MPG Forum

6 November 2020

South African Reserve Bank

Event Programme

1. Opening Remarks
2. Unsecured Interest Rates
3. Risk Free Rates
4. Transition / Next Steps
5. Q&A Session

South African Reserve Bank

Opening Remarks

Unsecured Interest Rates

Unsecured Workstream Mandate

The Workstream was mandated by the MPG to make final recommendations relating to the ***choice and design of reformed interest rate benchmarks*** in South Africa that include bank credit risk (i.e. are risk based); the ***choice of interest rate benchmark administrators and calculation agents***; and to ***produce a statement of compliance of the proposed*** interest rate benchmarks to the International Organization of Securities Commissions (IOSCO) principles for financial benchmarks.

The workstream was constituted by the ***SARB, ASISA, ACTSA, Insurance, Banking industry and market infrastructure*** bodies.

Workstream Problem Statement

The workstream was tasked primarily to solve for ***credible alternatives to the JIBARs***, failing which to ***establish interim measures to strengthen*** the JIBARs whilst suitable alternative reformed risk-free/near risk free reference rates are developed.

The workstream was furthermore tasked with ***recommending additional benchmark rates to enhance the level of transparency*** in the South African money markets to strengthen market insights into monetary policy transmission dynamics and serve the regulatory interest of maintaining financial market stability should vulnerabilities emerge.

Key IOSCO Principles

Several IOSCO Principles for Financial Benchmarks (2013), i.e. Benchmark Design, Data Sufficiency, Hierarchy of Data Inputs and Submitter Code of Conduct provided the barometer in guiding the workstream's key recommendations.

Design

- The design of the Benchmark should seek to achieve, and result in an accurate and reliable representation of the economic realities of the interest it seeks to measure and eliminate factors that might result in a distortion of the price, rate, index or value of the Benchmark.

Sufficiency

- The information used to construct a Benchmark determination should be sufficient to accurately and reliably represent the Interest measured by the Benchmark and should provide confidence that the price discovery system is reliable.

Hierarchy of Data Inputs

- An Administrator should establish and Publish or make Available clear guidelines regarding the hierarchy of data inputs and exercise of Expert Judgment used for the determination of Benchmarks.

Code of Conduct

- The Administrator should develop guidelines for Submitters ("Submitter Code of Conduct"), which should be available to any relevant Regulatory Authorities, if any and Published or Made Available to Stakeholders.

Term alternatives to JIBAR?

Maximising transactional data requires the incorporation of non-bank financial institutional fixed deposit transactions into the benchmark determination process (***Hybrid-JIBAR as per the 2018 SARB consultative paper***). This increase in transactional scope canvases the critical mass of available wholesale money market activities that could form a basis for transaction based alternatives.

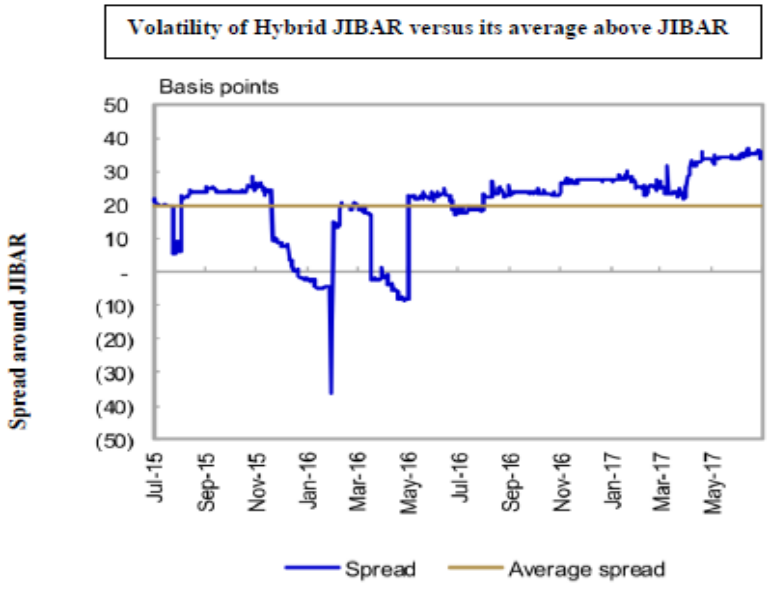
Tenor	Non-Bank Financial Institutions and Banks	Non-Financial Corporate	Public Sector
Other Short Term (1 day to 1 month)	160	78	120
Medium Term (1 month to 6 months)	331	80	76
Long Term (greater than 6 months)	875	59	32
Total	**1,366**	**218**	**228**
Percentage of Term Wholesale Deposits	**75%**	**12%**	**13%**

