HSBC HOLDINGS PLC
Form 6-K
March 27, 2014

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Report of Foreign Private Issuer

Pursuant to Rule 13a - 16 or 15d - 16 of

the Securities Exchange Act of 1934

For the month of March
HSBC Holdings plc

42nd Floor, 8 Canada Square, London E14 5HQ, England

(Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F).

Form 20-F X Form 40-F .....

(Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934).

Yes..... No X

(If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82-.....).

14 Trading assets

	2013 US$m	2012 US$m
Trading assets:		
- not subject to repledge or resale by counterparties	201,492	305,312
.....		
	101,700	103,499

- which may be repledged or resold by counterparties		
	303,192	408,811
Treasury and other eligible bills	21,584	26,282
Debt securities	141,644	144,677
Equity securities	63,891	41,634
Trading securities at fair value	227,119	212,593
Loans and advances to banks	27,885	78,271
Loans and advances to customers	48,188	117,947
	303,192	408,811

Trading securities valued at fair value1

	Fair value	
	2013	2012
	US$m	US$m
US Treasury and US Government agencies2	23,450	28,405
UK Government	11,591	11,688
Hong Kong Government	5,909	6,228
Other government	86,714	91,498
Asset-backed securities3	2,736	2,896
Corporate debt and other securities	32,828	30,244
Equity securities	63,891	41,634
	227,119	212,593

1 Included within these figures are debt securities issued by banks and other financial institutions of US$22,989m (2012: US$20,274m), of which US$3,973m (2012: US$3,469m) are guaranteed by various governments.
2 Include securities that are supported by an explicit guarantee issued by the US Government.
3 Exclude asset-backed securities included under US Treasury and US Government agencies.

Trading securities listed on a recognised exchange and unlisted

	Treasury and other eligible bills US$m	Debt securities US$m	Equity securities US$m	Total US$m
Fair value at 31 December 2013				
Listed1	194	85,821	62,724	148,739
Unlisted2	21,390	55,823	1,167	78,380
	21,584	141,644	63,891	227,119
Fair value at 31 December 2012				
Listed1	606	82,732	39,945	123,283
Unlisted2	25,676	61,945	1,689	89,310
	26,282	144,677	41,634	212,593

1 Included within listed investments are US$3,836m (2012: US$2,828m) of investments listed on a recognised exchange in Hong Kong.
2 Unlisted treasury and other eligible bills primarily comprise treasury bills not listed on an exchange but for which there is a liquid market.

Loans and advances to banks held for trading

	2013 US$m	2012 US$m
Reverse repos1	2,940	45,015
Settlement accounts	7,572	6,324
Stock borrowing	2,323	5,361
Other	15,050	21,571
	27,885	78,271

Loans and advances to customers held for trading

	2013 US$m	2012 US$m
Reverse repos1	7,180	73,666
	11,863	8,186

Settlement accounts		
Stock borrowing	7,995	10,710
Other	21,150	25,385
	48,188	117,947

1 In 2013, GB&M changed the way it manages repo and reverse repo activities in the Credit and Rates businesses as set out on page 220. This led to a reduction in the amount of reverse repos classified as trading assets.

15 Fair values of financial instruments carried at fair value

The accounting policies which determine the classification of financial instruments and the use of assumptions and estimation in valuing them are described on pages 432 to 450 and page 74. The fair value of financial instruments is generally measured on the basis of the individual financial instrument. However, when HSBC manages a group of financial assets and financial liabilities on the basis of its net exposure to either market risks or credit risk, it measures the fair value of the group of financial instruments on a net basis, but presents the underlying financial assets and liabilities separately in the financial statements, unless they satisfy the IFRSs offsetting criteria as described on page 442.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The following table sets out the financial instruments carried at fair value.

Financial instruments carried at fair value and bases of valuation

	Valuation techniques			
	Quoted market price Level 1 US$m	Using observable inputs Level 2 US$m	With significant unobservable inputs Level 3 US$m	Total US$m
Recurring fair value measurements				
At 31 December 2013				
Assets				
Trading assets	182,721	115,124	5,347	303,192
Financial assets designated at fair value	30,173	7,649	608	38,430
Derivatives	2,539	277,224	2,502	282,265
Financial investments: available for sale	262,836	130,760	7,245	400,841
Liabilities				
Trading liabilities	88,935	110,576	7,514	207,025
	10,482	78,602	-	89,084

Financial liabilities designated at fair value				
Derivatives	4,508	267,441	2,335	274,284
At 31 December 2012				
Assets				
Trading assets	198,843	205,590	4,378	408,811
Financial assets designated at fair value	25,575	7,594	413	33,582
Derivatives	1,431	352,960	3,059	357,450
Financial investments: available for sale	253,246	135,931	8,511	397,688
Liabilities				
Trading liabilities	116,550	180,543	7,470	304,563
Financial liabilities designated at fair value	10,703	77,017	-	87,720
Derivatives	1,506	354,375	3,005	358,886

The decrease in Level 2 trading assets and liabilities reflects the change in the way GB&M manages repo and reverse repo activities described on page 220. Movement in derivative balances is described in Note 18.

Transfers between Level 1 and Level 2 fair values

	Assets				Liabilities		
	Available for sale US$m	Held for trading US$m	Designated at fair value through profit or loss US$m	Derivatives US$m	Held for trading US$m	Designated at fair value through profit or loss US$m	Derivatives US$m
At 31 December 2013							
Transfers from Level 1 to Level 2	110	24,140	-	18	35,274	-	17
Transfers from Level 2 to Level 1	1,275	1,264	423	-	-	-	-

Transfers between levels of the fair value hierarchy are deemed to occur at the end of each semi-annual reporting period. Transfers from Level 1 to Level 2 reflect the reclassification of settlement balances and cash collateral following reassessment of the application of levelling criteria to these balances. Transfers from Level 2 to Level 1 related to increased liquidity in certain emerging market government bonds.

Control framework

Fair values are subject to a control framework designed to ensure that they are either determined or validated by a function independent of the risk-taker.

For all financial instruments where fair values are determined by reference to externally quoted prices or observable pricing inputs to models, independent price determination or validation is utilised. In inactive markets, direct observation of a traded price may not be possible. In these circumstances, HSBC will source alternative market information to validate the financial instrument's fair value, with greater weight given to information that is considered to be more relevant and reliable. The factors that are considered in this regard are, inter alia:

· the extent to which prices may be expected to represent genuine traded or tradeable prices;
· the degree of similarity between financial instruments;
· the degree of consistency between different sources;
· the process followed by the pricing provider to derive the data;
· the elapsed time between the date to which the market data relates and the balance sheet date; and
· the manner in which the data was sourced.

For fair values determined using valuation models, the control framework may include, as applicable, development or validation by independent support functions of (i) the logic within valuation models; (ii) the inputs to those models; (iii) any adjustments required outside the valuation models; and (iv) where possible, model outputs. Valuation models are subject to a process of due diligence and calibration before becoming operational and are calibrated against external market data on an ongoing basis.

The majority of financial instruments measured at fair value are in GB&M. GB&M's fair value governance structure is illustrated below as an example:
Determination of fair value

Fair values are determined according to the following hierarchy:

· Level 1 - quoted market price:financial instruments with quoted prices for identical instruments in active markets that HSBC can access at the measurement date.

