RBS Treasury

Structural hedges: a summary

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Comparison of rolling hedge rate and 3M LIBOR

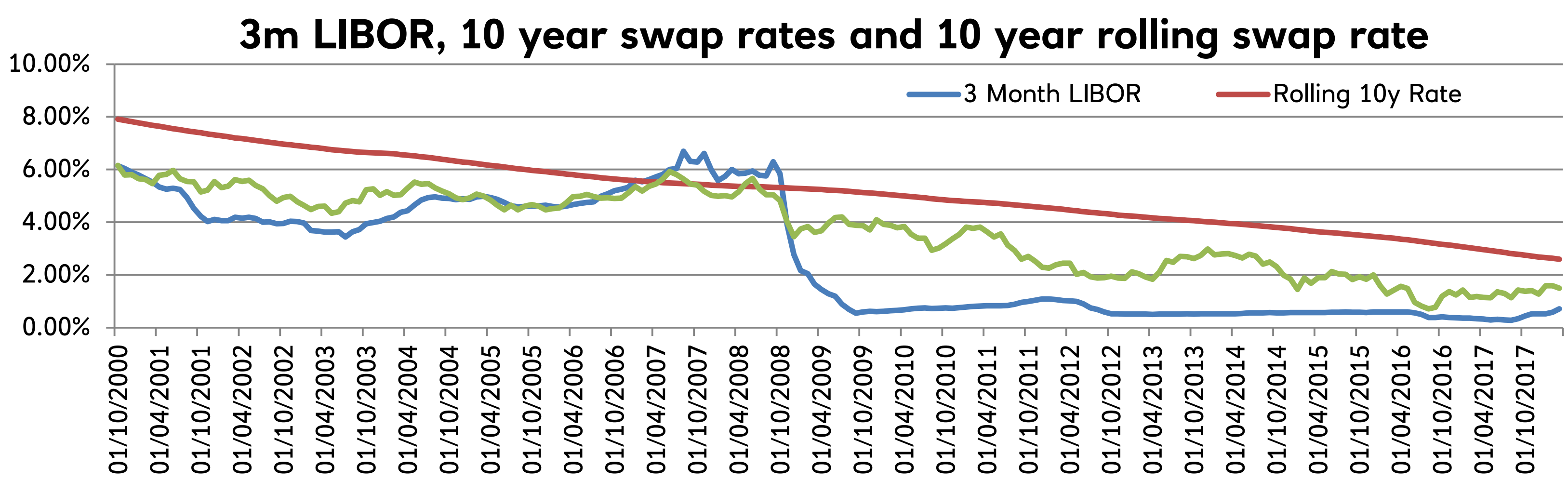
The aim of structural hedging is to reduce the sensitivity of earnings to interest rate shocks. It also provides some protection against prolonged periods of falling rates.

We assign an evenly amortising profile to the core element of some “indefinite maturity” liabilities. Equity, for example, is amortised monthly over a 10 year horizon.

The balance is hedged on a matched basis. Each month only 1/120th of the hedge matures and is reinvested.

If the balance is stable, we eventually realise a yield equivalent to the 10 year average of the 10 year swap rate.

The graph below shows how this provided protection to interest rate movements in recent years.



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The components of the structural hedge

Although ‘structural exposure’ can refer to various risks, the structural hedge is generally understood to refer to the net exposure to indefinite maturity liabilities:

- primarily current accounts and also some deposit balances
- equity and reserves also a significant element

It is not easy to reconcile the hedged nominal directly to the spot balance sheet because we haircut the hedges for prudence and include miscellaneous less material balances (e.g. fixed assets, credit cards, goodwill).

Additionally, subsidiary banks manage smaller structural exposures. They hedge against Treasury.

Natural offsets to the exposure are primarily provided by five year fixes on residential mortgage loans plus other fixed rate assets. There are fixed rate assets that do not match the structural hedging benchmark of 5 to 10 years (i.e. two year residential mortgages) and which may be separately hedged.

Overall we disclosed a nominal hedge of £149bn at December 2017.

