Report on stakeholder feedback on the reform of interest rate benchmarks in South Africa

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South African Reserve Bank

Contents

Glossary of terms

Reformed (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.
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 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 Rand Overnight Interbank Rate and refers to an interest rate benchmark derived from overnight interbank rand deposits.
SASFR	SASFR is short 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.
GB repo rate	GB repo rate refers to an interest rate benchmark derived from government bond repo transactions.

Abbreviations

ETP	electronic trading platform
FMLG	Financial Markets Liaison Group
FMI	Financial Market Infrastructure
FSB	Financial Services Board
FSCA	Financial Sector Conduct Authority
FX	foreign exchange
GB	government bond
GC	general collateral
HQLA	high-quality liquid assets
IOSCO	International Organization of Securities Commissions
Jibar	Johannesburg Interbank Average Rate
LCR	liquidity coverage ratio
Libor	London Interbank Offered Rate
MPG	Market Practitioners Group
MPIF	monetary policy implementation framework
NCD	negotiable certificate of deposit
NBFC	non-bank financial corporate
NSFR	net stable funding ratio
NT	National Treasury
OIS	overnight index swap
OSSG	Official Sector Steering Group
Repo rate	repurchase rate
RFR	risk free rate
Sabor	South African Benchmark Overnight Rate
SARB	South African Reserve Bank
SASFR	South African Secured Financing Rate
Sonia	Sterling Overnight Index Average
TBMWG	Treasury Bill Market Working Group

UK	United Kingdom
US	United States
Working Group	SARB Working Group on Rand Interest Rate Benchmarks
ZARibor	South African Rand Interbank Overnight Rate

1. Background

1.1 The South African Reserve Bank (SARB) published *a* 'Consultation paper on selected interest rate benchmarks in South Africa' on 30 August 2018.[1] The paper contains proposals on the reform of key interest rate benchmarks used in South Africa as well as proposals on a suite of new benchmarks that could potentially be used as alternative reference interest rates. The paper was published to solicit input from the public on the proposals contained therein.

1.2 The reform of interest rate benchmarks in South Africa is informed by various considerations, which include concerns with design aspects of the existing key reference rates, monetary and financial stability policy considerations as well as aligning with best practice standards. Importantly, the reform is also in response to a global shift towards strengthening major interest rate benchmarks that are used as reference rates. At global level, the Official Sector Steering Group (OSSG) has been at the forefront of the reforms and monitors progress across its constituency.

1.3 Following a resolution taken by the Financial Markets Liaison Group (FMLG), the SARB established the SARB Working Group on Rand Interest Rate Benchmarks (Working Group) to undertake a comprehensive review of interest rate benchmarks in South Africa. The Working Group conducted research on various interest rate benchmarks and its key findings and recommendations, as set out in the consultation paper, are summarised in Appendix A.

1.4 This report is intended to provide key takeaways from the public comments received and the SARB's position regarding those comments. The report also serves as a basis for engagement at the meetings of the Market Practitioners Group (MPG) and its work streams. The work streams have been tasked with making recommendations to the MPG, whose mandate is to facilitate decision

[1] See http://www.resbank.co.za/Lists/News%20and%20Publications/Attachments/8734/Consultation%20Paper%2030%20August%202018.pdf

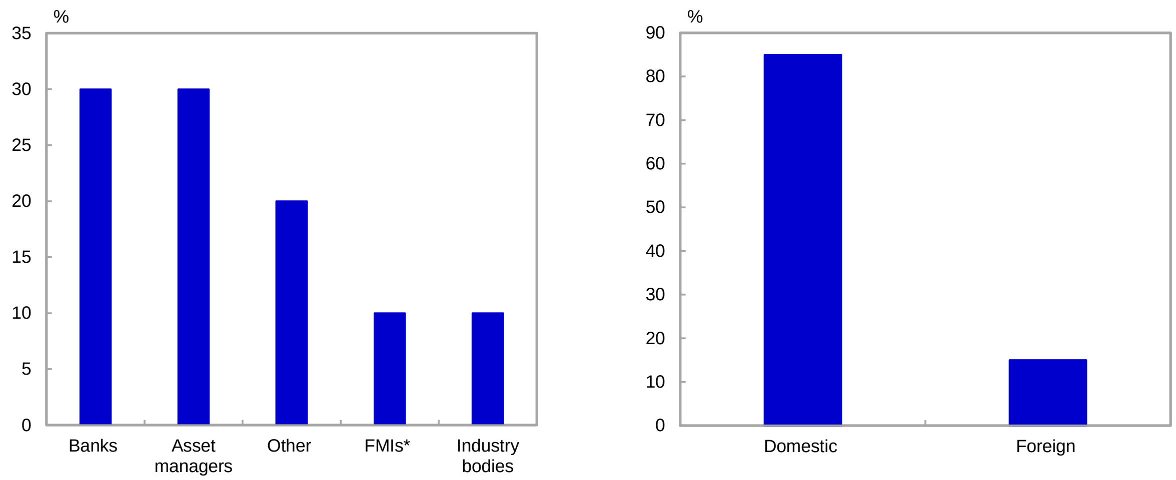
making regarding the choice of an alternative reference rate in South Africa as well as the operationalisation of interest rate benchmarks.[2]

1.5 The SARB acknowledges all market participants and stakeholders that participated in the public consultation process and welcomes all comments received.

2. Participation in the public consultation process

2.1 The public consultation period ran for three months, from 30 August 2018 to 30 November 2018. A total of 26 responses were received, mostly from domestic market participants, including banks, asset managers, financial market infrastructures as well as industry bodies. Figure 1 below shows the distribution of respondents.

