CAPITAL AND FUNDING UPDATE

March 2016

FIRSTRAND BANK

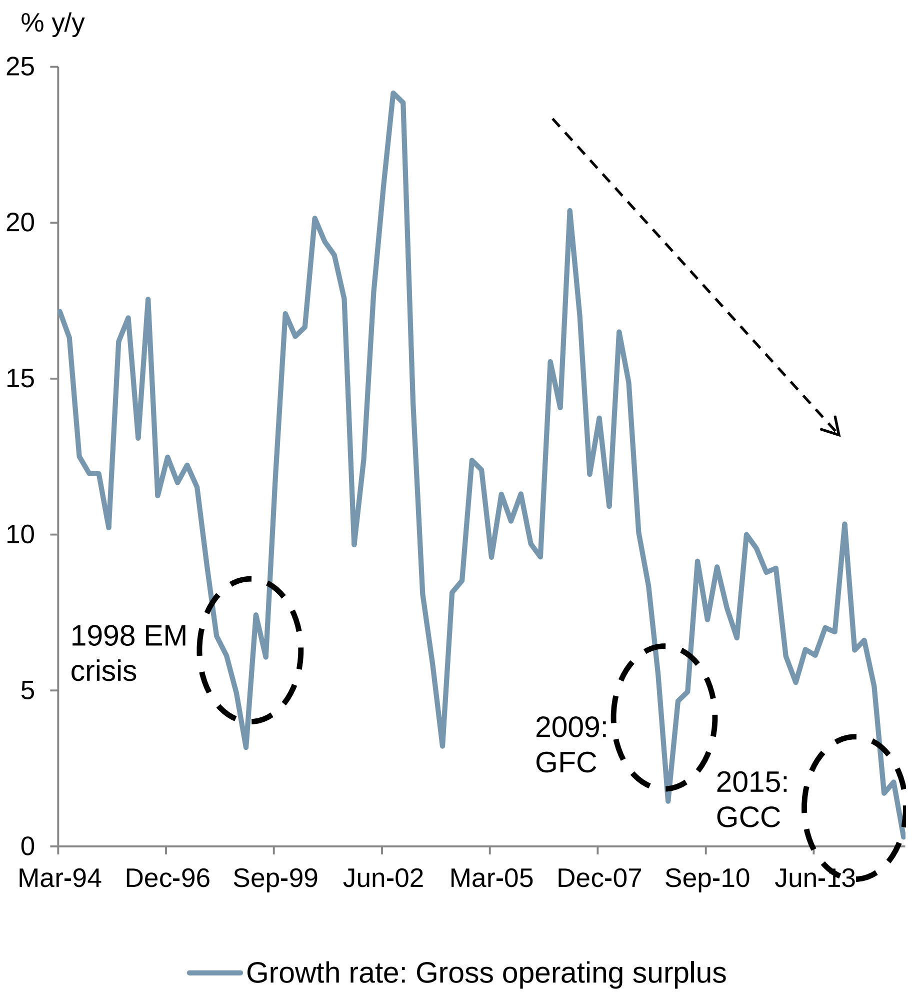
Agenda

- Economic conditions
- Market developments
- Capital update
- Funding and liquidity

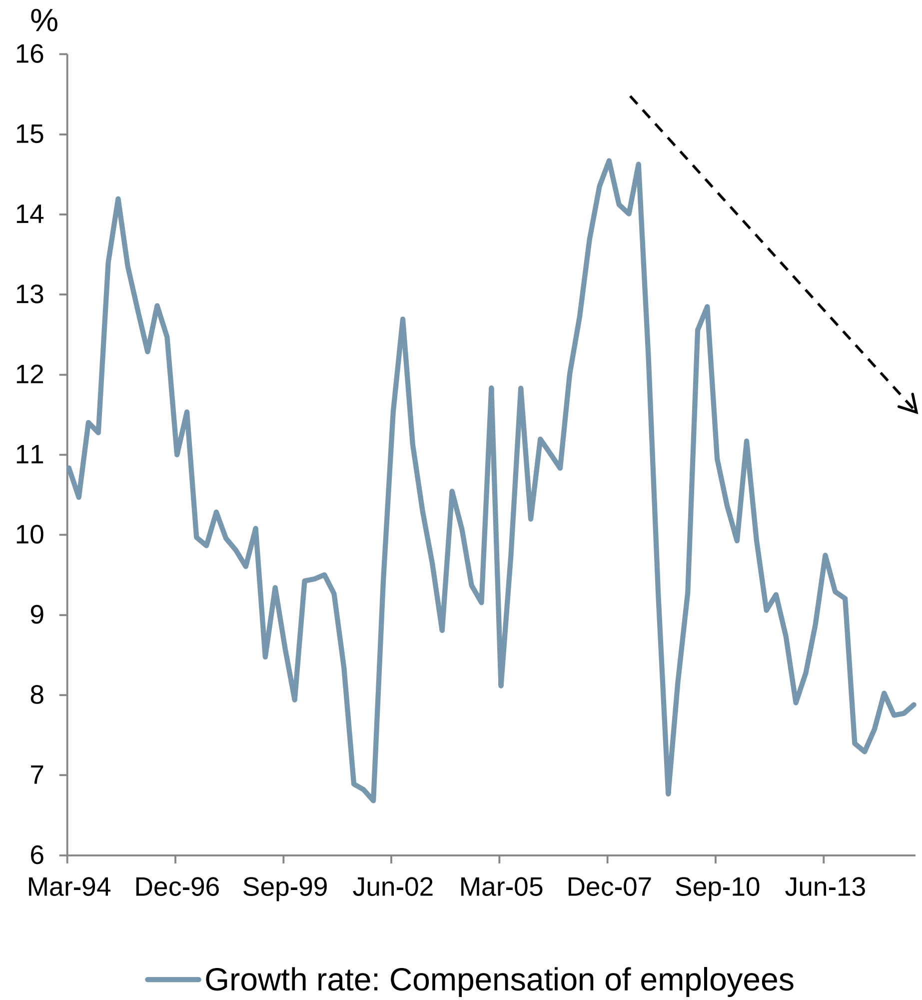
ECONOMIC CONDITIONS

SA income growth under significant pressure

Corporate income growth (Gross operating surplus)