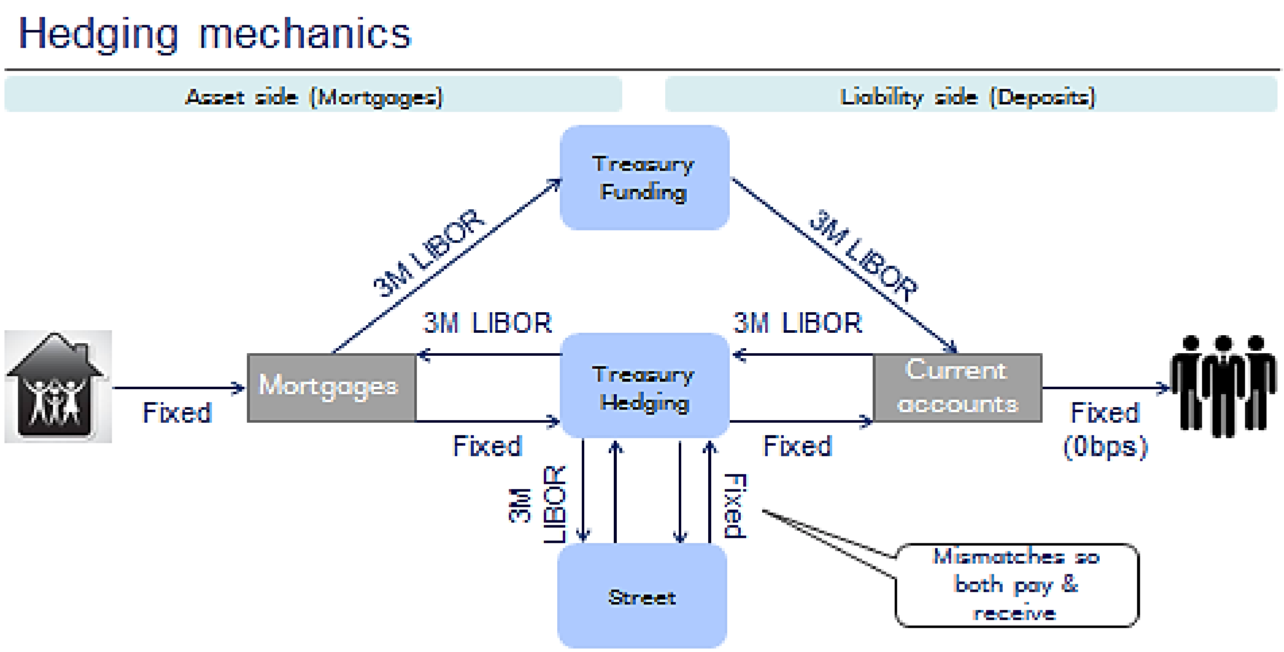
Hedging mechanics

The graphic shows how hedges might 'gross up' where the tenor of the mortgage fix does not match the structural hedge.

Initially, the hedge requirements of the businesses are transferred to Treasury for execution. In this illustration a 2 year pay fixed swap, say, is needed to hedge mortgages, but a 5 year receive fixed swap is needed to hedge current accounts in line with our benchmark. Therefore Treasury execute hedges to the street against each exposure separately.

The rate on execution is credited or charged back to the business. Hence the mortgage business receives a 2 year swap rate plus a spread from the customer and pays a 2 year swap rate to Treasury,

The deposit business pays 0% (or a rate close to zero) on current accounts and receives a 5 year swap rate.



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Disclosure 1: structural hedge

	2017			2016		
	Incremental income £m	Average notional £bn	Overall yield %	Incremental income £m	Average notional £bn	Overall yield %
Equity structural hedging	628	28	2.48%	633	33	2.41%
Product structural hedging	680	101	1.02%	635	90	1.20%
Total	1,308	129	1.34%	1,268	123	1.47%

We disclose detail on hedges managed directly by Treasury. This includes equity in Treasury's books and current accounts and deposits in PBB and Commercial Banking.

We show the income generated by the hedge in excess of 3M LIBOR, the average notional hedged over the period (in GBP equivalent) and the hedge yield. The yield is equivalent to the average fixed leg of the swap.

Hedging may have be in the form of external swap execution or use of internal offsetting exposures, so the yield is a proxy derived from income that was allocated to the products based on swap rates at the time the hedging requirement arose.

All Treasury income from structural hedging is allocated to franchises.

At year end 2017 we also provided an indication of the contribution from smaller customer hedges in Private Banking, RBS International, UBIDAC and Ulster Bank Limited:

> In addition to the hedges presented in the table above, other parts of the Group also maintain structural hedges. Hedges are transacted with Treasury and generally have an amortised five-year profile. In aggregate, Private Banking, RBS International, UBI DAC and Ulster Bank Limited maintained structural hedges against Treasury relating to equity and products, with an average notional of £20 billion for 2017. This resulted in £147 million incremental income allocation (above 3-month LIBOR) to the businesses in 2017, with an overall yield of 0.83%. A significant proportion of the hedge is euro-denominated.