Figure 1 Distribution of respondents



* FMI – Financial Market Infrastructure

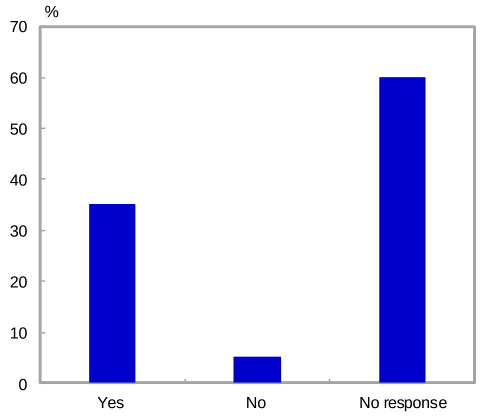
Source: SARB

[2] For purposes of executing its mandate, the MPG has established five work streams namely, the unsecured reference rate work stream; secured reference rate work stream; transition work stream; data collection and infrastructure work stream; and the governance work stream. For full MPG terms of reference, please visit: http://www.resbank.co.za/Markets/MPG/Pages/Terms-of-reference.aspx

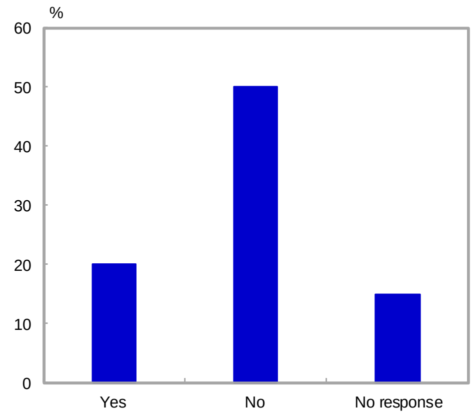
3. Outcomes of the public consultation

3.1 The frequency distribution charts below depict the responses to the SARB's proposed reforms.

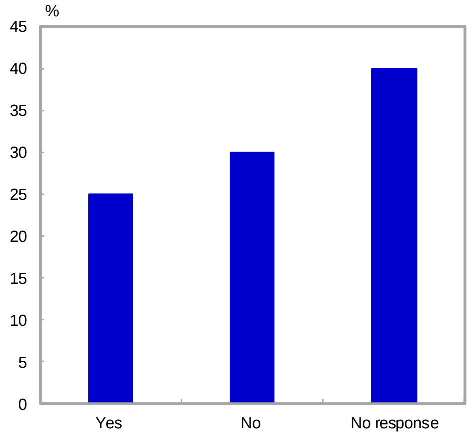
Phase out current Jibar calculation methodology



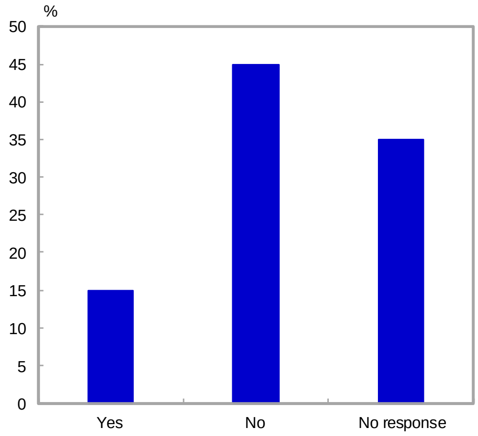
Replace current Jibar with reformed (hybrid) Jibar



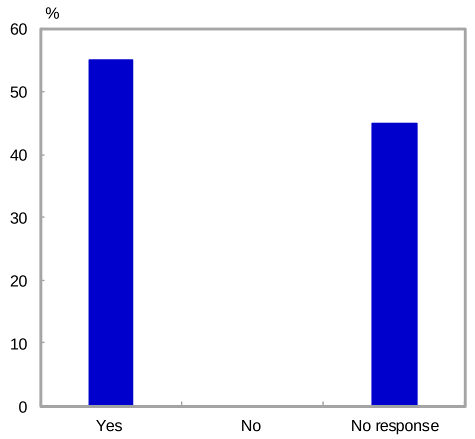
Use of risk-inclusive and risk-free rates in a manner that is fit for purpose



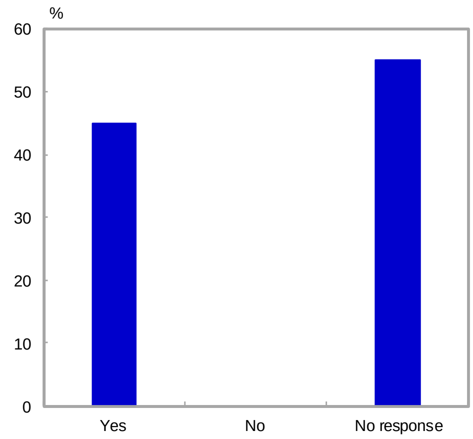
Introduce term depo benchmark as an alternative to Jibar



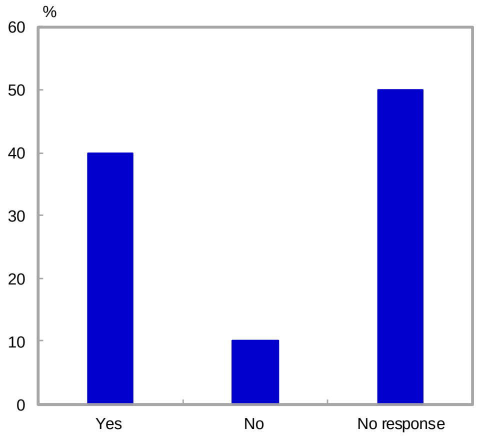
Reform Sabor to Sabor MM and exclude O/N FX swaps



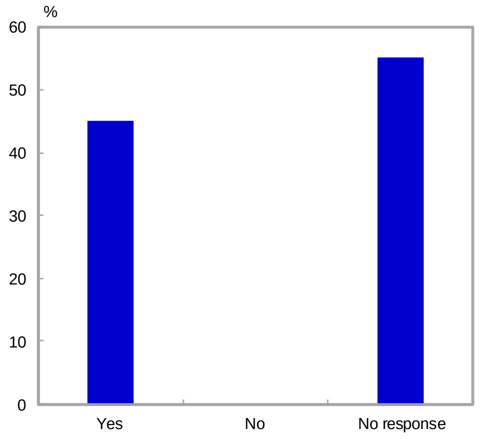
Introduce ZARibor as a benchmark for O/N interbank deposits