· Level 2 - valuation technique using observable inputs: financial instruments with quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in inactive markets and financial instruments valued using models where all significant inputs are observable.

· Level 3 - valuation technique with significant unobservable inputs: financial instruments valued using valuation techniques where one or more significant inputs are unobservable.

The best evidence of fair value is a quoted price in an actively traded market. The fair values of financial instruments that are quoted in active markets are based on bid prices for assets held and offer prices for liabilities issued. Where a financial instrument has a quoted price in an active market, the fair value of the total holding of the financial instrument is calculated as the product of the number of units and quoted price. In the event that the market for a financial instrument is not active, a valuation technique is used.

The judgement as to whether a market is active may include, but is not restricted to, the consideration of factors such as the magnitude and frequency of trading activity, the availability of prices and the size of bid/offer spreads. The bid/offer spread represents the difference in prices at which a market participant would be willing to buy compared with the price at which they would be willing to sell. In inactive markets, obtaining assurance that the transaction price provides evidence of fair value or determining the adjustments to transaction prices that are necessary to measure the fair value of the instrument requires additional work during the valuation process.

Valuation techniques

Valuation techniques incorporate assumptions about factors that other market participants would use in their valuations. A range of valuation techniques is employed, dependent on the instrument type and available market data. Most valuation techniques are based upon discounted cash flow analyses, in which expected future cash flows are calculated and discounted to present value using a discounting curve. Prior to considering credit risk, the expected future cash flows may be known, as would be the case for the fixed leg of an interest rate swap, or may be uncertain and require projection, as would be the case for the floating leg of an interest rate swap. 'Projection' utilises market forward curves, if available. In option models, the probability of different potential future outcomes must be considered. In addition, the value of some products are dependent on more than one market factor, and in these cases it will typically be necessary to consider how movements in one market factor may affect the other market factors. The model inputs necessary to perform such calculations include interest rate yield curves, exchange rates, volatilities, correlations, prepayment and default rates. For interest rate derivatives with collateralised counterparties and in significant currencies, HSBC uses a discounting curve that reflects the overnight interest rate ('OIS discounting').

The majority of valuation techniques employ only observable market data. However, certain financial instruments are valued on the basis of valuation techniques that feature one or more significant market inputs that are unobservable, and for them the measurement of fair value is more judgemental. An instrument in its entirety is classified as valued using significant unobservable inputs if, in the opinion of management, a significant proportion of the instrument's inception profit ('day 1 gain or loss') or greater than 5% of the instrument's valuation is driven by unobservable inputs. 'Unobservable' in this context means that there is little or no current market data available from which to determine the price at which an arm's length transaction would be likely to occur. It generally does not mean that there is no data available at all upon which to base a determination of fair value (consensus pricing data may, for example, be used). All fair value adjustments are included within the levelling determination.

In certain circumstances, HSBC records its own debt in issue at fair value, based on quoted prices in an active market for the specific instrument concerned, where available. An example of this is where own debt in issue is hedged with interest rate derivatives. When quoted market prices are unavailable, the own debt in issue is valued using valuation techniques, the inputs for which are either based upon quoted prices in an inactive market for the instrument, or are estimated by comparison with quoted prices in an active market for similar instruments. In both cases, the fair value includes the effect of applying the credit spread which is appropriate to HSBC's liabilities. The change in fair value of issued debt securities attributable to the Group's own credit spread is computed as follows: for each security at each reporting date, an externally verifiable price is obtained or a price is derived using credit spreads for similar securities for the same issuer. Then, using discounted cash flow, each security is valued using a Libor-based discount curve. The difference in the valuations is attributable to the Group's own credit spread. This methodology is applied consistently across all securities.

Structured notes issued and certain other hybrid instrument liabilities are included within trading liabilities and are measured at fair value. The credit spread applied to these instruments is derived from the spreads at which HSBC issues structured notes.

Gains and losses arising from changes in the credit spread of liabilities issued by HSBC reverse over the contractual life of the debt, provided that the debt is not repaid at a premium or a discount.

Changes in fair value are generally subject to a profit and loss analysis process. This process disaggregates changes in fair value into three high level categories; (i) portfolio changes, such as new transactions or maturing transactions, (ii) market movements, such as changes in foreign exchange rates or equity prices, and (iii) other, such as changes in fair value adjustments, discussed below.

Fair value adjustments

Fair value adjustments are adopted when HSBC considers that there are additional factors that would be considered by a market participant which are not incorporated within the valuation model. HSBC classifies fair value adjustments as either 'risk-related' or 'model-related'. The majority of these adjustments relate to GB&M.

Movements in the level of fair value adjustments do not necessarily result in the recognition of profits or losses within the income statement. For example, as models are enhanced, fair value adjustments may no longer be required. Similarly, fair value adjustments will decrease when the related positions are unwound, but this may not result in profit or loss.

Global Banking and Markets fair value adjustments

	At 31 December 2013 US$m	At 31 December 2012 US$m
Type of adjustment		
Risk-related	1,565	2,013
Bid-offer	561	638
Uncertainty	343	142
Credit valuation adjustment	1,274	1,747
Debit valuation adjustment	(616)	(518)
Other	3	4
Model-related	202	162
Model limitation	199	161
Other	3	1
Inception profit (Day 1 P&L reserves) (Note 18)	167	181
	1,934	2,356

Fair value adjustments declined by US$422m during the year. The most significant movement was a decline of US$473m in respect of the credit valuation adjustment, as a result of both reduced derivative counterparty exposures and general narrowing of CDS spreads.

Risk-related adjustments

Bid-offer

IFRS 13 requires use of the price within the bid-offer spread that is most representative of fair value. Valuation models will typically generate mid-market values. The bid-offer adjustment reflects the extent to which bid-offer costs would be incurred if substantially all residual net portfolio market risks were closed using available hedging instruments or by disposing of or unwinding the position.

Uncertainty

Certain model inputs may be less readily determinable from market data, and/or the choice of model itself may be more subjective. In these circumstances, there exists a range of possible values that the financial instrument or market parameter may assume and an adjustment may be necessary to reflect the likelihood that in estimating the fair value of the financial instrument, market participants would adopt more conservative values for uncertain parameters and/or model assumptions than those used in the valuation model.

Credit valuation adjustment

The credit valuation adjustment is an adjustment to the valuation of OTC derivative contracts to reflect within fair value the possibility that the counterparty may default and that HSBC may not receive the full market value of the transactions (see below).

Debit valuation adjustment

The debit valuation adjustment is an adjustment to the valuation of OTC derivative contracts to reflect within fair value the possibility that HSBC may default, and that HSBC may not pay full market value of the transactions (see below).

Model-related adjustments

Model limitation

Models used for portfolio valuation purposes may be based upon a simplifying set of assumptions that do not capture all material market characteristics. Additionally, markets evolve, and models that were adequate in the past may require development to capture all material market characteristics in current market conditions. In these circumstances, model limitation adjustments are adopted. As model development progresses, model limitations are addressed within the valuation models and a model limitation adjustment is no longer needed.

Inception profit (Day 1 P&L reserves)

Inception profit adjustments are adopted when the fair value estimated by a valuation model is based on one or more significant unobservable inputs. The accounting for inception profit adjustments is discussed on page 433. An analysis of the movement in the deferred Day 1 P&L reserve is provided on page 501.