Disclosure 2: earnings sensitivity

Change in net interest earnings – 25 basis point upward shift in yield curves

2017	Year 1 £m	Year 2 (2) £m	Year 3 (2) £m
Structural hedges	33	100	171
Managed margin (1)	153	170	178
Other	(8)	—	—
Total	178	270	349

We disclose the sensitivity to a instant parallel shift upwards of 25bps across all yield curves assuming a constant balance sheet.

At December 2017 the benefit to interest income was estimated at £178m over 12 months, compared to a scenario where the yield curve followed market expectations.

We also indicate how much benefit would be realised through hedging at higher rates, compared to the benefit expected to accrue from wider margins on unhedged deposits.

Years 2 and 3 provide an indication of how the benefit of higher rates to interest income will evolve over time.
While the annual interest income benefit to unhedged deposits is realised in year 1 and, more or less, repeated in outer years, the main benefit to the structural hedge arises in years 2 and 3 as more hedges are replaced with new hedges at higher rates.

Disclosure 3: reserve sensitivity

2017	Available-for-sale reserve £m	Cashflow hedge reserve £m	Total £m
+ 25 basis points	(41)	(443)	(484)
− 25 basis points	42	448	490
+ 100 basis points	(164)	(1,744)	(1,908)
− 100 basis points	167	1,819	1,986

We also disclose the sensitivity of reserves to up and down instantaneous parallel shifts in interest rates.

The main item to note is that most interest rate swaps relating to structural hedging are accounted for as cash flow hedges. The swaps are the primary driver of cash flow hedge reserve sensitivity.

The table shows the adverse sensitivity is to higher rates. The impact on swap valuations is recognised instantly. However, as the swap cash flows are realised and accrued as interest income in P&L the negative impact on the reserve will unwind.

Disclaimers

The targets, expectations and trends discussed in this presentation represent management's current expectations and are subject to change, including as a result of the factors described in the "Risk Factors" on pages 372 to 402 of the Annual Report and Accounts 2017.

