trading derivatives are typically held for short periods of time. The undiscounted cash flows potentially payable under financial guarantees and similar contracts are classified on the basis of the earliest date they can be called.

Market risk

(Audited)

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

We separate exposures to market risk into trading and non-trading portfolios. Trading portfolios include positions arising from market-making, position-taking and others designated as marked to market.

Non-trading portfolios include positions that primarily arise from the interest rate management of our retail and commercial banking assets and liabilities, financial investments designated as available for sale and held to maturity, and exposures arising from our insurance operations.

Market risk arising in our insurance businesses is discussed in 'Risk management of insurance operations' on pages 155 to 171.

Monitoring and limiting market risk exposure

(Audited)

Our objective is to manage and control market risk exposures in order to optimise return on risk while maintaining a market profile consistent with our status as one of the world's largest banking and financial services organisations.

The management of market risk is principally undertaken in Global Markets using risk limits approved by the GMB. Limits are set for portfolios, products and risk types, with market liquidity being a primary factor in determining the level of limits set. Group Risk, an independent unit within GMO, is responsible for our market risk management policies and measurement techniques. Each major operating entity has an independent market risk management and control function which is responsible for measuring market risk exposures in accordance with the policies defined by Group Risk, and monitoring and reporting these exposures against the prescribed limits on a daily basis.

Each operating entity is required to assess the market risks arising on each product in its business and to transfer them to either its local Global Markets unit for management, or to separate books managed under the supervision of the local Asset and Liability Management Committee ('ALCO'). Our aim is to ensure that all market risks are consolidated within operations that have the necessary skills, tools, management and governance to manage them

professionally. In certain cases where the market risks cannot be fully transferred, we use simulation modelling to identify the impact of varying scenarios on valuations and net interest income.

We employ a range of tools to monitor and limit market risk exposures. These include sensitivity analysis, value at risk ('VAR') and stress testing.

Sensitivity analysis

(Unaudited)

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

Value at risk

(Audited)

VAR is a technique that estimates the potential losses 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.

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

Our historical simulation models assess potential market movements with reference to data from the past two years and calculate VAR to a 99% confidence level and for a one-day holding period.

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

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

Report of the Directors: Operating and Financial Review (continued)

Risk > Market risk > Sensitivity analysis / Trading and non-trading portfolios

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

Stress testing

(Audited)

In recognition of VAR's limitations, we augment it with stress testing to evaluate the potential impact on portfolio values of more extreme, although plausible, events or movements in a set of financial variables. The process is governed by the Stress Testing Review Group forum which, in conjunction with regional risk managers, determines the scenarios to be applied at portfolio and consolidated levels, as follows:

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

Stress testing results provide senior management with an assessment of the financial effect such events would have on our profit.

Trading and non-trading portfolios

(Audited)

The following table provides an overview of the reporting of risks within this section:

Risk type	Portfolio	
	Trading	Non-trading
Foreign exchange and commodity	VAR	VAR ⁶³
Interest rate	VAR	VAR ⁶⁴
Equity	VAR	Sensitivity
Credit spread	VAR	VAR ⁶⁵

For footnotes, see page 174.

Value at risk of the trading and non-trading portfolios

Our Group VAR, both trading and non-trading, was as follows:

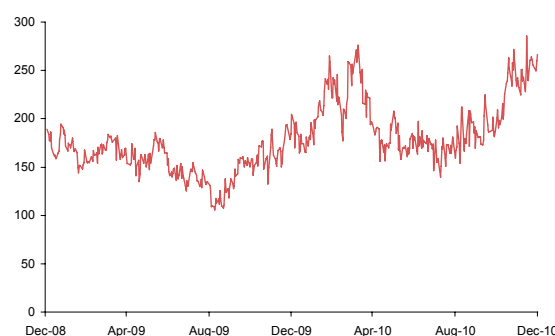
Value at risk (excluding credit spread VAR) (Audited)

	2010 US\$m	2009 US\$m
At 31 December	266.6	204.5
Average	199.8	156.1
Minimum	139.5	105.7
Maximum	285.7	204.5

The rise in interest rate volatility, coupled with a modest increase in underlying interest rate exposure, resulted in a higher VAR and higher maximum VAR at the end of 2010 compared with the end of 2009. The volatility in the other asset classes in 2010 was lower than in 2009.

Our Group daily VAR, both trading and non-trading, was as follows:

Daily VAR (excluding credit spread) (US\$m) (Unaudited)



The major contributor to our Group trading and non-trading VAR was Global Markets.

The histogram below illustrates the frequency of daily revenue arising from Global Markets' trading, balance sheet management and other trading activities.

Daily revenue (Unaudited)

	2010 US\$m	2009 US\$m
Average daily revenue	49.3	59.9
Standard deviation ⁶⁶	37.8	38.4

For footnote, see page 174.

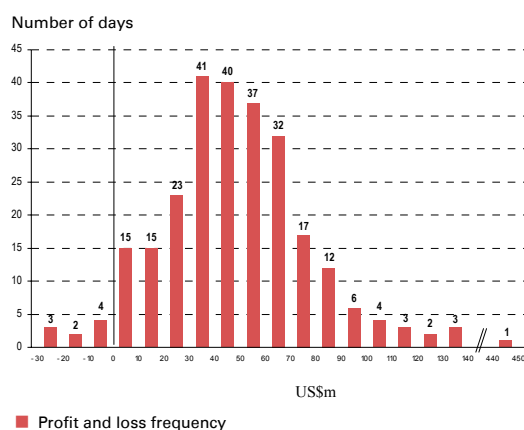
An analysis of the frequency distribution of daily revenue shows that there were nine days with negative revenues during 2010 compared with

11 days in the same period ended 31 December 2009. The most frequent result was daily revenue of between US\$30m and US\$40m with 41 occurrences, compared with between US\$30m and US\$40m and between US\$40m and US\$50m with 29 occurrences each in 2009.

On 9 May 2010, the International Monetary Fund and the 16 member states of the euro area announced stabilisation measures for the eurozone. The period prior to this announcement was volatile, leading to a number of negative revenue days. The maximum daily revenue of US\$450m arose on 10 May 2010 which in large part reflected a recovery of these negative revenues days.

Daily distribution of Global Markets' trading, balance sheet management and other trading revenues⁶⁷
(Unaudited)

2010



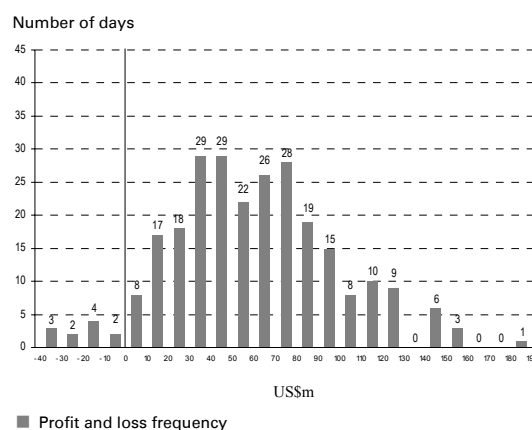
For footnote, see page 174.

Trading portfolios
(Audited)

Risk measurement and control

Our control of market risk in the trading portfolios is based on a policy of restricting individual operations to trading within a list of permissible instruments authorised for each site by Group Risk, of enforcing rigorous new product approval procedures, and of

2009



restricting trading in the more complex derivative products only to offices with appropriate levels of product expertise and robust control systems.

The VAR for trading intent activity within Global Markets at 31 December 2010 was US\$80.8m (2009: US\$95.1m). This is analysed below by risk type:

VAR by risk type for trading intent activities⁶⁸
(Audited)

	Foreign exchange and commodity US\$m	Interest rate US\$m	Equity US\$m	Credit spread ⁶⁹ US\$m	Total ⁷⁰ US\$m
At 31 December 2010	24.9	49.5	13.0	39.1	80.8
At 31 December 2009	19.5	42.6	17.5	59.3	95.1
Average					
2010	27.2	51.6	9.2	62.0	113.4
2009	20.6	51.3	11.3	58.0	85.3
Minimum					
2010	8.0	34.7	2.9	33.7	55.0
2009	11.1	35.6	4.9	31.9	54.3
Maximum					
2010	62.9	88.9	21.6	102.5	212.2
2009	46.7	78.0	18.7	94.3	132.5

For footnotes, see page 174.

Report of the Directors: Operating and Financial Review (continued)

Risk > Market risk > Trading and non-trading portfolios / Structural FX exposures / Sensitivity of NII

The VAR for overall trading intent activity as at 31 December 2010 was lower than at the end of 2009, because of reduced volatility in various asset classes. However, the wider band in VAR observed in 2010 was driven by an increase in client-led transactions and reduced portfolio diversification benefit, which resulted in occasionally higher VAR utilisation, as reflected in the above summary statistics.

Credit spread risk

(Audited)

The risk associated with movements in credit spreads is primarily managed through sensitivity limits, stress testing and VAR for those portfolios on which it is calculated.

At 31 December 2010, the Group credit spread VAR was US\$41.9m (2009: US\$72.7m). The decrease arose from the effect of volatile credit spread scenarios rolling off from the VAR calculation.

Credit spread risk also arises on credit derivative transactions entered into by Global Banking in order to manage the risk concentrations within our corporate loan portfolio and so enhance capital efficiency. The mark-to-market of these transactions is reflected in the income statement. At 31 December 2010, the credit VAR on the credit derivatives transactions entered into by Global Banking was US\$12.3m (2009: US\$13.8m).

Gap risk

Even for transactions that are structured to render the risk to HSBC negligible under a wide range of market conditions or events, there exists a remote possibility that a significant gap event could lead to loss. A gap event could arise from a significant change in market price with no accompanying trading opportunity, with the result that the threshold is breached beyond which the risk profile changes from no risk to full exposure to the underlying structure. Such movements may occur, for example, when, in reaction to an adverse event or unexpected news announcement, the market for a specific investment becomes illiquid, making hedging impossible.

Given their characteristics, these transactions make little or no contribution to VAR or to traditional market risk sensitivity measures. We capture their risks within our stress testing scenarios and monitor gap risk on an ongoing basis. We regularly consider the probability of gap loss, and fair value adjustments are booked against this risk. We did not incur any material gap loss in respect of such transactions in 2010.

Non-trading portfolios

(Audited)

Risk measurement and control

The principal objective of market risk management of non-trading portfolios is to optimise net interest income. Interest rate risk in non-trading portfolios arises principally from mismatches between the future yield on assets and their funding cost, as a result of interest rate changes. Analysis of this risk is complicated by having to make assumptions on embedded optionality within certain product areas such as the incidence of mortgage prepayments, and from behavioural assumptions regarding the economic duration of liabilities which are contractually repayable on demand such as current accounts.

Our control of market risk in the non-trading portfolios is based on transferring the risks to the books managed by Global Markets or the local ALCO. The net exposure is typically managed through the use of interest rate swaps within agreed limits. The VAR for these portfolios is included within the Group VAR (see 'Value at risk of the trading and non-trading portfolios' on page 146).

Credit spread risk

The risk associated with movements in credit spreads is primarily managed through sensitivity limits, stress testing, and VAR for those portfolios where VAR is calculated. We have introduced credit spread as a separate risk type within our VAR models on a global basis. The VAR shows the effect on income from a one-day movement in credit spreads over a two-year period, calculated to a 99% confidence interval.

At 31 December 2010, the sensitivity of equity capital to the effect of movements in credit spreads, based on credit spread VAR, on our available-for-sale debt securities was US\$264m (2009: US\$535m). After including the gross exposure for the SICs consolidated within our balance sheet, this exposure rose to US\$299m (2009: US\$549m). This sensitivity is calculated before taking into account losses which would have been absorbed by the capital note holders. At 31 December 2010, the capital note holders can absorb the first US\$2.2bn (2009: US\$2.2bn) of any losses incurred by the SICs before we incur any equity losses.

The decrease in this sensitivity at 31 December 2010 compared with 31 December 2009 can be explained by the effect of lower volatility in credit spread scenarios observed during 2010.

Equity securities classified as available for sale

*Fair value of equity securities classified as available for sale
(Audited)*

	2010 US\$bn	2009 US\$bn
Private equity holdings ⁷¹	2.8	4.0
Funds invested for short-term cash management	0.5	0.8
Investment to facilitate ongoing business ⁷²	1.0	1.2
Other strategic investments	3.7	3.1
	8.0	9.1

For footnotes, see page 174.

Market risk arises on equity securities classified as available for sale. The fair value of these securities at 31 December 2010 was US\$8.0bn (2009: US\$9.1bn).

The fair value of the constituents of equity securities classified as available for sale can fluctuate considerably. A 10% reduction in their value at 31 December 2010 would have reduced our equity by US\$0.8bn (2009: US\$0.9bn). For details of the impairment incurred on available-for-sale equity securities, see 'Securitisation exposures and other structured products' on page 128.

Structural foreign exchange exposures (Unaudited)

Structural foreign exchange exposures represent net investments in subsidiaries, branches and associates, the functional currencies of which are currencies other than the US dollar. An entity's functional currency is the currency of the primary economic environment in which the entity operates.

Exchange differences on structural exposures are recognised in other comprehensive income. We use the US dollar as our presentation currency in our consolidated financial statements because the US dollar and currencies linked to it form the major currency bloc in which we transact and fund our business. Our consolidated balance sheet is, therefore, affected by exchange differences between the US dollar and all the non-US dollar functional currencies of underlying subsidiaries.

We hedge structural foreign exchange exposures only in limited circumstances. Our structural foreign exchange exposures are managed with the primary objective of ensuring, where practical, that our consolidated capital ratios and the capital ratios of individual banking subsidiaries are largely protected from the effect of changes in exchange rates. This is usually achieved by ensuring that, for each subsidiary bank, the ratio of structural exposures in a given currency to risk-weighted assets denominated

in that currency is broadly equal to the capital ratio of the subsidiary in question.

We may also transact hedges where a currency in which we have structural exposures is considered to be significantly overvalued and it is possible in practice to transact a hedge. Any hedging is undertaken using forward foreign exchange contracts which are accounted for under IFRSs as hedges of a net investment in a foreign operation, or by financing with borrowings in the same currencies as the functional currencies involved. No forward foreign exchange hedges were in place during 2010 in respect of our consolidated Group structural foreign exchange position.

For details of structural foreign exchange exposures see Note 36 on the Financial Statements.

Sensitivity of net interest income (Unaudited)

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

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

The table below sets out the effect on future net interest income of incremental 25 basis point parallel falls or rises in all yield curves worldwide at the beginning of each quarter during the 12 months from 1 January 2011.

Report of the Directors: Operating and Financial Review (continued)

Risk > Market risk > Sensitivity of NII / Defined benefit pension schemes

Assuming no management actions, a sequence of such rises would increase planned net interest income for 2011 by US\$882m (2010: US\$695m), while a sequence of such falls would decrease

planned net interest income by US\$1,525m (2010: US\$1,563m). These figures incorporate the effect of any option features in the underlying exposures.