*BA900 data as at March 2020

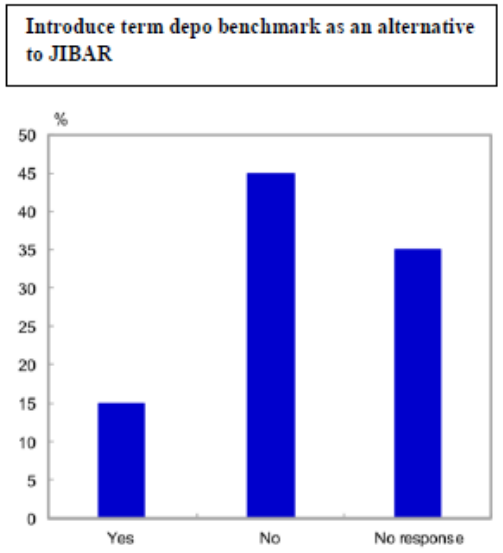
Reaffirming industry feedback

The resulting Hybrid-JIBAR compromises the design integrity of JIBAR and risks diluting the long term sustainability of the South African interest rate derivative markets due to the unpredictability and extreme volatility in the behaviour of these rates. Reaffirming the industries feedback that Hybrid-JIBAR is not a viable alternative.

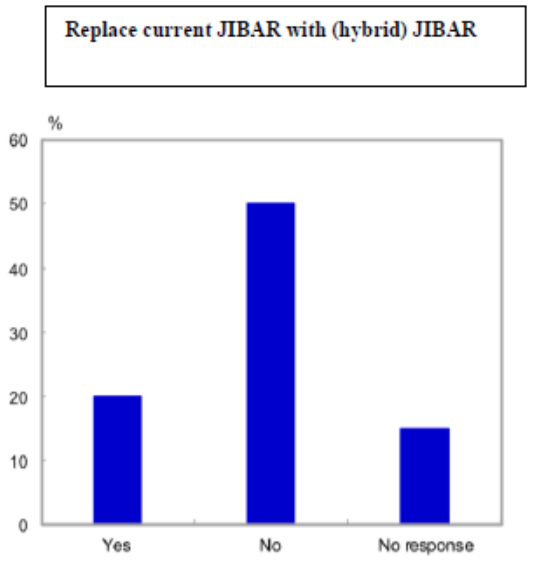
Graph 1 – Volatility in 3M Hybrid-JIBAR



Graph 2



Graph 3



SOUTH AFRICAN RESERVE BANK

Summary of Key Findings

Key Finding 1:
Hybrid-JIBAR is not a viable alternative to JIBAR for South Africa.

Key Finding 2:
JIBAR does not face any current regulatory equivalence restrictions that would preclude international participation in JIBAR linked financial contracts.

Key Finding 3:
Foreign jurisdictions that have progressed their benchmark reform dialogue have given rise broadly to either a Single or Multiple rate regime.

Key Finding 4:
JIBAR is representative of a reasonable volume of both primary and secondary market transactions, though primary activity in the shorter dated JIBARs have been adversely impacted by both Basel 3 liquidity regulations as well the evolution in market pricing dynamics.

Key Finding 5:
Establishing new benchmarks is critical for systemic risk monitoring and financial market stability.

Key Finding 6:
The development of a broader range of benchmarks requires a large amount of data effort.

Summary of Key Recommendations

Key Recommendation 1:
Enhance pricing commitments to R20-500m (from R20-100m) to strengthen JIBARs pricing credibility as an interim measure.

Key Recommendations 2 and 3:
Enhance pre and post trade transparency through daily reporting of transactional flows coupled with their distribution relative to published JIBAR.

Key Recommendation 4:
Publish the redemption profile of the banking sectors tradable money market maturities on a quarterly basis to highlight the scale of underlying market interest.

Key Recommendation 5:
Mandate the Data Collection and Infrastructure workstream to implement recommendations 2-4.

Key Recommendations 6 and 7:
Introduce additional money market benchmarks across NBFI, corporate and public sector fixed deposit activities to promote greater transparency, enhance insights into monetary policy price transmission in the interest of monitoring financial market stability.

Key Recommendation 8:
Incorporate recommendations 1-5 into a revised JIBAR Code of Conduct.