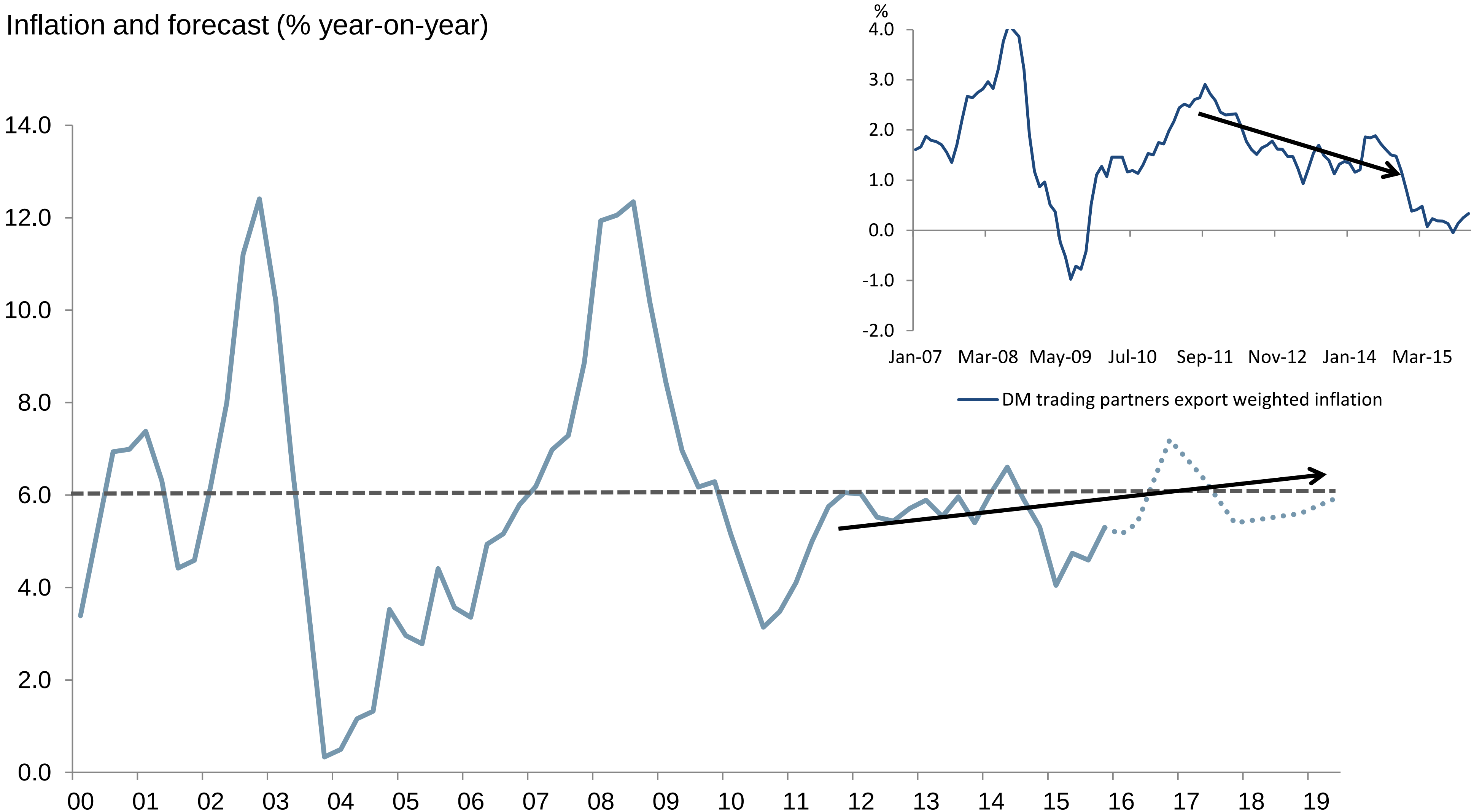


Remuneration of employees



Source: StatsSA, FirstRand.

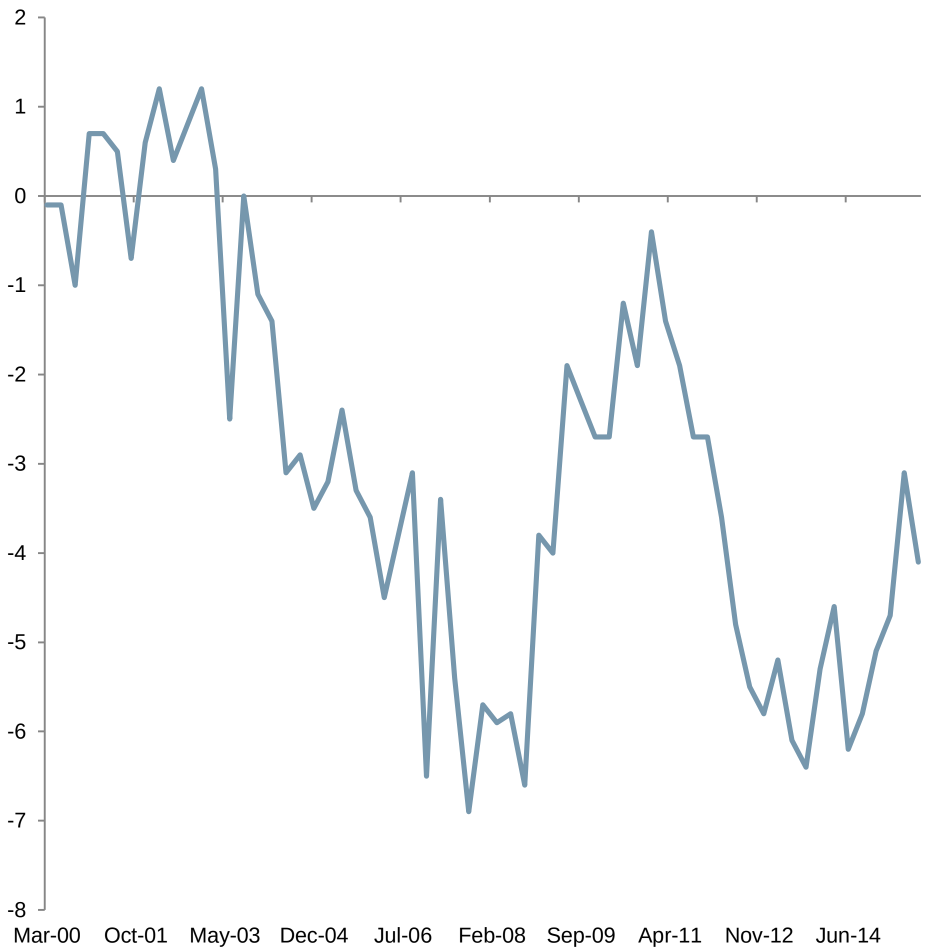
Cost of living and doing business are increasing



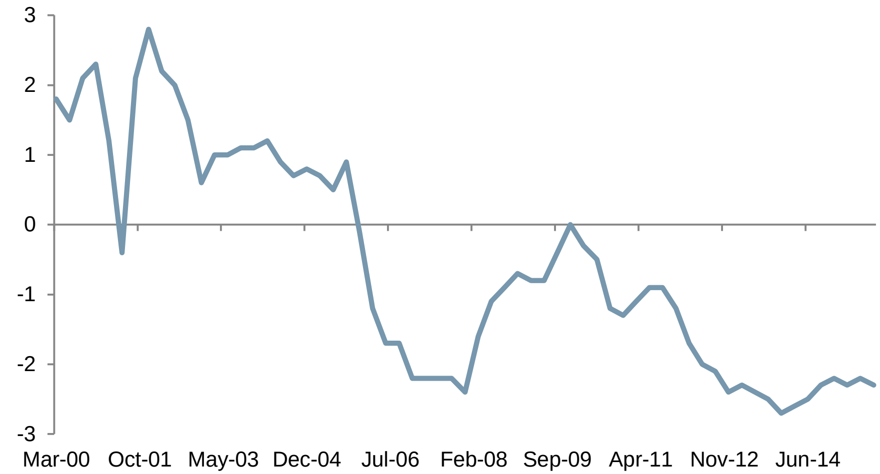
Sources: StatsSA, FirstRand.

Domestic savings remains constrained

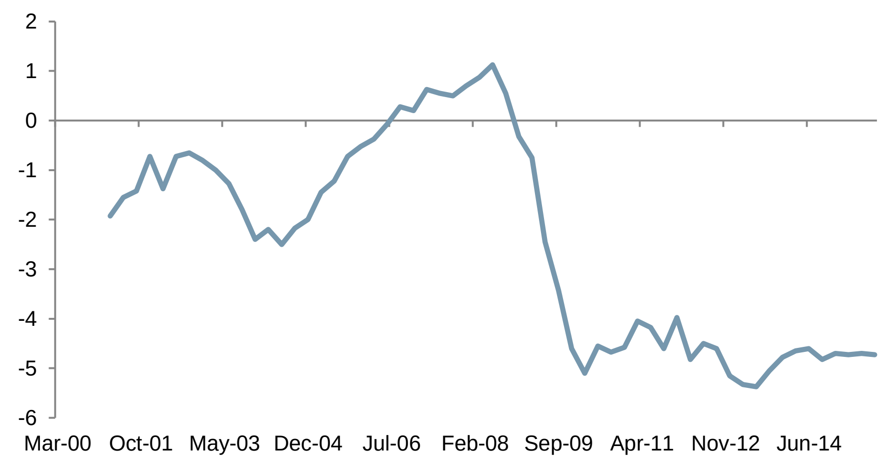
Current account deficit to GDP(%)



Household savings (% of disposable income)