Sensitivity of projected net interest income⁷³ (Unaudited)

	US dollar bloc US\$m	Rest of Americas bloc US\$m	Hong Kong dollar bloc US\$m	Rest of Asia bloc US\$m	Sterling bloc US\$m	Euro bloc US\$m	Total US\$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	164	72	191	245	292	(82)	882
–25 basis points at the beginning of each quarter	(550)	(68)	(280)	(143)	(546)	62	(1,525)
Change in 2010 projected net interest income arising from a shift in yield curves of:							
+25 basis points at the beginning of each quarter	13	92	416	112	363	(301)	695
–25 basis points at the beginning of each quarter	(382)	(46)	(507)	(133)	(689)	194	(1,563)

For footnote, see page 174.

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 our current interest rate risk profile. This effect, however, does not incorporate actions that would be taken by Balance Sheet Management within Global Markets or in the business units to mitigate the impact of this 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 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 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 too, including that all positions run to maturity.

Projecting the movement in net interest income from prospective changes in interest rates is a complex interaction of structural and managed exposures. Our exposure to the effect of movements

in interest rates on our net interest income arises in two main areas, core deposit franchises and Balance Sheet Management:

- core deposit franchises are exposed to changes in the cost of deposits raised and spreads on wholesale funds. 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; and
- residual interest rate risk is managed within Balance Sheet Management, under our policy of transferring interest rate risk to Balance Sheet Management to be managed within defined limits and with flexibility as to the instruments used.

The table above reflects the fact that our deposit taking businesses will generally benefit from rising rates which will be partially offset by increased funding costs in Balance Sheet Management given our simplifying assumption of unchanged Balance Sheet Management positioning. Additionally, the benefit to deposit taking businesses of rising rates is also offset by the increased funding cost of trading assets, which is recorded in 'Net interest income' and therefore captured in the above table, whereas the income from such assets is recorded in 'Net trading income'.

The main drivers of the year on year changes in the sensitivity of the Group's net interest income to the change in rates shown in the table were lower implied yield curves, changes in Balance Sheet Management positioning, and changed expectations for deposit pricing for some currencies in a rising rate environment.

We monitor the sensitivity of reported reserves to interest rate movements on a monthly basis by

Sensitivity of reported reserves to interest rate movements (Unaudited)

At 31 December 2010

+ 100 basis point parallel move in all yield curves	(6,162)	(6,162)	(3,096)
As a percentage of total shareholders' equity	(4.2%)	(4.2%)	(2.1%)
– 100 basis point parallel move in all yield curves	6,174	6,174	3,108
As a percentage of total shareholders' equity	4.2%	4.2%	2.1%

At 31 December 2009

+ 100 basis point parallel move in all yield curves	(3,096)	(3,438)	(2,715)
As a percentage of total shareholders' equity	(2.4%)	(2.7%)	(2.1%)
– 100 basis point parallel move in all yield curves	3,108	3,380	2,477
As a percentage of total shareholders' equity	2.4%	2.6%	1.9%

The sensitivities are illustrative only and are based on simplified scenarios. The table shows the potential sensitivity of reserves to valuation changes in available-for-sale portfolios and from cash flow hedges following the pro forma movements in interest rates. These particular exposures form only a part of our overall interest rate exposures. The accounting treatment under IFRSs of our remaining interest rate exposures, while economically largely offsetting the exposures shown in the above table, does not require revaluation movements to go to reserves.

The year-on-year increase in sensitivity of reserves is due to an increase in government bonds held in Balance Sheet Management, which are accounted for on an available-for-sale basis.

Defined benefit pension schemes (Audited)

Market risk arises within our defined benefit pension schemes to the extent that the obligations of the schemes are not fully matched by assets with determinable cash flows. Pension scheme obligations fluctuate with changes in long-term interest rates, inflation, salary levels and the longevity of scheme members. Pension scheme assets include equities and debt securities, the cash flows of which change as equity prices and interest

assessing the expected reduction in valuation of available-for-sale portfolios and cash flow hedges due to parallel movements of plus or minus 100 basis points in all yield curves. The table below describes the sensitivity of our reported reserves to these movements at the end of 2010 and 2009 and the maximum and minimum month-end figures during these years:

US\$m	Maximum impact US\$m	Minimum impact US\$m
(6,162)	(6,162)	(3,096)
(4.2%)	(4.2%)	(2.1%)
6,174	6,174	3,108
4.2%	4.2%	2.1%

rates vary. There is a risk that market movements in equity prices and interest rates could result in asset values which, taken together with regular ongoing contributions, are insufficient over time to cover the level of projected obligations and these, in turn, could increase with a rise in inflation and members living longer. Management, together with the trustees who act on behalf of the pension scheme beneficiaries, assess these risks using reports prepared by independent external actuaries, take action and, where appropriate, adjust investment strategies and contribution levels accordingly.

HSBC's defined benefit pension schemes (Audited)

	2010 US\$b	2009 US\$b
Liabilities (present value)	32.6	30.6
	%	%
Assets:		
Equities	20	21
Debt securities	66	67
Other (including property)	14	12
	100	100

For details of our defined benefit schemes, see Note 7 on the Financial Statements, and for pension risk management, see page 172.

Report of the Directors: Operating and Financial Review (continued)

Risk > Market risk > HSBC Holdings

HSBC Holdings

(Audited)

As a financial services holding company, HSBC Holdings has limited market risk activity. Its activities predominantly involve maintaining sufficient capital resources to support the Group's diverse activities; allocating these capital resources across our businesses; earning dividend and interest income on its investments in our businesses; providing dividend payments to HSBC Holdings' equity shareholders and interest payments to providers of debt capital; and maintaining a supply of short-term cash resources. It does not take proprietary trading positions.

The main market risks to which HSBC Holdings is exposed are interest rate risk and foreign currency risk. Exposure to these risks arises from short-term cash balances, funding positions held, loans to subsidiaries, investments in long-term financial assets and financial liabilities including debt capital issued. The objective of HSBC Holdings' market risk management strategy is to reduce exposure to these risks and minimise volatility in economic income, cash flows and distributable reserves. Market risk for HSBC Holdings is monitored by the Holdings ALCO (formerly the Structural Positions Review Group).

HSBC Holdings has entered into a number of cross-currency swaps to manage the market risk arising on certain long-term debt capital issues for which hedge accounting has not been applied.

Changes in the market values of these swaps are recognised directly in the income statement. HSBC Holdings expects that these swaps will be held to final maturity with the accumulated changes in market value consequently trending to zero.

Certain loans to subsidiaries of a capital nature that are not denominated in the functional currency of either the provider or the recipient are accounted for as financial assets. Changes in the carrying amount of these assets due to exchange differences are taken directly to the income statement. These loans, and the associated foreign exchange exposures, are eliminated on a Group consolidated basis.

The principal tools used in the management of market risk are the projected sensitivity of HSBC Holdings' net interest income to future changes in yield curves and interest rate gap re-pricing tables for interest rate risk, and VAR for foreign exchange rate risk.

Sensitivity of net interest income

(Unaudited)

HSBC Holdings monitors net interest income sensitivity over a 5-year time horizon reflecting the longer-term perspective on interest rate risk management appropriate to a financial services holding company. The table below sets out the effect on HSBC Holdings' future net interest income over a 5-year time horizon of incremental 25 basis point parallel falls or rises in all yield curves worldwide at the beginning of each quarter during the 12 months from 1 January 2011.

Sensitivity of HSBC Holdings' net interest income to interest rate movements⁷³

(Unaudited)

Change in projected net interest income as at 31 December arising from a shift in yield curves

2010

of + 25 basis points at the beginning of each quarter

0-1 year	(6)	19	11	24
2-3 years	(56)	75	62	81
4-5 years	(79)	71	58	50

of – 25 basis points at the beginning of each quarter

0-1 year	6	(19)	(11)	(24)
2-3 years	56	(75)	(62)	(81)
4-5 years	79	(71)	(58)	(50)

2009

of + 25 basis points at the beginning of each quarter

0-1 year	(13)	18	11	16
2-3 years	(172)	75	19	(78)
4-5 years	(165)	105	6	(54)

of – 25 basis points at the beginning of each quarter

0-1 year	12	(18)	(11)	(17)
2-3 years	172	(75)	(19)	78
4-5 years	165	(105)	(6)	54

	US dollar bloc US\$m	Sterling bloc US\$m	Euro bloc US\$m	Total US\$m
2010				
of + 25 basis points at the beginning of each quarter				
0-1 year	(6)	19	11	24
2-3 years	(56)	75	62	81
4-5 years	(79)	71	58	50
of – 25 basis points at the beginning of each quarter				
0-1 year	6	(19)	(11)	(24)
2-3 years	56	(75)	(62)	(81)
4-5 years	79	(71)	(58)	(50)
2009				
of + 25 basis points at the beginning of each quarter				
0-1 year	(13)	18	11	16
2-3 years	(172)	75	19	(78)
4-5 years	(165)	105	6	(54)
of – 25 basis points at the beginning of each quarter				
0-1 year	12	(18)	(11)	(17)
2-3 years	172	(75)	(19)	78
4-5 years	165	(105)	(6)	54

For footnote, see page 174.

The interest rate sensitivities tabulated above are illustrative only and are based on simplified scenarios. The figures represent the effect of pro forma movements in net interest income based on our projected yield curve scenarios, HSBC Holdings' current interest rate risk profile and assumed changes to that profile during the next five years. Changes to assumptions concerning the risk profile over the next five years can have a significant impact on the net interest income sensitivity for that period. The figures do not take into account the effect of actions that could be taken to mitigate this interest rate risk, however.

Repricing gap analysis of HSBC Holdings
(Audited)

At 31 December 2010

	Total US\$m	Up to 1 year US\$m	1-5 years US\$m	5-10 years US\$m	More than 10 years US\$m	Non- interest bearing US\$m
Cash at bank and in hand:						
– balances with HSBC undertakings	459	339	–	–	–	120
Derivatives	2,327	–	–	–	–	2,327
Loans and advances to HSBC undertakings	21,238	19,351	–	290	605	992
Financial investments	2,025	–	300	900	731	94
Investments in subsidiaries	92,899	1,785	875	1,164	–	89,075
Other assets	393	–	–	–	–	393
Total assets	119,341	21,475	1,175	2,354	1,336	93,001
Amounts owed to HSBC undertakings	(2,932)	(2,266)	–	–	–	(666)
Financial liabilities designated at fair values	(16,288)	–	(7,184)	(4,740)	(3,509)	(855)
Derivatives	(827)	–	–	–	–	(827)
Debt securities in issue	(2,668)	–	(1,664)	–	(1,004)	–
Other liabilities	(1,232)	–	–	–	–	(1,232)
Subordinated liabilities	(13,313)	(750)	(1,579)	(2,140)	(8,680)	(164)
Total equity	(81,331)	–	–	(7,450)	–	(73,881)
Other non-interest bearing liabilities	(750)	–	–	–	–	(750)
Total liabilities and equity	(119,341)	(3,016)	(10,427)	(14,330)	(13,193)	(78,375)
Off-balance sheet items attracting interest rate sensitivity	–	(15,302)	7,221	4,403	3,409	269
Net interest rate risk gap	–	3,157	(2,031)	(7,573)	(8,448)	14,895
Cumulative interest rate gap	–	3,157	1,126	(6,447)	(14,895)	–

At 31 December 2009

Cash at bank and in hand:						
– balances with HSBC undertakings	224	224	–	–	–	–
Derivatives	2,981	–	–	–	–	2,981
Loans and advances to HSBC undertakings	23,212	16,980	3,084	–	1,896	1,252
Financial investments	2,455	–	–	300	1,610	545
Investments in subsidiaries	86,247	1,866	1,217	–	875	82,289
Other assets	674	–	–	–	–	674
Total assets	115,793	19,070	4,301	300	4,381	87,741
Amounts owed to HSBC undertakings	(3,711)	(2,898)	–	–	–	(813)
Financial liabilities designated at fair values	(16,909)	–	(6,108)	(5,017)	(5,015)	(769)
Derivatives	(362)	–	–	–	–	(362)
Debt securities in issue	(2,839)	–	(1,784)	–	(1,055)	–
Other liabilities	(1,257)	–	–	–	–	(1,257)
Subordinated liabilities	(14,406)	(2,850)	(865)	(3,117)	(7,382)	(192)
Total equity	(75,876)	–	–	–	(3,650)	(72,226)
Other non-interest bearing liabilities	(433)	–	–	–	–	(433)
Total liabilities and equity	(115,793)	(5,748)	(8,757)	(8,134)	(17,102)	(76,052)
Off-balance sheet items attracting interest rate sensitivity	–	(15,302)	6,275	6,306	4,051	(1,330)
Net interest rate risk gap	–	(1,980)	1,819	(1,528)	(8,670)	10,359
Cumulative interest rate gap	–	(1,980)	(161)	(1,689)	(10,359)	–

Interest repricing gap table

The interest rate risk on the fixed-rate securities issued by HSBC Holdings is not included within the Group VAR but is managed on a repricing gap basis. The interest rate repricing gap table below analyses the full term structure of interest rate mismatches within HSBC Holdings' balance sheet. The year-on-year movement in the repricing gap was mainly due to the refinancing of maturing interest bearing capital liabilities with perpetual fixed rate issues.

Report of the Directors: Operating and Financial Review (continued)

Risk > Operational risk > Legal risk / Compliance risk / Security risk // Risk management of insurance operations

Value at risk

Total foreign exchange VAR arising within HSBC Holdings in 2010 and 2009 was as follows:

HSBC Holdings – foreign exchange VAR (Audited)

	Foreign exchange	
	2010 US\$m	2009 US\$m
At 31 December	40.4	83.2
Average	56.6	76.6
Minimum	40.2	55.2
Maximum	83.2	190.8

The foreign exchange risk largely arises from loans to subsidiaries of a capital nature that are not denominated in the functional currency of either the provider or the recipient and which are accounted for as financial assets. Changes in the carrying amount of these loans due to foreign exchange rate differences are taken directly to HSBC Holdings' income statement. These loans, and the associated foreign exchange exposures, are eliminated on a Group consolidated basis.

Operational risk

(Unaudited)

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

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

A formal governance structure provides oversight over the management of operational risk. A Global Operational Risk and Control Committee, which reports to the Risk Management Meeting, meets at least quarterly to discuss key risk issues and review the effective implementation of our operational risk management framework.

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

A centralised database is used to record the results of the operational risk management process. Operational risk self-assessments are input and maintained by business units. To ensure that operational risk losses are consistently reported and monitored at Group level, all Group companies are required to report individual losses when the net loss is expected to exceed US\$10,000.

Further details of our approach to Operational Risk Management can be found in *Pillar 3 Disclosures 2010* which is published as a separate document on www.hsbc.com.

Legal risk

(Unaudited)

Each operating company is required to implement procedures to manage legal risk that conform to our standards. Legal risk falls within the definition of operational risk and includes contractual risk, dispute risk, legislative risk and non-contractual rights risk.