Strengthening Jibar as an interim solution

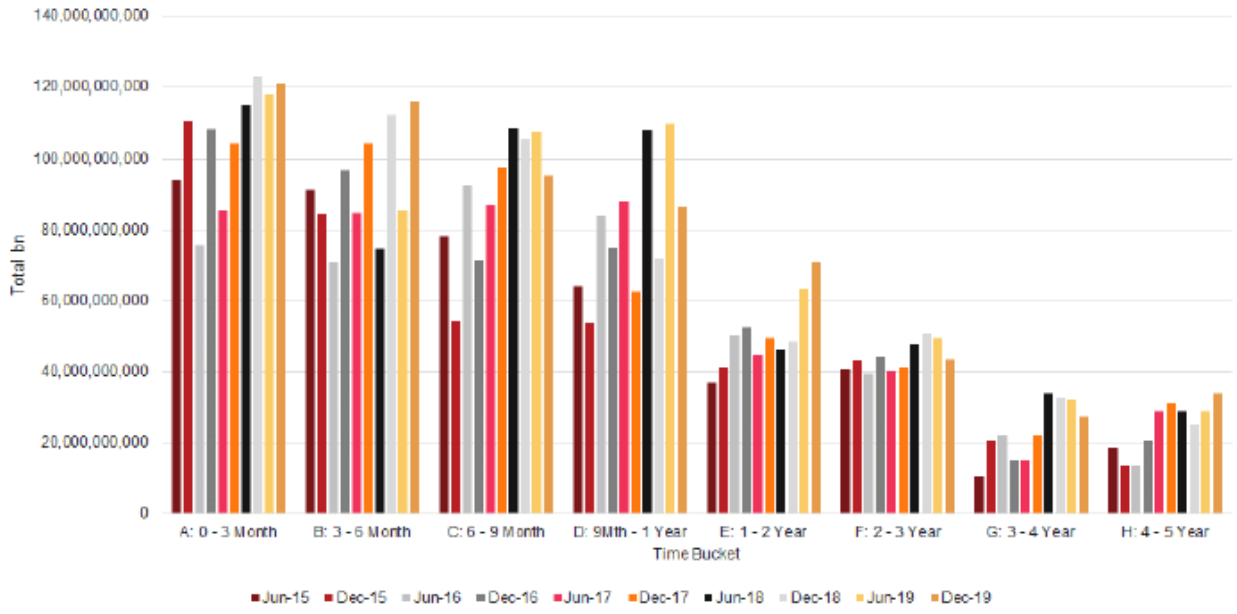
The recommendations aim to strengthen the pre and post trade transparency relating to Jibar.

Enhanced price making obligations across the 5 contributing banks supports R2.5bn in live pricing versus R0.5bn in the past.

With a large volume (up to R120bn) of money market paper maturing within 3 months, these increased price making obligations strengthen confidence in pricing credibility in the absence of transactional data sufficiency.

Remaining maturity of tradable money market paper issued by JIBAR contributing banks in South Africa

.



SOUTH AFRICAN RESERVE BANK

Risk-Free Rates

Risk-Free Rates Workstream Mandate

The Risk-Free Rates Workstream was created to execute the mandate of the Markets Practitioners Group (MPG) established by the SARB. The MPG functions alongside other structures such as the Financial Markets Liaison Group (FMLG).

The workstream is mandated to review proposals and ***make final recommendations*** to the MPG ***on the choice and design of suitable risk-free interest rate benchmarks*** to be used as ***reference rates***.

The members of the workstream were drawn from a diverse set of market practitioners whose insights were required to give effect to the workstream's mandate. The workstream constituted membership from the ***SARB, FSCA, BASA, ASISA, ACTSA, National Treasury, STRATE, JSE, the insurance industry, banking industry and the hedge fund industry.***

Workstream Problem Statement

Currently, South Africa has no suitable alternative (accredited) risk-free reference rates that serve as a viable replacement for its key money market reference rate (JIBAR) which is used as the underlying interest for most cash instruments and derivatives in the South African financial market.

Hence, in order to solve for this problem, the workstream aims to meet the following *key objectives*:

i. Define the ***guiding principles*** that will determine the selection criteria of the alternative risk-free reference rates.

ii. ***Investigate possible*** risk-free reference rate candidates.

iii. Provide the ***rationale for selecting*** the most ***suitable candidate rates.***

Guiding Principles I – IOSCO Principles

IOSCO Principles for Financial Benchmarks (2013) provided the Workstream with overarching guidelines for producing robust reference rates. The important role that a reference rate plays in financial markets means that in order to produce a credible rate, we must focus our attention on meeting criteria of integrity, design, efficacy and appropriateness in process to produce the rate.

