

Funding and liquidity risk

The Group's liquidity policy is designed to ensure that the Group can at all times meet its obligations as they fall due.

Liquidity management within the Group addresses the overall balance sheet structure and the control, within prudent limits, of risk arising from the mismatch of maturities across the balance sheet and from exposure to undrawn commitments and other contingent obligations.

Following a difficult first quarter of 2009, most indicators of stress in financial markets are close to or better than in late 2008. Liquidity conditions in money and debt markets have improved significantly since the beginning of the second quarter of 2009. Contributing to the improvement has been a combination of ongoing central bank and other official liquidity support schemes, guarantee schemes and rate cuts. Signs of underlying macroeconomic trends such as stabilisation of the UK economy also helped to sustain a recovery in debt markets.

Structural management

The Group regularly evaluates its structural liquidity risk and applies a variety of balance sheet management and term funding strategies to maintain this risk within its policy parameters. The degree of maturity mismatch within the overall long-term structure of the Group's assets and liabilities is managed within internal policy guidelines, aimed at ensuring term asset commitments are funded on an economic basis over their life. In managing its overall term structure, the Group analyses and takes into account the effect of retail and corporate customer behaviour on actual asset and liability maturities where they differ materially from the underlying contractual maturities.

The Group targets diversification in its funding sources to reduce funding risk. A key source of funds for the Group is core customer deposits gathered by its retail banking, private client, corporate and small and medium enterprises franchises. The Group's multi-brand offering and strong client focus is a key part of the funding strategy and continues to benefit the Group's funding position.

The Group also accesses the wholesale funding market to provide additional flexibility in funding sources. The Group has actively sought to manage its liquidity position through increasing the duration of wholesale funding, continued diversification of wholesale debt investors and depositors, supplemented by long-term issuance, government guaranteed debt, and a programme of ensuring that assets held are eligible as collateral to access central bank liquidity schemes.

Cash flow management

The short-term maturity structure of the Group's liabilities and assets is managed daily to ensure that all material or potential cash flows, undrawn commitments and other contingent obligations can be met. The primary focus of the daily management activity is to ensure access to sufficient liquidity to meet cash flow obligations within key time horizons, including out to one month ahead and FSA target horizons such as 90 days.

Risk and capital management (continued)

Funding liquidity risk (continued)

Cash flow management (continued)

Potential sources of liquidity include cash inflows from maturing assets, new borrowings or the sale of various debt securities held. Short-term liquidity risk is generally managed on a consolidated basis with liquidity mismatch limits in place for subsidiaries and non-UK branches which have material local treasury activities, thereby assuring that the daily maintenance of the Group's overall liquidity risk position is not compromised.

Volume management

The Group also actively monitors and manages future business volumes to assess funding and liquidity requirements and ensure that the Group operates within the risk appetite and metrics set by the Board. This includes management of undrawn commitments, conduits and liquidity facilities within acceptable levels.

Liquidity reserves

The Group holds a diversified stock of highly marketable liquid assets including highly rated central government debt that can be used as a buffer against unforeseen impacts on cash flows or in stressed environments. The make up of this portfolio of assets is sub-divided into tiers on the basis of asset liquidity with haircuts applied to ensure that realistic liquidation values are used in key metrics. This portfolio includes a centrally held buffer against severe liquidity stresses and locally held buffers to meet self sufficiency needs.

Stress testing

The Group performs stress tests to simulate how events may impact its funding and liquidity capabilities. Such tests assist in the planning of the overall balance sheet structure, help define suitable limits for control of the risk arising from the mismatch of maturities across the balance sheet and from undrawn commitments and other contingent obligations, and feed into the risk appetite and contingency funding plan. The form and content of stress tests are updated where required as market conditions evolve. These stresses include the following scenarios:

- Idiosyncratic stress: an unforeseen, name-specific, liquidity stress, with the initial short-term period of stress lasting for at least two weeks;
- Market stress: an unforeseen, market-wide liquidity stress of three months duration;
- Idiosyncratic and market stress: a combination of idiosyncratic and market stress;
- Rating downgrade: one and two notch long-term credit rating downgrade scenarios; and
- Daily market lockout: no access to unsecured funding and no funding rollovers are possible.

Risk and capital management (continued)

Funding and liquidity risk (continued)

Contingency planning

Contingency funding plans have been developed which incorporate early warning indicators to monitor market conditions. The Group reviews its contingency funding plans in the light of evolving market conditions and stress test results. The contingency funding plans cover: the available sources of contingent funding to supplement cash flow shortages; the lead times to obtain such funding; the roles and responsibilities of those involved in the contingency plans, the communication and escalation requirements when early warning indicators signal deteriorating market conditions; and the ability and circumstances within which the Group accesses central bank liquidity.