- Contractual risk is the risk that the rights and/or obligations of an HSBC company within a contractual relationship are defective.
- Dispute risk consists of the risks that an HSBC company is subject to when it is involved in or managing a potential or actual dispute.
- Legislative risk is the risk that an HSBC company fails to adhere to the laws of the jurisdictions in which it operates.
- Non-contractual rights risk is the risk that an HSBC company's assets are not properly owned or are infringed by others, or an HSBC company infringes another party's rights.

We have a global legal function to assist management in controlling legal risk. The function provides legal advice and support in managing claims against our companies, as well as in respect of non-routine debt recoveries or other litigation against third parties.

The GMO Legal department oversees the global legal function and is headed by the Group General Counsel. There are legal departments in 58 of the countries in which we operate. There are also regional legal functions in each of Europe, North America, Latin America, the Middle East, and Asia-Pacific headed by Regional General Counsels.

Our operating companies must notify the appropriate legal department immediately any litigation is either threatened or commenced against HSBC or an employee. Any claims which exceed US\$1.5m or equivalent must be advised to the

appropriate regional legal department and the regional legal department must immediately advise the GMO Legal department if any such claim exceeds US\$5m. The appropriate regional legal department must also be immediately advised (and must in turn immediately advise the GMO Legal department) of any action by a regulatory authority, where the proceedings are criminal, or where the claim might materially affect our reputation. Insofar as matters relate to GB&M or GPB, notification should also be made to GB&M Legal in London. All such matters are then reported to the Risk Management Meeting in a monthly paper.

In addition, our operating companies are required to submit semi-annual returns detailing outstanding claims where the claim (or group of similar claims) exceeds US\$10m, where the action is by a regulatory authority, where the proceedings are criminal, where the claim might materially affect our reputation, or, where the GMO Legal department has requested returns be completed for a particular claim. These returns are used for reporting to the Risk Management Meeting, the Group Audit Committee and the Board, and disclosure in the *Annual Report and Accounts* and *Interim Report*, if appropriate.

Compliance risk (Unaudited)

Compliance risk falls within the definition of operational risk. All Group companies are required to observe the letter and spirit of all relevant laws, codes, rules, regulations and standards of good market practice. These rules, regulations, other standards and Group policies include those relating to anti-money laundering, counter terrorist financing and sanctions compliance.

The Group Compliance function supports line management in ensuring that there are adequate policies and procedures, and is responsible for maintaining adequate resources to mitigate compliance risk. The GMO Compliance department oversees the global compliance function and is headed by the Head of Group Compliance who in turn reports to the Group Chief Risk Officer. There are compliance teams in all of the countries where we operate. These compliance teams are principally overseen by Regional Compliance Officers located in Europe, North America, Latin America, the Middle East and Asia-Pacific.

Group Compliance policies and procedures require the prompt identification and escalation to GMO Compliance of all actual or suspected breaches of any law, rule, regulation, Group policy or other relevant requirement. These escalation

procedures are supplemented by a requirement for the submission of compliance certificates at the half-year and year-end by all Group companies detailing any known breaches as above. The contents of these escalation and certification processes are used for reporting to the Risk Management Meeting, the Group Risk Committee and the Board and disclosure in the *Annual Report and Accounts* and *Interim Report*, if appropriate.

Group security and fraud risk (Unaudited)

Security and fraud risk issues are managed at Group level by Group Security and Fraud Risk. This unit, which has responsibility for physical risk, fraud, information and contingency risk, and security and business intelligence, is fully integrated within the central GMO Risk function. This enables management to identify and mitigate the effect of the permutations of these and other non-financial risks on our business lines across the jurisdictions in which we operate.

Risk management of insurance operations

(Audited)

We operate a bancassurance model which provides insurance products for customers with whom we have a banking relationship. Insurance products are sold to all customer groups, mainly utilising retail branches, the internet and phone centres. PFS customers attract the majority of sales and comprise the majority of policyholders.

Many of these insurance products are manufactured by our subsidiaries. This allows us to retain the risks and rewards associated with writing insurance contracts as both the underwriting profit and the commission paid by the manufacturer to the bank distribution channel are kept within the Group.

Where we consider it operationally more effective, third parties are engaged to manufacture insurance products for sale through our banking network. We work with a limited number of market-leading partners to provide the products. These arrangements earn us a commission.

Our bancassurance business operates in all six of our geographical regions with over 30 legal entities, the majority of which are subsidiaries of banking legal entities, manufacturing insurance products.

The insurance contracts we sell primarily relate to core underlying banking activities, such as savings and investment products, and credit life products.

Report of the Directors: Operating and Financial Review (continued)

Risk > Risk management of insurance operations > Overview of products / Nature and extent of risks / Insurance risk

Our manufacturing business concentrates on personal lines, e.g. contracts written for individuals. This focus on the higher volume, lower individual value personal lines contributes to diversifying risk.

Overview of insurance products

(Audited)

The main contracts we manufacture are listed below:

Life insurance business

- Life insurance contracts with discretionary participation features ('DPF');
- credit life insurance business;
- annuities;
- term assurance and critical illness policies;
- linked life insurance;
- investment contracts with DPF;
- unit-linked investment contracts; and
- other investment contracts (including pension contracts written in Hong Kong).

Non-life insurance business

Non-life insurance contracts include motor, fire and other damage to property, accident and health, repayment protection and commercial insurance.

Credit non-life insurance is concentrated in North America and Europe, and is originated in conjunction with the provision of loans. Following a decision taken to close the Consumer Lending network in the US, insurance products written in conjunction with this business are being run off.

In December 2007, we decided to stop selling payment protection insurance ('PPI') products in the UK and a phased withdrawal was completed across the HSBC, first direct and M&S Money brands during 2008. HFC ceased selling single premium PPI in 2008 and sales of regular premium PPI will reduce as HFC exits its remaining retail relationships. HSBC continues to distribute its UK short-term income protection ('STIP') product. In January 2009, the Competition Commission ('CC') published its report into the PPI market in which it stipulated that STIP products will also be subject to their remedies when sold in conjunction with or as a result of a referral following the sale of a loan or similar credit product. We have undertaken an analysis of the required changes to the STIP product and its sales processes resulting from the CC's remedies. Following an appeal to the Competition Appeal Tribunal, the CC had to reconsider whether a ban on firms selling PPI at the point of sale of the credit product was an appropriate and justified remedy for the deficiencies it identified in the PPI

market. On 14 October 2010, the CC confirmed that it intended to proceed with a point of sale ban. It is anticipated that the Order implementing the CC's remedies will be made in late March or early April, and that the point of sale ban will then come into effect 12 months after the date of the Order.

Nature and extent of risks

(Audited)

The majority of the risk in our insurance business derives from manufacturing activities and can be categorised as insurance risk and financial risks. The following sections describe how these risks are managed. Financial risks include market risk, credit risk and liquidity risk. The assets of insurance manufacturing subsidiaries are included within the consolidated credit risk disclosures on pages 93 to 128, although separate disclosures in respect of insurance manufacturing subsidiaries are provided below. The consolidated liquidity risk and market risk disclosures focus on banking entities and disclosures specific to the insurance manufacturing subsidiaries are provided in the sections below. Operational risk is covered by the Group's overall operational risk management process.

The insurance manufacturers set their own control procedures in addition to complying with guidelines issued by the Group Insurance Head Office. The control framework for monitoring risk includes the Group Insurance Risk Committee, which oversees the status of the significant risk categories in the insurance operations. Five sub-committees of this Committee focus on products and pricing, market and liquidity risk, credit risk, operational risk and insurance risk, respectively. Similar risk committees exist at regional and entity levels. Any issues requiring escalation from the Group Insurance Risk Committee would be reported to the GMB via the Risk Management Meeting.

In addition, local ALCOs and Risk Management Committees monitor certain risk exposures, mainly for life business where the duration and cash flow matching of insurance assets and liabilities are reviewed.

All insurance products, whether manufactured internally or by a third party, are subjected to a product approval process. Approval is provided by the Regional Insurance Head Office or Group Insurance Head Office depending on the type of product and its risk profile. The approval process is formalised through the Product and Pricing Committee, which comprise the heads of the relevant risk functions within insurance.

Insurance risk

(Audited)

Insurance risk is the risk, other than financial risk, of loss transferred from the holder of the insurance contract to the issuer (HSBC). The principal insurance risk we face is that, over time, the cost of acquiring and administering a contract, claims and benefits may exceed the aggregate amount of premiums received and investment income.

The cost of claims and benefits can be influenced by many factors, including mortality and morbidity experience, lapse and surrender rates and, if the policy has a savings element, the performance of the assets held to support the liabilities.

Life and non-life business insurance risks are controlled by high-level policies and procedures set centrally, taking into account where appropriate local market conditions and regulatory requirements.

Formal underwriting, reinsurance and claims-handling procedures designed to ensure compliance with regulations are applied, supplemented with stress testing.

As well as exercising underwriting controls, we use reinsurance as a means of mitigating exposure to insurance risk, in particular to aggregations of catastrophe risk. When we manage our exposure to insurance risk through the use of third-party reinsurers, the associated revenue and manufacturing profit is ceded to them. Although reinsurance provides a means of managing insurance risk, such contracts expose us to credit risk, the risk of default by the reinsurer (see page 165).

The following tables analyse our insurance risk exposures by geographical region and by type of business.

Analysis of life insurance risk – liabilities to policyholders⁷⁴

(Audited)

	Europe US\$m	Hong Kong US\$m	Rest of Asia- Pacific US\$m	North America US\$m	Latin America US\$m	Total US\$m
At 31 December 2010						
Life (non-linked)	1,679	17,989	789	1,004	2,122	23,583
Insurance contracts with DPF ⁷⁵	327	17,203	278	–	–	17,808
Credit life	565	–	72	36	2	675
Annuities	471	–	31	760	1,622	2,884
Term assurance and other long-term contracts	316	786	408	208	498	2,216
Life (linked)	2,274	3,235	485	–	4,502	10,496
Investment contracts with DPF ^{75,76}	22,052	–	22	–	–	22,074
Insurance liabilities to policyholders	26,005	21,224	1,296	1,004	6,624	56,153
At 31 December 2009						
Life (non-linked)	2,998	14,456	526	1,026	1,973	20,979
Insurance contracts with DPF ⁷⁵	1,128	14,095	227	–	–	15,450
Credit life	953	–	20	50	–	1,023
Annuities	452	–	28	777	1,554	2,811
Term assurance and other long-term contracts	465	361	251	199	419	1,695
Life (linked)	2,125	2,896	437	–	3,528	8,986
Investment contracts with DPF ^{75,76}	20,979	–	35	–	–	21,014
Insurance liabilities to policyholders	26,102	17,352	998	1,026	5,501	50,979

For footnotes, see page 174.

Our most significant life insurance products are investment contracts with DPF issued in France, insurance contracts with DPF issued in Hong Kong and unit-linked contracts issued in Hong Kong, Latin America and the UK.

The principal drivers of our insurance risk are described below. The liabilities for long-term contracts are set by reference to a range of

assumptions around these drivers. These typically reflect the issuers' own experiences. The type and quantum of insurance risk arising from life insurance depends on the type of business, and varies considerably.

- *mortality and morbidity*: the main contracts which generate exposure to these risks are term assurance, whole life products, critical illness

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Risk > Risk management of insurance operations > Insurance risk

and income protection contracts and annuities. The risks are monitored on a regular basis, and are primarily mitigated by underwriting controls and reinsurance and by retaining the ability in certain cases to amend premiums in the light of experience;

- *lapses and surrenders*: the risks associated with this are generally mitigated by product design, the application of surrender charges and management actions, for example, managing the level of bonus payments to policyholders. A detailed persistency analysis at a product level is carried out at least on an annual basis; and

- *expense risk* is mitigated by pricing, for example, retaining the ability in certain cases to amend premiums and/or policyholder charges based on experience, and cost management discipline.

Economic assumptions, such as investment returns and interest rates, are usually based on observable market data. Clearly, liabilities are affected by changes in assumptions (see 'Sensitivity of HSBC's insurance subsidiaries to risk factors' on page 165 and 'Sensitivity analysis' on page 171).

Analysis of non-life insurance risk – net written insurance premiums^{74,77} (Audited)

	Europe US\$m	Hong Kong US\$m	Rest of Asia- Pacific US\$m	North America US\$m	Latin America US\$m	Total US\$m
2010						
Accident and health	78	174	8	3	37	300
Motor	–	15	28	–	267	310
Fire and other damage	38	29	11	16	22	116
Liability	–	20	4	–	2	26
Credit (non-life)	25	–	–	53	2	80
Marine, aviation and transport	3	10	4	–	18	35
Other non-life insurance contracts	20	39	1	9	84	153
Total net written insurance premiums	164	287	56	81	432	1,020
Net insurance claims incurred and movement in liabilities to policyholders	(169)	(117)	(25)	(13)	(201)	(525)
2009						
Accident and health	94	160	7	3	23	287
Motor	123	14	20	–	234	391
Fire and other damage	72	22	8	16	22	140
Liability	–	15	4	–	2	21
Credit (non-life)	35	–	–	86	–	121
Marine, aviation and transport	7	9	4	–	17	37
Other non-life insurance contracts	24	32	1	12	58	127
Total net written insurance premiums	355	252	44	117	356	1,124
Net insurance claims incurred and movement in liabilities to policyholders	(748)	(107)	(17)	(96)	(155)	(1,123)
2008						
Accident and health	14	155	5	3	27	204
Motor	350	15	14	–	273	652
Fire and other damage	150	26	3	4	22	205
Liability	–	14	4	–	34	52
Credit (non-life)	99	–	–	144	–	243
Marine, aviation and transport	–	11	4	–	24	39
Other non-life insurance contracts	49	28	–	15	29	121
Total net written insurance premiums	662	249	30	166	409	1,516
Net insurance claims incurred and movement in liabilities to policyholders	(553)	(121)	(13)	(98)	(176)	(961)

For footnotes, see page 174.

(Audited)

Our motor business is written predominantly in Latin America. The run-off of the UK motor book continued in 2010. Accident and health is written in all regions but mainly in Hong Kong. We write fire and other damage to property contracts in all major markets, most significantly in Europe. Credit non-life insurance, which is originated in conjunction with the provision of loans, is concentrated in the US and Europe.

The main risks associated with non-life business are:

- underwriting: the risk that premiums are not appropriate for the cover provided; and
- claims experience: the risk that claims exceed expectations.

We manage these risks through pricing (for example, imposing restrictions and deductibles in the

policy terms and conditions), product design, risk selection, claims handling, investment strategy and reinsurance policy. The majority of our non-life insurance contracts are renewable annually, providing added flexibility to the underwriting terms and conditions.

Balance sheet of insurance manufacturing subsidiaries

(Audited)

A principal tool we use to manage our exposure to insurance risk, in particular for life insurance contracts, is asset and liability matching.

The tables below show the composition of assets and liabilities by contract and by geographical region and demonstrate that there were sufficient assets to cover the liabilities to policyholders in each case at the end of 2010.