Integrity

- Having strong governance and administration to safeguard against manipulation and error.
- Transparent rules for rate production and known fallbacks must exist in periods of stress.
- The rate is calculated based on a representative sample of transactions transacted by a wide number of participants to minimize manipulation.

Design

- Data used to construct a reference rate must be sufficient to accurately and reliably represent the interest rate being measured.
- The data should be based on prices or rates that have been formed by competitive forces of demand and supply in an active market and should be anchored on observable transactions.

Efficacy

- There must be transparent provisions intended to support users to understand the features of the reference rate of their choice.
- Rates must be calculated daily to facilitate market functioning.
- Rates must be published to dedicated sites.
- Operations behind production must ensure functioning markets.

Appropriateness

- There must be a suite of reference rates available to best suit the intended purpose.
- Hence, there must be a clear distinction between risk-free and near risk-free as well as secured and unsecured transactions.
- There must be a link between the policy rate and reference rates as ignoring this will cause elevated risks between different markets.

Guiding Principles II – Pragmatic Applications

Globally Accepted Best Standards (IOSCO Principles)

International Best Practice

- *Globally, there is a preference for a pure risk-free rate that is based on secured funding transactions because they are more appropriate for derivatives but not all markets are able to meet data sufficiency standards to develop these rates.*
- *Alternatives to purely risk-free rates have been the focus many developed markets. "Near" risk-free rates based on overnight unsecured transactions form the basis for new alternative reference rates in countries like Japan and EU because:*
  - *The overnight duration means there's insignificant amount of credit risk under normal market conditions.*
  - *The wide variety of market participants in these markets reduce the possibility of manipulating the rate.*
  - *These rates can address key financial stability objectives like monetary policy transmission and systemic monitoring.*

Application in South African Markets

- *Adopt a pragmatic approach when applying IOSCO Principles and international best practice to South African markets.*
- *Nuances within our markets must be considered for e.g. the Basel III regulations, availability of funding and the demand for High-Quality Liquid Assets by the large banks impacts the SA Government Bond repo market.*

Potential Candidate Rates

	Existing Rate	Interest the Rate Measures	Meets Guiding Principles	Market Infrastructure Available	Comment
SARB Repo Rate	✓	Policy rate administered by the SARB	✗	✓	• *Administered by the SARB hence immune to market manipulation.* • *Rate fails the **efficacy** criteria as it doesn't provide market participants with indication of future expectations of policy rate changes which are required to build a term structure.*
Overnight FX Implied Rate	✓	Implied rate on overnight ZAR funding in FX Swap Markets	✗	✓	• *Not directly observable as it is implied from FX forward points.* • *Market participation is limited.* • *Not a primary methods of raising bank funding in SA.* • *The rate **fails** **integrity**, **efficacy** and **appropriateness** criteria.*
SAFEX Overnight	✓	Interest paid to clients with initial margin on deposit at SAFEX	✗	✓	• *Rate is not based on transaction volumes.* • *The listed derivative markets exclude non-financial counterparties.* • *The rate **fails** **design,** **integrity**, **efficacy** and **appropriateness** criteria.*
SABOR Overnight	✓	Benchmark rate in the overnight interbank funding market.	✗	✓	• *Combines secured and unsecured components and rate is dependent on a small number of large depositors.* • *The rate **fails** on **design,** **integrity**, **efficacy** and **appropriateness***
SABOR Money Market	New rate proposed by SARB in their 2018 consultation paper on selected interest rate benchmarks in South Africa.	Includes interbank trades, wholesale deposits and excl. the FX Implied rate used in SABOR	✓	✓	• *It is a potential "near" risk-free rate if the call deposit universe expands beyond the wholesale funding markets and includes all financial corporates, non-financial corporates and the interbank market.*
ZARIBOR		Measures the deposit rate in the interbank market	✓	✓	• *It is a potential "near" risk-free rate as volumes in the interbank market are significant and high level of oversight in this market makes rates difficult to manipulate.*
SASFR		Cost of raising secured funding in the government bond repo market	✓	*Available but structural inhibitors need to be addressed*	• *Potential secured O/N rate based on Government bond repo market.*

IOSCO Principles International Best Practice Application to SA Financial Markets

SOUTH AFRICAN RESERVE BANK

Risk-Free Workstream Proposal

The rigorous analysis performed by the Workstream across all viable alternative rates resulted in two candidates that could serve as a credible alternative to JIBAR, viz. a Secured Overnight Rate and an Unsecured Overnight Rate.