Monitoring

Liquidity risk is constantly monitored to evaluate the Group's position having regard to its risk appetite and key metrics. Daily, weekly and monthly monitoring and control processes are in place, which allow management to take appropriate action. Actions taken to improve the liquidity risk include a focus on reducing the loan to deposit ratio, issuing longer-term wholesale funding, both guaranteed and unguaranteed, and the size of the conduit commitments. Metrics include, but are not limited to:

Wholesale funding > 1 year

As the wholesale funding markets have improved over the course of 2009 the Group has been better able to manage both its short and longer-term funding requirements and has significantly reduced its reliance on central bank funding. In 2009, the Group issued £21 billion of public, private and structured unguaranteed debt securities with a maturity greater than one year, including issuances with maturities of ten years and five years of £3 billion and £2 billion respectively. To provide protection from liquidity risk in these markets the Group targets the ratio of wholesale funding greater than one year. The proportion of outstanding debt instruments issued with a remaining maturity of greater than 12 months has increased from 45% at 31 December 2008 to 50% at 31 December 2009, reflecting a lengthening of the maturity profile of debt issuance over the period. The Group is also targeting an absolute funding reliance (unsecured wholesale funding with a residual maturity of less than one year) of less than £150 billion by 2013. The 2013 target can also be segmented further into bank deposits of less than £65 billion and other unsecured wholesale funding of less than £85 billion. The reliance on wholesale funding has improved from £343 billion as at 31 December 2008 to £249 billion at 31 December 2009 (and this figure includes £109 billion of bank deposits).

In common with other UK banks, the Group has benefited from the UK Government's scheme to guarantee debt issuance. At 31 December 2009 the Group had issued debt securities amounting to £52 billion (2008 - £32 billion), which is approximately 38% of the total UK Government guaranteed debt.

Loan to deposit ratio (net)

The Group monitors the loan to deposit ratio as a key metric. This ratio has decreased from 118% at 31 December 2008 to 104% at 31 December 2009 for Core and from 151% at 31 December 2008 to 134% at 31 December 2009 for the Group. The Group has a target of 100% for 2013. The gap between customer loans and customer deposits (excluding repos) narrowed by £91 billion from £233 billion as at 31 December 2008 to £142 billion as at 31 December 2009.

Risk and capital management (continued)

Funding and liquidity risk (continued)

Monitoring (continued)

Undrawn commitments: The Group has been actively managing down the amount of undrawn commitments that it is exposed to. Undrawn commitments have decreased from £349 billion as at 31 December 2008 to £289 billion as at 31 December 2009.

Conduit commitments: The Group has taken additional measures to improve the balance sheet structure. One area of focus has been reducing the size of the multi-seller conduits business, which relies upon funding assets through the issuance of short-term asset backed commercial paper. Total facilities have declined by £17.9 billion to £25.0 billion at 31 December 2009. This has reduced the liquidity risk to the Group through the commitments provided for this type of business.

Liquidity reserves: The total stock of liquid assets has increased by £81 billion during 2009 from £90 billion at 31 December 2008 to £171 billion at 31 December 2009; this reflects the injection of £25.5 billion of B Shares at the end of December 2009 provided as treasury bills and cash. The Group is targeting a liquidity pool of £150 billion by 2013. The table below shows the breakdown of these assets. In addition to available liquid assets, the Group has a pool of unencumbered assets that are available for securitisation to raise funds if and when required.

	31 December 2009 £m	30 September 2009 £m	31 December 2008 £m
Liquidity reserves			
Government securities	57,407	41,976	27,303
Cash and central bank balances	51,500	37,000	11,830
Unencumbered collateral (1)	42,055	35,852	30,054
Other liquid assets	19,699	25,221	20,647
	170,661	140,049	89,834

Note:

(1) Includes secured assets which are eligible for discounting at central banks.

Repo agreements: At 31 December 2009 the Group had £68 billion of customer secured funding and £38 billion of bank secured funding, which includes borrowing using central bank funding schemes. With markets continuing to stabilise through the course of 2009, the Group has significantly reduced its reliance on secured funding from central bank liquidity schemes.

