

Term SONIA Reference Rates

Presentation to the Working Group on Sterling Risk-Free Reference Rates

Who we are

- FTSE Russell is a leading global provider of benchmarks, analytics, and data solutions with multi-asset capabilities.
 - Approximately \$16 trillion is currently benchmarked to FTSE Russell indexes.
 - Global perspective is underpinned by specialist knowledge gained from developing local solutions.
 - FTSE Russell has a well established and robust governance framework designed to meet the requirements of the IOSCO Principles for Financial Benchmarks and the European Benchmark Regulation (EU BMR).
 - FTSE International Limited is authorized as a benchmark administrator under EU BMR.
 - FTSE Russell is the benchmark administrator for the Tradeweb FTSE Gilt Closing Prices.
- FTSE Russell is wholly owned by the London Stock Exchange Group (LSEG). LCH is also a subsidiary of LSEG and is a leading Rates and multi-asset clearing house, including a strong market presence in the clearing of SONIA-referenced OTC Rates derivatives.
- Tradition is a leading global interdealer broking firm with a presence in 28 countries. Trad-X is its multi-asset class trading platform for OTC derivatives.
- TP ICAP is a global firm of professional intermediaries that plays a pivotal role in the world's financial, energy and commodities markets. i-Swap is its electronic trading platform for OTC interest rate derivatives.

TSRR Status

Partnership Approach

- FTSE Russell has been working with LCH, Tradition and TP ICAP to:
 - Establish TSRR benchmark design principles
 - Evaluate existing order book data to inform methodologies and understand market structure changes needed to support certain methodologies
 - Define an appropriate two-part definition including an underlying interest and a detailed statement of methodology
 - Develop appropriate procedures and governance arrangements for the evolution of TSRRs
 - Undertake client outreach and formulate licensing approach.

Key Findings

- TSRRs should be designed for use in cash products, with primary use cases in treasury and funding functions.
- Spot SONIA OIS represents the best measure of a TSRR and futures could play a supporting role.
- TSSR robustness could be significantly improved through the trading of spot SONIA OIS on central limit order books (CLOBs).

TSRR Benchmark Design Principles

- TSRRs should be compliant with the IOSCO Principles for Financial Benchmarks and EU Benchmark Regulation.
- To ensure this is the case, we have established benchmark design principles.

Design Principle	Description
Anchored in transactions, or executable data, where possible	The methodology must be biased in the direction of tangible / observable transactions or executable data above all other available market raw material
Resilient and reliable, particularly in times of market stress	The methodology must be able to produce a reliable rate in times of extreme market stress, particularly when there is a shortage of available market data
Robust to potential manipulation	The methodology design must protect the rate from manipulation attempts, and be able to identify and highlight suspicious activity
Derived from transparent methodologies and processes, which are publicly available	The methodology used must be clear, transparent and comprehensible to market participants
Allow for data sources and methodologies to evolve, transparently, over time	The methodology must be able to appropriately utilise underlying market data in an objective and structured manner, recognising data sources may change over time
Devoid of expert judgement on behalf of the Index provider	To the extent possible, the methodology must avoid the use of expert judgement. In all circumstances, expert judgement on behalf of the index provider is avoided
Designed with appropriate fallback arrangements	In the event that RFR-derived term rates can no longer be produced, appropriate fallback rates/mechanisms should be defined

TSRR Input Data

- TSRRs can be created from derivative markets referencing SONIA. Available markets and contract types have strengths and weaknesses for the construction of robust TSRR benchmarks.
- We plan to consult with market participants to understand their methodology preferences and incorporate into benchmark design.

Market	Description	Strength(s)	Weakness(es)	High Level Methodology
OIS	Interest rate swaps in which daily compounded SONIA is exchanged for a fixed interest rate.	<ul style="list-style-type: none"> ▪ Reference period alignment. ▪ Market size. 	<ul style="list-style-type: none"> ▪ Executed transactions in spot contracts can be sporadic and may be insufficient in isolation to calculate robust TSRRs on all trading days. 	<p>Transactions: Volume-weighted average price (VWAP) of eligible transactions.</p> <p>Quotes: Create an aggregated central order book from contributing trading venues and find the weighted average rate at top of order book.</p>
Futures	Various contracts with differing specifications have been launched across futures exchanges.	<ul style="list-style-type: none"> ▪ Highly standardised and can consolidate liquidity. 	<ul style="list-style-type: none"> ▪ Reference period misalignment. ▪ A yield curve model is needed. This requires assumptions to be made and introduces model risk. ▪ Current market size. 	<p>Transactions: VWAP of eligible transactions and contracts. Use these as inputs to model a SONIA curve.</p> <p>Quotes: Weighted average rate at top of order book for each futures contract. Use these as inputs to model a SONIA curve.</p>
Hybrid	A combination of both futures and OIS can be used to construct TSRRs.	<ul style="list-style-type: none"> ▪ Maximises the use of available data sources. 	<ul style="list-style-type: none"> ▪ Benchmark production may be more complex and less transparent. ▪ The combining of input data may be subjective. 	A methodology to either prioritise or combine OIS and futures data.

Market Structure Developments & Implications

Development of CLOBs

- The Working Group's consultation found that firm quotes for SONIA OIS are likely to offer the most feasible and robust data sources in the near-term.
- CLOBs for SONIA OIS are not yet in place and dealer support is needed to achieve this.

Benefits of CLOBs

- The creation and use of the CLOB gives the reference price desirable attributes:
 - Transparency
 - Irrefutable Liquidity
 - A cleared rather than credit based market
 - Provision by independent MiFID II regulated MTFs.

Conflicts of Interest

- The fact that all prices are tradable helps to ensure genuine liquidity.
- The methodology also has a number of layers of defence to mitigate potential conflicts of interest.
- Ongoing surveillance and monitoring on venue and across venues would also be established.

Next Steps

- 1) Broad Market Engagement
- 2) Consultation on Methodology

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FTSE Russell index expertise and products are used extensively by institutional and retail investors globally. For over 30 years, leading asset owners, asset managers, ETF providers and investment banks have chosen FTSE Russell indexes to benchmark their investment performance and create investment funds, ETFs, structured products and index-based derivatives. FTSE Russell indexes also provide clients with tools for asset allocation, investment strategy analysis and risk management.

A core set of universal principles guides FTSE Russell index design and management: a transparent rules-based methodology is informed by independent committees of leading market participants. FTSE Russell is focused on index innovation and customer partnership applying the highest industry standards and embracing the IOSCO Principles. FTSE Russell is wholly owned by London Stock Exchange Group.

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