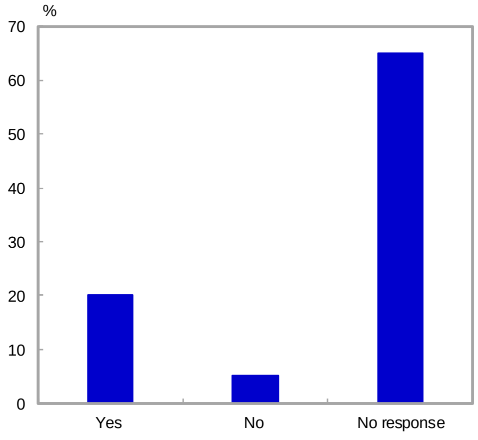
Designate Zaribor as a near-risk free rate



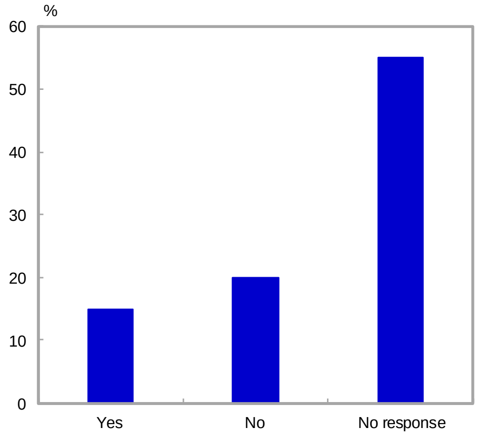
Improve liquidity in the secondary market for TBs



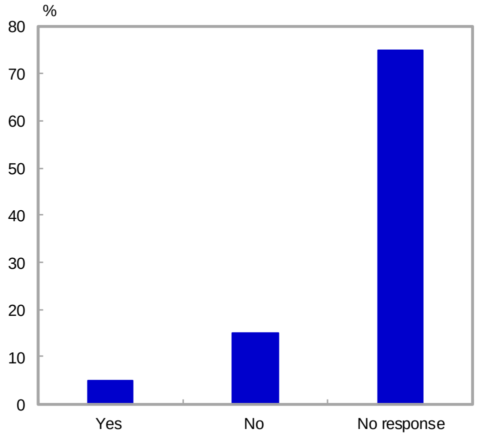
Introduce SASFR



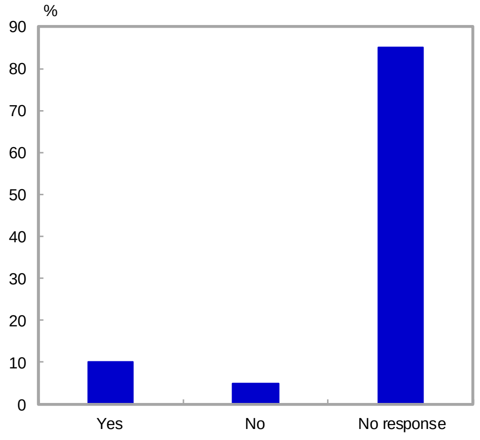
Use of SASFR as the reference rate for OIS market



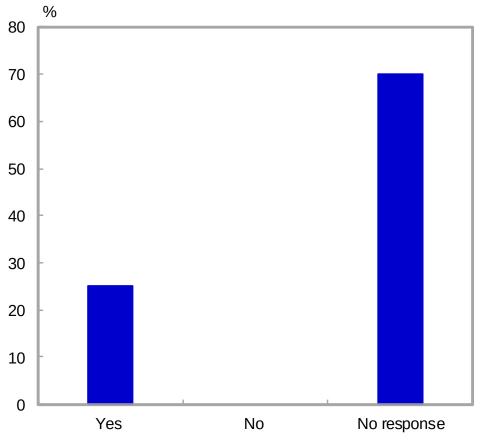
Use SASFR or GB repo as ON risk-free reference rate in SA



If Zaribor is designated as near-risk free, use it as a ON RFR



Developing a broader GC repo market



4. Comments and recommendations based on the SARB consultation paper

4.1 This section covers the comments on, and consequences for, the key recommendations contained in the SARB consultation paper. From the responses/input received on the consultation paper, it is evident that some respondents could not differentiate between interest rate benchmarks and reference interest rates and the SARB's intended use of these interest rates. It is on that premise that clarity on the differences on the rates, prior to providing detail of these responses, is given in order to curb any misunderstanding or improper interpretation of these interest rates. The distinction between benchmark and reference interest rates is that:

A ***benchmark interest rate*** *refers to an index, rate or price that is used as a standard against which the performance of an investment, security or fund can be measured. A benchmark is determined by the state of the market and is made available to the public (whether free of charge or on payment).*

The OSSG defines ***reference interest rates*** *as "[…] interest rates underpinning a wide array of financial instruments used in global financial markets" (Financial Stability Board, 2014). Reference rates are therefore commonly used as interest rates that link payments in a financial contract to standard money market interest rates. As a result, certain reference rates are deeply embedded in financial systems, especially in loan and interest rate derivative contracts.*

4.2 Chapter 5 of the consultation paper refers to the use of interest rate benchmarks in policy frameworks, describing how an improved set of interest rate benchmarks can be used to improve both the implementation of monetary policy and the monitoring of financial stability. This captures the essence of the SARB's proposals of new **interest rate benchmarks**. The expanded suite of interest rate benchmarks is intended to improve the transparency of monetary policy transmission as well as to enhance the SARB's ability to analyse and monitor financial stability conditions in the domestic financial markets.

4.3 A reference rate to replace the Johannesburg Interbank Average Rate (Jibar) as a key reference rate in the domestic financial markets will be determined. The MPG will facilitate the decision to select an alternative reference rate by the representatives of market participants – who are expected to make a recommendation as part of either the risk-free or unsecured reference rate work stream of the MPG.