Credit valuation adjustment/debit valuation adjustment methodology

HSBC calculates a separate credit valuation adjustment ('CVA') and debit valuation adjustment ('DVA') for each HSBC legal entity, and within each entity for each counterparty to which the entity has exposure. The calculation of the monoline credit valuation adjustment is described on page 208.

HSBC calculates the CVA by applying the probability of default ('PD') of the counterparty, conditional on the non-default of HSBC, to HSBC's expected positive exposure to the counterparty and multiplying the result by the loss expected in the event of default. Conversely, HSBC calculates the DVA by applying the PD of HSBC, conditional on the non-default of the counterparty, to the expected positive exposure of the counterparty to HSBC and multiplying by

the loss expected in the event of default. Both calculations are performed over the life of the potential exposure.

For most products HSBC uses a simulation methodology to calculate the expected positive exposure to a counterparty. This incorporates a range of potential exposures across the portfolio of transactions with the counterparty over the life of the portfolio. The simulation methodology includes credit mitigants such as counterparty netting agreements and collateral agreements with the counterparty. A standard loss given default ('LGD') assumption of 60% is generally adopted for developed market exposures, and 75% for emerging market exposures. Alternative loss given default assumptions may be adopted when both the nature of the exposure and the available data support this.

For certain types of exotic derivatives where the products are not currently supported by the simulation, or for derivative exposures in smaller trading locations where the simulation tool is not yet available, HSBC adopts alternative methodologies. These may involve mapping to the results for similar products from the simulation tool or, where the mapping approach is not appropriate, using a simplified methodology which generally follows the same principles as the simulation methodology. The calculation is applied at a trade level, with more limited recognition of credit mitigants such as netting or collateral agreements than is used in the simulation methodology.

The methodologies do not, in general, account for 'wrong-way risk'. Wrong-way risk arises when the underlying value of the derivative prior to any CVA is positively correlated to the probability of default by the counterparty. When there is significant wrong-way risk, a trade-specific approach is applied to reflect the wrong-way risk within the valuation.

With the exception of certain central clearing parties, HSBC includes all third-party counterparties in the CVA and DVA calculations and does not net these adjustments across Group entities. During the year, HSBC refined the methodologies used to calculate the CVA and DVA to more accurately reflect the impact of ratings downgrade triggers on credit mitigation. HSBC reviews and refines the CVA and DVA methodologies on an ongoing basis.

Valuation of uncollateralised derivatives

HSBC values uncollateralised derivatives by discounting expected future cash flows at a benchmark interest rate, typically Libor or its equivalent. This approach has historically been adopted across the industry, and has therefore been an appropriate basis for fair value. HSBC and other industry participants are currently considering whether this approach appropriately reflects the manner in which the derivatives are funded, which may occur at rates other than interbank offer rates. No consensus has yet emerged on how such funding should be reflected in the fair value measurement for uncollateralised derivatives. In the future, and possibly in 2014, HSBC may adopt a 'funding fair value adjustment' to reflect funding of uncollateralised derivatives at rates other than interbank offer rates.

Fair value valuation bases

Financial instruments measured at fair value using a valuation technique with significant unobservable inputs - Level 3

	Assets					Liabilities			
	Available for sale US$m	Held for trading US$m	At fair value1 US$m	Deriv-atives US$m	Total US$m	Held for trading US$m	At fair value1 US$m	Deriv-atives US$m	Total US$m
At 31 December 2013									
Private equity including strategic investments	3,729	103	420	-	4,252	-	-	-	-

Asset-backed securities	1,677	643	-	-	2,320	-	-	-	-
Loans held for securitisation	-	83	-	-	83	-	-	-	-
Structured notes	-	14	-	-	14	7,514	-	-	7,514
Derivatives with monolines	-	-	-	320	320	-	-	-	-
Other derivatives	-	-	-	2,182	2,182	-	-	2,335	2,335
Other portfolios	1,839	4,504	188	-	6,531	-	-	-	-
	7,245	5,347	608	2,502	15,702	7,514	-	2,335	9,849
At 31 December 2012									
Private equity including strategic investments	3,582	92	377	-	4,051	-	-	-	-
Asset-backed securities	2,288	652	-	-	2,940	-	-	-	-
Loans held for securitisation	-	547	-	-	547	-	-	-	-
Structured notes	-	23	-	-	23	6,987	-	-	6,987
Derivatives with monolines	-	-	-	630	630	-	-	-	-
Other derivatives	-	-	-	2,429	2,429	-	-	3,005	3,005
Other portfolios	2,641	3,064	36	-	5,741	483	-	-	483
	8,511	4,378	413	3,059	16,361	7,470	-	3,005	10,475

1 Designated at fair value through profit or loss.

Level 3 instruments are present in both ongoing and legacy businesses. Loans held for securitisation, derivatives with monolines, certain 'other derivatives' and all level 3 asset-backed securities are legacy. HSBC has the capability to hold these positions.

Private equity and strategic investments

HSBC's private equity and strategic investments are generally classified as available for sale and are not traded in active markets. In the absence of an active market, an investment's fair value is estimated on the basis of an analysis of the investee's financial position and results, risk profile, prospects and other factors, as well as by reference to market valuations for similar entities quoted in an active market, or the price at which similar companies have changed ownership.

Asset-backed securities

While quoted market prices are generally used to determine the fair value of these securities, valuation models are used to substantiate the reliability of the limited market data available and to identify whether any adjustments to quoted market prices are required. For ABSs including residential MBSs, the valuation uses an industry standard model and the assumptions relating to prepayment speeds, default rates and loss severity based on collateral type, and performance, as appropriate. The valuations output is benchmarked for consistency against observable data for securities of a similar nature.

Loans, including leveraged finance and loans held for securitisation

Loans held at fair value are valued from broker quotes and/or market data consensus providers when available. In the absence of an observable market, the fair value is determined using valuation techniques. These techniques include discounted cash flow models, which incorporate assumptions regarding an appropriate credit spread for the loan, derived from other market instruments issued by the same or comparable entities.

Structured notes

The fair value of structured notes valued using a valuation technique is derived from the fair value of the underlying debt security, and the fair value of the embedded derivative is determined as described in the paragraph below on derivatives.

Trading liabilities valued using a valuation technique with significant unobservable inputs principally comprised equity-linked structured notes which are issued by HSBC and provide the counterparty with a return that is linked to the performance of certain equity securities, and other portfolios. The notes are classified as Level 3 due to the unobservability of parameters such as long-dated equity volatilities and correlations between equity prices, between equity prices and interest rates and between interest rates and foreign exchange rates.

Derivatives

OTC (i.e. non-exchange traded) derivatives are valued using valuation models. Valuation models calculate the present value of expected future cash flows, based upon 'no-arbitrage' principles. For many vanilla derivative products, such as interest rate swaps and European options, the modelling approaches used are standard across the industry. For more complex derivative products, there may be some differences in market practice. Inputs to valuation models are determined from observable market data wherever possible, including prices available from exchanges, dealers, brokers or providers of consensus pricing. Certain inputs may not be observable in the market directly, but can be determined from observable prices via model calibration procedures or estimated from historical data or other sources. Examples of inputs that may be unobservable include volatility surfaces, in whole or in part, for less commonly traded option products, and correlations between market factors such as foreign exchange rates, interest rates and equity prices. The valuation of derivatives with monolines is discussed on page 208.