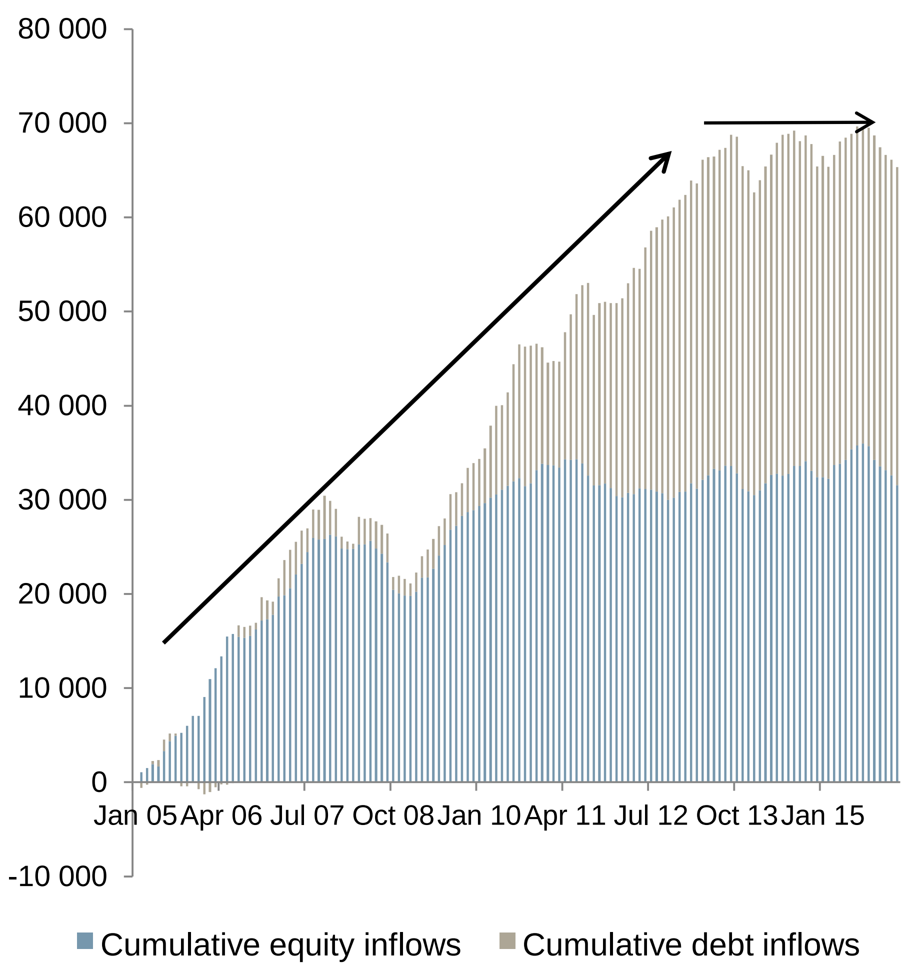
Government savings to GDP (%)



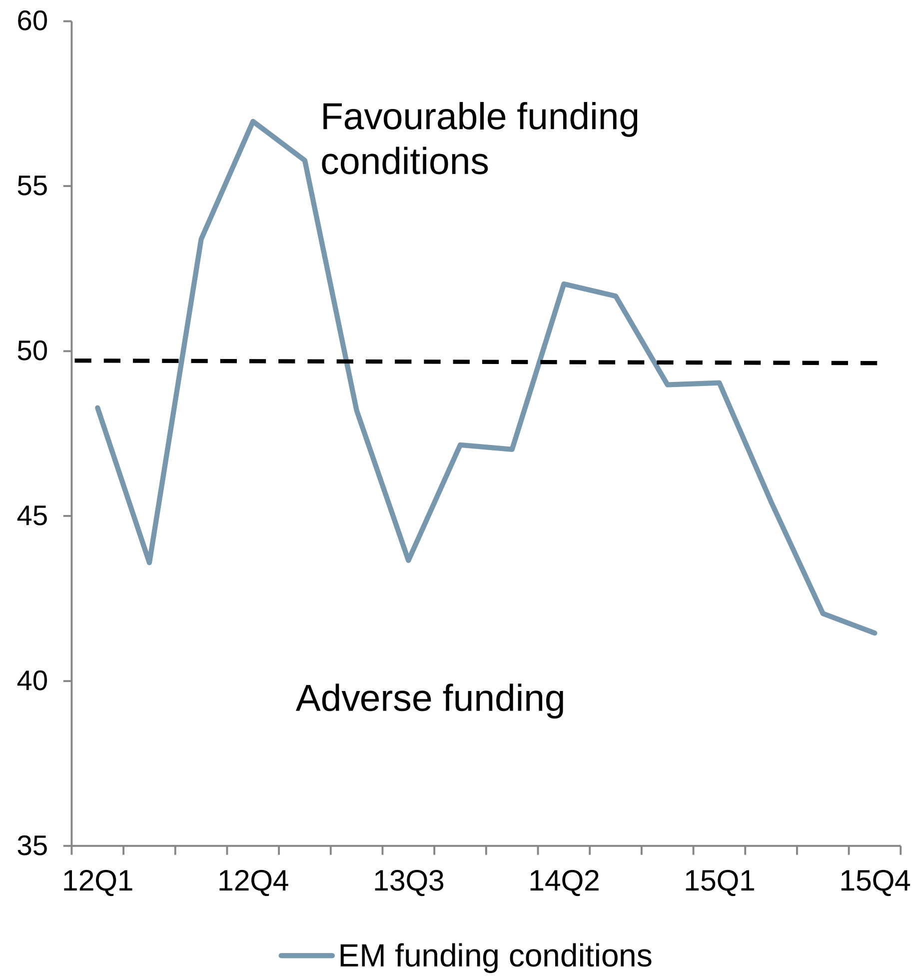
Source: SARB, Bloomberg, FirstRand.

Foreign portfolio inflows (saving) under pressure

Portfolio flows into South Africa (US$ m)



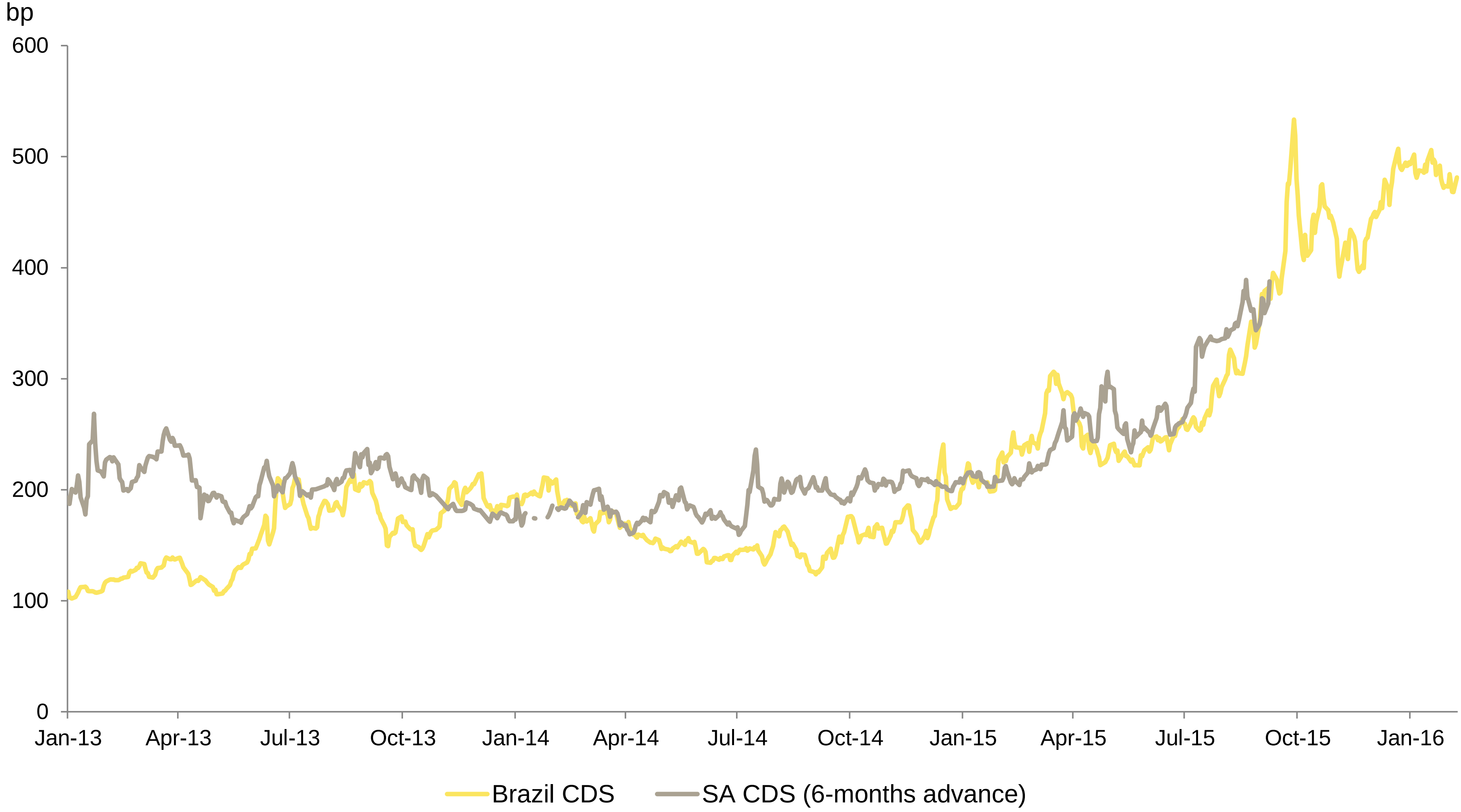
EM funding conditions (index)