- **Secured O/N rate** is implied by the current SA government bond (SAGB) repo market.
- This rate has been the focus of reference rate reform internationally and excludes the credit risk of the counterparties to the transaction.
- A well-functioning collateralized market insulates financial markets in times of stress and can serve as a critical determinant of efficacy of monetary policy transmission.

Key Findings

- *The rate does reflect the idiosyncrasies in SAGB Repo Markets, for e.g.:*
  - *The market is driven by participants who need to finance their long bond positions is highly correlated to their demand for cash.*
  - *The banking sector is the major funder of this market and the underlying demand for HQLA, the banks aggregated cost of funds and their supply of cash impacts the rate.*
- *Although these characteristics may not be ideal for a reference rate, there is sufficient research by global regulators and exchanges which proves that developing fluid collateral markets lowers systemic risk and reliance on the central bank during extreme stress, lowers borrowing costs in the markets and increases price stability.*
- *The Workstream agrees that improving the quality of this market is a key development for financial stability and systemic monitoring and has recommended key reforms across the financial sector that will contribute to creating a robust secured financing transaction market in South Africa.*

SOUTH AFRICAN RESERVE BANK

Risk-Free Workstream Proposal

The rigorous analysis performed by the Workstream across all viable alternative rates resulted in two candidates that could serve as a credible alternative to JIBAR, viz. a Secured Overnight Rate and an Unsecured Overnight Rate.

- ***Unsecured O/N rate*** is based on the criteria that was used for SABOR MM in the SARB's consultation paper on selected interest rate benchmarks in South Africa. However, this rate will incorporate all overnight call deposits across financial corporates (including the interbank clearing market), non-financial corporates and public sector enterprises.
- The credit component of the counterparties to the transactions is limited because it's an overnight transaction, hence the rate is **"near-risk free"**

Key Findings

- *The vast transactional volumes and broad coverage of contributing sectors across the economy means that this rate is a more reflective of money markets in South Africa.*
- *Banks within South-Africa have varied preferences to bank different sectors in the economy. This rate will contain some of the strategic pricing outcome of this preference, however the vast volumes means that this impact should be muted.*
- *The production of this rate is operationally complex as it is reliant on multiple process across all contributing banks for e.g. there is consistency required across the contributors when mapping counterparties.*

SOUTH AFRICAN RESERVE BANK

Key Recommendations

Key Recommendation 1:

Focus on developing both Secured and Unsecured O/N rates. Multiple interest rate benchmarks from different funding segments in the market enable broader stability and efficiency in the market and they assist in informing appropriate actions from the regulator during market stresses.

Key Recommendation 2:

When developing the O/N risk-free rates, the work across the Transition, Data and Governance Workstreams must closely follow the steps that are consistent with the lessons learnt from international developments with SOFR, SONIA, €STR and TONA, i.e.

i. Focus on developing the integrity and quality of the overnight rates.
ii. Create market infrastructure that allows trading derivatives (e.g. OIS) that will create demand and liquidity in these rates.
iii. The regulator's support for a targeted cessation date of JIBAR to encourage new financial contracts to reference the new overnight rates and provide a migration plan for transitioning existing contracts that reference JIBAR.
iv. Apply the fallback approach used for LIBOR, e.g. ISDA protocol.

Key Recommendations

Key Recommendation 3:
Mandate the Data Workstream to establish and implement data standards and conventions for the new rates.

Key Recommendation 4:
Mandate the Governance Workstream to establish and implement a Code of Conduct for these new reference rates.

Key Recommendation 5:
Measures need to be put in place to accelerate enhancing regulations and market infrastructure to develop a robust general collateral repo market in South Africa. These reforms will remove the structural biases and vulnerabilities of the current market which will enhance the integrity and quality of the Secured O/N reference rate and enhance financial stability in South African markets.