Derivative products valued using valuation techniques with significant unobservable inputs included certain types of correlation products, such as foreign exchange basket options, equity basket options, foreign exchange interest rate hybrid transactions and long-dated option transactions. Examples of the latter are equity options, interest rate and foreign exchange options and certain credit derivatives. Credit derivatives include certain tranched CDS transactions.

Reconciliation of fair value measurements in Level 3 of the fair value hierarchy

The following table provides a reconciliation of the movement between opening and closing balances of Level 3 financial instruments, measured at fair value using a valuation technique with significant unobservable inputs:

Movement in Level 3 financial instruments

	Assets				Liabilities		
	Available for sale US$m	Held for trading US$m	Designated at fair value through profit or loss US$m	Derivatives US$m	Held for trading US$m	Designated at fair value through profit or loss US$m	Derivatives US$m
At 1 January 2013	8,511	4,378	413	3,059	7,470	-	3,005
Total gains/(losses) recognised in profit or loss	(52)	343	36	(205)	(747)	-	393
- trading income excluding net interest income	-	343	-	(205)	(747)	-	393
- net income/(expense) from other financial instruments designated at fair value	-	-	36	-	-	-	-
- gains less losses from financial investments	(66)	-	-	-	-	-	-
- loan impairment charges and other credit risk provisions	14	-	-	-	-	-	-
Total gains/(losses) recognised in other comprehensive income1	487	20	-	(7)	9	-	57
- available-for-sale investments: fair value gains/(losses)	568	-	-	-	-	-	-
- cash flow hedges: fair value gains/(losses)	-	-	-	(11)	-	-	-
- exchange differences	(81)	20	-	4	9	-	57
Purchases	1,838	1,293	56	-	(482)	-	-
New issuances	-	-	-	-	3,161	-	-
Sales	(766)	(1,821)	(4)	-	(14)	-	-
Settlements	(756)	(473)	(27)	(311)	(1,150)	-	(1,004)
Transfers out	(3,121)	(385)	(68)	(171)	(1,051)	-	(160)
Transfers in	1,104	1,992	202	137	318	-	44
	7,245	5,347	608	2,502	7,514	-	2,335

At 31 December 2013							
Unrealised gains/(losses) recognised in profit or loss relating to assets and liabilities held at 31 December 2013	(166)	362	41	(297)	(401)	-	72
- trading income excluding net interest income	-	362	-	(297)	(401)	-	72
- net income/(expense) from other financial instruments designated at fair value	-	-	41	-	-	-	-
- loan impairment charges and other credit risk provisions	(166)?	-	-	-	-	-	-
At 1 January 2012	9,121	4,780	716	4,449	7,827	567	3,129
Total gains/(losses) recognised in profit or loss	(414)	356	10	(974)	319	-	10
Total gains/(losses) recognised in other comprehensive income1	472	78	(32)	92	143	-	84
Purchases	1,738	942	113	-	(368)	-	-
New issuances	-	-	-	-	2,852	-	-
Sales	(840)	(1,408)	(69)	-	-	-	-
Settlements	(367)	(617)	(25)	(14)	(1,604)	-	18
Transfers out	(2,944)	(298)	(350)	(571)	(1,901)	(567)	(291)
Transfers in	1,745	545	50	77	202	-	55
At 31 December 2012	8,511	4,378	413	3,059	7,470	-	3,005
Total gains/(losses) recognised in profit or loss relating to assets and liabilities held at 31 December 2012	166	339	9	(1,294)	384	-	(395)

.....

1 Included in 'Available-for-sale investments: fair value gains/(losses)' and 'Exchange differences' in the consolidated statement of comprehensive income.

Purchases of Level 3 available-for-sale assets primarily reflect the acquisition of certain less liquid emerging market government and corporate debt. Transfers in of Level 3 available-for-sale securities reflect decreased confidence in the pricing of certain ABS assets. This is offset by transfers out reflecting increased confidence in the pricing of certain other ABS assets and increased liquidity in certain emerging market sovereign and corporate debt. Sales of Level 3 trading assets reflect the unwind of certain legacy monoline and structured credit exposures. New issuances of trading liabilities reflect structured note issuances, predominantly equity-linked notes.

Effect of changes in significant unobservable assumptions to reasonably possible alternatives

The following table shows the sensitivity of Level 3 fair values to reasonably possible alternative assumptions:

Sensitivity of fair values to reasonably possible alternative assumptions

	Reflected in profit or loss		Reflected in other comprehensive income	
	Favourable changes US$m	Unfavourable changes US$m	Favourable changes US$m	Unfavourable changes US$m
At 31 December 2013				
Derivatives, trading assets and trading liabilities1	350	(285)	-	-
Financial assets and liabilities designated at fair value	32	(51)	-	-
Financial investments: available for sale	-	-	434	(673)
	382	(336)	434	(673)
At 31 December 2012				
Derivatives, trading assets and trading liabilities1	465	(384)	-	-
Financial assets and liabilities designated at fair value	41	(41)	-	-
Financial investments: available for sale	-	-	680	(710)
	506	(425)	680	(710)

1 Derivatives, trading assets and trading liabilities are presented as one category to reflect the manner in which these financial instruments are risk-managed.

The decrease in the effect of favourable and unfavourable changes in significant unobservable inputs in relation to derivatives, trading assets and trading liabilities reflects a reduction in exposures and reduced market data dispersion as market volatility generally declined over the year. The reduction in the effect of favourable changes in financial investments primarily reflects a decline in private equity, following a reassessment of potential upside.

Sensitivity of fair values to reasonably possible alternative assumptions by Level 3 instrument type

	Reflected in profit or loss		Reflected in other comprehensive income	
	Favourable changes US$m	Unfavourable changes US$m	Favourable changes US$m	Unfavourable changes US$m
At 31 December 2013				
Private equity including strategic investments	31	(61)	226	(436)
Asset-backed securities	60	(27)	113	(99)
Loans held for securitisation	3	(3)	-	-
Structured notes	16	(9)	-	-
Derivatives with monolines	25	(16)	-	-
Other derivatives	212	(164)	-	-
Other portfolios	35	(56)	95	(138)
	382	(336)	434	(673)
At 31 December 2012				
Private equity including strategic investments	62	(62)	353	(353)
Asset-backed securities	41	(27)	143	(139)
Loans held for securitisation	3	(3)	-	-
Structured notes	4	(5)	-	-
Derivatives with monolines	36	(20)	-	-
Other derivatives	320	(267)	-	-
Other portfolios	40	(41)	184	(218)
	506	(425)	680	(710)

Favourable and unfavourable changes are determined on the basis of sensitivity analysis. The sensitivity analysis aims to measure a range of fair values consistent with the application of a 95% confidence interval. Methodologies take account of the nature of the valuation technique employed, as well as the availability and reliability of observable proxy and historical data. When the available data is not amenable to statistical analysis, the quantification of uncertainty is judgemental, but remains guided by the 95% confidence interval.

When the fair value of a financial instrument is affected by more than one unobservable assumption, the above table reflects the most favourable or the most unfavourable change from varying the assumptions individually.

Key unobservable inputs to Level 3 financial instruments

The table below lists key unobservable inputs to Level 3 financial instruments, and provides the range of those inputs as at 31 December 2013. The core range of inputs is the estimated range within which 90% of the inputs fall. A further description of the categories of key unobservable inputs is given below.