Source: IIF, FirstRand.

Sovereign ratings risks have increased

SA and Brazil CDS (SA CDS is pushed back by 6-months)



Source: Bloomberg, FirstRand.

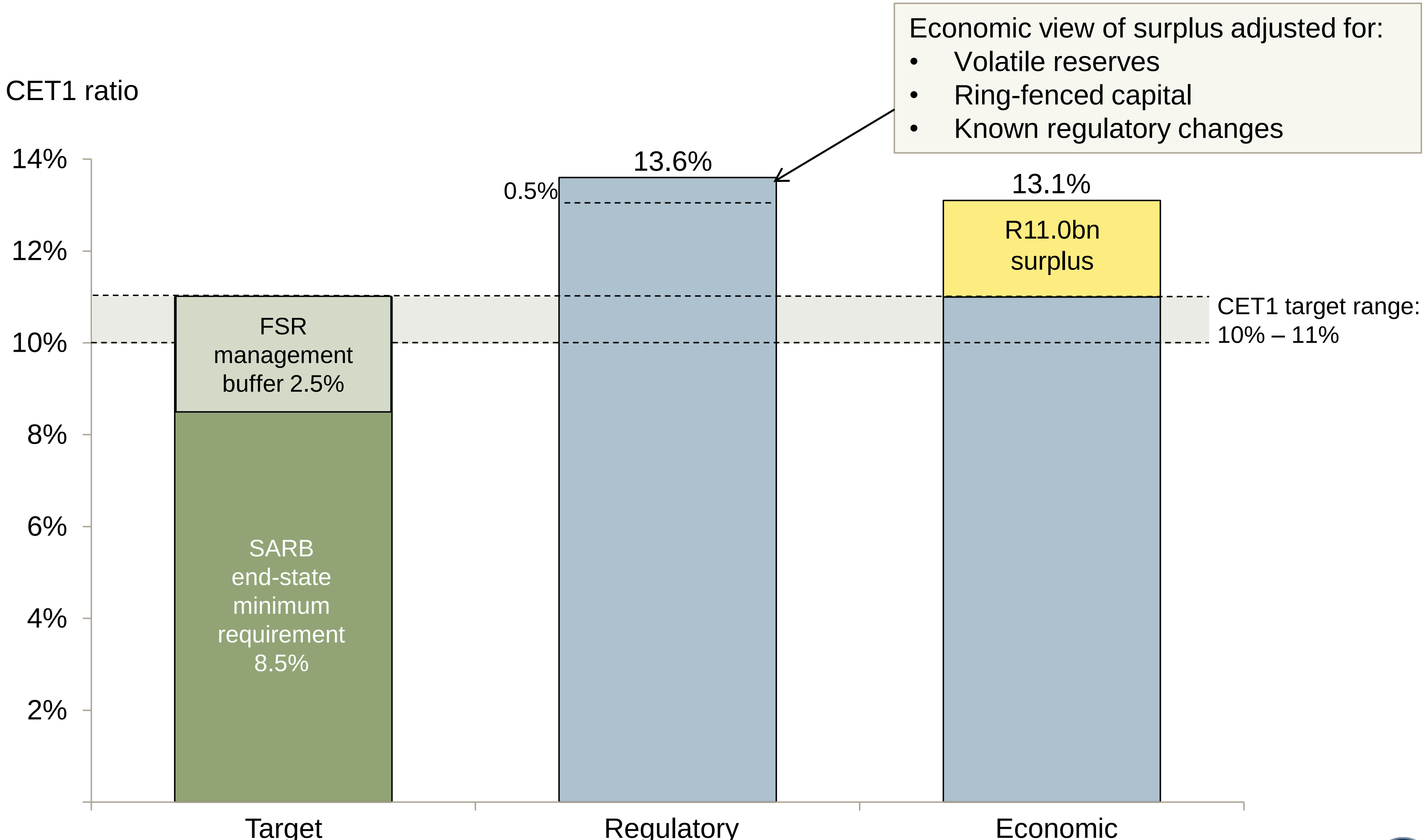
MARKET DEVELOPMENTS

Market developments

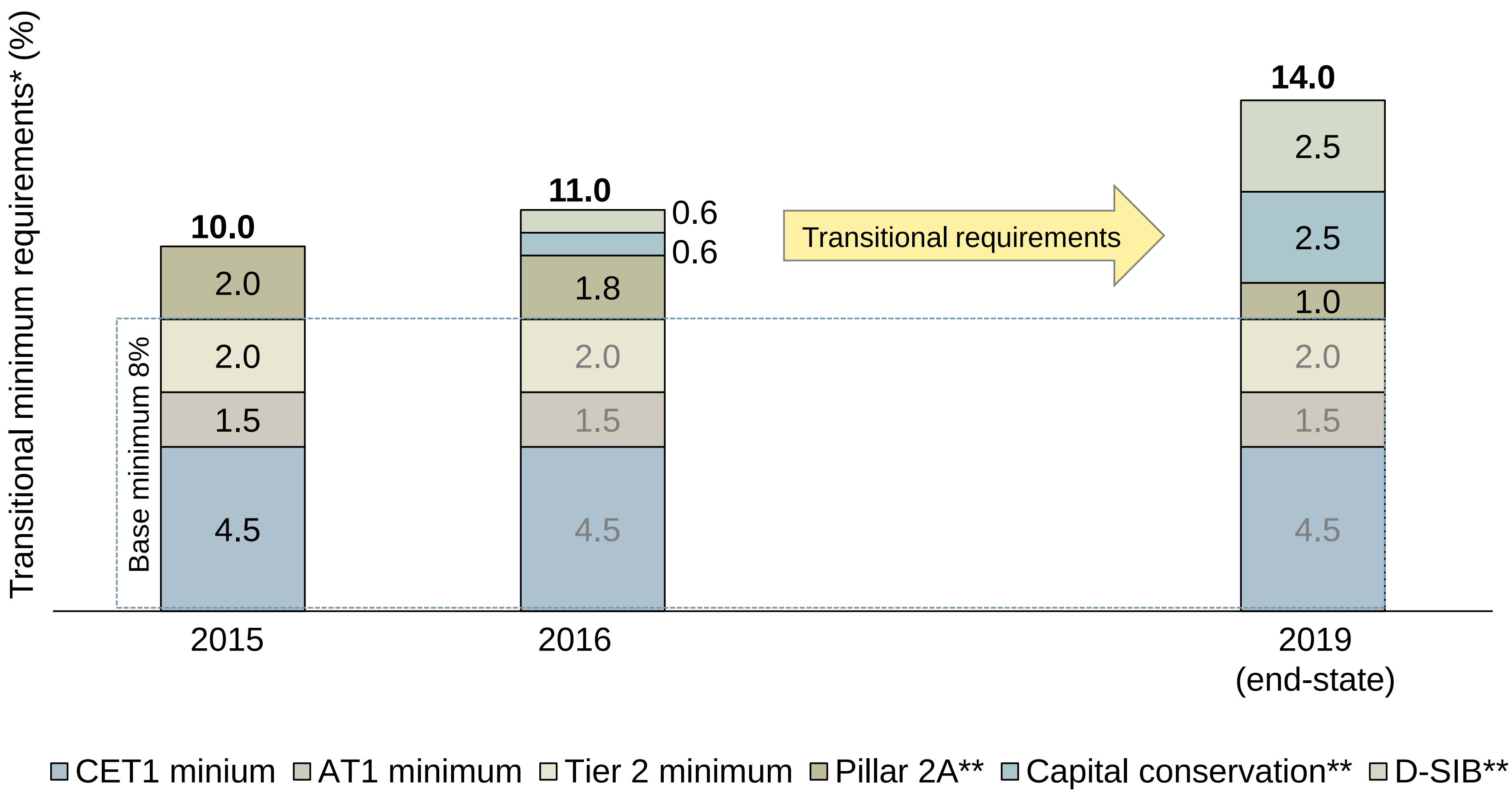
- Strate and Clearstream collateral management JV has gone live in SA, enables:
  - Efficient collateralization
  - A secured square-off between clearing banks
- Funding models for SA Inc. workgroup
  - Securitisation workgroup to update exemption notice
  - Updates to commercial paper regulations
  - NT, JSE, ASISA with banks working on project bond framework
- SA as financial hub
  - Multi currency settlement and listing of multi-currency instruments
  - Financial holding company
  - Designated “Financial Centre”
- London clearing house (LCH)