4.4 While the proposed suite of interest rate benchmarks is intended to serve the purpose outlined in paragraph 4.2 above, it also provides a pool from which market participants may select their preferred alternative reference interest rate. While the SARB encourages market participants to select an alternative reference rate from the suite of benchmarks provided, market participants have a choice not to exercise this option. In such case, a different alternative reference rate may be selected, subject to the alternative being International Organization of Securities Commissions (IOSCO) compliant and preferably not resulting in exceptionally long delays in implementation.

4.5 The lack of clarity on the intended use of interest rate benchmarks also led to a concern about the proliferation of interest rates that could create confusion among market participants. However, for reasons alluded to in paragraph 4.2, the SARB will, after giving due consideration to responses on its initial proposals and for purposes of informing its policies, introduce a broader suite of benchmarks in the form outlined later in section 5. The SARB will publish a technical specification paper late in 2019 that will provide details on the final suite of interest rate benchmarks to be published. It is envisioned that the technical specification paper will cover the following key areas in respect of each interest rate benchmark:

4.5.1 definitions;
4.5.2 eligibility criteria (minimum trade size; credit rating of issuer, etc.);
4.5.3 contributors;
4.5.4 calculation methodology and notations;
4.5.5 data collection and quality;
4.5.6 publication and licensing issues; and
4.5.7 usage (policy and otherwise).

4.6 Table 1 below sets out responses from the consultation process, together with comments from the SARB, following the order of key recommendations made in the consultation paper.

***Table 1:* Public comments and recommendations**

No.	Key recommendation	Response from public consultation		SARB's comment
1(a)	Phase out the current calculation [method] of Jibar.	1(a).1	The majority of respondents did not comment on the recommendation to phase out the current Jibar calculation methodology. However, some respondents highlighted that maintaining a legacy Jibar publication will not be viable in the long term as the integrity of the benchmark will be compromised. Furthermore, this will place reputational burden upon willing contributors, should there be any. Consequently, the design for the future should comprise a plan for the outright transition to reformed reference rates.	The SARB is concerned about the current calculation methodology of Jibar as it is untenable at a fundamental level, especially given all the challenges outlined in the consultation paper. Hence, there is a need to find an interim solution to reform Jibar, to make it more robust and reliable, while the MPG and its work streams decide on, and implement, an alternative reference rate.
		1(a).2	The current calculation methodology poses a risk to the credibility of Jibar, given the reliance on-screen negotiable certificate of deposit (NCD) quotes and the insufficiency of underlying transaction volumes. The international acceptance and/or use of Jibar may be limited if it is not sufficiently reformed or replaced.	

		1(a).3	Some proponents for the reform of the Jibar calculation methodology suggested that, when redesigning the Jibar,	Even though the consultation paper proposed the use of a volume-weighted mean, the SARB agrees that the volume-weighted trimmed mean could be more robust to outliers than the volume-weighted mean methodology. The SARB has also considered the volume-weighted median methodology, which is the preferred methodology in the United States. The volume-weighted median methodology is also more robust to outliers compared to the volume-weighted mean, while also sufficiently simple to compute. Nonetheless, it does suffer from an important shortfall, which arises when the distribution of rates is dispersed. In such instances, the median could be more volatile. The relevant MPG work stream would need to consider all alternative methodologies and test their performance prior deciding on a particular methodology.
		1(a).3(i)	• the calculation methodology for Jibar should incorporate other deposits as well, and not be confined to non-bank financial corporate deposits; and	
		1(a).3(ii)	• a volume-weighted trimmed mean should be used instead of a simple volume-weighted mean, which would be skewed by large single depositors.	

1(b)	Introduce a transaction-based rate, comprising NCDs and non-bank financial corporate (NBFC) deposits, in order to reform the current Jibar.	1(b).1	The recommendation for the proposed hybrid (reformed) Jibar was not widely supported in lieu of its potential use as a reference rate. The various reasons cited include:	The proposed hybrid Jibar was designed to serve as an interim solution to service existing contracts (see Roadmap for interest rate benchmark reforms in South Africa, pp 126 of the consultation paper). In addition, the SARB deemed the hybrid Jibar to be the most viable alternative among those considered at the time of publishing the consultation paper, notwithstanding its shortcomings such as those relating to the structural differences (including pricing) between NCDs and NBFCs. The SARB had been aware, and had acknowledged in the consultation paper, that for purposes of the LCR, NCDs with a maturity outside of the 30-day LCR window receive a 2.5% outflow factor (see Box 3, pp 63 of the consultation paper). The SARB considers the hybrid Jibar as a reasonably viable option among other available alternatives. However, it also appreciates that, given the differences
		1(b).1(i)	• the hybrid Jibar would include bank-specific term-funding strategy pricing, credit risks and liquidity risks, which would render it unresponsive to changes in interest rate expectations – a shortcoming of the current Jibar. Consequently, the reformed Jibar rates would be subject to monetary policy dislocation in times of stress, and as such, they may thus drive monetary tightening in the real economy and circumvent monetary policy objectives;	
		1(b).1(ii)	• the reformed Jibar would be influenced by Basel III liquidity coverage ratio (LCR) and net stable funding ratio (NSFR) regulations, which would introduce large pricing disparities in the manner in which banks price deposits for various end-user clients. Furthermore, the discipline of	