Private equity including strategic investments

HSBC's private equity and strategic investments are generally classified as available for sale and are not traded in active markets. In the absence of an active market, an investment's fair value is estimated on the basis of an analysis of the investee's financial position and results, risk profile, prospects and other factors, as well as by reference to market valuations for similar entities quoted in an active market, or the price at which similar companies have changed ownership. Given the bespoke nature of the analysis in respect of each holding, it is not practical to quote a range of key unobservable inputs.

Prepayment rates

Prepayment rates are a measure of the anticipated future speed at which a loan portfolio will be repaid in advance of the due date. Prepayment rates are an important input into modelled values of ABSs. A modelled price may be used where insufficient observable market prices exist to enable a market price to be determined directly. Prepayment rates are also an important input into the valuation of derivatives linked to securitisations. For example, so-called securitisation swaps have a notional value that is linked to the size of the outstanding loan portfolio in a securitisation, which may fall as prepayments occur. Prepayment rates vary according to the nature of the loan portfolio, and expectations of future market conditions. For example, current prepayment rates in US residential mortgage-backed securities would generally be expected to rise as the US economy improves. Prepayment rates may be estimated using a variety of evidence, such as prepayment rates implied from proxy observable security prices, current or historic prepayment rates and macro-economic modelling.

Market proxy

Market proxy pricing may be used for an instrument for which specific market pricing is not available, but evidence is available in respect of instruments that have some characteristics in common. In some cases it might be possible to identify a specific proxy, but more generally evidence across a wider range of instruments will be used to understand the factors that influence current market pricing and the manner of that influence. For example, in the collateralised loan obligation market it may be possible to establish that A-rated securities exhibit prices in a range, and to isolate key factors that influence position within the range. Application of this to a specific A-rated security within HSBC's portfolio allows assignment of a price.

The range of prices used as inputs into a market proxy pricing methodology may therefore be wide. This range is not indicative of the uncertainty associated with the price derived for an individual security.

Volatility

Volatility is a measure of the anticipated future variability of a market price. Volatility tends to increase in stressed market conditions, and decrease in calmer market conditions. Volatility is an important input in the pricing of options. In general, the higher the volatility, the more expensive the option will be. This reflects both the higher probability of an increased return from the option, and the potentially higher costs that HSBC may incur in hedging the risks associated with the option. If option prices become more expensive, this will increase the value of HSBC's long option positions (i.e. the positions in which HSBC has purchased options), while HSBC's short option positions (i.e. the positions in which HSBC has sold options) will suffer losses.

Quantitative information about significant unobservable inputs in Level 3 valuations

	Fair value				Full range of inputs		Core range of inputs	
	Assets	Liabilities	Valuation technique	Key unobservable inputs	Lower	Higher	Lower	Higher
	US$m	US$m						
At 31 December 2013								
Private equity including strategic investments	4,252	-	See notes on page 491	See notes on page 491	n/a	n/a	n/a	n/a
Asset-backed securities	2,320	-						
CLO/CDO1	1,180	-	Model - Discounted cash flow	Prepayment rate	0%	5%	0%	5%
			Market proxy	Bid quotes	0	102	46	95
Other ABSs	1,140	-						
Loans held for securitisation	83	-						
Structured notes	14	7,514						
Equity-linked notes	-	5,750	Model - Option model	Equity volatility	6%	73%	13%	39%
			Model - Option model	Equity correlation	51%	59%	52%	57%
Fund-linked notes	-	717	Model - Option model	Fund volatility	18%	22%	20%	21%
FX-linked notes	14	662	Model - Option model	FX volatility	0.1%	28%	5%	15%
Other	-	385						
Derivatives with monolines	320	-	Model - Discounted cash flow	Credit spread	3%	5%	4%	5%
Other derivatives	2,182	2,335						
Interest rate derivatives:								
- securitisation swaps	275	1,127	Model - Discounted cash flow	Prepayment rate	0%	22%	2%	20%
- long-dated swaptions	655	185	Model - Option model	IR volatility	3%	160%	13%	41%
	540	265						

- other								
FX derivatives:								
- FX options.....	114	151	Model - Option model	FX volatility ...	0.1%	75%	7%	18%
- other.....	69	51						
Equity derivatives:								
- long-dated single stock options	218	247	Model - Option model	Equity volatility.....	6%	73%	15%	36%
- other	24	151						
Credit derivatives:								
- other	287	158						
Other portfolios	6,531	-						
Structured certificates	3,800	-	Model - Discounted cash flow	Credit volatility.....	1%	3%	1%	3%
EM corporate debt	2,073	-	Market proxy	Credit spread	0.2%	17%	1%	7%
			Market proxy	Bid quotes	57	141	100	134
Other2	658	-						
	15,702	9,849						

1 Collateralised loan obligation/collateralised debt obligation.
2 Includes a range of smaller asset holdings.

Volatility varies by underlying reference market price, and by strike and maturity of the option. Volatility also varies over time. As a result, it is difficult to make general statements regarding volatility levels. For example, while it is generally the case that foreign exchange volatilities are lower than equity volatilities, there may be examples in particular currency pairs or for particular equities where this is not the case.

Certain volatilities, typically those of a longer-dated nature, are unobservable. The unobservable volatility is then estimated from observable data. For example, longer-dated volatilities may be extrapolated from shorter-dated volatilities.

The range of unobservable volatilities quoted in the table reflects the wide variation in volatility inputs by reference market price. For example, foreign exchange volatilities for a pegged currency may be very low, whereas for non-managed currencies the foreign exchange volatility may be higher. As a further example, volatilities for deep-in-the-money or deep-out-of-the-money equity options may be significantly higher than at-the-money options. The core range is significantly narrower than the full range because these examples with extreme volatilities occur relatively rarely within the HSBC portfolio. For any single unobservable volatility, the uncertainty in the volatility

determination is significantly less than the range quoted above.

Correlation

Correlation is a measure of the inter-relationship between two market prices. Correlation is a number between minus one and one. A positive correlation implies that the two market prices tend to move in the same direction, with a correlation of one implying that they always move in the same direction. A negative correlation implies that the two market prices tend to move in opposite directions, with a correlation of minus one implying that the two market prices always move in opposite directions.

Correlation is used to value more complex instruments where the payout is dependent upon more than one market price. For example, an equity basket option has a payout that is dependent upon the performance of a basket of single stocks, and the correlation between the price movements of those stocks will be an input to the valuation. This is referred to as equity-equity correlation. There is a wide range of instruments for which correlation is an input, and consequently a wide range of both same-asset correlations (e.g. equity-equity correlation) and cross-asset correlations (e.g. foreign exchange rate-interest rate correlation) used. In general, the range of same-asset correlations will be narrower than the range of cross-asset correlations.

Correlation may be unobservable. Unobservable correlations may be estimated on the basis of a range of evidence, including consensus pricing services, HSBC trade prices, proxy correlations and examination of historical price relationships.

The range of unobservable correlations quoted in the table reflects the wide variation in correlation inputs by market price pair. For any single unobservable correlation, the uncertainty in the correlation determination is likely to be less than the range quoted above.

Credit spread

Credit spread is the premium over a benchmark interest rate required by the market to accept lower credit quality. In a discounted cash flow model, the credit spread increases the discount factors applied to future cash flows, thereby reducing the value of an asset. Credit spreads may be implied from market prices. Credit spreads may not be observable in more illiquid markets.

