Sterling Overnight Index Average (SONIA): a Guide

Note: this document has been updated in May 2004.

SONIA benchmarks the cost of funds in the overnight sterling market and provides a methodology for fixing Overnight Indexed Swaps.

SONIA was introduced by the Wholesale Markets Brokers' Association (WMBA) in March 1997. It is London's first Overnight Index and has stimulated the development of Overnight Index Swaps in the Sterling Money Markets. Some central banks commonly publish such rates. As no appropriate rate existed in Sterling the WMBA, with the BBA's backing, decided to develop SONIA.

Data is available from the following sources:
Moneyline Telerate 3937
Reuters SONIA 1
Bloomberg WMBA<GO>

Historical data are available on the Wholesale Markets Brokers' Associations' website, please see link below.

What is SONIA?
It is the Sterling Overnight Interbank Average. It tracks actual Sterling overnight funding rates experienced by market participants. The development of SONIA led to product developments which reduce risk and increase transparency.

SONIA is the weighted average rate to four decimal places of all unsecured sterling overnight cash transactions brokered in London by WMBA member firms between midnight and 4.15pm with all counterparties in a minimum deal size of £25 million.

What is an OIS?
An OIS is a fixed rate interest rate swap against a floating rate index, e.g. SONIA or EURONIA. It replicates a mismatched deposit position through either -

- a short term loan funded by an overnight deposit; or
- an overnight loan funded by a short term deposit.

OISs allow banks to manage their liquidity requirements more effectively.

What are the steps in an OIS trade?
Two parties agree to exchange the difference between the interest accrued at an agreed fixed interest rate for a fixed period - say 3 months - on an agreed notional amount and interest accrued on the same amount by compounding SONIA daily over the term of the swap. Settlement is then netted at an agreed date after maturity, so the principal never changes hands.

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Back in 1998 the BBA in close cooperation…

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Who developed SONIA?
It was developed by the Wholesale Markets Brokers' Association and receives the full endorsement of the BBA.

Which trades are eligible for SONIA?
Eligible trades are those arranged between 0000hrs and 1615hrs London time on settlement day where repayment is made on the following business day. SONIA is published by 1700 on the day of calculation.

What obstacles are there for SONIA?
The main obstacles to SONIA in London have concerned the past volatility of Sterling overnight interest rates and that a floating rate index may not reflect the true depth of overnight business in the market. These problems have been resolved by more stable overnight rates since the introduction of the Bank of England gilt repo in 1996 and by the innovative approach adopted in fixing SONIA.

What are the key features to this benchmark?
An overnight benchmark should be credible and transparent and mirror actual overnight funding as closely as possible. France, Spain and Italy previously had the most respected overnight swap benchmarks and SONIA has now to be included in that group.

How important are OISs?
The importance of OIS stem from their impact on activity at the overnight end of the yield curve. This means that overnight interest rate risk can be managed off-balance sheet, thereby giving money market participants a means of:

- diminishing credit risk
- reducing capital charges
- enhancing liquidity and gearing
- reducing the use of credit lines
- lowering transaction costs.

Importantly the ability to separate interest rate decisions from balance sheet decisions increases banks' flexibility.

Will the rate benefit risk managers?
OISs allow the interest rate risk profile of a portfolio to be changed as if by the addition of a cash asset or borrowing, but with no use of cash and with minimal use of credit. These features allow much better risk management and allow active trading or market-making of OIS as an instrument. They may increase liquidity along the money market curve and reduce systemic risk relative to the cash alternatives.

Does OIS improve liquidity?
Liquidity requirements can be managed more effectively with OIS. Floating overnight rates allow term deposits to be raised thus improving liquidity ratios but without locking in the term interest rate. This procedure involves paying the fixed rate on the term funds, and then through an OIS, receiving the overnight floating rate.

Do OIS trades help the repo book?
OIS can simplify the risk management in the repo book. An overnight or open repo allows collateral to be changed daily, while an OIS fixes the repo rate for a term. Collateral can be changed overnight, but a fixed interest rate can be maintained, or a term repo can be indexed to overnight rates.

What other benefits will SONIA have for the derivatives market?
An OIS provides more accurate forward-forward rates with which to quantify market expectations about the future rates and produce a clearer forward curve. As OIS are derivatives, they are likely to be more liquid than cash and will therefore trade at narrower spreads.

Will fund managers benefit?
Having an internal benchmark against which to manage interest rate risk in short-term portfolios will benefit fund managers. Often an attractive asset cannot be taken because it does not match interest rate needs. With an OIS it

is possible to swap assets with longer maturities into the overnight index. This adds value across the entire yield curve.

How will OIS trades affect funded investors?
It is common for funded investors to use futures to cover the risk of a rise in short term rates. But the nearest futures contract will mature 3-6 months in advance. Often, the sharper the overnight rise, the less sustainable it is seen as being and the less it is reflected in the futures. This makes futures a poor hedge for funding risk. By contrast, paying fixed and receiving floating in an OIS exactly compensates for rises in overnight rates.

What type of formal documentation is required?
Currently, most OIS structures are completed using International Swaps and Derivatives (ISDA) documentation.

What is the cost of an OIS?
The markets in OIS normally trade at spreads of 5 basis points with a range between 3 and 10 basis points, out to 18 months. However, the spreads are larger for thinly traded currencies. Markets which are relatively mature have shown spreads as low as 3 basis points for larger transactions.

How large is the OIS market?
Current sterling OIS volume is estimated at £3 billion x 3 month equivalent per day (or £9 billion x 1 month equivalent, etc). Volume in euro OIS in London is estimated at 100-150 billion x 3 month equivalent per day. Much of this volume stems from the interbank market as the product is particularly suitable for financial institutions asset and liability management operations in the money market. It is anticipated that OIS will become more popular with non-bank treasury teams looking for more flexible ways of interest rate management at the short end of the yield curve.

Are OIS good for positioning?
OIS are an excellent positioning tool for putting on carry trades or expressing a directional view. Since the floating leg exactly follows overnight rates, central bank rate cuts or increases can be directly exploited.

How do SONIA and OIS trades affect money market funds? With the development of the gilt repo market and SONIA, sterling overnight rates have stabilised and led to the growth of money market funds. In the past, the lack of a benchmark and the lack of investments of short enough duration impeded money market progress. With SONIA, and more OIS trades, both of these problems are eliminated.

Why are OIS better than term deposits?
Investment institutions prefer using the one night OIS funding because of its flexibility. Aside from flexibility gains OIS can have cost benefits if the forward curve is considered too steep. Also term deposits can create unwanted interest rate exposures since their maturities may not be favourable. Overall institutions can gain from credit, liquidity, capital and cost drawbacks that come with using the balance sheet, but which are avoided with OIS.