			pricing is moving away from trading desks, which are incentivised and regulated to reflect prices that are indicative of market conditions. Pricing is now more dependent on the Corporate Banking salesforce – meaning that pricing is at the risk of being skewed by client relationship management objectives. This will add noise to the true rate;	between NCDs and NBFC deposits, combining these securities could lead to increased risk. Therefore, the SARB further proposes that the MPG work streams consider a reformed Jibar constituted purely with NBFC deposits. Should the MPG work stream deem it necessary, it may consider other alternative beyond the proposals or recommendations of the SARB. However, whichever alternative benchmark that the MPG work stream will decide on would need to be IOSCO compliant. The SARB would encourage the MPG and its work streams to prioritise the reform of Jibar. It is envisaged that the interim reform measure, that will ultimately be adopted, will be effective from a date that will be announced by the SARB, before the end of 2019.
		1(b).1(iii)	• there would be an embedded liquidity premium in the hybrid structure of the reformed Jibar as it would co-mingle liquid and tradable deposits with contractual deposits;	
		1(b).1(iv)	• retaining NCDs in the Jibar calculation methodology adds complexity to the definition of Jibar, instead of clarifying it;	
		1(b).1(v)	• the increased volatility of the rate is also a negative factor. It has a potential to introduce unintended systemic risk into the financial sector as transactions would now reference this reformed Jibar and may inadvertently threaten liquidity in	

			interest rate swaps and the stability of the corporate funding market. Increased volatility would introduce uncertainty into the market, and that would outweigh the credibility gained through having increased volumes;	
		1(b).1(vi)	• there is a risk that a hybrid Jibar may not meet IOSCO principles, particularly in relation to data sufficiency. The proposed hybrid Jibar will increase transaction volumes; however, it is likely that there will be many instances where transaction volumes will not be sufficient or available. Even if the hybrid Jibar meets the desirable features of integrity (i.e. data sufficiency and robustness to outliers) it may fail under efficacy (transmission) and appropriateness. It will create basis risk as the hybrid structure combines rates that have a basis to one another, that is, they are not necessarily additive.	
		1(b).1(vii)	• hedging costs might increase upon the introduction of hybrid Jibar, given the	

			additional uncertainty resulting from the calculation methodology; and	
		1(b).1(viii)	• the move to a transaction-based calculation methodology could result in the benchmarks being calculated on a t-1 basis, from a t+0 basis. This change may result due to a delay in the settlement of interest and collateral payments.	
		1(b).2	Few other respondents highlighted global developments pertaining to the preference for risk free rates (RFR) as alternative reference rates in the transition away from existing Interbank offered rates (Ibors), notwithstanding some international initiatives to strengthen the existing Ibors. Some respondents argue that derivatives market participants would be less likely to adopt the hybrid Jibar considering the global trajectory of developments on RFRs. And, should the reformed Jibar remain used in the derivatives market, there may be dislocations between cash and derivatives markets, resulting in undesirable basis risks for cash market	The SARB does not necessarily oppose this proposal. This stance is in line with a change in the viewpoint of other Financial Stability Board member authorities in other jurisdictions. Originally, these authorities held a view that a multiple rate approach in which Ibors could coexist with risk-free rates was possible. However, in light of the possible discontinuation of Libor, these jurisdictions have deviated from their initial viewpoint.

			participants. It is therefore proposed that South Africa should align itself with other jurisdictions that have opted for alternative RFRs in transitioning away from existing Ibors.	
		1(b).3	It might be prudent to wait until the US and/or Europe resolve the issue of 'LIBOR' post-2021 prior to reforming Jibar. This would allow South Africa to learn from their mistakes and to be aware of unintended negative consequences, whether in the form of redrafting legal documentation or systemic financial risk implications.	
2.	Use risk-inclusive reference rates for pricing of unsecured on-balance sheet (Jibar-linked) items and use risk-free reference rates for collateralised	2.1	The group of respondents that favour the multiple rate approach saw it as a useful means that will enable better monitoring of liquidity and financial stability risk. However, the regulator would need to provide guidance in terms of which benchmark rate is used for which purpose.	

	transactions and derivative contracts.	2.2	Respondents do not necessarily support the differentiation between risk-free and risk-inclusive reference rates, in particular for their use as reference rates. The existence of two separate curves could result in complexity in pricing and risk management models.	
		2.2(i)	This approach would leave significant unmanageable interest rate risk on the balance sheets of banks, financial institutions and corporate clients by driving up frictional costs in the real economy. Consequently, an alignment of reference rates across on- and off-balance sheet activities is paramount. The lack of alignment would introduce unhedgeable basis risk for the real economy.	
		2.2(ii)	Based on the above, it is proposed that, when credible overnight RFRs are established, on-balance sheet items should be priced using these RFRs instead of the proposed risk inclusive reference rates so that the important link between cash and derivatives markets, which is critical for	As indicated under recommendation 1(b).2, the SARB does not necessarily oppose this proposal.

			hedging of interest rate risk on cash instruments, is maintained.	
		2.2(iii)	It is desirable to have common reference rates between derivatives and cash markets as far as possible. International regulators and the Financial Stability Board have signalled a preference to transition away from Ibors, notwithstanding some international initiatives to strengthen the existing Ibors.	
3.	Introduce a term deposit benchmark, which could also serve as an alternative to the proposed reformed Jibar. This deposit benchmark should be based on eligible deposit transactions from all banks. Furthermore, in order to leverage on deposit data more	3.1	The respondents did not have any objections to the calculation of the term deposit benchmark to the extent that it will not be used as a reference rate. Some of the supporters of the term deposit benchmark noted that the provision of transparent information to market participants and the development of relevant statistics relating to money markets should lead to more efficient functioning of these markets. Other respondents requested an extension of the term to 60 months.	More data are required to assess the viability of extending the term to 60 months.