Inter-relationships between key unobservable inputs

Key unobservable inputs to Level 3 financial instruments may not be independent of each other. As described above, market variables may be correlated. This correlation typically reflects the manner in which different markets tend to react to macroeconomic or other events. For example, improving economic conditions may lead to a 'risk on' market, in which prices of risky assets such as equities and high yield bonds rise, while 'safe haven' assets such as gold and US Treasuries decline. Furthermore, the impact of changing market variables upon the HSBC portfolio will depend on HSBC's net risk position in respect of each variable. For example, increasing high-yield bond prices will benefit long high-yield bond positions, but the value of any credit derivative protection held against these bonds will fall.

HSBC Holdings

The following table provides an analysis of the basis for valuing financial assets and financial liabilities measured at fair value in the financial statements:

Basis of valuing HSBC Holdings' financial assets and liabilities measured at fair value

	At 31 December	
	2013	2012
	US$m	US$m
Valuation technique using observable inputs: Level 2		
Assets		
Derivatives	2,789	3,768
Available for sale	1,210	1,208
Liabilities		
Designated at fair value	21,027	23,195
Derivatives	704	760

Financial instruments measured at fair value - Level 3

Financial instruments measured using a valuation technique with significant unobservable inputs (Level 3) comprised fixed-rate preferred securities and senior notes purchased from HSBC undertakings. The unobservable elements of the valuation technique included the use of implied credit spreads and simplified bond pricing assumptions.

Movement in Level 3 financial instruments available for sale

	2013	2012
	US$m	US$m
At 1 January	-	1,078
Total gains or losses:		
- recognised in profit or loss	-	-
- recognised in other comprehensive income	-	130
Settlements	-	-
Transfers out	-	(1,208)
At 31 December	-	-
Unrealised gains/(losses) recognised in profit or loss relating to assets and liabilities held at 31 December	-	-

16 Fair values of financial instruments not carried at fair value

The classification of financial instruments is determined in accordance with the accounting policies set out in Note 2.

Fair values of financial instruments which are not carried at fair value and bases of valuation

	At 31 December 2013					At 31 December 2012	
		Fair value					
			Valuation techniques				
	Carrying amount US$m	Quoted market price Level 1 US$m	Using observable inputs Level 2 US$m	With significant unobserv-able inputs Level 3 US$m	Total US$m	Carrying amount US$m	Fair value US$m
Assets and liabilities not held for sale							
Assets							
Loans and advances to banks	211,521	-	201,643	9,858	211,501	152,546	152,823
Loans and advances to customers1	1,080,304	-	98,932	971,555	1,070,487	997,623	973,741
Financial investments: debt securities	25,084	1,432	23,960	25	25,417	23,413	25,458
Liabilities							
Deposits by banks	129,212	-	129,144	52	129,196	107,429	107,392
Customer accounts	1,482,812	-	1,467,812	14,622	1,482,434	1,340,014	1,340,521
Debt securities in issue	104,080	166	101,551	2,941	104,658	119,461	120,779
Subordinated liabilities	28,976	-	29,704	1,309	31,013	29,479	32,159
Loans and advances and customer accounts held for sale2							
Loans and advances to banks and customers	1,973	-	249	1,731	1,980	6,632	6,387
Customer accounts	2,187	-	2,186	-	2,186	2,990	2,990

1 Level 2 fair value amounts primarily include reverse repos.
2 Including financial instruments within disposal groups held for sale.

Fair values are determined according to the hierarchy set out in Note 15.

The following is a list of financial instruments whose carrying amount is a reasonable approximation of fair value because, for example, they are short-term in nature or reprice to current market rates frequently:

Assets
Cash and balances at central banks
Items in the course of collection from other banks
Hong Kong Government certificates of indebtedness
Endorsements and acceptances

Short-term receivables within 'Other assets'

Liabilities
Hong Kong currency notes in circulation
Items in the course of transmission to other banks
Investment contracts with discretionary participation features within 'Liabilities under insurance contracts'
Endorsements and acceptances
Short-term payables within 'Other liabilities'

Carrying amount and fair value of loans and advances to customers by industry sector

	Carrying amount at 31 December			
	Not impaired US$m	Impaired US$m	Impairment allowances1 US$m	Total US$m
2013				
Loans and advances to customers	1,059,019	36,428	(15,143)	1,080,304
- personal	391,930	18,798	(6,602)	404,126
- corporate and commercial	529,661	16,877	(8,059)	538,479
- financial	137,428	753	(482)	137,699
2012				
Loans and advances to customers	975,064	38,671	(16,112)	997,623
- personal	391,342	23,751	(8,212)	406,881
- corporate and commercial	503,291	14,093	(7,346)	510,038
- financial	80,431	827	(554)	80,704

	Fair value at 31 December		
	Not impaired US$m	Impaired US$m	Total US$m
2013			
Loans and advances to customers	1,045,900	24,587	1,070,487
- personal	379,353	13,774	393,127
- corporate and commercial	529,586	10,340	539,926
- financial	136,961	473	137,434

2012			
Loans and advances to customers	948,822	24,919	973,741
- personal	369,692	15,369	385,061
- corporate and commercial	499,261	9,158	508,419
- financial	79,869	392	80,261

1 Impairment allowances relate to both impaired and not impaired loans and advances.

Analysis of loans and advances to customers by geographical segment

	At 31 December 2013		At 31 December 2012	
	Carrying amount US$m	Fair value US$m	Carrying amount US$m	Fair value US$m
Loans and advances to customers				
Europe	504,201	501,422	463,440	453,382
Hong Kong	195,549	194,081	173,613	171,926
Rest of Asia-Pacific	147,796	147,488	138,119	138,015
Middle East and North Africa	27,211	26,891	28,086	27,954
North America	161,629	156,500	140,756	128,637
Latin America	43,918	44,105	53,609	53,827
	1,080,304	1,070,487	997,623	973,741

Valuation

The fair value measurement is HSBC's estimate of the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. It does not reflect the economic benefits and costs that HSBC expects to flow from the instruments' cash flows over their expected future lives. Other reporting entities may use different valuation methodologies and assumptions in determining fair values for which no observable market prices are available.

The fair values of loans and advances to customers in the US are substantially lower than their carrying amount, reflecting the market conditions at the balance sheet date. The secondary market demand and estimated value for US loans and advances have been heavily influenced by the challenging economic conditions during the past number of years, including house price depreciation, rising unemployment, changes in consumer behaviour, changes in discount rates and the lack of financing options available to support the purchase of loans and advances. Many investors are non-bank financial institutions or hedge funds with high equity levels and a high cost of debt. For certain consumer loans, investors take a more conservative view of future performance than HSBC. As a result, third parties are likely to assume higher charge-off levels and/or slower voluntary prepayment speeds than HSBC believes will ultimately be the case. The investor discount rates reflect this difference in the overall cost of capital as well as the potential

volatility in the underlying cash flow assumptions, the combination of which may yield a significant pricing discount from HSBC's intrinsic value. The relative fair value of loans and advances to customers increased during 2013 largely due to improved conditions in the housing industry driven by increased property values and, to a lesser extent, lower required market yields and increased investor demand for these types of loans and advances.

The fair value of loans and advances to customers has improved in Europe relative to carrying amounts, primarily in the UK mortgage market where increased competition and Central Bank policies to stimulate lending have reduced interest rates and increased fair values accordingly. The overall improvement in fair value has also benefited from higher valuations of ABSs classified as loans and advances following improved market appetite for such securities.