Transition / Next Steps

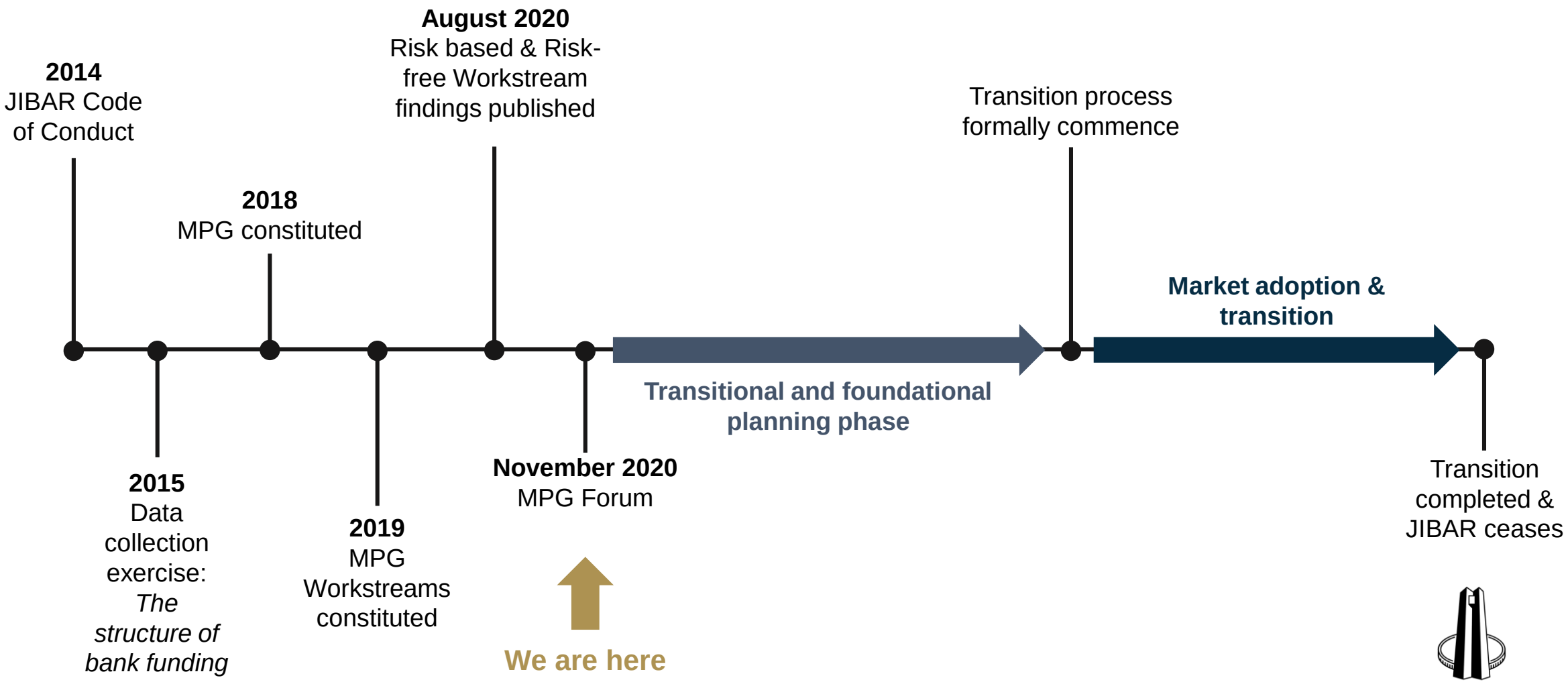
Outline

- Overview
  - Mandate of the Transition Workstream
  - Timeline of the interest rate benchmark journey
- Next steps
  - Transition approaches
  - The transition structure observed internationally
  - Key milestones & activities
- Market considerations

Overview | Mandate of the Transition Workstream

- Examine **options for transition approaches**
- **Identify the key risks** associated with each transition approach
- **Identify mitigants for key risks** relating to the proposed transition plan(s).
- Provide **recommendations** to the MPG on the **timelines and steps** of transition

Overview | Timeline of the interest rate benchmark journey



SOUTH AFRICAN RESERVE BANK

Next steps | Transition approaches

	Characteristics	South African considerations
Parallel	• Parallel publication of old and new benchmark • The two benchmarks are independent and spreads are a function of market developments • Market-led transition, that is gradual, voluntary & negotiated • Require regulatory and commercial incentives to support the new rate	• Does the strengthening for JIBAR support this approach? • Does the SARB envisage a pure market-led approach? • What is the time required to develop liquidity in the new benchmarks?
Contractual alternative	• Similar to parallel • Transfer liquidity from legacy to new rates at a given date • Hard deadline or contractual cessation date set on contracts referencing legacy rate • Extensive consultation required to minimize negative effects (e.g. value transfer, cliff effect, litigation risks/disputes)	• Amount of time required for market to familiarise themselves with the new rates • Will the market enforce a contractual cessation date? • Will effective (once-off) transfer of liquidity from JIBAR to the new rate be feasible?