	exhaustively, an interpolated benchmarking methodology should be considered as a fall-back in times where there are insufficient data within the standard maturity buckets.	3.2	Respondents cautioned against the use of a term deposit benchmark as a reference rate. While, the benchmark may meet the desirable characteristic of integrity (i.e. IOSCO compliant), it is likely that it would fail under efficacy (i.e. transmission) and hence, it may not capture monetary policy expectations.	The MPG and its work streams have to make the decision regarding the choice of an interest rate benchmark that will be used as a reference rate.
		3.3	Respondents were ardent that the term deposit benchmark should not be considered as an alternative to Jibar as it shares similar shortfalls with the hybrid Jibar.	
		3.4	There may be compliance risks in providing deposit information for the creation of term deposit benchmarks, which will need to be carefully managed.	
4.	Reform Sabor and rename Sabor Money Market, which reflects eligible overnight unsecured funding from all banks, including funding obtained at the	4.1	Responses showed wide support for the proposed reform of Sabor as it would enhance transparency in the domestic money market. It was noted that exclusion of FX swaps was desirable as they were effectively secured deposits. But also, the inclusion of call accounts would be necessary as these	

	prevailing repo rate, but excluding overnight FX swaps.		represent significant money market activity within South Africa, unlike in the determination of Sonia, where they were excluded.	
		4.2	There were proposals that the calculation methodology be changed to a volume-weighted trimmed mean instead of the proposed volume-weighted average, which could potentially skew the rate toward big clients.	The SARB prefers the volume-weighted trimmed mean as it is more robust to outliers and errors compared to a volume-weighted mean.
		4.3	Respondents indicated that Sabor Money Market (MM) could be considered for use in the new monetary policy implementation framework (MPIF) and for general risk-free purposes as it is closely aligned to international practise and presents limited operational issues. Albeit, some cautioned that a very narrow list of reformed risk-free or near risk-free benchmarks would be desirable, and therefore, a comparative study of Sabor MM, ZARibor and SASFR would need to be conducted for this purpose.	The MPG work streams would need to consider Sabor MM when choosing an appropriate reference rate.

		4.4	There was also a proposal to consider changing the name from Sabor MM to ZAR overnight index average (ZONIA).	The name ZONIA is quite similar to SONIA, and hence, it may lead to confusion. The SARB would rather consider renaming Sabor MM to South African Rand Overnight Index Average (ZARonia).
5(a)	Calculate a new interest rate based solely on eligible overnight interbank transactions from all banks, the South African Rand Interbank Overnight Rate, (ZARibor).	5(a).1	The recommendation to introduce ZARibor as a benchmark rate for overnight interbank deposits is widely supported.	
5(b)	Consider designating ZARibor as a near-risk free rate.	5(b).1	The majority of respondents support the idea of designating ZARibor as a near-risk free rate, notwithstanding the credit risk element inherent in the rate. The minimal credit and liquidity risk characteristics of ZARibor as well as its negative spread to repo and Sabor make it compelling to consider the rate as near-risk free. Furthermore, the benchmark rate could be strengthened by a mechanism	The decision lies with risk-free reference rate work stream of the MPG.

			that can remove outliers in the construction of the rate.	
		5(b).2	Some respondents proposed mandating underlying ZARibor transactions to be accompanied by adequate collateral in the form of qualifying high-quality liquid assets (HQLA) as per the regulatory LCR eligibility criteria with corresponding haircuts. Alternatively, benchmark administrators would need to apply specific eligibility criteria that would allow ZARibor to exhibit the desired attributes of a risk-free rate.	The recommended construct of ZARibor as an unsecured rate is likely to offer the SARB a lens to assess the interconnectedness of banks for financial stability purposes. However, in the event that the MPG decides to designate ZARibor as a near-risk free rate with an eligibility criteria that results in the exclusion of other contributors, the lens could be distorted – which could lead to an under estimation of the true extent of interconnectedness. Therefore, serious thought would need to be given to the manner in which the objectives of the SARB and the MPG's near risk-free reference consideration could both be satisfied. Furthermore, using collateralised transaction in the determination of ZARibor would alter the fundamental character of the rate and

				would rather be appropriate for a different benchmark rate.
		5(b).3	Like Sabor MM, it is suggested that consideration be given to using ZARibor as an operating target for the new MPIF. The selection by the SARB of either Sabor MM or ZARibor as a policy target may impact the adoption of either benchmark as a reference rate by the market. It is likely that the market would prefer reference rates to be aligned to targeted policy rate.	The SARB will consider various options as part of the review of the MPIF to determine the most optimal operating target for policy purposes.
		5(b).4	The respondents that do not support the designation of ZARibor as a near-risk free rate noted that there was no such thing as a near-risk free rate and that such a designation would create confusion, misinformation and a false sense of security.	

			Moreover, during times of heightened market stress, such a rate would exhibit undesirable volatility. Similarly, the respondents that support designating ZARibor as a near-risk free rate also recognised the latter concern. However, they noted that a fall back in times of heightened market stress could be devised as a solution to the problem.	
6.	Improve the liquidity of the secondary market for Treasury bills. Steps in that direction should entail the inclusion of Treasury bills in the government bond (GB) electronic trading platform (ETP), the use of primary dealers to quote prices, a Treasury bill repo facility and the daily collection of transaction data.	6.1	Respondents support the proposed initiatives to improve liquidity in the secondary market for Treasury bills. The ways in which support could be achieved range from: requiring primary dealers to make Treasury bill prices in addition to government bonds, including Treasury bills on the electronic trading platform, and creating a repo facility for Treasury bills.	As indicated in the consultation paper, National Treasury (NT) and the SARB, through the Treasury Bill Market Working Group, have been in consultation with banks and asset managers and similar views have been expressed by both banks and asset managers who are in support of developing the secondary Treasury Bill Market.
		6.2	Other respondents expressed reservations regarding the viability of this proposal, particularly if Treasury bills were to be used as underlying instruments for term rates. This is owing to liquidity challenges in longer tenors emanating from banks' behaviour to	

			buy and hold Treasury bills for LCR purposes. Furthermore, as expressed in the case of hybrid Jibar, there is a global shift towards using overnight (and not term) rates as reference interest rates. Even in instances where term rates are required, those will be derived from overnight rates rather than being derived from underlying markets that fall short of the IOSCO data sufficiency requirement.	
7.	Calculate the South African Secured Financing Rate (SASFR) based on supplementary repos conducted with the SARB as well as overnight funding in the GB repo market.	7.1	Respondents generally supported the proposal to introduce SASFR, albeit, not to the extent that it is used as a reference rate.	
		7.2	The respondents that did not support the introduction of the benchmark raised concerns about its composition, particularly regarding the inclusion of GB repo rates given the distortions in the GB repo market. There were also concerns raised about the infrequency of supplementary repos and structural bias in the overnight GB repo market, both which limit the viability of adopting SASFR as a credible reference rate.	The SARB views the concerns raised about the infrequency of supplementary repos and the dynamics of the domestic GB repo market as valid. As such, there are compelling reasons for not including SASFR as part of the new suite of benchmarks to be considered as reference rates. However, the rate may be calculated for other purposes, including monitoring financial stability risks.