Balance sheet of insurance manufacturing subsidiaries by type of contract

(Audited)

	Insurance contracts					Investment contracts				Total US\$m
	With DPF US\$m	Unit- linked US\$m	Annu- ities US\$m	Term assur- ance ⁷⁸ US\$m	Non-life US\$m	With DPF ⁷² US\$m	Unit- linked US\$m	Other US\$m	Other assets ⁷⁹ US\$m	
At 31 December 2010										
Financial assets	17,665	9,763	2,615	2,671	2,231	21,511	8,338	3,927	7,157	75,878
– trading assets	–	–	–	–	11	–	–	–	–	11
– financial assets designated at fair value	1,206	9,499	413	523	180	5,961	7,624	1,486	1,452	28,344
– derivatives	53	–	1	6	–	229	7	1	4	301
– financial investments ...	14,068	–	1,847	1,661	692	14,465	–	1,804	4,495	39,032
– other financial assets	2,338	264	354	481	1,348	856	707	636	1,206	8,190
Reinsurance assets	10	760	400	263	432	–	–	–	79	1,944
PVIF ⁸⁰	–	–	–	–	–	–	–	–	3,440	3,440
Other assets and investment properties	189	6	21	398	213	565	14	56	712	2,174
Total assets	17,864	10,529	3,036	3,332	2,876	22,076	8,352	3,983	11,388	83,436
Liabilities under investment contracts:										
– designated at fair value	–	–	–	–	–	–	8,321	3,379	–	11,700
– carried at amortised cost	–	–	–	–	–	–	–	439	–	439
Liabilities under insurance contracts	17,808	10,496	2,884	2,891	2,456	22,074	–	–	–	58,609
Deferred tax	11	–	20	4	6	–	–	1	793	835
Other liabilities	–	–	–	–	–	–	–	–	2,075	2,075
Total liabilities	17,819	10,496	2,904	2,895	2,462	22,074	8,321	3,819	2,868	73,658
Total equity	–	–	–	–	–	–	–	–	9,778	9,778
Total equity and liabilities⁸¹	17,819	10,496	2,904	2,895	2,462	22,074	8,321	3,819	12,646	83,436

Report of the Directors: Operating and Financial Review (continued)

Risk > Risk management of insurance operations > Insurance risk / Financial risks

Balance sheet of insurance manufacturing subsidiaries by type of contract (continued)

	Insurance contracts					Investment contracts				
	With DPF US\$m	Unit-linked US\$m	Annuities US\$m	Term assurance ⁷⁸ US\$m	Non-life US\$m	With DPF ⁷⁶ US\$m	Unit-linked US\$m	Other US\$m	Other assets ⁷⁹ US\$m	Total US\$m
At 31 December 2009										
Financial assets	15,322	8,204	2,567	2,053	2,290	20,501	7,366	4,008	7,252	69,563
– trading assets	–	–	–	–	10	–	–	–	–	10
– financial assets designated at fair value	599	7,837	446	482	63	5,498	6,572	1,582	2,085	25,164
– derivatives	16	1	–	3	–	144	299	2	3	468
– financial investments	13,013	–	1,511	1,033	742	13,948	–	1,701	3,901	35,849
– other financial assets	1,694	366	610	535	1,475	911	495	723	1,263	8,072
Reinsurance assets	6	831	376	389	467	–	–	–	60	2,129
PVIF ⁸⁰	–	–	–	–	–	–	–	–	2,780	2,780
Other assets and investment properties	165	5	25	634	242	516	13	56	601	2,257
Total assets	15,493	9,040	2,968	3,076	2,999	21,017	7,379	4,064	10,693	76,729
Liabilities under investment contracts:										
– designated at fair value	–	–	–	–	–	–	7,347	3,518	–	10,865
– carried at amortised cost	–	–	–	–	–	–	–	417	–	417
Liabilities under insurance contracts	15,450	8,986	2,811	2,718	2,728	21,014	–	–	–	53,707
Deferred tax	6	–	22	1	7	1	–	2	750	789
Other liabilities	–	–	–	–	–	–	–	–	2,371	2,371
Total liabilities	15,456	8,986	2,833	2,719	2,735	21,015	7,347	3,937	3,121	68,149
Total equity	–	–	–	–	–	–	–	–	8,580	8,580
Total equity and liabilities ⁸²	15,456	8,986	2,833	2,719	2,735	21,015	7,347	3,937	11,701	76,729

For footnotes, see page 174.

Balance sheet of insurance manufacturing subsidiaries by geographical region⁷⁴

(Audited)

	Europe US\$m	Hong Kong US\$m	Rest of Asia-Pacific US\$m	North America US\$m	Latin America US\$m	Total US\$m
At 31 December 2010						
Financial assets	36,233	26,278	1,651	2,548	9,168	75,878
– trading assets	–	–	–	–	11	11
– financial assets designated at fair value	16,133	5,550	1,106	–	5,555	28,344
– derivatives	238	50	12	–	1	301
– financial investments	16,758	17,299	247	2,006	2,722	39,032
– other financial assets	3,104	3,379	286	542	879	8,190
Reinsurance assets	974	770	33	23	144	1,944
PVIF ⁸⁰	1,102	1,734	165	141	298	3,440
Other assets and investment properties	1,060	743	26	9	336	2,174
Total assets	39,369	29,525	1,875	2,721	9,946	83,436
Liabilities under investment contracts:						
– designated at fair value	7,359	4,300	41	–	–	11,700
– carried at amortised cost	–	–	–	–	439	439
Liabilities under insurance contracts	27,475	21,515	1,381	1,169	7,069	58,609
Deferred tax	375	298	39	–	123	835
Other liabilities	1,354	289	58	12	362	2,075
Total liabilities	36,563	26,402	1,519	1,181	7,993	73,658
Total equity	2,806	3,123	356	1,540	1,953	9,778
Total equity and liabilities ⁸¹	39,369	29,525	1,875	2,721	9,946	83,436

	Europe US\$m	Hong Kong US\$m	Rest of Asia- Pacific US\$m	North America US\$m	Latin America US\$m	Total US\$m
At 31 December 2009						
Financial assets	35,704	22,337	1,330	2,582	7,610	69,563
– trading assets	–	–	–	–	10	10
– financial assets designated at fair value	14,756	4,758	877	–	4,773	25,164
– derivatives	446	18	3	–	1	468
– financial investments	16,940	14,771	133	2,037	1,968	35,849
– other financial assets	3,562	2,790	317	545	858	8,072
Reinsurance assets	1,100	849	25	19	136	2,129
PVIF ⁸⁰	1,022	1,248	113	138	259	2,780
Other assets and investment properties	1,380	498	23	40	316	2,257
Total assets	39,206	24,932	1,491	2,779	8,321	76,729
Liabilities under investment contracts:						
– designated at fair value	6,500	4,299	66	–	–	10,865
– carried at amortised cost	–	–	–	–	417	417
Liabilities under insurance contracts	27,845	17,618	1,072	1,268	5,904	53,707
Deferred tax	334	220	27	82	126	789
Other liabilities	1,744	284	54	3	286	2,371
Total liabilities	36,423	22,421	1,219	1,353	6,733	68,149
Total equity	2,783	2,511	272	1,426	1,588	8,580
Total equity and liabilities ⁸²	39,206	24,932	1,491	2,779	8,321	76,729

For footnotes, see page 174.

Financial risks

(Audited)

Our insurance businesses are exposed to a range of financial risks, including market risk, credit risk and liquidity risk. Market risk includes interest rate risk, equity risk and foreign exchange risk. The nature and management of these risks is described below.

Manufacturing subsidiaries are exposed to financial risks when, for example, the proceeds from financial assets are not sufficient to fund the obligations arising from non-linked insurance and investment contracts. In many jurisdictions, local regulatory requirements prescribe the type, quality

and concentration of assets that these subsidiaries must maintain to meet insurance liabilities. These requirements complement Group-wide policies.

The following table analyses the assets held in our insurance manufacturing subsidiaries at 31 December 2010 by type of contract, and provides a view of the exposure to financial risk. For linked contracts, which pay benefits to policyholders which are determined by reference to the value of the investments supporting the policies, we typically designate assets at fair value; for non-linked contracts, the classification of the assets is driven by the nature of the underlying contract.

Report of the Directors: Operating and Financial Review (continued)**Risk > Risk management of insurance operations > Financial risks > Market risk***Financial assets held by insurance manufacturing subsidiaries**(Audited)*

	Life linked contracts ⁸³ US\$m	Life non-linked contracts ⁸⁴ US\$m	Non-life insurance ⁸⁵ US\$m	Other assets ⁷⁹ US\$m	Total US\$m
At 31 December 2010					
Trading assets					
Debt securities	–	–	11	–	11
Financial assets designated at fair value	17,123	9,589	180	1,452	28,344
Treasury bills	10	119	–	10	139
Debt securities	6,660	3,281	180	847	10,968
Equity securities	10,453	6,189	–	595	17,237
Financial investments					
Held-to-maturity:					
– debt securities	–	16,015	152	908	17,075
Available-for-sale:	–	17,830	540	3,587	21,957
– Treasury bills	–	10	–	31	41
– other eligible bills	–	36	140	217	393
– debt securities	–	17,776	391	3,210	21,377
– equity securities	–	8	9	129	146
Derivatives	7	290	–	4	301
Other financial assets ⁸⁶	971	4,665	1,348	1,206	8,190
Total financial assets ⁸¹	18,101	48,389	2,231	7,157	75,878
At 31 December 2009					
Trading assets					
Debt securities	–	–	10	–	10
Financial assets designated at fair value	14,409	8,607	63	2,085	25,164
Treasury bills	46	174	–	3	223
Debt securities	5,086	3,428	63	1,220	9,797
Equity securities	9,277	5,005	–	862	15,144
Financial investments					
Held-to-maturity:					
– debt securities	–	13,995	186	670	14,851
Available-for-sale:	–	17,211	556	3,231	20,998
– Treasury bills	–	–	211	86	297
– other eligible bills	–	26	127	126	279
– debt securities	–	17,169	199	2,787	20,155
– equity securities	–	16	19	232	267
Derivatives	300	165	–	3	468
Other financial assets ⁸⁶	861	4,473	1,475	1,263	8,072
Total financial assets ⁸²	15,570	44,451	2,290	7,252	69,563

For footnotes, see page 174.

Approximately 65.1% of financial assets were invested in debt securities at 31 December 2010 (2009: 64.4%) with 22.9% (2009: 22.2%) invested in equity securities.

In life linked insurance, premium income less charges levied is invested in a portfolio of assets. We manage the financial risks of this product on behalf of the policyholders by holding appropriate assets in segregated funds or portfolios to which the liabilities are linked. These assets represented 23.9% of the total financial assets of our insurance manufacturing subsidiaries at the end of 2010 (2009: 22.4%).

Market risk*(Audited)*

Market risk arises when mismatches occur between product liabilities and the investment assets which back them. For example, mismatches between asset and liability yields and maturities give rise to interest rate risk.

Description of market risk*(Audited)*

The main features of products manufactured by our insurance manufacturing subsidiaries which generate market risk, and the market risk to which these

features expose the subsidiaries, are discussed below.

Long-term insurance or investment products may incorporate benefits that are guaranteed. The table below shows, in respect of each category of guarantee, the total liabilities to policyholders established for guaranteed products manufactured by our insurance subsidiaries. The table also shows the range of investment returns (net of operating costs) on the assets supporting these products and the implied investment returns that would enable the business to meet the guarantees.

*Liabilities to policyholders*⁸⁷
(Audited)

	2010			2009		
	Amount of reserve US\$m	Investment returns implied by guarantee ⁸¹ %	Current yields %	Amount of reserve US\$m	Investment returns implied by guarantee ⁸² %	Current yields %
Annuities in payment	1,491	0.0 – 8.5	1.5 – 16.2	1,299	0.0 – 7.5	1.3 – 16.7
Deferred annuities	642	0.0 – 6.0	2.1 – 16.8	569	0.0 – 6.0	0.9 – 15.1
Immediate annuities	532	6.0 – 9.0	5.5 – 5.5	553	6.0 – 9.0	5.4 – 5.4
Annual return	19,980	0.0 – 4.5	0.0 – 5.9	17,147	0.0 – 4.5	0.8 – 6.2
Annual return	841	4.5 – 6.0	6.1 – 8.5	497	4.5 – 6.0	5.1 – 6.5
Capital	15,445	–	2.0 – 4.0	15,866	–	2.4 – 4.3

For footnotes, see page 174.

Interest rate risk arises to the extent that yields on the assets are lower than the investment returns implied by the guarantees payable to policyholders by insurance manufacturing subsidiaries. When this happens, we may discontinue products.

The proceeds from insurance and investment products with DPF are primarily invested in bonds with a proportion allocated to other asset classes in order to provide customers with the potential for enhanced returns. Subsidiaries with portfolios of such products are exposed to the risk of falls in market prices which cannot be fully reflected in the discretionary bonuses. An increase in market volatility could also result in an increase in the value of the guarantee to the policyholder.

Long-term insurance and investment products typically permit the policyholder to surrender the policy or let it lapse at any time. When the surrender value is not linked to the value realised from the sale of the associated supporting assets, the subsidiary is exposed to market risk. In particular, when customers seek to surrender their policies when asset values are falling, assets may have to be sold at a loss to fund redemptions.

Categories of guaranteed benefits

- annuities in payment;
- deferred/immediate annuities: these consist of two phases – the savings and investing phase and the retirement income phase;
- annual return: the annual return is guaranteed to be no lower than a specified rate. This may be the return credited to the policyholder every year, or the average annual return credited to the policyholder over the life of the policy, which may occur on the maturity date or the surrender date of the contract; and
- capital: policyholders are guaranteed to receive no less than the premiums paid plus declared bonuses less expenses.

A subsidiary holding a portfolio of long-term insurance and investment products, especially with DPF, may attempt to reduce exposure to its local market by investing in assets in countries other than that in which it is based. These assets may be denominated in currencies other than the subsidiary's local currency. It is often not cost effective for the subsidiary to hedge the foreign exchange exposure associated with these assets, and this exposes it to the risk that its local currency will strengthen against the currency of the related assets.

For unit-linked contracts, market risk is substantially borne by the policyholder, but we typically remain exposed to market risk as the market value of the linked assets influences the fees we earn for managing them.

Asset and liability matching

It may not always be possible to achieve a complete matching of asset and liability durations, partly because there is uncertainty over policyholder behaviour, which introduces uncertainty over the receipt of all future premiums and the timing of claims, and partly because the duration of liabilities may exceed the duration of the longest available dated fixed interest investments.

Report of the Directors: Operating and Financial Review (continued)

Risk > Risk management of insurance operations > Financial risks > Market risk / Credit risk

We use models to assess the effect of a range of future scenarios on the values of financial assets and associated liabilities, and ALCOs employ the outcomes in determining how the assets and liabilities should be matched. The scenarios include stresses applied to factors which affect insurance risk such as mortality and lapse rates. Of particular importance is matching the expected pattern of cash inflows with the benefits payable on the underlying contracts, which can extend for many years.

