

# **IBOR Transition**



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## **Challenges and Impacts for Corporate Treasurers**

South Africa's major corporates seem not to have awakened yet to the fact that in a few years interbank offered rates (such as LIBOR and JIBOR) will transition to alternative reference rates. This transition will be one of the most significant transformations of interest rate benchmarks in the last 25 years, but are major corporate treasurers fully aware of the challenges ahead? How can they ensure their business is well prepared to handle the possible disruption caused by this transition?

IBOR transition is a fundamental issue for financial market participants. Regulators across the world have made it clear that the discontinuation of interbank offered rates (IBOR) rates by the end of 2021 and their replacement with a new set of reference rates, the so-called Risk Free Rates (RFR), is a certainty and market participants are urged to plan accordingly.

IBOR rates have been, and still are, at the core of the financial system, providing a reference for the pricing of a wide array of financial contracts, including derivatives, loans and securities. Hundreds of trillions of dollars' worth of financial contracts reference interbank offered rates in one of the major currencies and it is difficult to overstate the scale of funding and investment activity based on IBOR rates.

Notwithstanding the combined efforts of regulators, central banks and industry groups focusing on developing alternative reference rates and robust contractual fallbacks to manage the transition as smoothly as possible, firms cannot just sit and wait, but will instead have to take action in order to adequately prepare for the discontinuation of interbank offered rates.

The purpose of this article is to discuss the potential impact of the IBOR transition, which expands across many critical aspects of organisations, touching on financing and transactions, clients and contracts, operations, systems, models, processes, and accounting.

To meet the 2021 timeline, planning needs to be underway and the scale and complexity of the transition should not be underestimated.

#### **Background**

Concerns about benchmark rates have been swirling for years. Indeed, even before the LIBOR scandal hit in 2012, unsecured wholesale borrowing activity had been in decline. The LIBOR scandal made clear that the potential for manipulation was high and when in July 2017 the UK's Financial Conduct Authority (FCA) announced it would no longer compel panel banks to make LIBOR submissions after 2021, the writing was on the wall: the IBORs' days were numbered.

Over the past years, it has become increasingly clear that global regulatory preference was to replace IBOR with risk- free (overnight) rates based on transactional data. Central banks have encouraged the forming of industry working groups to help in solving issues arising from establishing and then transitioning to new more trustworthy benchmark rates. In the run-up to 2021, working groups and several industry advocates have been working to ensure that the new rates will have established robust underlying cash markets, sufficient liquidity in hedging instruments and broad acceptance from market participants.

#### Global challenges

IBORs currently underpin a huge range of financial products and valuations, from loans and mortgages through securitisations and to derivatives across multiple jurisdictions. They are used in determining all sorts of tax, pension, insurance and leasing agreements and are embedded in a wide range of finance processes such as remuneration plans and budgeting tools. The impact will, therefore, be felt far and wide. The challenge will be particularly acute for central counterparties, exchanges, banks, insurers, and asset managers, but the ripple effects will also be felt by corporations and consumers as the transition impacts for example the valuation and accounting of derivatives, corporate bonds & business and consumer loans.

# The key to any IBOR AI project is the digitisation of contracts.

In most of the major currency areas the 'successors' of the IBORs seem to have been identified; SOFR in the US, €STR in the euro area, SONIA in the UK and TONA in Japan. It is interesting to see that the US has opted for a secured rate (as has Switzerland), while the chosen RFRs in the other currency areas are unsecured. The latter type of rates is expected to be influenced less by the supply