8.	Consider SASFR as the reference interest rate for the overnight index swap (OIS) market.	8.1	The majority of respondents do not agree with the proposal to use SASFR as a reference rate for the OIS market. Instead, they recommended that either ZARibor (in its current proposed form or a secured version thereof) or Sabor MM to be considered for this purpose.	As indicated in 7.2 above, there are compelling reasons to withdraw the recommendation to use SASFR as the reference rate for OIS market.
9.	Use GB repo and/or SASFR as overnight RFRs for South Africa. Furthermore, if designated as a near RFR, ZARibor could also be used for that purpose.	9.1	There was a clear objection to the adoption of SASFR as an overnight risk-free reference rate for the South African financial markets. This was due to vulnerabilities and structural biases in the GB repo market.	In its deliberations over the choice of an alternative reference rate, the MPG and its work streams would need to take into account the objection by respondents regarding the adoption of SASFR as reference rate.
		9.2	Respondents supported the proposal to use ZARibor as an overnight risk-free rate, subject to the rate being designated as near-risk free. There would need to be some adjustments in the eligibility criteria that deal with the credit risk element. To that effect, there is a recommendation to shift towards a secured equivalent of ZARibor (refer to 5(b).1 and 5(b).2).	The MPG would need to consider carefully the designation of ZARibor as a near risk-free rate, having taken into account the recommendation to mandate underlying ZARibor transactions to be accompanied by adequate collateral.

10.	Develop a broader general collateral (GC) repo market with a broader pool of collateral than the current GB repo market.	10.1	The respondents support the proposal to develop a broader GC repo market. Respondents specifically noted the following as necessary to allow for a more developed GC repo market:	The SARB will liaise with the Financial Markets Liaison Group (FMLG) to consider this recommendation as part of the work plans of the Fixed Income and Derivatives sub-committee.
		10.1(i)	• the Prudential Authority (PA) could assist by broadening the collateral pool for market operations. And thus, the first step would entail recognition of all HQLA eligible collaterals with prescribed LCR haircuts, which will mobilise other pools of collateral within the South African financial system;	This would be a matter for the PA to consider.
		10.1(ii)	• an amendment to clause 25 of the Financial Markets Act 19 of 2012. Effectively, the clause requires that transactions in listed securities be booked through Nutron, which does not have the capacity to book classic repos with haircuts and daily mark-to-market margining. The system can only book buy-sellbacks; and	The inability of the system to book classic repos could be dealt with as a system development request to the JSE Limited (JSE).

		10.1(iii)	• an amendment to Board Notice 90 would also be required to enable money market funds to engage in reverse repos.	

5. Next steps

5.1 This report will inform the engagements of the SARB as well as the MPG and its work streams.

5.2 It should be noted that there are two distinct processes linked to the reform of interest rates. The first relates to alternative <u>reference rates</u> and falls within the ambits of the MPG. The second relates to <u>benchmark interest rates</u> and remains the responsibility of the SARB.

5.3 The SARB has prioritised to publish a technical specification paper on benchmark interest rates before the end of 2019. The outcome of the engagements with market participants, via the MPG, will contribute towards the production of the technical specification paper by the SARB, which is envisaged to provide the final suite of benchmarks that will be calculated by the SARB, and to serve as technical reference.

5.4 Parallel to this process, the MPG work streams will make their recommendations to the MPG in terms of their preferred choice of an alternative reference rate. The work streams will also advise on transition and other implementation issues that need to be considered by the MPG.

5.5 It is worth noting that the reform of interest rate benchmarks in South Africa is a multi-year project, whose implementation will be phased over the next couple of years. While the SARB intends to publish a technical specification paper by the end of 2019, the MPG will have its own work plan and will provide guidance in terms of its implementation timelines.

5.6 With regard to Jibar, the SARB strongly recommends that the current Jibar methodology be phased out and be replaced as soon as reasonably practicable, especially given all the challenges. The SARB expects the MPG and its work streams to prioritise the reform of Jibar and also come up with an interim solution, which will become effective from a date that will be announced by the SARB.

End of report

Appendix A

Summary of the SARB consultation paper key findings and recommendations

This appendix summarises the key findings (KF) and key recommendations (KR) as per the SARB consultation paper.

In respect of Jibar, the SARB found the following:

KF1 Within the wholesale market, fixed and floating-rate deposits comprise the largest source of funding, ahead of NCDs. Within the NCD universe, three-month NCDs, which are used as a basis for calculating the three-month Jibar, account for less than 3% of total issuance.

KF2 Jibar is based on indicative rates and not actual transactions. Further, there are insufficient transactions in the NCD market for Jibar to meet the IOSCO principles of benchmark design.

KF3 While market participants recognise that Jibar falls short of IOSCO standards, the participants are reluctant to changing, citing concerns about the cost and complexity of transitioning to a new reference rate. However, market participants believe that the calculation methodology should be changed.

In considering various alternatives to the current Jibar calculation methodology, the SARB found the following:

KF4 Sporadic issuance of three-month NCDs means that a mere change to the data collection methodology will not address the concerns about data sufficiency in the Jibar calculation process.

The SARB went further to investigate the possibility of basing Jibar on observable transactions in related markets. One option was to anchor Jibar to observed promissory note transactions as a related market. Upon investigating this alternative, the SARB found the following:

KF5 The volume of promissory notes (PNs) in circulation was too small to make a significant improvement to the calculation of Jibar.