CAPITAL UPDATE

Current CET1 target aligned with end-state



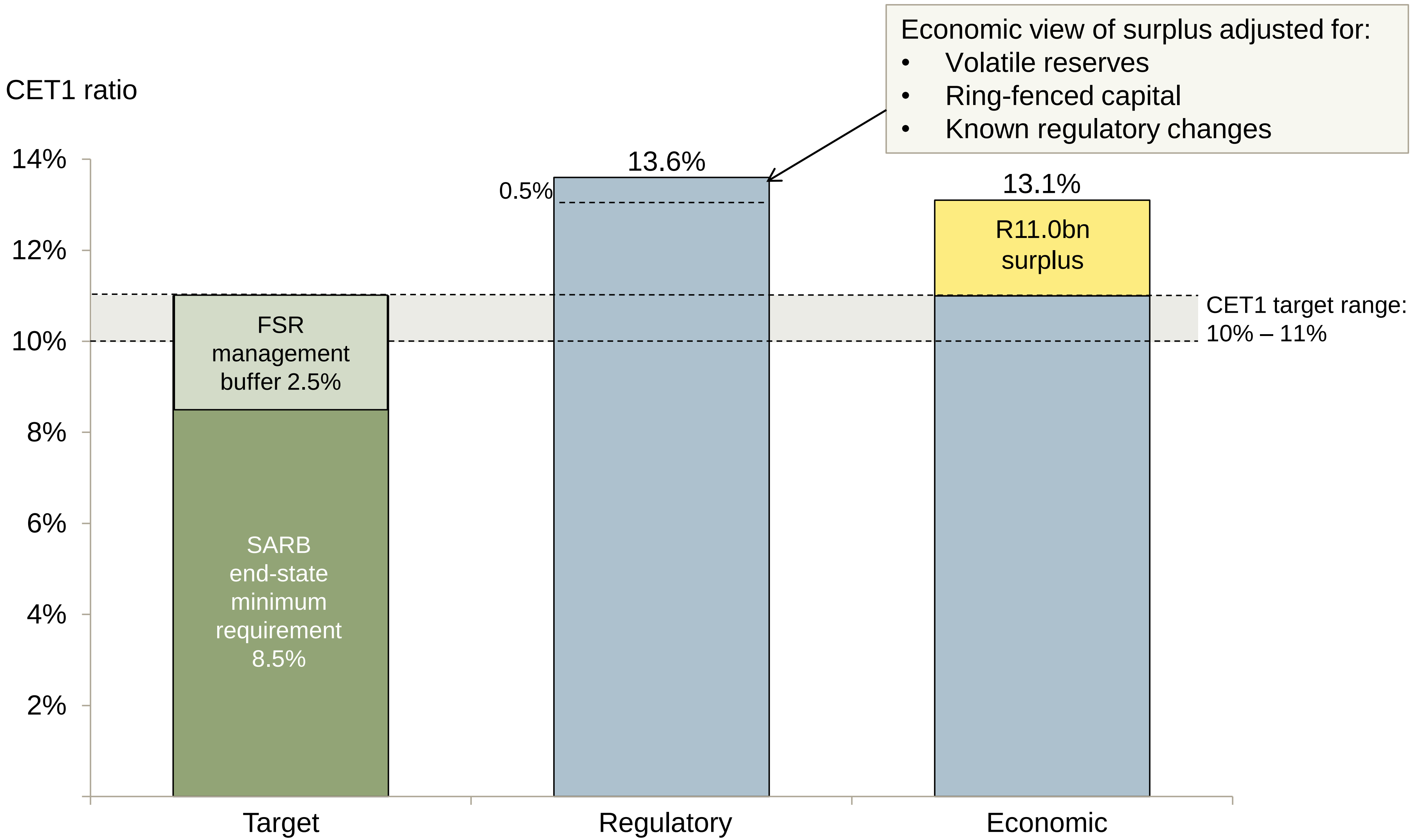
D-SIB and capital conservation requirement; jumping from 2016 to end-state



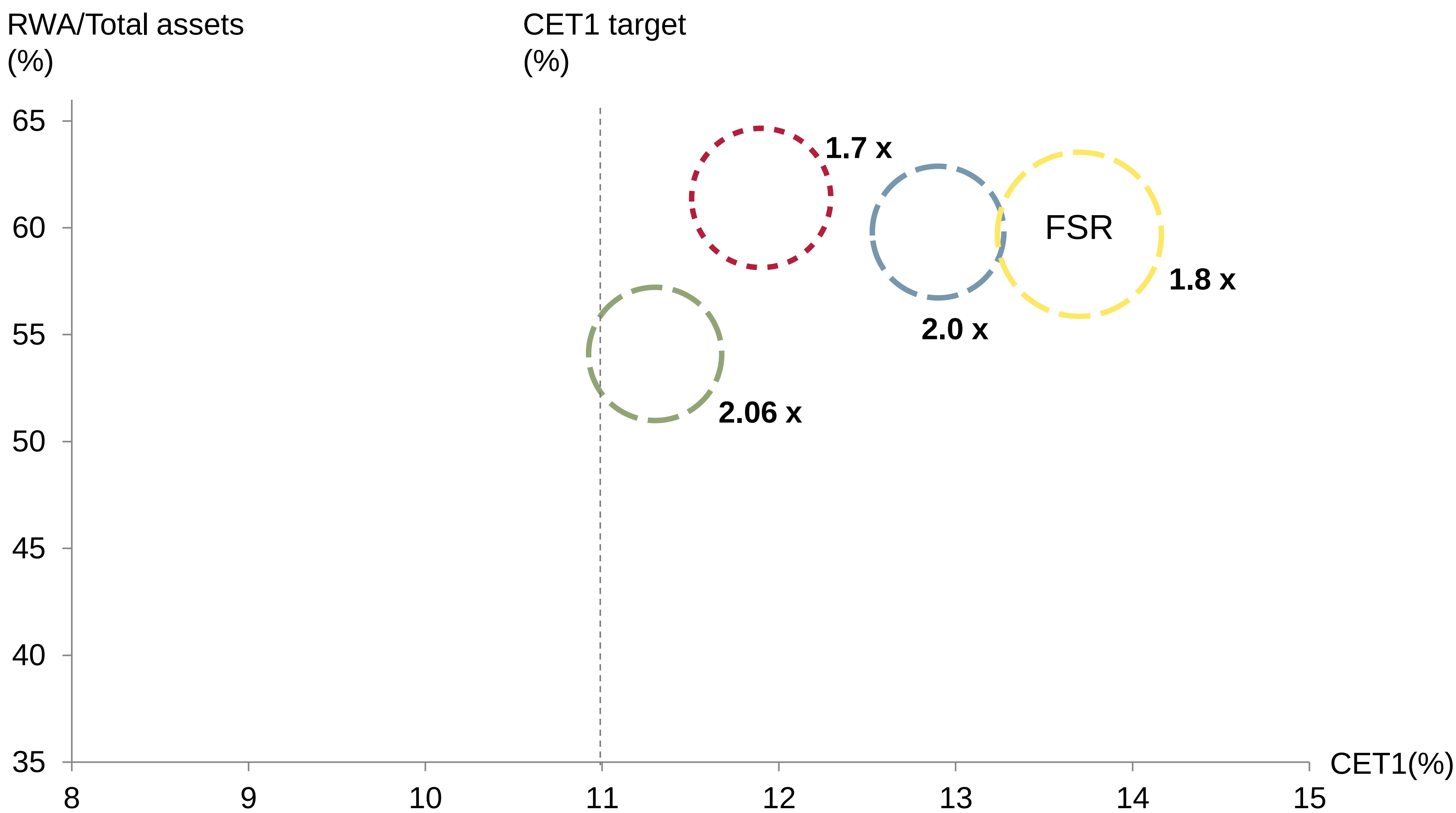
* *Assumes a maximum add-on for D-SIBs.*