Our current portfolio of assets includes debt securities issued at a time when yields were higher than those observed in the current market. As a result, yields on extant holdings of debt securities exceed those which may be obtained on current issues. We reduced short-term bonus rates paid to policyholders on certain participating contracts to manage the immediate strain on the business. Should interest rates and yield curves remain low for prolonged periods, further such steps may be needed.

How market risk is managed

(Audited)

All our insurance manufacturing subsidiaries have market risk mandates which specify the investment instruments in which they are permitted to invest and the maximum quantum of market risk which they are permitted to retain. They manage market risk by using some or all of the techniques listed below, depending on the nature of the contracts they write.

Techniques for managing market risk

- for products with DPF, adjusting bonus rates to manage the liabilities to policyholders. The effect is that a significant portion of the market risk is borne by the policyholder;
- as far as possible, matching assets to liabilities;
- using derivatives to a limited extent;
- for new products with investment guarantees, considering the cost when determining the level of premiums or the price structure;
- periodically reviewing products identified as higher risk, which contain investment guarantees and embedded optionality features linked to savings and investment products;
- including features designed to mitigate market risk in new products, such as charging surrender penalties to recoup losses incurred when policyholders surrender their policies; and
- exiting, to the extent possible, investment portfolios whose risk is considered unacceptable.

In the product approval process, the risks embedded in new products are identified and assessed. When, for example, options and guarantees are embedded in new products, the due diligence process ensures that complete and appropriate risk management procedures are in place. For all but the simplest of guaranteed benefits the assessment is

undertaken by Group Insurance Head Office. Management reviews certain exposures more frequently when markets are more volatile to ensure that any matters arising are dealt with in a timely fashion.

How the exposure to market risk is measured

(Audited)

Our insurance manufacturing subsidiaries monitor exposures against mandated limits regularly and report them to Group Insurance Head Office. Exposures are aggregated and reported on a quarterly basis to senior risk management forums in the Group, including the Group Insurance Market and Liquidity Risk Committee, Group Insurance Risk Committee and the Group Stress Test Review Group.

Standard measures for quantifying market risks

- for interest rate risk, the sensitivities of the net present values of asset and expected liability cash flows, in total and by currency, to a one basis point parallel shift in the discount curves used to calculate the net present values;
- for equity price risk, the total market value of equity holdings and the market value of equity holdings by region and country; and
- for foreign exchange risk, the total net short foreign exchange position and the net foreign exchange positions by currency.

The standard measures are relatively straightforward to calculate and aggregate, but they have limitations. The most significant one is that a parallel shift in yield curves of one basis point does not capture the non-linear relationships between the values of certain assets and liabilities and interest rates. Non-linearity arises, for example, from investment guarantees and product features which enable policyholders to surrender their policies. We bear the shortfall if the yields on investments held to support contracts with guaranteed benefits are less than the investment returns implied by the guaranteed benefits.

We recognise these limitations and augment our standard measures with stress tests which examine the effect of a range of market rate scenarios on the aggregate annual profits and total equity of our insurance manufacturing subsidiaries, after taking into consideration tax and accounting treatments where material and relevant. The results of these tests are reported to Group Insurance Head Office and risk committees every quarter.

The following table illustrates the effects of various interest rate, equity price, foreign exchange rate and credit spread scenarios on our profit for the year and total equity of our insurance manufacturing subsidiaries:

Sensitivity of HSBC's insurance manufacturing subsidiaries to risk factors
(Audited)

	2010		2009	
	Effect on profit for the year US\$m	Effect on total equity US\$m	Effect on profit for the year US\$m	Effect on total equity US\$m
+ 100 basis points parallel shift in yield curves	72	(132)	68	(82)
– 100 basis points parallel shift in yield curves	(86)	131	(69)	92
10% increase in equity prices	76	76	19	19
10% decrease in equity prices	(76)	(76)	(20)	(20)
10% increase in US dollar exchange rate compared to all currencies	21	21	20	20
10% decrease in US dollar exchange rate compared to all currencies	(21)	(21)	(20)	(20)
Sensitivity to credit spread increases	(31)	(74)	(36)	(91)

Where appropriate, we include the impact of the stress on the PVIF in the results of the stress tests. The relationship between the values of certain assets and liabilities and the risk factors may be non-linear and, therefore, the results disclosed cannot be extrapolated to measure sensitivities to different levels of stress. The sensitivities are stated before allowance for the effect of management actions which may mitigate changes in market rates, and for any factors such as policyholder behaviour that may change in response to changes in market risk.

Credit risk
(Audited)

Description of credit risk

Credit risk can give rise to losses through default and can lead to volatility in our income statement and balance sheet figures through movements in credit spreads, principally on the US\$43.3bn (2009: US\$40.5bn) non-linked bond portfolio.

As tabulated above, the sensitivity of the net profit after tax of our insurance subsidiaries to the effects of increases in credit spreads is a fall of US\$31m (2009: US\$36m fall). This is small because 51.4% of the financial assets held by our insurance subsidiaries are classified as either held to maturity or available for sale, and consequently any changes in the fair value of these financial investments, absent impairment, would have no impact on the profit after tax. We calculate the sensitivity using simplified assumptions based on a one-day movement in credit spreads over a two-year period. A confidence level of 99%, consistent with our Group VAR, is applied. While credit spreads have generally widened from the levels observed at the end of 2009, the volatility experienced during 2010 was lower than that seen in 2009, leading to a reduction in our sensitivity to credit spread movements.

We used to sell certain unit-linked life insurance contracts which were reinsured with a third-party counterparty, who also underwrote market return guarantees. We are exposed to credit risk to the extent that the counterparty is unable to meet the terms of the guaranteed benefits. The cost to us of market return guarantees increases when interest rates fall, equity markets fall or market volatility increases. In addition, when determined by reference to a discounted cash flow model in which the discount rate is based on current interest rates, guarantee costs increase in a falling interest rate environment. The sale of these contracts ceased in 2008, reflecting our adjusted risk appetite.

How credit risk is managed

Our exposure to credit risk products is included in the tables showing exposures to life and non-life insurance risk on pages 157 to 159. Our insurance manufacturing subsidiaries are responsible for the credit risk, quality and performance of their investment portfolios. Our assessment of the creditworthiness of issuers and counterparties is based primarily upon internationally recognised credit ratings and other publicly available information.

Investment credit exposures are monitored against limits by our local insurance manufacturing subsidiaries, and are aggregated and reported to Group Credit Risk, the Group Insurance Credit Risk Meeting and the Group Insurance Risk Committee. Stress testing is performed by Group Insurance Head Office on the investment credit exposures using credit spread sensitivities and default probabilities. The stresses are reported to the Group Insurance Risk Committee.

We use a number of tools to manage and monitor credit risk. These include an Early Warning Report and a watch list of investments with current credit concerns which are circulated fortnightly to

Report of the Directors: Operating and Financial Review (continued)

Risk > Risk management of insurance operations > Financial risks > Credit risk

senior management in Group Insurance Head Office and the Regional Chief Risk Officers to identify investments which may be at risk of future impairment.

Credit quality

(Audited)

The following table presents an analysis of treasury bills, other eligible bills and debt securities within

our insurance business by measures of credit quality. The five credit quality classifications are defined on page 114. Only assets supporting non-linked liabilities are included in the table as financial risk on assets supporting linked liabilities is predominantly borne by the policyholder. 90.5% (2009: 90.9%) of the assets included in the table are invested in investments rated as 'Strong'.

Treasury bills, other eligible bills and debt securities in HSBC's insurance manufacturing subsidiaries

(Audited)

	Neither past due nor impaired					Total US\$m
	Strong US\$m	Good US\$m	Satisfactory US\$m	Sub- standard US\$m	Impaired ⁸⁸ US\$m	
At 31 December 2010						
Supporting liabilities under non-linked insurance and investment contracts						
Trading assets – debt securities	9	–	2	–	–	11
Financial assets designated at fair value	3,126	88	330	36	–	3,580
– treasury and other eligible bills	118	–	1	–	–	119
– debt securities	3,008	88	329	36	–	3,461
Financial investments	32,164	1,948	250	158	–	34,520
– treasury and other similar bills	–	–	10	–	–	10
– other eligible bills	176	–	–	–	–	176
– debt securities	31,988	1,948	240	158	–	34,334
	35,299	2,036	582	194	–	38,111
Supporting shareholders' funds⁸⁹						
Financial assets designated at fair value	492	286	75	4	–	857
– treasury and other eligible bills	10	–	–	–	–	10
– debt securities	482	286	75	4	–	847
Financial investments	3,443	740	101	82	–	4,366
– treasury and other similar bills	–	–	31	–	–	31
– other eligible bills	217	–	–	–	–	217
– debt securities	3,226	740	70	82	–	4,118
	3,935	1,026	176	86	–	5,223
Total⁸¹						
Trading assets – debt securities	9	–	2	–	–	11
Financial assets designated at fair value	3,618	374	405	40	–	4,437
– treasury and other eligible bills	128	–	1	–	–	129
– debt securities	3,490	374	404	40	–	4,308
Financial investments	35,607	2,688	351	240	–	38,886
– treasury and other similar bills	–	–	41	–	–	41
– other eligible bills	393	–	–	–	–	393
– debt securities	35,214	2,688	310	240	–	38,452
	39,234	3,062	758	280	–	43,334

	Neither past due nor impaired					
	Strong US\$m	Good US\$m	Satisfactory US\$m	Sub- standard US\$m	Impaired ⁸⁸ US\$m	Total US\$m
At 31 December 2009						
Supporting liabilities under non-linked insurance and investment contracts						
Trading assets – debt securities	8	–	2	–	–	10
Financial assets designated at fair value	2,812	80	704	69	–	3,665
– treasury and other eligible bills	174	–	–	–	–	174
– debt securities	2,638	80	704	69	–	3,491
Financial investments	30,126	1,509	130	148	–	31,913
– treasury and other similar bills	211	–	–	–	–	211
– other eligible bills	153	–	–	–	–	153
– debt securities	29,762	1,509	130	148	–	31,549
	32,946	1,589	836	217	–	35,588
Supporting shareholders' funds ⁸⁹						
Financial assets designated at fair value	527	506	180	10	–	1,223
– treasury and other eligible bills	3	–	–	–	–	3
– debt securities	524	506	180	10	–	1,220
Financial investments	3,335	312	16	6	–	3,669
– treasury and other similar bills	82	–	4	–	–	86
– other eligible bills	126	–	–	–	–	126
– debt securities	3,127	312	12	6	–	3,457
	3,862	818	196	16	–	4,892
Total ⁸²						
Trading assets – debt securities	8	–	2	–	–	10
Financial assets designated at fair value	3,339	586	884	79	–	4,888
– treasury and other eligible bills	177	–	–	–	–	177
– debt securities	3,162	586	884	79	–	4,711
Financial investments	33,461	1,821	146	154	–	35,582
– treasury and other similar bills	293	–	4	–	–	297
– other eligible bills	279	–	–	–	–	279
– debt securities	32,889	1,821	142	154	–	35,006
	36,808	2,407	1,032	233	–	40,480

For footnotes, see page 174.

Issuers of treasury bills, other eligible bills and debt securities in HSBC's insurance manufacturing subsidiaries (Audited)

	Treasury bills US\$m	Other eligible bills US\$m	Debt securities US\$m	Total US\$m
At 31 December 2010				
Governments	170	121	9,401	9,692
Local authorities	–	–	915	915
Asset-backed securities	–	–	60	60
Corporates and other	–	272	32,395	32,667
	170	393	42,771	43,334
At 31 December 2009				
Governments	342	6	8,548	8,896
Local authorities	–	–	886	886
Asset-backed securities	–	–	54	54
Corporates and other	132	273	30,239	30,644
	474	279	39,727	40,480

Report of the Directors: Operating and Financial Review (continued)

Risk > Risk management of insurance operations > Financial risks > Liquidity risk

Credit risk also arises when part of the insurance risk we incur is assumed by reinsurers. The split of liabilities ceded to reinsurers and outstanding reinsurance recoveries, analysed by credit quality,

is shown below. Our exposure to third parties under the reinsurance agreements described in the Credit Risk section above is included in this table.

Reinsurers' share of liabilities under insurance contracts (Audited)

	Neither past due nor impaired				Past due but not impaired	Total
	Strong US\$m	Good US\$m	Satisfactory US\$m	Sub-standard US\$m	US\$m	US\$m
At 31 December 2010						
Linked insurance contracts	44	716	–	–	–	760
Non-linked insurance contracts	997	11	76	12	9	1,105
Total⁸¹	1,041	727	76	12	9	1,865
Reinsurance debtors	30	8	30	1	10	79
At 31 December 2009						
Linked insurance contracts	27	804	–	–	–	831
Non-linked insurance contracts	1,133	10	90	5	–	1,238
Total⁸²	1,160	814	90	5	–	2,069
Reinsurance debtors	24	2	11	6	17	60

For footnotes, see page 174.

Liquidity risk (Audited)

Description of liquidity risk

It is an inherent characteristic of almost all insurance contracts that there is uncertainty over the amount of claims liabilities that may arise and the timing of their settlement, and this creates liquidity risk.

There are three aspects to liquidity risk. The first arises in normal market conditions and is referred to as funding liquidity risk; specifically, the capacity to raise sufficient cash when needed to meet payment obligations. Secondly, market liquidity risk arises when the size of a particular holding may be so large that a sale cannot be completed around the market price. Finally, standby liquidity risk refers to the capacity to meet payment terms in abnormal conditions.

How liquidity risk is managed

Our insurance manufacturing subsidiaries primarily fund cash outflows arising from claim liabilities from the following sources of cash inflows:

- premiums from new business, policy renewals and recurring premium products;
- interest and dividends on investments and principal repayments of maturing debt investments;
- cash resources; and
- the sale of investments.

They manage liquidity risk by utilising some or all of the following techniques:

- matching cash inflows with expected cash outflows using specific cash flow projections or more general asset and liability matching techniques such as duration matching;
- maintaining sufficient cash resources;
- investing in good credit-quality investments with deep and liquid markets to the degree to which they exist;
- monitoring investment concentrations and restricting them where appropriate, for example, by debt issues or issuers; and
- establishing committed contingency borrowing facilities.

Each of these techniques contributes to mitigating the three types of liquidity risk described above.

Every quarter, our insurance manufacturing subsidiaries are required to complete and submit liquidity risk reports to Group Insurance Head Office for collation and review by the Group Insurance Market and Liquidity Risk Meeting. Liquidity risk is assessed in these reports by measuring changes in expected cumulative net cash flows under a series of stress scenarios designed to determine the effect of reducing expected available liquidity and accelerating cash outflows. This is achieved, for example, by assuming new business or renewals are

lower, and surrenders or lapses are greater, than expected.

The following tables show the expected undiscounted cash flows for insurance contract liabilities and the remaining contractual maturity of investment contract liabilities at 31 December 2010. A significant proportion of our non-life insurance business is viewed as short-term, with the settlement of liabilities expected to occur within one year of the

period of risk. There is a greater spread of expected maturities for the life business where, in a large proportion of cases, the liquidity risk is borne in conjunction with policyholders (wholly in the case of unit-linked business).