One other related market considered was the market for fixed-rate wholesale deposits. In this regard, the SARB found the following:

KF6 On a daily basis, non-bank financial corporate (NBFC) deposits range between R10 billion and R30 billion. As such, this deposit category adds substantial volume per day to the universe of transactions that underpin the proposed reformed Jibar.[3]

KF7 NCD issuance typically ranges between 0% and 2% of the transaction universe of the proposed hybrid Jibar, while NBFC deposits account for approximately 98%. Effectively, this makes the proposed reformed Jibar an interest rate on wholesale NBFC deposits. The hybrid Jibar averages 20 basis points above the current Jibar, but exhibits a similar degree of volatility.

KF8 The volume and frequency of NBFC deposits is large enough to address the issues of data sufficiency and mismatch with the volume of contracts that reset against Jibar.

KF9 The reformed Jibar based on NCDs and NBFC deposits is a more accurate reflection of banks' actual wholesale funding costs.

The SARB proposed a development of credit risk-inclusive reference rates to be used for the pricing of unsecured on-balance sheet items as well as RFRs for collateralised transactions. With respect to the former, the SARB investigated the possibility of developing a term deposit benchmark comprising all deposit categories and found that:

KF10 Fixed-rate wholesale deposits constitute a large portion of total wholesale bank funding. An interest rate benchmark derived from this market would thus allow for the formulation of an interest rate that provides a better reflection of the realities of the domestic money market.

[3] Reformed Jibar refers to the hybrid Jibar.

KF11 From a data sufficiency point of view, the statistics on daily volume and number of transactions of wholesale bank deposits provide reasonable comfort that an interest rate benchmark derived from this market will be IOSCO compliant.

KF12 A term deposit benchmark based on current fixed-rate wholesale deposit transactions complies with the IOSCO principles of data sufficiency and presents a viable alternative to a reformed Jibar.

The SARB also conducted a review of Sabor, with the intention to reform the benchmark as well as propose additional overnight interest rate benchmarks. The research revealed the following:

KF13 Sample data on overnight FX swaps – a subcomponent of Sabor – are inadequate as the underlying data was found to be insufficient, highly concentrated and not necessarily observable.

KF14 It is difficult to justify the inclusion of FX swaps in the Sabor calculation, as FX swaps are structurally different from deposits (i.e. FX swaps are secured, while deposits are unsecured), and are not a directly observable rate as they are implied from FX forward points, and are subject to regulatory constraints that cause pricing frictions.

KF15 An interest rate based on unsecured overnight interbank deposits is required. Furthermore, given the minimal credit and liquidity risks of the underlying transactions, such a rate could be considered as a near RFR.

In light of the global shift towards the use of RFRs as reference interest rates for derivative contracts, the SARB holds a view that such benchmarks should be calculated and published in South Africa. These RFR benchmarks will serve as ‘fallbacks’ in the case that unsecured benchmarks are permanently discontinued and they will also facilitate policymakers’ task in monitoring the transmission of monetary policy. In conducting its research on RFRs, the SARB found the following:

KF16 At present, there were no risk-free money market interest rate benchmarks published in the South African financial markets.

KF17 The secondary market for Treasury bills in South Africa – a potential source market for calculating term RFRs – is illiquid, mainly due to banks buying and holding Treasury bills for prudential reasons.

KF18 The GB repo market in South Africa, which the SARB considers as the primary choice for overnight and one-week RFRs, is not a general collateral (GC) market in the true sense, as the former is driven by holders of bonds who need to fund their long bond positions.

KF19 Activity in longer GB repos is scarce and this presents a challenge for using GB repos as a basis for calculating term RFRs.

KF20 While the GB repo rate is a secured rate, it trades at a spread above the unsecured overnight rate, the Sabor.

Pursuant to these findings, the SARB made recommendations for consideration by stakeholders active in the South African financial markets.

With respect to Jibar, the SARB recommends that:

KR1 The current calculation of Jibar be phased out and that a transaction-based rate, comprising NCDs and NBFC deposits, be introduced to reform the current Jibar.

With respect to the overall use of interest rate benchmarks, the SARB recommends that:

KR2 Risk-inclusive reference rates be used for the pricing of unsecured on-balance sheet (Jibar-linked) items and risk-free reference rates be used for collateralised transactions and derivative contracts.

With respect to developing an additional risk-inclusive benchmark, the SARB recommends that:

KR3 A term deposit benchmark be introduced, which could also serve as an alternative to the proposed reformed Jibar. This deposit benchmark will be based on eligible deposit transactions from all banks. Furthermore, in order to leverage on deposit data more exhaustively, an interpolated benchmarking methodology should be considered as a fallback in times where there are insufficient data within the standard maturity buckets.

With respect to Sabor, the SARB recommends that:

KR4 Sabor be reformed and renamed Sabor Money Market which reflects eligible overnight unsecured funding from all banks, including funding obtained at the prevailing repo rate, but excluding overnight FX swaps.

KR5 A new interest rate based solely on eligible overnight interbank transactions from all banks, the South African Rand Interbank Overnight Rate (ZARibor) be calculated, and be considered as a near RFR.

With respect to RFR benchmarks, the SARB recommends:

KR6 An improvement in the liquidity of the secondary market for Treasury bills. Steps in that direction entail the inclusion of Treasury bills in the GB electronic trading platform (ETP), the use of primary dealers to quote prices, a Treasury bill repo facility as well as daily collection of transaction data.

KR7 A South African Secured Financing Rate (SASFR) be calculated based on supplementary repos conducted with the SARB as well as overnight funding in the GB repo market.

KR8 SASFR as the reference interest rate for the overnight index swap (OIS) market.

KR9 GB repo and/or SASFR be used as overnight RFRs for South Africa. Furthermore, if designated as a near RFR, ZARibor could also be used for that purpose.

KR10 The development of a broader GC repo market with a broader pool of collateral than the current GB repo market.