Fig 1: Summary of the SARB Proposal

CURRENT	PROPOSAL	DESCRIPTION PROPOSAL
UNSECURED REFERENCE RATE  DESCRIPTION PROPOSAL		
JIBAR Johannesburg Interbank Average Rate	Hybrid Jibar	Reformed Jibar refers to the SARB's proposed reform of Jibar, for it to be derived from actual market transactions relating to negotiable certificates of deposits and non-bank financial corporate deposits.
	Term Deposit Benchmark	Deposit benchmark refers to an interest rate benchmark derived from deposit transactions conducted in rand including, but not limited to, deposits from banks, non-bank financial corporates, non-financial corporates and the public sector.
SABOR SA Benchmark O/N Rate	SABOR Money Market	Sabor Money Market refers to the reformed version of Sabor. The proposed Sabor Money Market is an overnight interest rate benchmark that will represent the cost of unsecured funding in the domestic money market.
	ZARIbor	ZARibor is short for South African Overnight Interbank Rate and refers to an interest rate benchmark derived from overnight interbank rand deposits.
RISK FREE REFERENCE RATE		
New	Secondary Market for Treasury Bills	This refers to the Secondary Market for Treasury Bills.
	GB Repo Government Bond Repo	GB repo rate refers to an interest rate benchmark derived from government bond repo transactions.
	SASFR South African Secured Funding Rate	SASFR is shot for South African Secured Financing Rate and refers to an interest rate benchmark derived from supplementary repurchase (repo) transactions conducted with the South African Reserve Bank as well as overnight funding in the government bond repo market.

and demand in collateral markets, avoiding in this way for example the risk of rates falling during flight-to-safety episodes when sovereign bonds (that serve as collateral) are in high demand.

Between the different currency areas the transition paths have been all but aligned. In the US for example the Alternative Reference Rates Committee (ARRC) published its 'paced transition plan' in 2017 and the Fed began publication of SOFR in April 2018. The ECB on the other hand convened its working group for the first time in 2018 and will start publishing the €STR from 2 October 2019. Organisations therefore have to manage multiple timelines.

Creating a robust demand for the new RFRs and developing the liquidity required to support the hedging and risk management relating to the new RFRs, is key to ensuring a smooth transition.

It remains to be seen to what extent the multiple rate approach based on a reformed term IBOR and a new overnight rate (potentially becoming the standard approach in the euro and JPY currency areas) could potentially cannibalise the transition of liquidity from IBORs to RFRs.

The new RFRs are overnight indices and currently have no term structure (unlike IBORs). The consensus across the market is that term rates might be required, at least for cash products (where users often prefer knowing future cash flows), as well as to support and ease the transition process. In its paced transition plan the ARRC foresees

the creation of a term reference rate based on SOFR derivatives markets, but only by the end 2021.

#### **Local challenges**

In August 2018, the South African Reserve Bank (SARB) published a 'Consultation paper on selected interest rate benchmarks in South Africa', outlining proposals for reforming key interest rate benchmarks used in South Africa as well as suggestions for new benchmarks that could potentially be used as alternative reference interest rates. The Reserve Bank has also established the 'SARB Working Group on Rand Interest Rate Benchmarks' to undertake a comprehensive review of interest rate benchmarks in South Africa. In parallel, a Market Practitioners Group and various work streams were established to facilitate and operationalise decisions on alternate reference rates.

Fig 2



## ACCOUNTING AND TAX

- Impacts on fair value calculation according to IFRS 13
- Derecognition of hedge accounting under IAS 39 / IFRS 9
- Potential tax acceleration impacts



#### REGULATORY AND LEGAL

- Contract amendments will lead to significant costs
- Difference in requirements of RFRs across jurisdictions



## VALUATION AND CURVE CONSTRUCTION

- Impacts on pricing and valuation of financial instruments, including derivatives and nonderivatives contracts
- Adjustments needed for existing curve framework
- Challenge in curve construction led by insufficient liquidity of RFRs



#### | RISK | MANAGEMENT

- Basis risk led by different RFRs, which will not be economically equivalent to LIBOR
- Pricing gaps and volatility arising from change in reference rates
- Operational risks resulting from differences between existing and new contracts and parallel pricing using LIBOR and RFRs
- New hedging and insurance plan programs needed



## OPERATION AND IT INFRASTRUCTURE

- Documentation, implementation and administration of the transition
- Systems, especially those for interest calculation, needed to be updated
- Different publication times and pricing across all RFRs needed to be incorporated in processes and systems



#### LIQUIDITY

- Different fall back rates are only short term solutions and could increase liquidity risks
- Challenge in refinancing due to the facts that RFRs currently available are mostly overnight rates and might not be sufficiently liquid
- Challenges for intercompany loans and agreements

A subsequent report was published in May 2019 on stakeholder feedback, highlighting industry preferences for the proposed alternative RFR and new benchmarks, as well as the SARB's recommendation. (See Figure 1.)