** *D-SIB and Pillar 2A met with all components of capital; capital conservation requirement met with CET1 only.*

Remains well capitalised at 31 December 2015



FirstRand's capital position stands out compared to peer group



Size of bubble = ROE%

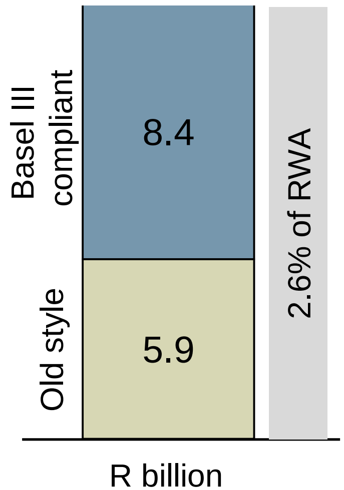
Basel update – further changes to risk coverage

	Q1	Q2	Q3	Q4
Credit risk				
• Constraints on internal models	Consultation anticipated	Consultation response deadline	Analysis and review	Finalisation
• Revisions to standardised approach	Consultation ends (Mar 11)	Analysis and review	Finalisation	
Capital floors (based on standardised approaches)	Consultation anticipated		Ongoing review and analysis	Finalisation and calibration
Sovereign risk			Possible consultation	
Expected loss			Review of EL in terms of ECL accounting	
Operational risk	Consultation anticipated	Consultation response deadline	Analysis and review	Finalisation
Market risk – fundamental review of the trading book	Standard finalised			
Interest rate risk in the banking book	Finalisation anticipated			
TLAC holdings	Consultation ends Feb 16			
Step-in risk	Consultation ends Mar 17			

FirstRand philosophy on Tier 2 issuance

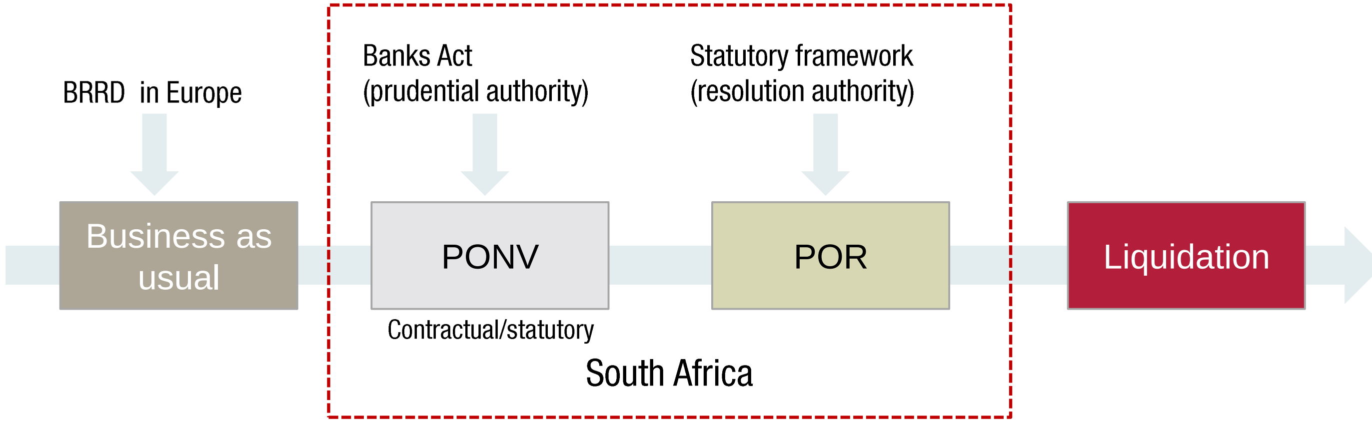
- Raise capital in good times, not in times of stress
- Capital planning performed on a forward-looking basis, not point-in-time
- Optimal levels (mix and pricing) given internal targets
- Frequent issuer, managing its roll-over profile
- Considerations of volume of proposed Tier 2 issuance
  - Actual against target levels for all elements of the capital stack
  - Tier 2 run-off profile – grandfathering and redemption
  - Ongoing regulatory and accounting changes
  - Changes in composition of balance sheet
- View Tier 2 capital as a source of long-term funding, not used to support economic risk

Tier 2 issuance to date
(R14.3 billion)



Update on capital and TLAC instruments

- Point of non-viability (PONV) vs point of resolution (POR)