Risk and capital management (continued)

Wholesale funding breakdown

Funding and liquidity risk (continued)

The table below shows the composition of the Group's sources of wholesale funding. The Group has implemented its funding strategy of reducing its reliance on short-term wholesale funding. Deposits by banks have decreased by £63 billion to £116 billion; comprising 14.3% of total funding sources as at 31 December 2009, down from 18.8% as at 31 December 2008. Short term debt securities such as commercial paper and certificates of deposits in issue have also reduced by £41 billion to £103 billion as at 31 December 2009 from £144 billion as at 31 December 2008.

	31 December 2009		30 September 2009		31 December 2008	
	£m	%	£m	%	£m	%
Deposits by banks (1)	115,642	14.3	138,584	16.1	178,943	18.8
Debt securities in issue:						
- Commercial paper	44,307	5.5	45,508	5.3	69,891	7.3
- Certificates of deposits	58,195	7.2	79,305	9.2	73,925	7.8
- Medium term notes and other bonds	125,800	15.6	124,531	14.4	108,529	11.4
- Securitisations	18,027	2.2	16,869	2.0	17,113	1.8
	246,329	30.5	266,213	30.9	269,458	28.3
Subordinated debt	31,538	3.9	33,085	3.8	43,678	4.6
Total wholesale funding	393,509	48.7	437,882	50.8	492,079	51.7
Customer deposits (1)	414,251	51.3	423,769	49.2	460,318	48.3
	807,760	100.0	861,651	100.0	952,397	100.0

Note:

(1) Excluding repurchase agreements and stock lending.

The total level of the Group's wholesale funding has reduced year on year by £99 billion with the majority of the reduction attributable to a reduced reliance on inter-bank funding.

The table below shows the maturity profile of the Group's debt securities in issue and subordinated debt. The composition of the profile reflects the increased proportion of the Group's debt securities in issue of greater than 1 year maturity. Debt securities with a remaining maturity of less than 1 year has reduced by £33 billion to £139 billion as at 31 December 2009 down from £172 billion as at 31 December 2008.

	31 December 2009							
	Debt securities in issue		Subordinated debt	Total	30 September 2009		31 December 2008	
	£m	£m			£m	%	£m	%
Less than one year	136,901	2,144	139,045	50.0	162,427	54.3	172,234	55.0
1-5 years	70,437	4,235	74,672	26.9	75,227	25.1	61,842	19.8
More than 5 years	38,991	25,159	64,150	23.1	61,644	20.6	79,060	25.2
Total	246,329	31,538	277,867	100.0	299,298	100.0	313,136	100.0

Risk and capital management (continued)

Funding and liquidity risk (continued)

Net stable funding ratio

The net stable funding ratio shown below is assessed using the proposed Basel measure. This measure seeks to show the proportion of structural term assets which are funded by stable funding including customer deposits, long-term wholesale funding, and equity. Through the course of 2009, the measure has improved from 79% at 31 December 2008 to 90% at 31 December 2009. Over time this will be reviewed as proposals are developed and industry standards implemented.

	2009		2008		Weighting %
	£bn	ASF(1) £bn	£bn	ASF(1) £bn	
Equity	80	80	62	62	100
Wholesale lending > 1 year	144	144	149	149	100
Wholesale lending < 1 year	249	-	343	-	-
Derivatives	422	-	969	-	-
Repos	106	-	142	-	-
Customer deposits	415	353	460	391	85
Others (deferred tax, insured liabilities, etc)	106	-	94	-	-
Total liabilities and equity	1,522	577	2,219	602	
Cash	52	-	12	-	-
Inter bank lending	49	-	71	-	-
Government and corporate bonds	249	50	253	51	20
Derivatives	438	-	991	-	-
Reverse repos	76	-	98	-	-
Advances < 1 year	139	69	173	87	50
Advances >1 year	416	416	518	518	100
Others (Prepayments, accrued income, deferred taxation)	103	103	103	103	100
Total assets	1,522	638	2,219	759	
Net stable funding ratio		90%		79%	

Note:

(1) ASF means available stable funding.

Outlook for 2010

Whilst there have been improvements in the state of the global economy over the course of 2009, the outlook for 2010 remains uncertain. In line with meeting the objectives of the Strategic Plan, the Group is actively focusing on closing the customer funding gap, continuing to exit Non-Core businesses and focusing on reducing undrawn and contingent commitments. This will reduce the absolute need for wholesale funding, with the Group targeting £150 billion in 2013. In addition, the Group will continue to make progress in terming out its remaining wholesale funding. The Group will continue to reduce reliance on government supported schemes, and be governed by the state of the markets and the economies in which it operates. These strategies will ensure that the Group will be more resilient to any further disruptions in the market and will be better placed to take advantage of favourable trading conditions as they return.