Next steps | Transition approaches (cont.)

	Characteristics	South African considerations
Recalibration	• Legacy rate developed to become dependent on new rate at calibration date, with a fixed, constant spread • Parallel publication with legacy rate as tracker benchmark only • Unlimited time frames could result in market fragmentation and distributed liquidity • Legacy contracts can mature without legal documentation amendments required	**Considerations:** • Unlikely suitable when new and legacy rates are fundamentally different • Time limit required for recalibration • Relationship between the two rates to be observed; value transfer to be minimized • Requires a spread methodology • Market wide acknowledgement and appreciation for new rate methodology
Pure succession	• Big bang approach with no parallel publication – new rate deemed the successor rate and supersedes the legacy rate • No transition spreads • Hard deadline or contractual cessation date set on contracts referencing legacy rate • May require immediate technological, operational and repapering changes • Extensive consultation required to minimize negative effects (e.g. value transfer, cliff effect, litigation risks/disputes) • Requires legislative action, very strong public sector involvement and extensive consultation to minimise disruption • Potentially disruptive to the economy and risk of disputes	• Requires a deeming of a successor rate which supersedes the existing rate • Clear choice between secured or unsecured – only one successor rate can be chosen • How will the successor rate be enforced – through fallback mechanisms or legislative action • Legislative action will imply that a transition is not market-led and requires strong official sector involvement • Sufficient time required to reduce the JIBAR exposures from legacy transactions

Next steps | Transition structure observed internationally

Three pillars to support an **orderly transition** with **coordinated efforts** across market participants

Pillar I
Derivatives market adoption

Key criteria:

- Establish ZAR OIS market
- ZAR interest rate swap market to transition to OIS market
- Liquidity of the OIS market to support the transition
- Regulatory/industry commitments around JIBAR cessation dates

Pillar II
Cash/other markets adoption

Key criteria:

- Recognise the role of cash instruments in the demand for derivatives
- Adoption of successor rate in the cash market to align with the derivatives market

Pillar III
Transition of legacy contracts

Key criteria:

- Legacy contracts at risk if JIBAR ceases
- All legacy contracts (maturing beyond the cessation date) to migrate to successor rate
- Transition via renegotiations or the use of fallback language to aid in the transition

New contracts

Legacy contracts

Next steps | Key milestones & activities

Transitional & foundational planning

Market adoption & transition

Key milestones	Key activity to achieve the milestone
Strengthened JIBAR	Action the recommendation from the Risk Based Workstream
ARR published	Establish data & governance process for ARFR publications, i.e. infrastructure readiness
JIBAR cessation date announced	**Regulators to announce a date** by when JIBAR will no longer be published
Transition plan accepted & published	Detailed transition planning with input from sub-workstream inputs
Transition preparation for ARR	Legislative, accounting & fallback requirements addressed