That stakeholder feedback report showed a lack of consensus among industry participants to fully support any of the proposed alternative rates. That observation was compounded by the lack of a mature OIS market in South Africa, which was always expected to create a bigger transition challenge in comparison to the EU, UK or the US where an OIS/Risk free rate was already traded and used as discount curves for collateralised derivatives.

Although IBOR transition working groups have started with a delay of approximately 15 to 18 months in South Africa, there are some benefits in being a follower instead of a first mover. It allows considering lessons learned from possible mistakes in other jurisdictions when designing an optimal transition path from JIBAR to alternative unsecured and secured reference rates.

#### More specific challenges

#### Managing legal contracts & unstructured information

One of the biggest challenges resides in companies' and large institutions' ability to identify and quantify the contracts that need to be transitioned to alternative reference rates. Despite the ubiquity of databases and sophisticated reporting tools to capture contract-related data, by far the biggest part of relevant information is not only unstructured, but also locked up in documents. In the absence of searchable tools to easily extract key contract information, determining the volume of contracts that require amendment and repapering is a significant undertaking. Once the initial scoping is completed, companies need to identify contracts with fall-backs provisions, and specifically those that will need to be renegotiated or amended. There are significant risks if contracts are not amended accurately and consistently.

The latest innovations around Artificial Intelligence (AI) and Machine Learning (ML) might offer a cost-effective solution to repapering IBOR contracts (albeit probably more appropriate in cases of large numbers of contracts). The key to any IBOR AI project is the digitisation of contracts, which allows creating metadata chunks that can be safely stored into databases and searched more effectively for repapering or amendment.

#### **Valuation**

Valuation experts and quantitative analysts are starting to worry about how LIBOR transition will affect pricing and risk management models. During the transition period, when LIBOR is neither dead nor alive, firms might have to model three curves in some jurisdictions, i.e. LIBOR, the 'old' overnight index rate and the new RFR, as well as the related basis curves. Apart from the increased complexity of valuing transactions in a three-curve framework, the new rates will initially also not have enough history, which might lead to reliability issues for risk management and volatility models that rely on historical data.

#### Fig 3

#### **EXPOSURE ANALYSIS AND MODEL IMPACT ASSESSMENT**



- Have a clear measure of LIBOR exposure broken down by maturity beyond 2021.
- Ideally, the exposure should be grouped by business lines and counterparties.
- Build an inventory of all pricing, valuation and risk models that have a dependency on LIBORs and rank order the models based on materiality and complexity for redevelopment.

#### **CONTRACT ASSESSMENT**



- Through a scalable process (leveraging technology) if possible), firms need to identify all products and business lines, including expected fallbacks, and the bilateral negotiations likely to be in scope.
- ISDA will play a key role in shaping the derivative market transition, but other cash products are typically not standardized contracts and can involve additional legal complexities.

#### **GOVERNANCE AND CLIENT OUTREACH**



- Develop internal governance processes to approve changes to policies, systems, processes and controls.
- It will be imperative to ensure clients are treated fairly through the transition.
- Firms will need to educate client-facing staff on the transition implications.

#### **PROGRAM SET UP**



- Develop and manage a cross-functional RFR program that handles all business line jurisdictional differences.
- Certain areas will have critical issues that need to be linked across these programs.

#### STRATEGIC PLANNING



Based on economic impacts to the existing portfolio and the potential business opportunities arising from the use of new alternative reference rates:

- Establish client communication and negotiation workflows
- Review contract structure
- Evaluate profitability, cash-flows and hedging risk



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Over the past 20 years, he has travelled to serve clients across Africa (15+ countries including Egypt, Nigeria, Togo, Ghana, Zambia, Mozambique, Kenya, Tanzania, Botswana), Middle East, Europe, UK, Singapore and Hong Kong. He is a board member of the IMD alumni association, member of the South African Institute of Risk Management and the Professional Risk Management International Association.