The profile of the expected maturity of the insurance contracts as at 31 December 2010 remained comparable with 2009.

Expected maturity of insurance contract liabilities
(Audited)

	Expected cash flows (undiscounted)				
	Within 1 year US\$m	1-5 years US\$m	5-15 years US\$m	Over 15 years US\$m	Total US\$m
At 31 December 2010					
Non-life insurance	1,140	1,157	83	76	2,456
Life insurance (non-linked)	2,463	11,178	18,839	21,093	53,573
Life insurance (linked)	485	2,557	6,366	10,724	20,132
Total ⁸¹	4,088	14,892	25,288	31,893	76,161
At 31 December 2009					
Non-life insurance	1,318	1,277	123	10	2,728
Life insurance (non-linked)	2,393	10,098	17,253	18,231	47,975
Life insurance (linked)	522	2,290	4,483	6,899	14,194
Total ⁸²	4,233	13,665	21,859	25,140	64,897

For footnote, see page 174.

Remaining contractual maturity of investment contract liabilities
(Audited)

	Liabilities under investment contracts by insurance manufacturing subsidiaries			
	Linked investment contracts US\$m	Other investment contracts US\$m	Investment contracts with DPF US\$m	Total US\$m
At 31 December 2010				
Remaining contractual maturity: ⁸¹				
– due within 1 year	391	446	11	848
– due between 1 and 5 years	940	–	11	951
– due between 5 and 10 years	1,182	–	–	1,182
– due after 10 years	2,133	–	–	2,133
– undated ⁹⁰	3,675	3,372	22,052	29,099
	8,321	3,818	22,074	34,213
At 31 December 2009				
Remaining contractual maturity: ⁸²				
– due within 1 year	477	443	14	934
– due between 1 and 5 years	904	–	20	924
– due between 5 and 10 years	693	–	–	693
– due after 10 years	2,093	–	–	2,093
– undated ⁹⁰	3,180	3,492	20,980	27,652
	7,347	3,935	21,014	32,296

For footnotes, see page 174.

Report of the Directors: Operating and Financial Review (continued)

Risk > Risk management of insurance operations > PVIF insurance business / Economic assumptions / Non-economic assumptions

Present value of in-force long-term insurance business

(Audited)

Our life insurance business is accounted for using the embedded value approach which, *inter alia*, provides a comprehensive risk and valuation framework. The present value of our in-force long-term ('PVIF') asset at 31 December 2010 was

US\$3.4bn (2009: US\$2.8bn), representing the present value of the shareholders' interest in the profits expected to emerge from the book of in-force policies at that date.

The following table shows the movements recorded during the year in respect of total equity and PVIF of insurance operations:

Movements in total equity and PVIF of insurance operations

(Audited)

	2010		2009	
	Total equity US\$m	PVIF included in total equity US\$m	Total equity US\$m	PVIF included in total equity US\$m
At 1 January	8,580	2,780	7,577	2,033
Value of new business written during the year ⁹¹	737	737	600	600
Movements arising from in-force business:				
– expected return	(85)	(85)	(123)	(123)
– experience variances ⁹²	20	20	(44)	(44)
– change in operating assumptions	58	58	48	48
Investment return variances	19	19	16	16
Changes in investment assumptions	(38)	(38)	19	19
Return on net assets	858	–	522	–
Exchange differences and other	(222)	(51)	(83)	231
Capital transactions	(149)	–	48	–
At 31 December	9,778	3,440	8,580	2,780

For footnotes, see page 174.

Key assumptions used in the computation of PVIF for main life insurance operations

	2010			2009		
	UK %	Hong Kong %	France %	UK %	Hong Kong %	France %
Risk free rate	3.46	3.10	3.15	3.50	2.58	3.46
Risk discount rate	7.00	11.00	8.00	7.00	11.00	8.00
Expenses inflation	3.76	3.00	2.00	3.50	3.00	2.00

The calculation of the PVIF is based upon assumptions that take into account risk and uncertainty. To project these cash flows, a variety of assumptions regarding future experience is made by each insurance operation which reflects local market conditions and management's judgement of local future trends. Some of the Group's insurance operations incorporate risk margins separately in the projection assumptions for each product, while others incorporate risk margins into the overall discount rate. Both factors are reflected in the wide range of risk discount rates applied.

Economic assumptions

(Audited)

The following table shows the effect on the PVIF of reasonably possible changes in the main economic

assumptions, namely the risk-free and risk discount rates, across all insurance manufacturing subsidiaries.

Due to certain characteristics of the contracts, the relationships may be non-linear and the results of the stress-testing should not be extrapolated to higher levels of stress. In calculating the various scenarios, all assumptions are held stable except when testing the effect of the shift in the risk-free rate, when resultant changes to investment returns, risk discount rates and bonus rates are also incorporated. The sensitivities shown are before actions that could be taken by management to mitigate effects and before resultant changes in policyholder behaviour.

Sensitivity of PVIF to changes in economic assumptions
(Audited)

	PVIF at 31 December	
	2010 US\$m	2009 US\$m
+ 100 basis point shift in risk-free rate	231	212
– 100 basis point shift in risk-free rate	(190)	(145)
+ 100 basis point shift in risk discount rate	(179)	(140)
– 100 basis point shift in risk discount rate	205	162

Non-economic assumptions
(Audited)

We determine the policyholder liabilities and PVIF by reference to non-economic assumptions which include, for non-life manufacturers, claims costs and expense rates and, for life manufacturers, mortality and/or morbidity, lapse rates and expense rates. The table below shows the sensitivity of profit for 2010 and total equity at 31 December 2010 to reasonably possible changes in these non-economic assumptions at that date across all our insurance manufacturing subsidiaries, with comparatives for 2009.

The cost of claims is a risk associated with non-life insurance business. An increase in claims costs

Sensitivity analysis
(Audited)

2010

20% increase in claims costs	–	(211)	(211)
20% decrease in claims costs	–	211	211
10% increase in mortality and/or morbidity rates	(55)	–	(55)
10% decrease in mortality and/or morbidity rates	66	–	66
50% increase in lapse rates	(203)	–	(203)
50% decrease in lapse rates	363	–	363
10% increase in expense rates	(63)	(11)	(74)
10% decrease in expense rates	63	11	74

2009

20% increase in claims costs	–	(191)	(191)
20% decrease in claims costs	–	190	190
10% increase in mortality and/or morbidity rates	(51)	–	(51)
10% decrease in mortality and/or morbidity rates	62	–	62
50% increase in lapse rates	(162)	–	(162)
50% decrease in lapse rates	408	–	408
10% increase in expense rates	(52)	(11)	(63)
10% decrease in expense rates	52	11	63

would have a negative effect on profit. Our main exposures to this scenario are in the UK, Hong Kong, Latin America and Bermuda.

Mortality and morbidity risk is typically associated with life insurance contracts. The effect on profit of an increase in mortality or morbidity depends on the type of business being written. Our largest exposures to mortality and morbidity risk exist in France, Hong Kong, the UK and the US.

Sensitivity to lapse rates depends on the type of contracts being written. For insurance contracts, claims are funded by premiums received and income earned on the investment portfolio supporting the liabilities. For a portfolio of term assurance, an increase in lapse rates typically has a negative effect on profit due to the loss of future premium income on the lapsed policies. France, Hong Kong, the UK and the US are where we are most sensitive to a change in lapse rates.

Expense rate risk is the exposure to a change in expense rates. To the extent that increased expenses cannot be passed on to policyholders, an increase in expense rates will have a negative impact on our profits.

Effect on profit for the year to 31 December			Effect on total equity at 31 December		
Life US\$m	Non-life US\$m	Total US\$m	Life US\$m	Non-life US\$m	Total US\$m
–	(211)	(211)	–	(211)	(211)
–	211	211	–	211	211
(55)	–	(55)	(55)	–	(55)
66	–	66	66	–	66
(203)	–	(203)	(203)	–	(203)
363	–	363	363	–	363
(63)	(11)	(74)	(63)	(11)	(74)
63	11	74	63	11	74
–	(191)	(191)	–	(191)	(191)
–	190	190	–	190	190
(51)	–	(51)	(51)	–	(51)
62	–	62	62	–	62
(162)	–	(162)	(162)	–	(162)
408	–	408	408	–	408
(52)	(11)	(63)	(52)	(11)	(63)
52	11	63	52	11	63

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Risk > Other material risks > Reputational risk / Pension risk / Sustainability risk

Other material risks

Reputational risk

(Unaudited)

The safeguarding of our reputation is of paramount importance to our continued prosperity and is the responsibility of every member of staff.

We regularly review our policies and procedures for safeguarding against reputational and operational risks. This is an evolutionary process which takes account of relevant developments and industry guidance such as The Association of British Insurers' guidance on best practice when responding to environmental, social and governance ('ESG') risks.

We have always aspired to the highest standards of conduct and, as a matter of routine, take account of reputational risks to our business. Reputational risks can arise from a wide variety of causes, including ESG issues and operational risk events. As a banking group, our good reputation depends upon the way in which we conduct our business, but it can also be affected by the way in which clients, to whom we provide financial services, conduct themselves. The training of Directors on appointment includes reputational matters.

Group functions with responsibility for activities that attract reputational risk are represented at the Group Reputational Risk Committee ('GRRC'), which is chaired by the Group Chairman. The primary role of the GRRC is to consider areas and activities presenting significant reputational risk and, where appropriate, to make recommendations to the Risk Management Meeting and the GMB for policy or procedural changes to mitigate such risk. Reputational Risk Committees have been established in each of the Group's regions. These committees are required to ensure that reputational risks are considered at a regional as well as Group level. Minutes from the regional committees are tabled at GRRC.

Standards on all major aspects of business are set for HSBC and for individual subsidiaries, businesses and functions. Reputational risks, including ESG matters, are considered and assessed by the Board, the GMB, the Risk Management Meeting, subsidiary company boards, Board committees and senior management during the formulation of policy and the establishment of our standards. These policies, which form an integral part of the internal control system (see page 202), are communicated through manuals and statements of policy and are promulgated through internal

communications and training. The policies cover ESG issues and set out operational procedures in all areas of reputational risk, including money laundering deterrence, counter-terrorist financing, environmental impact, anti-corruption measures and employee relations. The policy manuals address risk issues in detail and co-operation between GMO departments and businesses is required to ensure a strong adherence to our risk management system and our sustainability practices.

Pension risk

(Unaudited)

We operate a number of pension plans throughout the world, as described in Note 7 on the Financial Statements. Some of them are defined benefit plans, of which the largest is the HSBC Bank (UK) Pension Scheme ('the principal plan').

In order to fund the benefits associated with these plans, sponsoring Group companies (and, in some instances, employees) make regular contributions in accordance with advice from actuaries and in consultation with the scheme's trustees (where relevant). The defined benefit plans invest these contributions in a range of investments designed to meet their long-term liabilities.

The level of these contributions has a direct impact on HSBC's cash flow and would normally be set to ensure that there are sufficient funds to meet the cost of the accruing benefits for the future service of active members. However, higher contributions will be required when plan assets are considered insufficient to cover the existing pension liabilities as a deficit exists. Contribution rates are typically revised annually or triennially, depending on the plan. The agreed contributions to the principal plan are revised triennially.

A deficit in a defined benefit plan may arise from a number of factors, including

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

A plan's investment strategy is determined after taking into consideration the market risk inherent in the investments and its consequential impact on potential future contributions. The long-term

investment objectives of both HSBC and, where relevant and appropriate, the trustees are:

- to limit the risk of the assets failing to meet the liabilities of the plans over the long-term; and
- to maximise returns consistent with an acceptable level of risk so as to control the long-term costs of the defined benefit plans.

In pursuit of these long-term objectives, a benchmark is established for the allocation of the defined benefit plan assets between asset classes. In addition, each permitted asset class has its own benchmarks, such as stock market or property valuation indices and, where relevant, desired levels of out-performance. The benchmarks are reviewed at least triennially within 18 months of the date at which an actuarial valuation is made, or more frequently if required by local legislation or circumstances. The process generally involves an extensive asset and liability review.

Ultimate responsibility for investment strategy rests with either the trustees or, in certain circumstances, a Management Committee. The degree of independence of the trustees from HSBC varies in different jurisdictions. For example, the principal plan, which accounts for approximately 70% of the obligations of our defined benefit pension plans, is overseen by a corporate trustee who regularly monitors the market risks inherent in the scheme.

The principal plan holds a diversified portfolio of investments to meet future cash flow liabilities arising from accrued benefits as they fall due to be paid. The trustee of the principal plan is required to produce a written Statement of Investment Principles which governs decision-making about how investments are made.

The DBS principal plan – asset allocation

	2010 %	2006 %
Equities	15.5	15.0
Bonds	56.5	50.0
Alternative assets ⁹³	10.5	10.0
Property	9.0	10.0
Cash	8.5	15.0
	100.0	100.0

For footnote, see page 174.

In 2006, HSBC and the trustee of the principal plan agreed to change the investment strategy in order to reduce the investment risk. The target asset allocations for this strategy at that time and as revised in 2010 are shown above. The strategy is to

hold the majority of assets in bonds, with the remainder in a more diverse range of investments, and includes a commitment to undertake a programme of swap arrangements (see Note 45 on the Financial Statements) by which the principal plan makes LIBOR-related interest payments in exchange for the receipt of cash flows which are based on projected future benefit payments to be made from the principal plan.

Sustainability risk

(Unaudited)

Assessing the environmental and social impacts of providing finance to our customers has been firmly embedded into our overall risk management processes.

Sustainability risks arise from the provision of financial services to companies or projects which run counter to the needs of sustainable development; in effect this risk arises when the environmental and social effects outweigh economic benefits. Within GMO, a separate function, Group Corporate Sustainability, is mandated to manage these risks globally working through local offices as appropriate. Sustainability Risk Managers have regional or national responsibilities for advising on and managing environmental and social risks.

Group Corporate Sustainability's risk management responsibilities include:

- formulating sustainability risk policies. This includes oversight of our sustainability risk standards, management of the Equator Principles for project finance lending, and sector-based sustainability policies covering those sectors with high environmental or social impacts (forestry, freshwater infrastructure, chemicals, energy, mining and metals, and defence-related lending); undertaking an independent review of transactions where sustainability risks are assessed to be high, and supporting our operating companies to assess similar risks of a lower magnitude;
- building and implementing systems-based processes to ensure consistent application of policies, reduce the costs of sustainability risk reviews and capture management information to measure and report on the effect of our lending and investment activities on sustainable development; and
- providing training and capacity building within our operating companies to ensure sustainability risks are identified and mitigated consistently to either our own standards, international standards or local regulations, whichever is higher.

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Risk > Other material risks > Residual value risk // Footnotes to Risk

Residual value risk

(Unaudited)

A significant part of a lessor's return from operating leases is dependent upon its management of residual value risk. This arises from operating lease transactions to the extent that the values recovered from disposing of leased assets or re-letting them at

the end of the lease terms (the 'residual values') differ from those projected at the inception of the leases.

The sale of our rail finance business 'Eversholt Rail Group' during the year has significantly reduced our exposure to residual value risk.