Market risk

Market risk arises from changes in interest rates, foreign currency, credit spread, equity prices and risk related factors such as market volatilities. The Group manages market risk centrally within its trading and non-trading portfolios through a comprehensive market risk management framework. This framework includes limits based on, but not limited to VaR, scenario analysis, position and sensitivity analyses.

Measurement

At the Group level the risk appetite is expressed in the form of a combination of VaR, sensitivity and scenario limits. VaR is a technique that produces estimates of the potential change in the market value of a portfolio over a specified time horizon at given confidence levels. For internal risk management purposes, the Group's VaR assumes a time horizon of one trading day and in June 2009 the Group changed the VaR confidence level from 95% to 99% as it considers this provides greater clarity in respect of more severe potential economic outcomes. The Group's VaR model is based on a historical simulation model, utilising data from the previous two years trading results.

The VaR disclosure is broken down into trading and non-trading, where trading VaR relates to the main trading activities of the Group and non-trading reflects the VaR associated with reclassified assets, money market business and the management of internal funds flow within the Group's businesses.

As part of the Strategic Review, the designation of assets between Core and Non-Core divisions was completed during 2009. As the Non-Core division was not established until the conclusion of the Strategic Review in the first quarter of 2009, constitution of the average, maximum and minimum VaR for Core and Non-Core has been prepared on a best efforts basis as these measures require daily data.

All VaR models have limitations, which include:

- Historical simulation VaR may not provide the best estimate of future market movements. It can only provide a prediction of the future based on events that occurred in the time series horizon. Therefore, events more severe than those in the historical data series cannot be predicted;
- VaR that uses a 99% confidence level does not reflect the extent of potential losses beyond that percentile;
- VaR that uses a one-day time horizon will not fully capture the profit and loss implications of positions that cannot be liquidated or hedged within one day; and
- The Group computes the VaR of trading portfolios at the close of business. Positions may change substantially during the course of the trading day and intra-day profit and losses will be incurred.

These limitations mean that the Group cannot guarantee that losses will not exceed the VaR.

Risk and capital management (continued)

Market risk (continued)

Traded portfolios

The VaR for the Group's 2009 trading portfolios segregated by type of market risk exposure is shown below.

	2009				2008			
	Average £m	Period end £m	Maximum £m	Minimum £m	Average £m	Period end £m	Maximum £m	Minimum £m
Interest rate	57.0	50.5	112.8	28.1	38.7	54.4	94.0	18.2
Credit spread	148.3	174.8	231.2	66.9	71.5	61.5	130.8	51.7
Currency	17.9	20.7	35.8	9.2	7.6	17.0	18.0	3.5
Equity	13.0	13.1	23.2	2.7	22.4	18.3	42.6	11.0
Commodity	14.3	8.9	32.1	6.5	9.9	10.0	25.8	0.2
Diversification		(86.1)				(52.4)		
	155.2	181.9	229.0	76.8	82.3	108.8	155.7	49.3
Core	101.5	127.3	137.8	54.8				
CEM (1)	29.7	38.6	41.3	11.5				
Core excluding CEM	86.7	97.4	128.5	54.9				
Non-Core	86.3	84.8	162.1	29.3				

Note:

- (1) CEM: Counterparty exposure management.
- (2) The VaR above excludes super senior tranches of asset backed CDOs as VaR no longer produces an appropriate measure of risk for these exposures due to the illiquidity and opaqueness of the pricing of these instruments over an extended period. For these exposures, the maximum potential loss is equal to the aggregate net exposure, which was £910 million as at 31 December 2009.

Non-traded portfolios

The VaR for the Group's non-trading portfolios and segregated by type of market risk exposure, is shown below.

	2009				2008			
	Average £m	Period end £m	Maximum £m	Minimum £m	Average £m	Period end £m	Maximum £m	Minimum £m
Interest rate	15.5	16.5	26.1	9.5	10.6	24.4	32.9	5.2
Credit spread	211.2	213.3	270.3	65.4	10.5	65.2	65.2	5.5
Currency	1.4	0.6	7.0	0.2	0.6	2.2	5.7	0.1
Equity	3.6	2.3	7.2	1.7	3.4	7.0	8.0	0.8
Diversification		(26.0)				(22.7)		
	207.1	206.7	274.9	76.1	14.8	76.1	76.1	7.7
Core	105.1	129.4	142.7	55.0				
Non-Core	112.6	87.6	145.3	20.2				

Risk and capital management (continued)

Market risk (continued)

Traded and non-traded portfolios (continued)