Industry input/consultation on key industry decisions

Other workstreams

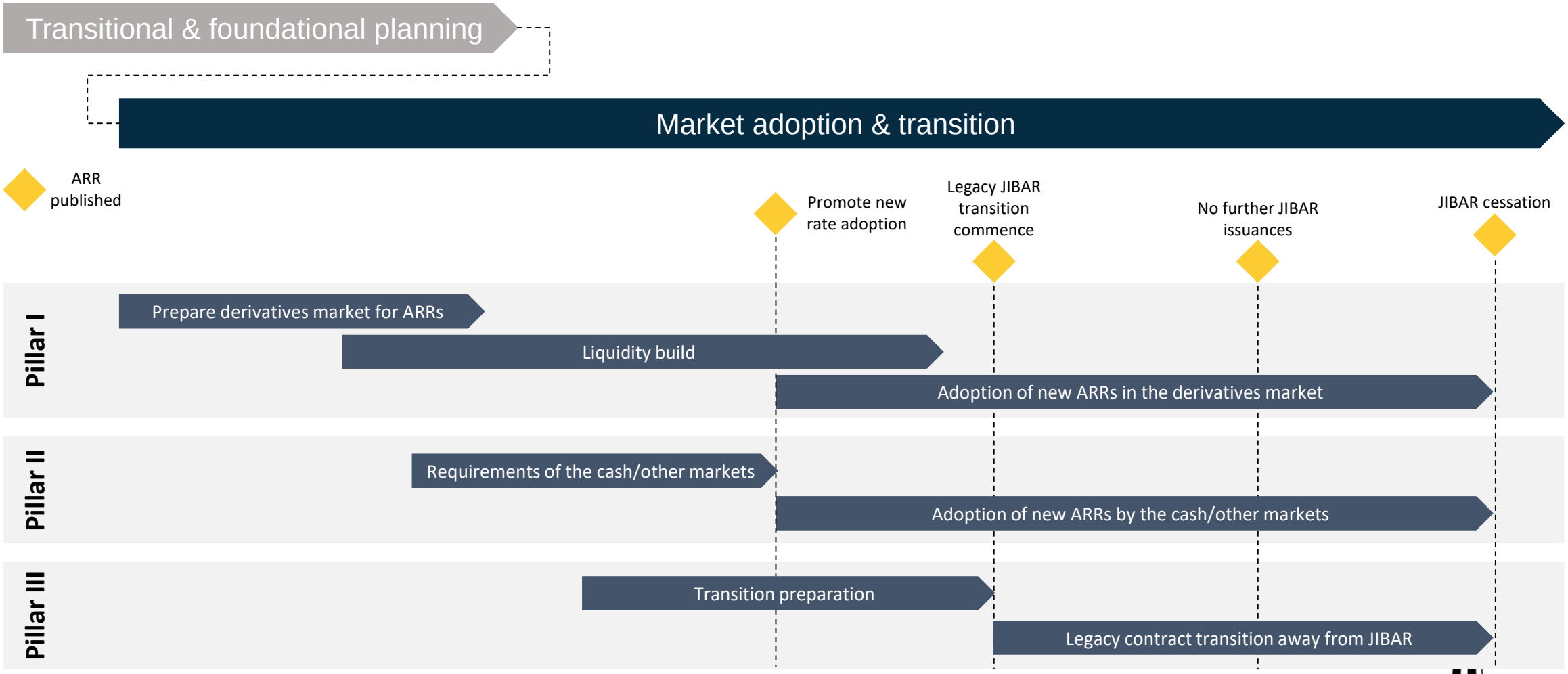
Transition workstream and sub-streams

Industry consultation

Key milestones

South African Reserve Bank

Next steps | Key milestones & activities (cont.)



Other workstreams

Key milestones

SOUTH AFRICAN RESERVE BANK

Market considerations

Sell side

Specific considerations for banks:
Banks will have to consider various risks and challenges, which include the following:

- ***Risks***
  - Conduct risk
  - Basis risk
  - Legal risk
  - Operational risk
  - Systemic risk
- ***Impacts***: Tax, accounting (incl. financial reporting and regulatory
- ***Challenges***
  - Communication and client outreach
  - Contract remediation
  - New product development
  - Liquidity and term structure of rates

Buy side

Specific considerations for the buy side of the market:
Corporates, insurers, asset manager will face similar challenges in varying degrees, however the following needs to be considered by these

- ***Risks***
  - Basis risk
  - Operational risk
  - Systemic risk
  - Cashflow management
- ***Impacts* on** accounting and financial reporting
- ***Challenges***
  - Contract remediation
  - Term structure of rates
  - Long term derivatives exposures (for Insurers specifically)
  - Risk-free yield curves for solvency reporting purposes

Market infrastructures

Market infrastructures (MI) will facilitate the data collection with SARB and will face the following risks and considerations:

- ***Risks***
  - Operational risk
- ***Challenges***
  - Data collection and publication
  - Data security
  - Data architecture and infrastructure

From a **market function** perspective **exchanges and clearing houses** will also need to consider the impact and risks on trading, clearing and settlement activities (especially for the derivatives market)

- Valuation risk (e.g. margin calculations)
- Market risk
- Operational risk
- Legal risk
- Systemic risk

Regulators

Specific considerations for regulators:
Regulators have to balance the risks associated with remaining on the old interest rate benchmarks, with the risks and challenges associated with transitioning to new benchmark rates:

- ***Risks***
  - Conduct risk
  - Systemic risk
  - Financial stability
  - Data security
  - Operational risk
- ***Challenges***
  - Compliance with international best practices
  - Liquidity of the replacement rates
  - The speed of the transition
  - Market readiness
  - Cost

Q&A Session

THANK YOU

SOUTH AFRICAN RESERVE BANK