Footnotes to Risk

Credit risk

- 1 The amount of the loan commitments reflects, where relevant, the expected level of take-up of pre-approved loan offers made by mailshots to personal customers. In addition to those amounts, there is a further maximum possible exposure to credit risk of US\$220.2bn (2009: US\$62.3bn), reflecting the full take-up of such irrevocable loan commitments. The take-up of such offers is generally at modest levels.
- 2 A change in the write-off period in North America during 2009 resulted in an acceleration of write-offs which reduced residential mortgages by US\$1.9bn, other personal loans by US\$1.3bn and total personal lending by US\$3.3bn, with a corresponding reduction in impairment allowances. There was no significant effect on net loans and advances or loan impairment charges.
- 3 Residential mortgages include Hong Kong Government Home Ownership Scheme loans of US\$3.5bn at 31 December 2010 (2009: US\$3.5bn). Where disclosed, earlier comparatives were 2008: US\$3.9bn; 2007: US\$3.9bn; 2006: US\$4.1bn.
- 4 Other personal loans and advances include second lien mortgages and other property-related lending.
- 5 Other commercial loans and advances include advances in respect of agriculture, transport, energy and utilities.
- 6 Included within 'Total gross loans and advances to customers' ('TGLAC') is credit card lending of US\$62bn (2009: US\$68bn). Where disclosed, earlier comparatives were 2008: US\$75bn; 2007: US\$83bn; 2006: US\$75bn.
- 7 The above numbers for North America include a reclassification within the corporate and commercial lending category to reflect a more accurate presentation of lending in the region.
- 8 The impairment allowances on loans and advances to banks relate to the geographical regions, Europe, Middle East and North America.
- 9 These balances were between 0.75% and 1% of total assets. All other balances were above 1%.
- 10 We do not have material retail exposures in any of the eurozone countries listed in this table.
- 11 Includes balances at central banks. Lending to banks comprises non-trading loans and advances to banks including reverse repurchase transactions.
- 12 Derivative assets net of collateral and derivative liabilities for which a legally enforceable right of offset exists.
- 13 Includes residential mortgages of HSBC Bank USA and HSBC Finance.
- 14 Comprising Hong Kong, Rest of Asia-Pacific, Middle East and Latin America.
- 15 Negative equity arises when the value of the property used to secure a loan is below the balance outstanding on the loan, generally based on values at the balance sheet date.
- 16 Loan-to-value ratios are generally based on values at the balance sheet date.
- 17 HSBC Finance lending is shown on a management basis and includes loans transferred to HSBC USA Inc. which are managed by HSBC Finance.
- 18 Interest-only (affordability mortgages) are loans which are classified as 'interest only' for initial period before reverting to repayment. As a consequence, in the table 'Mortgage lending products' on page 109 these balances are included in the category 'Affordability mortgages, including ARMs'.
- 19 Stated income lending forms a subset of total mortgage services lending across all categories.
- 20 By states which individually account for 5% or more of HSBC Finance's US customer loan portfolio.
- 21 The average loss on sale of foreclosed properties is calculated as cash proceeds after deducting selling costs, commissions and other ancillary costs, minus the book value of the property when it was moved to assets held for sale, divided by the book value of the property when it was moved to assets held for sale.
- 22 The average total loss on foreclosed properties sold includes both the loss on sale (see footnote 21) and the cumulative write-downs recognised on the loans up to and upon classification as assets held for sale. This average total loss on foreclosed properties is expressed as a percentage of the book value of the property prior to its transfer to assets held for sale.
- 23 Percentages are expressed as a function of the relevant loans and receivables balance.
- 24 At 31 December 2010 and 2009, real estate secured delinquency included US\$4.2bn and US\$3.3bn, respectively, of loans that we carried at the lower of cost on net realisable value.
- 25 We observe the disclosure convention that, in addition to those classified as EL9 to EL10, retail accounts classified EL1 to EL8 that are delinquent by 90 days or more are considered impaired, unless individually they have been assessed as not impaired (see page 117, 'Past due but not impaired gross financial instruments').
- 26 The EL percentage is derived through a combination of PD and LGD, and may exceed 100% in circumstances where the LGD is above 100% reflecting the cost of recoveries.
- 27 Impairment allowances are not reported for financial instruments whereby the carrying amount is reduced directly for impairment and not through the use of an allowance account.
- 28 Impairment is not measured for assets held in trading portfolios or designated at fair value as assets in such portfolios are managed according to movements in fair value, and the fair value movement is taken directly to the income statement. Consequently, we report all such balances under 'Neither past due nor impaired'.
- 29 Loans and advances to customers includes asset-backed securities that have been externally rated as strong (2010: US\$4.1bn; 2009: US\$5.7bn), good (2010: US\$627m; 2009: US\$881m), satisfactory (2010: US\$452m; 2009: US\$311m), sub-standard (2010: US\$669m; 2009: US\$468m) and impaired (2010: US\$29m; 2009: US\$460m).
- 30 Impaired loans and advances are those classified as CRR 9, CRR 10, EL 9 or EL 10 and all retail loans 90 days or more past due, unless individually they have been assessed as not impaired (see page 117, 'Past due but not impaired gross financial instruments').

- 31 Collectively assessed loans and advances comprise homogeneous groups of loans that are not considered individually significant, and loans subject to individual assessment where no impairment has been identified on an individual basis, but on which a collective impairment allowance has been calculated to reflect losses which have been incurred but not yet identified.
- 32 Collectively assessed loans and advances not impaired are those classified as CRR1 to CRR8 and EL1 to EL8 but excluding retail loans 90 days past due.
- 33 Net of repo transactions, settlement accounts and stock borrowings.
- 34 As a percentage of loans and advances to banks and loans and advances to customers, as applicable.
- 35 Includes movement in impairment allowances against banks.
- 36 See table below 'Net loan impairment charge to the income statement by geographical region'.
- 37 Collectively assessed impairment allowances are allocated to geographical segments based on the location of the office booking the allowances or provisions. Consequently, the collectively assessed impairment allowances booked in Hong Kong may cover assets booked in branches located outside Hong Kong, principally in Rest of Asia-Pacific, as well as those booked in Hong Kong.
- 38 Total includes holdings of ABSs issued by Freddie Mac and Fannie Mae.
- 39 'Directly held' includes assets held by Solitaire where we provide first loss protection and assets held directly by the Group.
- 40 Impairment charges allocated to capital note holders represent impairments where losses would be borne by external third-party investors in the structures.
- 41 Mortgage-backed securities ('MBS's), asset-backed securities ('ABS's) and collateralised debt obligations ('CDO's).
- 42 High grade assets rated AA or AAA.
- 43 Gains or losses on the net principal exposure (footnote 49) recognised in the income statement as a result of changes in the fair value of the asset.
- 44 Fair value gains and losses on the net principal exposure (footnote 49) recognised in other comprehensive income as a result of the changes in the fair value of available-for-sale assets.
- 45 Realised fair value gains and losses on the net principal exposure (footnote 49) recognised in the income statement as a result of the disposal of assets or the receipt of cash flows from assets.
- 46 Reclassified from equity on impairment, disposal or payment. This includes impairment losses recognised in the income statement in respect of the net principal exposure (footnote 49) of available-for-sale assets. Payments are the contractual cash flows received on the assets.
- 47 The gross principal is the redemption amount on maturity or, in the case of an amortising instrument, the sum of the future redemption amounts through the residual life of the security.
- 48 A credit default swap ('CDS') gross protection is the gross principal of the underlying instrument that is protected by CDSs.
- 49 Net principal exposure is the gross principal amount of assets that are not protected by CDSs. It includes assets that benefit from monoline protection, except where this protection is purchased with a CDS.
- 50 Carrying amount of the net principal exposure.
- 51 Net exposure after legal netting and any other relevant credit mitigation prior to deduction of the credit risk adjustment.
- 52 Cumulative fair value adjustment recorded against exposures to OTC derivative counterparties to reflect their creditworthiness.
- 53 Funded exposures represent the loan amount advanced to the customer, less any fair value write-downs, net of fees held on deposit. Unfunded exposures represent the contractually committed loan facility amount not yet drawn down by the customer, less any fair value write-downs, net of fees held on deposit.

Liquidity and funding

- 54 2009 comparative data have been re-presented in line with the classification used in 2010. This resulted in an increase in the 'On demand' time band of US\$273,078m for 'Loan and other credit-related commitments' and US\$10,450m for 'Financial guarantees and similar contracts'. There was an equivalent reduction across the other time bands.
- 55 Figures provided for HSBC Bank plc and The Hongkong and Shanghai Banking Corporation incorporate all overseas branches. Subsidiaries of these entities are not included unless there is unrestricted transferability of liquidity between the subsidiaries and the parent.
- 56 This comprises our other main banking subsidiaries and, as such, includes businesses spread across a range of locations, in many of which we may require a higher ratio of net liquid assets to customer liabilities to reflect local market conditions.
- 57 Unused committed sources of secured funding for which eligible assets were held.
- 58 Client-originated asset exposures relate to consolidated multi-seller conduits (see page 363). These vehicles provide funding to our customers by issuing debt secured by a diversified pool of customer-originated assets.
- 59 HSBC-managed asset exposures relate to consolidated securities investment conduits, primarily Solitaire and Mazarin (see page 362). These vehicles issue debt secured by ABSs which are managed by HSBC. Of the total contingent liquidity risk under this category, US\$8.1bn was already funded on-balance sheet at 31 December 2010 (2009: US\$7.6bn) leaving a net contingent exposure of US\$17.5bn (2009: US\$21.5bn).
- 60 Other conduit exposures relate to third-party sponsored conduits (see page 364).
- 61 The five largest committed liquidity facilities provided to customers other than facilities to conduits.
- 62 The total of all committed liquidity facilities provided to the largest market sector, other than facilities to conduits.

Market risk

- 63 The structural foreign exchange risk is monitored using sensitivity analysis (see page 351). The reporting of commodity risk is consolidated with foreign exchange risk and is not applicable to non-trading portfolios.
- 64 The interest rate risk on the fixed-rate securities issued by HSBC Holdings is not included in the Group VAR. The management of this risk is described on page 148.
- 65 Credit spread sensitivity is reported separately for insurance operations (see page 165).
- 66 The standard deviation measures the variation of daily revenues about the mean value of those revenues.
- 67 The effect of any month-end adjustments, not attributable to a specific daily market move, is spread evenly over the days in the month in question.
- 68 Trading intent portfolios include positions arising from market-making and position taking.
- 69 Trading credit spread VAR was previously reported in the Group trading credit VAR. See page 148.
- 70 The total VAR is non-additive across risk types due to diversification effects. It incorporates credit spread VAR.

Report of the Directors: Operating and Financial Review (continued)

Risk > Footnotes to Risk // Capital > Capital management

- 71 Investments in private equity are primarily made through managed funds that are subject to limits on the amount of investment. Potential new commitments are subject to risk appraisal to ensure that industry and geographical concentrations remain within acceptable levels for the portfolio as a whole. Regular reviews are performed to substantiate the valuation of the investments within the portfolio.
- 72 Investments held to facilitate ongoing business include holdings in government-sponsored enterprises and local stock exchanges.
- 73 Instead of assuming that all interest rates move together, HSBC groups its interest rate exposures into currency blocs whose rates are considered likely to move together.

Risk management of insurance operations

- 74 HSBC has no insurance manufacturing subsidiaries in the Middle East.
- 75 Insurance contracts and investment contracts with discretionary participation features ('DPF') can give policyholders the contractual right to receive, as a supplement to their guaranteed benefits, additional benefits that may be a significant portion of the total contractual benefits, but whose amount and timing are determined by HSBC. These additional benefits are contractually based on the performance of a specified pool of contracts or assets, or the profit of the company issuing the contracts.
- 76 Although investment contracts with DPF are financial investments, HSBC continues to account for them as insurance contracts as permitted by IFRS 4.
- 77 Net written insurance premiums represent gross written premiums less gross written premiums ceded to reinsurers.
- 78 Term assurance includes credit life insurance.
- 79 Other assets comprise shareholder assets.
- 80 Present value of in-force long-term insurance contracts and investment contracts with DPF.
- 81 Does not include associated insurance companies, Ping An Insurance, SABB Takaful Company and Bao Viet, or joint venture insurance companies, Hana Life and Canara HSBC Oriental Bank of Commerce Life Insurance Company Limited.
- 82 Does not include associated insurance companies, Ping An Insurance and SABB Takaful Company or joint venture insurance companies, Hana Life and Canara HSBC Oriental Bank of Commerce Life Insurance Company Limited.
- 83 Comprise life linked insurance contracts and linked long-term investment contracts.
- 84 Comprise life non-linked insurance contracts and non-linked long-term investment contracts.
- 85 Comprises non-life insurance contracts.
- 86 Comprise mainly loans and advances to banks, cash and intercompany balances with other non-insurance legal entities.
- 87 The table excludes contracts where the risk is 100% reinsured.
- 88 Impairment is not measured for debt securities held in trading portfolios or designated at fair value, as assets in such portfolios are managed according to movements in fair value, and the fair value movement is taken directly to the income statement. Consequently, we report all such balances under 'neither past due nor impaired'.
- 89 Shareholders' funds comprise solvency and unencumbered assets.
- 90 In most cases, policyholders have the option to terminate their contracts at any time and receive the surrender values of their policies. These may be significantly lower than the amounts shown above.
- 91 Value of net new business during the year is the present value of the projected stream of profits from the business.
- 92 Experience variances include the effect of the difference between demographic, expense and persistency assumptions used in the previous PVIF calculation and actual experience observed during the year.

Pension risk

- 93 In 2010, alternative assets included ABSs, MBSs and infrastructure assets. In 2006, alternative assets included loans and infrastructure assets.

Capital

Capital management

(Audited)

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

It is our objective to maintain a strong capital base to support the development of our business and to meet regulatory capital requirements at all times. To achieve this, our policy is to hold capital in a range of different forms and from diverse sources, and all capital raising is agreed with major subsidiaries as part of their individual and the Group's overall capital management processes.

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

Capital measures

- market capitalisation is the stock market value of the company;
- invested capital is the equity capital invested in HSBC by our shareholders;
- economic capital is the internally calculated capital requirement which we deem necessary to support the risks to which we are exposed at a confidence level consistent with a target credit rating of AA; and
- regulatory capital is the capital which we are required to hold in accordance with the rules established by the FSA for the consolidated Group and by our local regulators for individual Group companies.

The following risks managed through the capital management framework have been identified as material: credit, market, operational, interest rate risk in the banking book, pension fund, insurance and residual risks.

We incorporate stress testing in the capital management framework, and it is important in understanding the sensitivities of the core assumptions in our capital plans to the adverse effect of extreme, but plausible, events. Stress testing allows us to formulate our response, including risk mitigation actions, in advance of conditions starting to exhibit the stress scenarios identified. The actual market stresses which occurred throughout the financial system during recent years have been used

to inform our capital planning process and further develop the stress scenarios we employ.

In addition to our internal stress tests, others are carried out, both at the request of regulators and by the regulators themselves using their prescribed assumptions. We take into account the results of all such regulatory stress testing when undertaking our internal capital management assessment.