Auguste holds a MBA from IMD in Switzerland, a Master in Electrical Engineering and Computer science as well as a Master in Mathematical Finance respectively from ENSI Caen and Polytechnique Sophia, both in France. He also holds a Professional Risk Management (PRM) certification.

#### **Hedge accounting**

Market participants are not clear about the effects of switching IBOR-based floating rate notes for notes that use an RFR while contemporaneously maintaining products such as loans and derivatives that still reference 'old' benchmarks e.g. LIBOR or JIBAR. Under the International Financial Reporting Standard 9, there needs to be an economic relationship between the hedged item and the hedging instrument in order to obtain hedge accounting treatment. In that respect, any change of benchmark should lead to an assessment of the impact on existing hedges (particularly cash flow hedges) and whether forecasted transactions based on the old benchmark are still likely to occur. Hedge effectiveness testing will need to be re-conducted, with a view on highlighting and assessing ineffectiveness due to any newly introduced basis risk, driven by the use of different benchmark rates between loans and hedges.

### Managing LIBOR-type benchmarks alongside risk free ones

Japan and Australia are planning to retain LIBOR-equivalent benchmarks, to run alongside risk-free rates, for pricing financial instruments (and the €-area is analysing whether it can retain a hybrid version of the EURIBOR). South African firms might have to manage a similar scenario post 2021. This approach has some key limitations as having bonds and loans on one rate and the hedges referencing another creates basis risks that need to be managed by the basis swap market. That might be a major concern because of a potential lack of sufficiently liquid markets for managing the basis risk between LIBOR-equivalent benchmarks and risk free rates.





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Ulrich has more than 20 years of experience in financial risk modelling. He started his career in Brussels at the fixed income desk of a fund manager, where he took care of the

day-to-day management of EUR500M invested in international sovereign and corporate bonds and was also responsible for the development and maintenance of the term structure models used by the bond fund managers for pricing and risk management.

In 2001 Ulrich joined KPMG's financial risk management department and after having worked for the Belgian and Italian FRM departments, he has recently moved to the Johannesburg office. He focuses

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#### Way forward

While the timing and transition to RFRs may seem uncertain, there is much that firms can be doing to prepare. The key is to position the organisation through dynamic and early-stage planning while still maintaining the agility required to pivot against a range of potential transition options. This is about identifying and taking 'no regret' actions that will support the transition regardless of the final timing and approach.

Planning for the transition will require firms to take on a series of key activities such as:

## Identifying exposures and developing a transition strategy

Firms will need to identify the products that will likely be in scope and start analysing the legal language in order both to assess the scale of the challenge and to determine the most appropriate strategy for achieving contractual changes and mitigating franchise and client risks through the transition.

#### Assessing the initial impact

All business units will need to assess their models and systems to analyse the areas currently impacted by IBORs. Firms will need to consider how best to alleviate potential operational, legal and conduct risks involved in changing a complex infrastructure that is currently heavily reliant on IBOR.

#### Setting up an RFR programme

This will require the development and management of an organisational, cross-functional RFR programme that handles all business lines and jurisdictional differences while also ensuring alignment and coordination across critical issues.

#### Creating the right governance and awareness

Organisations will need to develop internal governance processes that allow them to properly oversee changes to policies, systems, processes and controls while also ensuring that key employees are educated on the implications of the transition.

Communicating with external parties Corporates will need to start communicating with their counterparts in order to discuss and, eventually, renegotiate contracts. Preparing and managing these discussions through the transition will be key given the potential for value transfer as existing positions are re-referenced to RFRs.

#### In conclusion

Clearly, there is still much uncertainty surrounding the discontinuation of the IBORs. But, even so, it is possible for firms to move forward by creating a plan that includes flexibilities to accommodate the transition to RFRs as the approach and timelines become better established.

Those that move quickly, smartly and flexibly today will have the opportunity to make the transition efficiently and minimise potential downside risks. Those that wait for full clarity before taking steps will almost certainly struggle to meet the deadline before the IBORs potentially disappear at the end of 2021.



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