Cautionary statement regarding forward-looking statements
Certain sections in this document contain 'forward-looking statements' as that term is defined in the United States Private Securities Litigation Reform Act of 1995, such as statements that include the words 'expect', 'estimate', 'project', 'anticipate', 'commit', 'believe', 'should', 'intend', 'plan', 'could', 'probability', 'risk', 'Value-at-Risk (VaR)', 'target', 'goal', 'objective', 'may', 'endeavour', 'outlook', 'optimistic', 'prospects' and similar expressions or variations on these expressions.
In particular, this document includes forward-looking statements relating, but not limited to: future profitability and performance, including financial performance targets such as return on tangible equity; cost savings and targets, including cost:income ratios; litigation and government and regulatory investigations, including the timing and financial and other impacts thereof; structural reform and the implementation of the UK ring-fencing regime; the implementation of RBS's transformation programme, including the further restructuring of the NatWest Markets franchise; the satisfaction of the Group's residual EU State Aid obligations; the continuation of RBS's balance sheet reduction programme, including the reduction of risk-weighted assets (RWAs) and the timing thereof; capital and strategic plans and targets; capital, liquidity and leverage ratios and requirements, including CET1 Ratio, RWA equivalents (RWAe), Pillar 2 and other regulatory buffer requirements, minimum requirement for own funds and eligible liabilities, and other funding plans; funding and credit risk profile; capitalisation; portfolios; net interest margin; customer loan and income growth; the level and extent of future impairments and write-downs, including with respect to goodwill; restructuring and remediation costs and charges; future pension contributions; RBS's exposure to political risks, operational risk, conduct risk, cyber and IT risk and credit rating risk and to various types of market risks, including as interest rate risk, foreign exchange rate risk and commodity and equity price risk; customer experience including our Net Promotor Score (NPS); employee engagement and gender balance in leadership positions.
Limitations inherent to forward-looking statements
These statements are based on current plans, estimates, targets and projections, and are subject to significant inherent risks, uncertainties and other factors, both external and relating to the Group's strategy or operations, which may result in the Group being unable to achieve the current targets, predictions, expectations and other anticipated outcomes expressed or implied by such forward-looking statements. In addition certain of these disclosures are dependent on choices relying on key model characteristics and assumptions and are subject to various limitations, including assumptions and estimates made by management. By their nature, certain of these disclosures are only estimates and, as a result, actual future gains and losses could differ materially from those that have been estimated. Accordingly, undue reliance should not be placed on these statements. Forward-looking statements speak only as of the date we make them and we expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in the Group's expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.
Important factors that could affect the actual outcome of the forward-looking statements
We caution you that a large number of important factors could adversely affect our results or our ability to implement our strategy, cause us to fail to meet our targets, predictions, expectations and other anticipated outcomes or affect the accuracy of forward-looking statements we describe in this document, including in the risk factors and other uncertainties set out in the Group's 2017 Annual Report on Form 20-F and other materials filed with, or furnished to, the US Securities and Exchange Commission, and other risk factors and uncertainties discussed in this document. These include the significant risks for RBS presented by the outcomes of the legal, regulatory and governmental actions and investigations that RBS is or may be subject to and any resulting material adverse effect on RBS of unfavourable outcomes and the timing thereof (including where resolved by settlement); economic, regulatory and political risks, including as may result from the uncertainty arising from Brexit and from the outcome of general elections in the UK and changes in government policies; RBS's ability to satisfy its residual EU State Aid obligations and the timing thereof; RBS's ability to successfully implement the significant and complex restructuring required to be undertaken in order to implement the UK ring-fencing regime and related costs; RBS's ability to successfully implement the various initiatives that are comprised in its restructuring and transformation programme, particularly the proposed further restructuring of the NatWest Markets franchise, the balance sheet reduction programme and its significant cost-saving initiatives and whether RBS will be a viable, competitive, customer focused and profitable bank especially after its restructuring and the implementation of the UK ring-fencing regime; the dependence of the Group's operations on its IT systems; the exposure of RBS to cyber-attacks and its ability to defend against such attacks; RBS's ability to achieve its capital, funding, liquidity and leverage requirements or targets which will depend in part on RBS's success in reducing the size of its business and future profitability as well as developments which may impact its CET1 capital including additional litigation or conduct costs, additional pension contributions, further impairments or accounting changes; ineffective management of capital or changes to regulatory requirements relating to capital adequacy and liquidity or failure to pass mandatory stress tests; RBS's ability to access sufficient sources of capital, liquidity and funding when required; changes in the credit ratings of RBS, RBS entities or the UK government; declining revenues resulting from lower customer retention and revenue generation in light of RBS's strategic refocus on the UK; as well as increasing competition from new incumbents and disruptive technologies.
In addition, there are other risks and uncertainties that could adversely affect our results, ability to implement our strategy, cause us to fail to meet our targets or the accuracy of forward-looking statements in this document. These include operational risks that are inherent to RBS's business and will increase as a result of RBS's significant restructuring and transformation initiatives being concurrently implemented; the potential negative impact on RBS's business of global economic and financial market conditions and other global risks, including risks arising out of geopolitical events and political developments; the impact of a prolonged period of low interest rates or unanticipated turbulence in interest rates, yield curves, foreign currency exchange rates, credit spreads, bond prices, commodity prices, equity prices; basis, volatility and correlation risks; the extent of future write-downs and impairment charges caused by depressed asset valuations; deteriorations in borrower and counterparty credit quality; heightened regulatory and governmental scrutiny (including by competition authorities) and the increasingly regulated environment in which RBS operates as well as divergences in regulatory requirements in the jurisdictions in which RBS operates; the risks relating to RBS's IT systems or a failure to protect itself and its customers against cyber threats, reputational risks; risks relating to increased pension liabilities and the impact of pension risk on RBS's capital position, including on any requisite management buffer; risks relating to the failure to embed and maintain a robust conduct and risk culture across the organisation or if its risk management framework is ineffective; RBS's ability to attract and retain qualified personnel; limitations on, or additional requirements imposed on, RBS's activities as a result of HM Treasury's investment in RBS; the value and effectiveness of any credit protection purchased by RBS; risks relating to the reliance on valuation, capital and stress test models and any inaccuracies resulting therefrom or failure to accurately reflect changes in the micro and macroeconomic environment in which RBS operates, risks relating to changes in applicable accounting policies or rules which may impact the preparation of RBS's financial statements or adversely impact its capital position; the impact of the recovery and resolution framework and other prudential rules to which RBS is subject; the application of stabilisation or resolution powers in significant stress situations; contribution to relevant compensation schemes; the execution of the run-down and/or sale of certain portfolios and assets; the recoverability of deferred tax assets by the Group; and the success of RBS in managing the risks involved in the foregoing.
The forward-looking statements contained in this document speak only as at the date hereof, and RBS does not assume or undertake any obligation or responsibility to update any forward-looking statement to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.
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