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

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

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

The tier 1 ratio (unaudited) increased to 12.1% at 31 December 2010 (2009: 10.8%). It is our belief that this enhanced ratio is appropriate in light of our current evolution of the regulatory framework.

Report of the Directors: Operating and Financial Review (continued)

Capital > Capital measurement and allocation

Capital measurement and allocation

(Unaudited)

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

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

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

Regulatory capital

Our capital is divided into two tiers:

- tier 1 capital is divided into core tier 1 and other tier 1 capital. Core tier 1 capital comprises shareholders’ equity and related non-controlling interests. The book values of goodwill and intangible assets are deducted from core tier 1 capital and other regulatory adjustments are made for items reflected in shareholders’ equity which are treated differently for the purposes of capital adequacy. Qualifying capital instruments such as non-cumulative perpetual preference shares and hybrid capital securities are included in other tier 1 capital; and
- tier 2 capital comprises qualifying subordinated loan capital, related non-controlling interests, allowable collective impairment allowances and unrealised gains arising on the fair valuation of equity instruments held as available for sale. Tier 2 capital also includes reserves arising from the revaluation of properties.

To ensure the overall quality of the capital base, the FSA’s rules set limits on the amount of hybrid capital instruments that can be included in tier 1 capital relative to core tier 1 capital, and also limits overall tier 2 capital to no more than tier 1 capital.

Regulatory and accounting consolidations

The basis of consolidation for financial accounting purposes is described on page 251 and differs from that used for regulatory purposes. Investments in banking associates are equity accounted in the financial accounting consolidation, whereas their exposures are proportionally consolidated for regulatory purposes. Subsidiaries and associates engaged in insurance and non-financial activities are excluded from the regulatory consolidation and are deducted from regulatory capital. The regulatory consolidation does not include SPEs where significant risk has been transferred to third parties. Exposures to these SPEs are risk-weighted as securitisation positions for regulatory purposes.

Pillar 1 capital requirements

Pillar 1 covers the capital resources requirements for credit risk, market risk and operational risk. Credit risk includes counterparty credit risk and securitisation requirements. These requirements are expressed in terms of risk-weighted assets (‘RWA’s).

Credit risk capital requirements

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

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

For credit risk, with the FSA’s approval, we have adopted the IRB advanced approach for the majority of our business, with the remainder on either IRB foundation or standardised approaches.

For consolidated group reporting, the FSA's rules permit the use of other regulators' standardised approaches where they are considered equivalent. The use of other regulators' IRB approaches is subject to the agreement of the FSA. Under our Basel II rollout plans, a number of our Group companies and portfolios are in transition to advanced IRB approaches. At December 2010, portfolios in much of Europe, Hong Kong, Rest of Asia-Pacific and North America were on advanced IRB approaches. Others remain on the standardised or foundation approaches under Basel II, pending definition of local regulations or model approval, or under exemptions from IRB treatment.

Counterparty credit risk

Counterparty credit risk arises for OTC derivatives and securities financing transactions. It is calculated in both the trading and non-trading books and is the risk that the counterparty to a transaction may default before completing the satisfactory settlement of the transaction. Three approaches to calculating counterparty credit risk and determining exposure values are defined by Basel II: standardised, mark-to-market and internal model method. These exposure values are used to determine capital requirements under one of the credit risk approaches: standardised, IRB foundation and IRB advanced.

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

Securitisation

Basel II specifies two methods for calculating credit risk requirements for securitisation positions in the non-trading book, being the standardised and IRB approaches. Both approaches rely on the mapping of rating agency credit ratings to risk weights, which range between 7% and 1,250%. Positions that would otherwise be weighted at 1,250% are deducted from capital.

Within the IRB approach, we use the Ratings Based Method for the majority of our non-trading book securitisation positions, and the Internal Assessment Approach for unrated liquidity facilities and programme-wide enhancements for asset-backed securitisations. We use the IRB approach for the majority of our non-trading book securitisation positions, while those in the trading book are treated like other market risk positions.

Market risk capital requirement

The market risk capital requirement is measured, with FSA permission, using VAR models, or the standard rules prescribed by the FSA.

We use both VAR and standard rules approaches for market risk. Our aim is to migrate more positions from standard rules to VAR.

Operational risk capital requirement

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

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

Pillar 2 capital requirements

The second pillar of Basel II (Supervisory Review and Evaluation Process) involves both firms and regulators taking a view on whether a firm should hold additional capital against risks not covered in pillar 1. Part of the pillar 2 process is the Internal Capital Adequacy Assessment Process which is the firm's self assessment of the levels of capital that it needs to hold. The pillar 2 process culminates in the FSA providing firms with Individual Capital Guidance ('ICG'). The ICG is set as a capital resources requirement higher than that required under pillar 1. In 2011, this will be supplemented by an additional Capital Planning Buffer, set by the FSA, to cover capital demand should economic conditions worsen considerably against the current outlook.

Pillar 3 disclosure requirements

Pillar 3 of Basel II is related to market discipline and aims to make firms more transparent by requiring them to publish specific, prescribed details of their risks, capital and risk management under the Basel II framework. Our pillar 3 disclosures for the year ended 31 December 2010 are published as a separate document on the Group Investor Relations website.

Report of the Directors: Operating and Financial Review (continued)**Capital > Capital measurement and allocation / Future developments***Capital structure at 31 December*

	2010 US\$m	2009 US\$m
Composition of regulatory capital		
<i>(Audited)</i>		
Tier 1 capital		
Shareholders' equity	142,746	135,252
Shareholders' equity per balance sheet ¹	147,667	128,299
Preference share premium	(1,405)	(1,405)
Other equity instruments	(5,851)	(2,133)
Deconsolidation of special purpose entities ²	2,335	10,491
Non-controlling interests	3,917	3,932
Non-controlling interest per balance sheet	7,248	7,362
Preference share non-controlling interests	(2,426)	(2,395)
Non-controlling interest transferred to tier 2 capital	(501)	(678)
Non-controlling interest in deconsolidated subsidiaries	(404)	(357)
Regulatory adjustments to the accounting basis	1,794	164
Unrealised losses on available-for-sale debt securities ³	3,843	906
Own credit spread	(889)	(1,050)
Defined benefit pension fund adjustment ⁴	1,676	2,508
Reserves arising from revaluation of property and unrealised gains on available-for-sale equities	(3,121)	(2,226)
Cash flow hedging reserve	285	26
Deductions	(32,341)	(33,088)
Goodwill capitalised and intangible assets	(28,001)	(28,680)
50% of securitisation positions	(1,467)	(1,579)
50% of tax credit adjustment for expected losses	241	546
50% of excess of expected losses over impairment allowances	(3,114)	(3,375)
Core tier 1 capital	116,116	106,260
Other tier 1 capital before deductions	17,926	15,798
Preference share premium	1,405	1,405
Preference share non-controlling interests	2,426	2,395
Hybrid capital securities	14,095	11,998
Deductions	(863)	99
Unconsolidated investments ⁵	(1,104)	(447)
50% of tax credit adjustment for expected losses	241	546
Tier 1 capital	133,179	122,157
Tier 2 capital		
Total qualifying tier 2 capital before deductions	52,713	50,075
Reserves arising from revaluation of property and unrealised gains on available-for-sale equities	3,121	2,226
Collective impairment allowances ⁶	3,109	4,120
Perpetual subordinated debt	2,781	2,987
Term subordinated debt	43,402	40,442
Non-controlling interest in tier 2 capital	300	300
Total deductions other than from tier 1 capital	(18,337)	(16,503)
Unconsolidated investments ⁵	(13,744)	(11,547)
50% of securitisation positions	(1,467)	(1,579)
50% of excess of expected losses over impairment allowances	(3,114)	(3,375)
Other deductions	(12)	(2)
Total regulatory capital	167,555	155,729
Risk-weighted assets		
<i>(Unaudited)</i>		
Credit risk	890,696	903,518
Counterparty credit risk	50,175	51,892
Market risk	38,679	51,860
Operational risk	123,563	125,898
Total	1,103,113	1,133,168

Capital ratios*(Unaudited)*

	2010 %	2009 %
Core tier 1 ratio	10.5	9.4
Tier 1 ratio	12.1	10.8
Total capital ratio	15.2	13.7

For footnotes, see page 182.

Source and application of tier 1 capital**Movement in tier 1 capital***(Audited)*

	2010 US\$m	2009 US\$m
Opening tier 1 capital	122,157	95,336
Contribution to tier 1 capital from profit for the year	13,218	10,247
Consolidated profits attributable to shareholders of the parent company	13,159	5,834
Removal of own credit spread net of tax	59	4,413
Net dividends	(3,827)	(3,969)
Dividends	(6,350)	(5,639)
Add back: shares issued in lieu of dividends	2,523	1,670
Decrease/(increase) in goodwill and intangible assets deducted	679	(1,819)
Ordinary shares issued	180	18,399
Rights issue (net of expenses) ⁷	–	18,326
Other	180	73
Hybrid capital securities issued net of redemptions	2,368	–
Foreign currency translation differences	(526)	4,837
Other	(1,070)	(874)
Closing tier 1 capital	133,179	122,157
Movement in risk-weighted assets <i>(Unaudited)</i>		
At 1 January	1,133,168	1,147,974
Movements	(30,055)	(14,806)
At 31 December	1,103,113	1,133,168

For footnotes, see page 182.

Movement in tier 1 capital*(Audited)*

HSBC complied with the FSA's capital adequacy requirements throughout 2010 and 2009. Profits attributable to shareholders of the parent company increased capital by US\$13.2bn, offset by net dividends of US\$3.8bn after taking account of shares issued in lieu of dividends. Hybrid capital securities issued, net of redemptions, increased tier 1 capital by US\$2.4bn.

Movement in risk-weighted assets*(Unaudited)*

RWAs decreased by US\$30.1bn or 3% in 2010. Of this reduction, US\$12.8bn was due to credit risk, reflecting decreases in North America and Europe offset by increases in Asia and Latin America. There has been a decline in some North American retail portfolio exposures as a result of run off. However, the deterioration in the US economy and housing market in recent years has resulted in increases in the

average risk weighting applicable to those portfolios as we progressively captured the effects of these events within the various Basel II model parameters. Market risk RWAs decreased by US\$13.2bn, primarily due to reduced market volatility and continuing exposure management.

Future developments*(Unaudited)*

The regulation and supervision of financial institutions continues to undergo significant change in response to the global financial crisis. In December 2010, the Basel Committee issued final rules in two documents: *A global regulatory framework for more resilient banks and banking systems* and *International framework for liquidity risk measurement, standards and monitoring*, which together are commonly referred to as 'Basel III'. The new minimum capital requirements will be phased in from 1 January 2013, with full implementation required by 1 January 2019. The minimum common

Report of the Directors: Operating and Financial Review (continued)

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equity tier 1 requirement of 4.5% and additional capital conservation buffer requirement of 2.5% will be phased in sequentially from 1 January 2013, becoming fully effective on 1 January 2019. Any additional countercyclical capital buffer requirements will also be phased in, starting in 2016, in parallel with the capital conservation buffer to a maximum level of 2.5% effective on 1 January 2019, although individual jurisdictions may choose to implement larger countercyclical capital buffers. The leverage ratio will be subject to a supervisory monitoring period, which commenced on 1 January 2011, and a parallel run period which will run from 1 January 2013 until 1 January 2017. Further calibration of the leverage ratio will be carried out in the first half of 2017, with a view to migrating to a pillar 1 requirement from 1 January 2018. The Basel Committee has increased the capital requirements for the trading book and complex securitisation exposures which are due to be implemented on 31 December 2011. They will continue to conduct the fundamental review of the trading book, which is targeted for completion by the end of 2011. In addition to the reforms discussed above, institutions designated as G-SIFIs may be subjected to additional requirements, which have yet to be proposed by regulators. The Basel Committee will provide the approach to defining G-SIFIs by the end of 2011. On 13 January 2011, the Basel Committee issued further minimum requirements to ensure that all classes of capital instruments fully absorb losses at the point of non-viability before taxpayers are exposed to loss. Instruments issued on or after 1 January 2013 may only be included in regulatory capital if the new requirements are met. The capital treatment of securities issued prior to this date will be phased out over a 10-year period commencing 1 January 2013.

Impact of Basel III

(Unaudited)

In order to provide some insight into the possible effects of the new Basel III rules on HSBC, we have estimated the pro forma common equity tier 1 ratio of the Group on the basis of our interpretation of those rules, as they would apply at 1 January 2019, but based on the position at 31 December 2010.

We have estimated that the application of the full Basel III rules on a pro forma basis would result in a common equity tier 1 ratio which is lower than the Basel II core tier 1 ratio by some 250–300 basis points. However, as the new rules will be phased in between 1 January 2013 and 1 January 2019, their impact will be gradual over that period. This estimate does not, however, take account of any future retained earnings, nor any management actions to reduce RWAs. The Basel III changes relate to increased capital deductions, new regulatory adjustments and increases in RWAs. The majority of the increase in RWAs relates to Basel III changes which are scheduled to come into effect on 1 January 2013, in particular to changes to counterparty credit risk capital charges and amounts for securitisation positions that were previously deducted from capital that will now be risk-weighted instead. Other increases in RWAs will begin to be phased in from 1 January 2014, including the majority of the unconsolidated investments that were previously deducted from capital. The remainder of the RWA increase arises from increases in trading book capital requirements which take effect on 31 December 2011, primarily relating to changes in market risk.

The estimated impact of Basel III is subject to change as regulators develop their requirements around the practical application and interpretation of the new rules, in particular the counterparty credit risk capital charge. Further uncertainty remains regarding any capital requirements which may be imposed on the Group over the period to 1 January 2019 in respect of the countercyclical capital buffer and any additional regulatory requirements for G-SIFIs. Under the Basel III rules as they will apply from 1 January 2019, we believe that ultimately the level for the common equity tier 1 ratio of the Group may lie in the range 9.5% to 10.5%. This exceeds the minimum requirement for common equity tier 1 capital plus the capital conservation buffer. HSBC has a strong track record of capital generation and actively manages its RWAs. Before these new rules come into force, we will take appropriate management action over the implementation period to 1 January 2019 to reduce the quantum of increase in RWAs that would have occurred if the new rules had been in effect at 31 December 2010.

Footnotes to Capital

- 1 Includes externally verified profits for the year to 31 December 2010.
- 2 Mainly comprises unrealised losses on available-for-sale debt securities within special purpose entities which are excluded from the regulatory consolidation.
- 3 Under FSA rules, unrealised gains/losses on debt securities net of tax must be excluded from capital resources.
- 4 Under FSA rules, the defined benefit liability may be substituted with the additional funding that will be paid into the relevant schemes over the following five year period.
- 5 Mainly comprise investments in insurance entities.
- 6 Under FSA rules, collective impairment allowances on loan portfolios on the standardised approach are included in tier 2 capital.
- 7 Rights issue excludes US\$493m of losses arising on derivative contracts and certain fees, which are recognised in the income statement.