Key points

- The average total VaR utilisation increased in 2009 compared with 2008 largely as a result of the increased market volatility experienced since the credit crisis began in August 2007 being more fully incorporated into the two year time series used by the Group in its VaR model. This volatility is particularly pronounced in respect of credit spreads and has a marked impact on credit spread VaR. This increase is partially off-set by a reduction in trading book exposure throughout the period, due to a reduction in the size of the inventory held on the balance sheet as a result of sales, reclassification of assets to the non-trading book and write-downs.
- The credit spread VaR increased significantly during May 2009 due to the purchasing of additional protection against the risk of counterparty failure on CDPC exposures. As this counterparty risk is itself not in VaR these hedges have the effect of increasing the reported VaR.
- The credit spread VaR decreased significantly at the end of August 2009 due to the positions relating CDPCs, being capitalised under Pillar II approach and hence excluded from the VaR measure from this date.
- The Counterparty Exposure Management (CEM) trading book exposure and the exposure of Core without CEM have been disclosed separately. CEM manages the OTC derivative counterparty credit risk in GBM, by actively controlling risk concentrations and reducing unwanted risk exposures. The hedging transactions CEM enters into are recorded in the trading book, and therefore contribute to the market risk VaR exposure of the Group. The counterparty exposures themselves are not captured in VaR for regulatory capital. In the interest of transparency, CEM trading book exposure is disclosed separately.
- The average total non-trading VaR utilisation was higher in 2009 at £207 million, compared with £15 million in 2008. This is primarily due to assets from the Group's now dissolved securitisation arbitrage conduit, which was transferred from ABN AMRO to RBS, being included in the Group's VaR measure from January 2009 and the increased market volatility being incorporated into the two year time series as noted above. If both of these factors are excluded, the non-trading VaR would decrease to reflect actions taken through the course of the year to dynamically reduce the underlying risk sensitivity.

Risk and capital management (continued)

Market risk (continued)

Structural interest rate VaR

Non-trading interest rate VaR for the Group's retail and commercial banking activities at a 99% confidence level was £101.3 million at 31 December 2009 (2008 - £76.7 million). During 2009, the maximum VaR was £123.2 million (2008 - £197.4 million), the minimum was £53.3 million (2008 - £76.7 million) and the average was £85.5 million (2008 - £130.0 million). A breakdown by currency of the Group's non-trading VaR (including RFS Holdings minority interest) is shown below.

	2009 £m	2008 £m
EUR	32.2	30.9
GBP	111.2	26.0
USD	42.1	57.9
Other	9.0	14.0

At year end the GBP VaR was increased by the impact of the B share issuance.

Sensitivity of net interest income

There have been no material changes to the Group's measurement of, and management philosophy towards, the sensitivity of net interest income to movement in interest rates. The Group aims to be relatively neutral to directional shifts in interest rates and it seeks to mitigate the effect of prospective interest movements which could reduce future net interest income, whilst balancing the cost of such hedging activities on the current net revenue stream. The following table shows the sensitivity of net interest income over the next twelve months to an immediate up and down 1% change to all interest rates.

	2009 £m	2008 £m
+ 100bp shift in yield curves	510	139
- 100bp shift in yield curves	(687)	(234)

The base case projected net interest income is based on the Group's current balance sheet, forward rate paths implied by the yield curve as at 31 December and using contractual repricing dates. Where contractual repricing dates are not held an estimate of the likely timing and extent of any rate change is used. The projection also includes the expected effects of behavioural options such as the prepayment of residential mortgages. The above sensitivities show how this projected NII would change in response to an immediate parallel shift to all market rates.

The scenarios used are simplified in that they assume all interest rates for all currencies and maturities move at the same time and by the same amount and therefore do not reflect the potential effect on net interest income of some rates changing whilst others remain the same. The scenarios also do not incorporate actions that would be taken by the business units to mitigate the effect of this interest rate risk.

Risk and capital management (continued)

Market risk (continued)

Sensitivity of net interest income (NII) (continued)

The projections do not take into account the effect on net interest income of anticipated differences in changes between interest rates and interest rates linked to other bases (such as central bank rates or product rates for which the entity has discretion over the timing and extent of rate changes). The projections make other simplifying assumptions, including that all positions run to maturity and that there are no negative interest rates.

The Group's asset sensitive position has increased in 2009. The primary contributors to the change are enhanced modelling of embedded deposit floors, active position management to benefit from the impact of a tightening US monetary policy regime by Citizens and the impact of not fully hedging the interest rate exposure related to the APS capital proceeds which were received in late December.