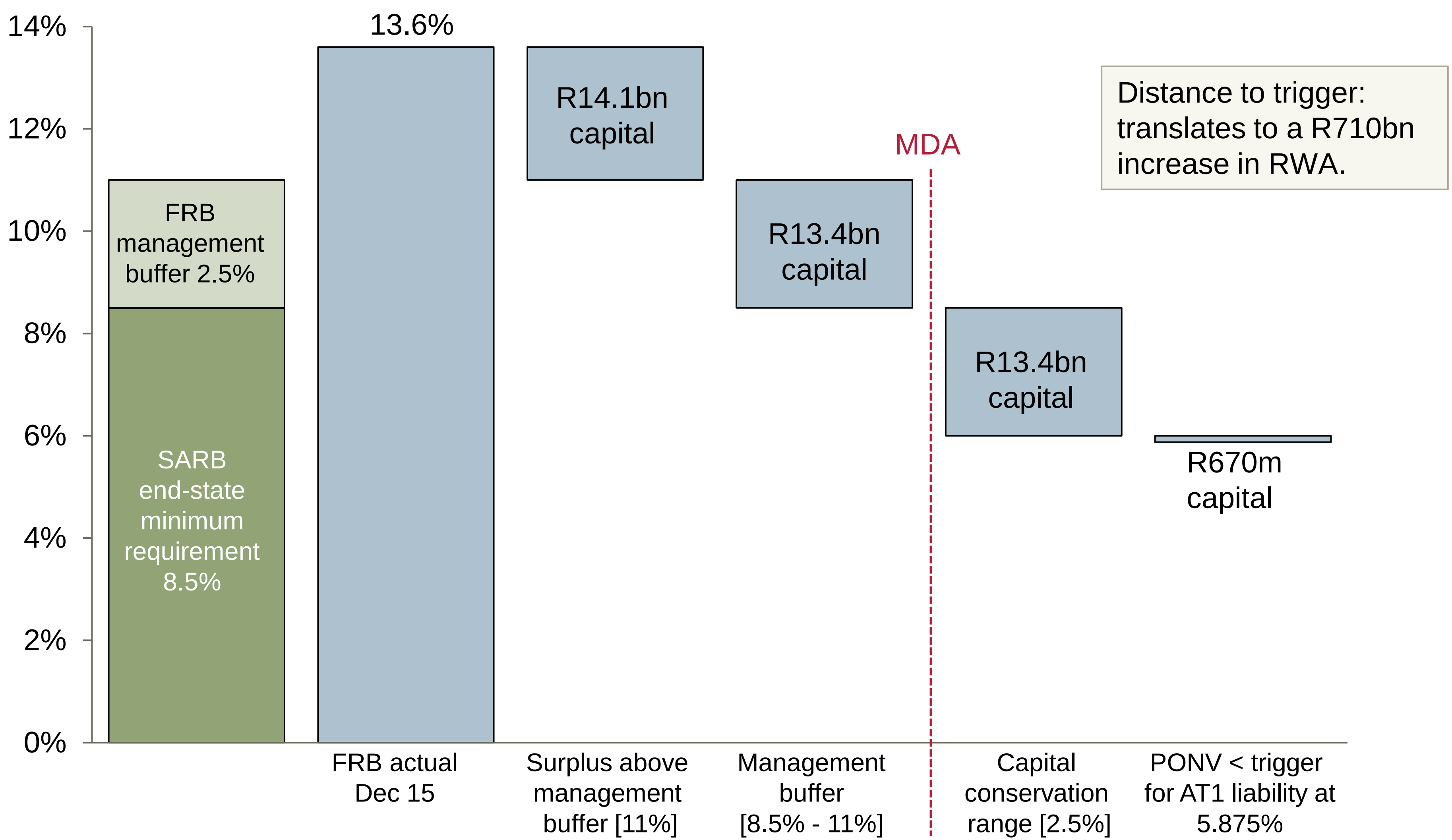
- Key principles and considerations
  - Recovery plan
  - No creditor worse off (NCWO)
  - Total loss absorbing capacity (TLAC) – requirement and definition
  - Going concern instruments
- Recent international developments in AT1
  - Concerns around distance to maximum distributable amount (MDA) given lack of visibility around bank-specific requirements
  - Targets should reflect bank-specific add-on
- Holding company vs operating entity

A framework to differentiate between issuers; reassess the risk of capital instruments

Earnings resilience, volatility and growth		• Quality • Diversification • Risk appetite
Balance sheet strength	Assets	• Quality
	Liabilities	• Integrated funding and liquidity

	Capital management	• Strong capital position
		  • Appropriate buffers in excess of minimum
		  • Distance-to-trigger/default

R41bn distance-to-trigger in CET1



Regulatory interaction well before MDA

FUNDING AND LIQUIDITY

Regulatory update

NSFR update

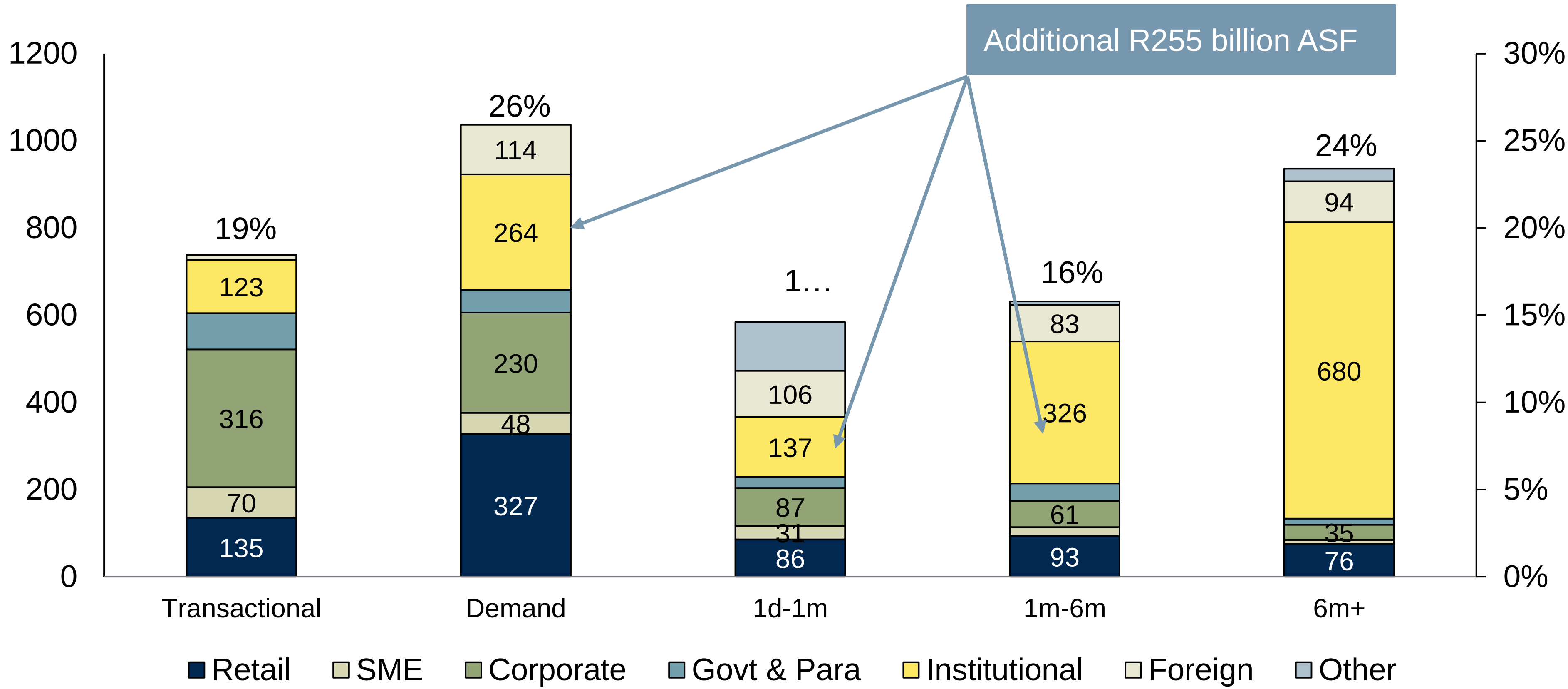
- In proposed directive published 18 November 2015 (Ref:15/8), the SARB announced amendments to the NSFR

- Summary Key SARB proposal
  - Affirmed the 5% RSF for off-balance sheet contingent funding obligations
  - Deviation from BIS Basel III
    - As per Basel III funding from financial institutions
      - Where remaining maturity < 6m, receives a 0% ASF
      - SARB has proposed applying a 35% ASF

- SARB indicated that the BIS calibration does not reflect the actual stability of this funding source for SA
  - SARB considered actual local conditions, determining that regulatory and economic barriers that prevent liquidity from flowing out of the domestic economy