The fair values of loans and advances to customers in Latin America are higher than their carrying amount, primarily driven by mortgages where the market interest rate remains below the historic average.

Fair values of the following assets and liabilities are estimated for the purpose of disclosure as described below:

Loans and advances to banks and customers

The fair value of loans and advances is based on observable market transactions, where available. In the absence of observable market transactions, fair value is estimated using valuation models that incorporate a range of input assumptions. These assumptions may include value estimates from third party brokers which reflect over-the-counter trading activity, forward looking discounted cash flow models using assumptions which HSBC believes are consistent with those which would be used by market participants in valuing such loans, and trading inputs from other market participants which includes observed primary and secondary trades.

Loans are grouped, as far as possible, into homogeneous groups and stratified by loans with similar characteristics to improve the accuracy of estimated valuation outputs. The stratification of a loan book considers all material factors including vintage, origination period, estimates of future interest rates, prepayment speeds, delinquency rates, loan-to-value ratios, the quality of collateral, default probability, and internal credit risk ratings.

Valuation techniques are calibrated on a regular basis and tested for validity using prices from observable current market transactions in the same instrument, without modification or repackaging, or are based on any available observable market data.

The fair value of a loan reflects both loan impairments at the balance sheet date and estimates of market participants' expectations of credit losses over the life of the loans, and the fair value effect of repricing between origination and the balance sheet date.

Financial investments

The fair values of listed financial investments are determined using bid market prices. The fair values of unlisted financial investments are determined using valuation techniques that take into consideration the prices and future earnings streams of equivalent quoted securities.

Deposits by banks and customer accounts

For the purpose of estimating fair value, deposits by banks and customer accounts are grouped by remaining contractual maturity. Fair values are estimated using discounted cash flows, applying current rates offered for deposits of similar remaining maturities. The fair value of a deposit repayable on demand is approximated by its carrying value.

Debt securities in issue and subordinated liabilities

Fair values are determined using quoted market prices at the balance sheet date where available, or by reference to quoted market prices for similar instruments.

The fair values in this note are stated at a specific date and may be significantly different from the amounts which will actually be paid on the maturity or settlement dates of the instruments. In many cases, it would not be possible to realise immediately the estimated fair values given the size of the portfolios measured. Accordingly, these fair values do not represent the value of these financial instruments to HSBC as a going concern.

HSBC Holdings

The methods used by HSBC Holdings to determine fair values of financial instruments for the purpose of measurement and disclosure are described above.

The following table provides an analysis of the fair value of financial instruments not carried at fair value on the balance sheet:

Fair values of HSBC Holdings' financial instruments not carried at fair value on the balance sheet

	At 31 December 2013		At 31 December 2012	
	Carrying amount US$m	Fair value1 US$m	Carrying amount US$m	Fair value US$m
Assets				
Loans and advances to HSBC undertakings	53,344	55,332	41,675	42,843
Liabilities				
Amounts owed to HSBC undertakings	11,685	11,868	12,856	13,133
Debt securities in issue	2,791	3,124	2,691	3,188
Subordinated liabilities	14,167	16,633	11,907	14,865

1 Fair values were determined using valuation techniques with observable inputs (Level 2).

17 Financial assets designated at fair value

	At 31 December	
	2013 US$m	2012 US$m
Financial assets designated at fair value:		
- not subject to repledge or resale by counterparties	38,062	33,562
- which may be repledged or resold by counterparties	368	20
	38,430	33,582

Treasury and other eligible bills	50	54
Debt securities	12,589	12,551
Equity securities	25,711	20,868
Securities designated at fair value	38,350	33,473
Loans and advances to banks	76	55
Loans and advances to customers	4	54
	38,430	33,582

Securities designated at fair value1

	At 31 December	
	2013 US$m	2012 US$m
Fair value		
US Treasury and US Government agencies2	34	37
UK Government	534	625
Hong Kong Government	113	135
Other government	4,097	4,508
Asset-backed securities3	140	158
Corporate debt and other securities	7,721	7,142
Equities	25,711	20,868
	38,350	33,473

1 Included within these figures are debt securities issued by banks and other financial institutions of US$4,419m (2012: US$3,509m), of which US$92m (2012: US$5m) are guaranteed by various governments.
2 Include securities that are supported by an explicit guarantee issued by the US Government.
3 Exclude asset-backed securities included under US Treasury and US Government agencies.

Securities listed on a recognised exchange and unlisted

	Treasury and other	Debt securities	Equity securities	Total

	eligible bills US$m	US$m	US$m	US$m
Fair value at 31 December 2013				
Listed1	–	2,773	18,235	21,008
Unlisted	50	9,816	7,476	17,342
	50	12,589	25,711	38,350
Fair value at 31 December 2012				
Listed1	-	3,007	14,063	17,070
Unlisted	54	9,544	6,805	16,403
	54	12,551	20,868	33,473

1 Included within listed investments are US$1,148m of investments listed on a recognised exchange in Hong Kong (2012: US$931m).

18 Derivatives

Fair values of derivatives by product contract type held by HSBC

	Assets			Liabilities		
	Trading US$m	Hedging US$m	Total US$m	Trading US$m	Hedging US$m	Total US$m
At 31 December 2013						
Foreign exchange	78,652	2,262	80,914	75,350	448	75,798
Interest rate	456,282	2,294	458,576	448,434	4,097	452,531
Equity	18,389	-	18,389	22,573	-	22,573
Credit	9,092	-	9,092	8,926	-	8,926
Commodity and other	2,624	-	2,624	1,786	-	1,786
Gross total fair values	565,039	4,556	569,595	557,069	4,545	561,614
Offset			(287,330)			(287,330)
Total			282,265			274,284
At 31 December 2012						
Foreign exchange	68,277	1,227	69,504	70,944	239	71,183
Interest rate	628,162	2,417	630,579	618,808	6,491	625,299
Equity	15,413	-	15,413	19,889	-	19,889
Credit	12,740	-	12,740	13,508	-	13,508
Commodity and other	1,443	-	1,443	1,236	-	1,236

Gross total fair values	726,035	3,644	729,679	724,385	6,730	731,115
Offset.....			(372,229)			(372,229)
Total			357,450			358,886

Derivative assets and liabilities decreased during the year, driven by a decrease in the fair value of interest rate derivatives as yield curves in major currencies steepened. This resulted in the decrease in gross fair values and a commensurate decrease in the offset amount.

Fair values of derivatives by product contract type held by HSBC Holdings with subsidiaries

	Assets			Liabilities		
	Trading US$m	Hedging US$m	Total US$m	Trading US$m	Hedging US$m	Total US$m
At 31 December 2013						
Foreign exchange	1,774	45	1,819	471	-	471
Interest rate	955	15	970	233	-	233
	2,729	60	2,789	704	-	704
At 31 December 2012						
Foreign exchange	1,636	-	1,636	760	-	760
Interest rate	2,132	-	2,132	-	-	-
	3,768	-	3,768	760	-	760

Derivatives are financial instruments that derive their value from the price of underlying items such as equities, bonds, interest rates, foreign exchange, credit spreads, commodities and equity or other indices. Derivatives enable users to increase, reduce or alter exposure to credit or market risks.

Derivatives are carried at fair value and shown in the balance sheet as separate totals of assets and liabilities. A description of how the fair value of derivatives is derived is set out on page 488. Derivative assets and liabilities are only offset and reported net in the balance sheet when there is a legally enforceable right to offset and the cash flows are intended to be settled on a net basis.

Use of derivatives

HSBC transacts derivatives for three primary purposes: to create risk management solutions for clients, to manage the portfolio risks arising from client business and to manage and hedge HSBC's own risks. Derivatives (except for derivatives which are designated as effective hedging instruments as defined in IAS 39) are held for trading. Within the held-for-trading classification are two types of derivatives: those used in sales and trading activities, and those used for risk management purposes but which for various reasons do not meet the qualifying criteria for hedge accounting. The second category includes derivatives managed in conjunction with financial instruments designated at

fair value. These activities are described more fully below.

HSBC's derivative activities give rise to significant open positions in portfolios of derivatives. These positions are managed constantly to ensure that they remain within acceptable risk levels. When entering into derivative transactions, HSBC employs the same credit risk management framework to assess and approve potential credit exposures that it uses for traditional lending.

Trading derivatives

Most of HSBC's derivative transactions relate to sales and trading activities. Sales activities include the structuring and marketing of derivative products to customers to enable them to take, transfer, modify or reduce current or expected risks. Trading activities include market-making and risk management. Market-making entails quoting bid and offer prices to other market participants for the purpose of generating revenues based on spread and volume. Risk management activity is undertaken to manage the risk arising from client transactions, with the principal purpose of retaining client margin.

Other derivatives classified as held for trading include non-qualifying hedging derivatives, ineffective hedging derivatives and the components of hedging derivatives that are excluded from assessing hedge effectiveness. Non-qualifying hedging derivatives are entered into for risk management purposes but do not meet the criteria for hedge accounting. Trading derivatives also include derivatives managed in conjunction with financial instruments designated at fair value.

Gains and losses from changes in the fair value of derivatives, including the contractual interest, that do not qualify for hedge accounting are reported in 'Net trading income' except for derivatives managed in conjunction with financial instruments designated at fair value, where gains and losses are reported in 'Net income from financial instruments designated at fair value' together with the gains and losses on the economically hedged items. Where the derivatives are managed with debt securities in issue, the contractual interest is shown in 'Interest expense' together with the interest payable on the issued debt. Substantially all of HSBC Holdings' derivatives entered into with HSBC undertakings are managed in conjunction with financial liabilities designated at fair value.

The notional contract amounts of derivatives held for trading purposes indicate the nominal value of transactions outstanding at the balance sheet date; they do not represent amounts at risk. The 23% increase in the notional contract amounts of HSBC's derivatives during 2013 was primarily driven by an increase in the trading volumes of interest rate contracts.

Notional contract amounts of derivatives held for trading purposes by product type

	HSBC		HSBC Holdings	
	At 31 December 2013 US$m	At 31 December 2012 US$m	At 31 December 2013 US$m	At 31 December 2012 US$m
Foreign exchange	5,264,978	4,435,729	17,280	17,576
Interest rate	27,056,367	21,355,749	10,304	11,554
Equity	589,903	495,668	-	-
	678,256	901,507	-	-

Credit				
Commodity and other	77,842	80,219	-	-
	33,667,346	27,268,872	27,584	29,130

Credit derivatives

HSBC trades credit derivatives through its principal dealing operations and acts as a principal counterparty to a broad range of users, structuring transactions to produce risk management products for its customers, or making markets in certain products. Risk is typically controlled through entering into offsetting credit derivative contracts with other counterparties.

HSBC manages the credit risk arising on buying and selling credit derivative protection by including the related credit exposures within its overall credit limit structure for the relevant counterparty. Trading of credit derivatives is restricted to a small number of offices within the major centres which have the control infrastructure and market skills to manage effectively the credit risk inherent in the products.

Credit derivatives are also deployed to a limited extent for the risk management of the Group's loan portfolios. The notional contract amount of credit derivatives of US$678bn (2012: US$902bn) consisted of protection bought of US$339bn (2012: US$446bn) and protection sold of US$339bn (2012: US$455bn). The credit derivative business operates within the market risk management framework described on page 281.

Derivatives valued using models with unobservable inputs

The difference between the fair value at initial recognition (the transaction price) and the value that would have been derived had valuation techniques used for subsequent measurement been applied at initial recognition, less subsequent releases, is as follows:

Unamortised balance of derivatives valued using models with significant unobservable inputs

	2013 US$m	2012 US$m
Unamortised balance at 1 January	181	200
Deferral on new transactions	206	149
Recognised in the income statement during the period:		
- amortisation	(105)	(112)
- subsequent to unobservable inputs becoming observable	(39)	(1)
- maturity, termination or offsetting derivative	(77)	(46)
- risk hedged	-	(11)
Exchange differences	1	2

Unamortised balance at 31 December1	167	181

1 This amount is yet to be recognised in the consolidated income statement.

Hedge accounting derivatives

HSBC uses derivatives (principally interest rate swaps) for hedging purposes in the management of its own asset and liability portfolios and structural positions. This enables HSBC to optimise the overall cost to the Group of accessing debt capital markets, and to mitigate the market risk which would otherwise arise from structural imbalances in the maturity and other profiles of its assets and liabilities.

The accounting treatment of hedge transactions varies according to the nature of the instrument hedged and the type of hedge transactions. Derivatives may qualify as hedges for accounting purposes if they are fair value hedges, cash flow hedges, or hedges of net investment in foreign operations. These are described under the relevant headings below.

The notional contract amounts of derivatives held for hedge accounting purposes indicate the nominal value of transactions outstanding at the balance sheet date; they do not represent amounts at risk.

Notional contract amounts of derivatives held for hedge accounting purposes by product type

	At 31 December 2013		At 31 December 2012	
	Cash flow hedge US$m	Fair value hedge US$m	Cash flow hedge US$m	Fair value hedge US$m
HSBC				
Foreign exchange	25,799	226	16,716	112
Interest rate	201,197	90,354	182,688	75,505
	226,996	90,580	199,404	75,617

	Fair value hedge at 31 December	
	2013 US$m	2012 US$m
HSBC Holdings		
Foreign exchange	1,120	-
Interest rate	1,977	-
	3,097	-

Fair value hedges

HSBC's fair value hedges principally consist of interest rate swaps that are used to protect against changes in the fair value of fixed-rate long-term financial instruments due to movements in market interest rates. For fair value hedges, all changes in the fair value of the derivative and in the fair value of the item in relation to the risk being hedged are recognised in the income statement. If the hedge relationship is terminated, the fair value adjustment to the hedged item continues to be reported as part of the basis of the item and is amortised to the income statement as a yield adjustment over the remainder of the hedging period.

Fair value of derivatives designated as fair value hedges

	At 31 December 2013		At 31 December 2012	
	Assets	Liabilities	Assets	Liabilities
	US$m	US$m	US$m	US$m
HSBC				
Foreign exchange	5		-	
.....		-		-
Interest rate	1,163		199	
.....		2,889		4,450
	1,168	2,889	199	4,450
HSBC Holdings				
Foreign exchange	45		-	
.....		-		-
Interest rate	15		-	
.....		-		-
	60	-	-	-

Gains or losses arising from fair value hedges

	2013	2012	2011
	US$m		