Significant outcome in regulatory reform agenda

Recalibration of NSFR impacts R700bn+ in balances for the sector



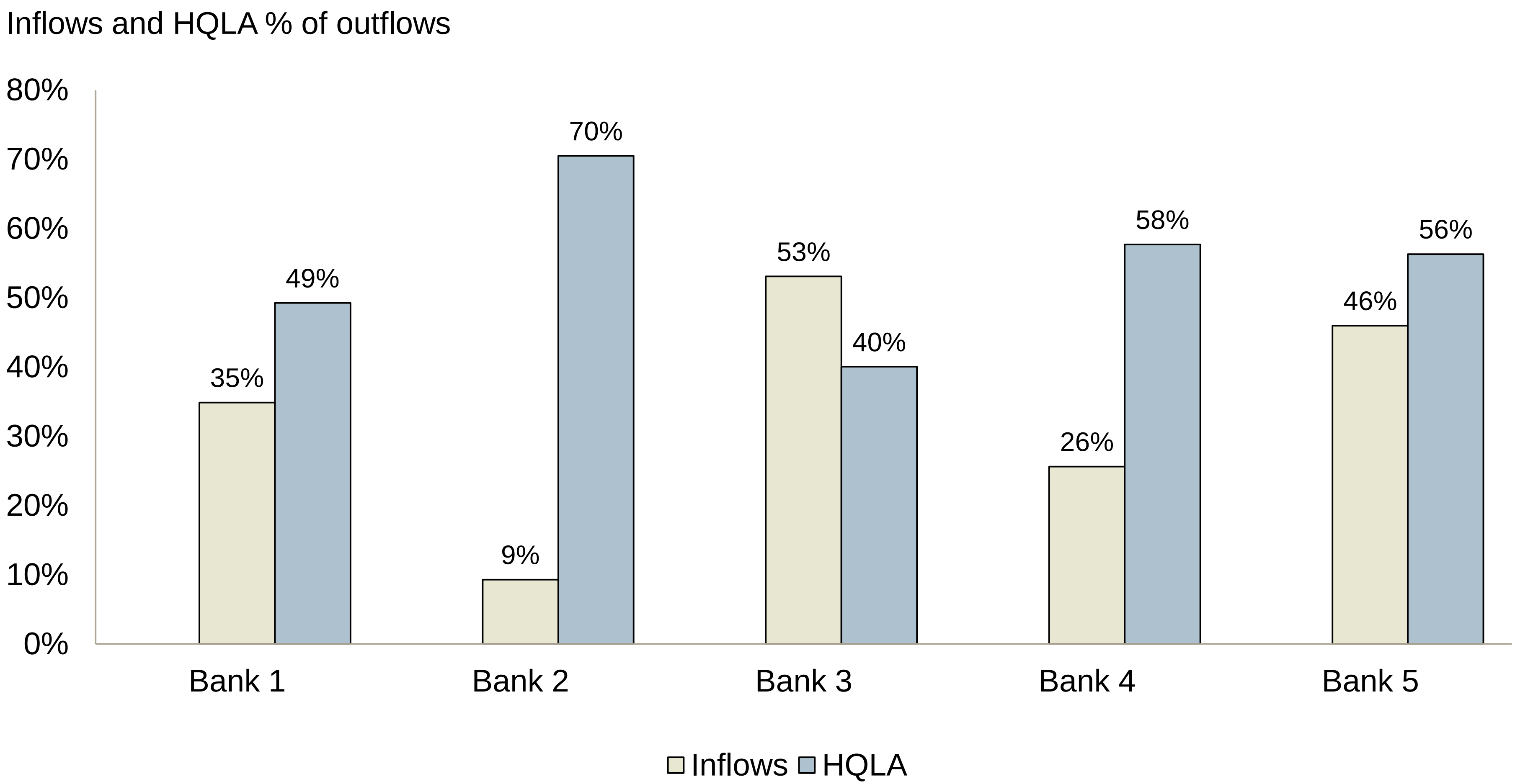
Largely addresses NSFR shortfall of the SA banking sector – the bank estimates that FRB would exceed the NSFR minimum requirements under this calibration

Source: SARB BA900 Total, December 2015.

Significant interpretive issues still remain in application of new regulations

- The objective of LCR is to promote the short-term resilience of liquidity risk profile of banks
- The LCR provides a key measure of liquidity resilience to creditors, rating agencies, market participants and other stakeholders
- Comparison of these ratios between local and international banks provides a basis to assess the resilience of an entity and a country to a liquidity event
- To enable a fair and efficient market it is important that “standards” are applied consistently with no room for specific interpretation
- Industry work group with BASA, SAICA and SARB to try improve consistency

Comparing how banks mitigate their risk of outflows



Significant structural difference are observed in NCOF (inflows and outflows)

Source: Individual banks common disclosure templates as at 30 June 2015.

FUNDING AND LIQUIDITY
Liquidity conditions

Pillars of market liquidity – show all markets constrained

Greater liquidity transmission is required across markets

Cash market	Repo market	FX swap market
(funding liquidity)	(financing liquidity)	(cross currency liquidity)

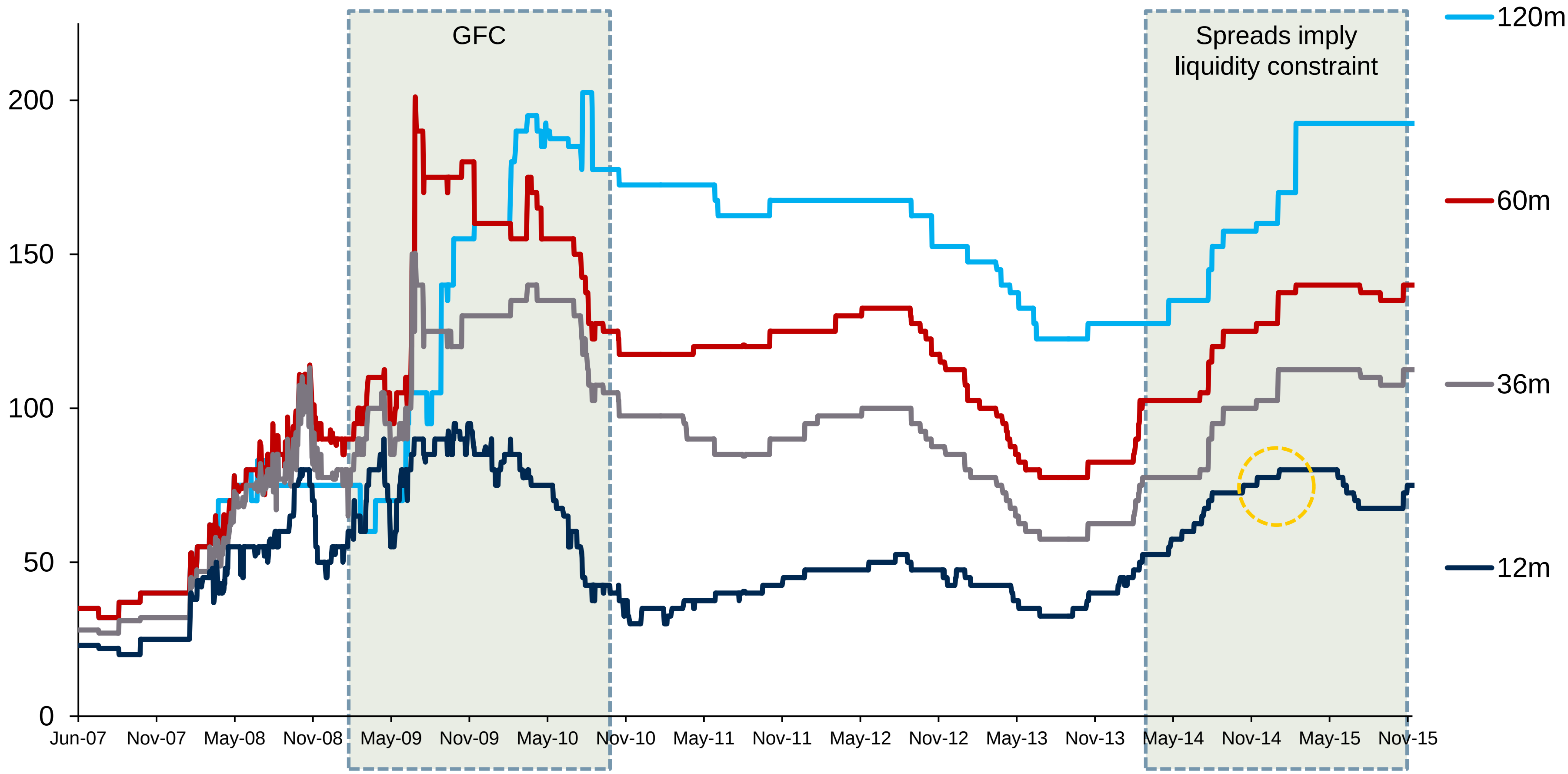
In an efficient market banking system should transmit liquidity to all markets as required

Central bank market operations

Charles Goodhart of the BIS Advisory Committee, BOE and LSE explains:
Ultimately, Central Banking is about providing liquidity and liquidity provision is an essential and central component of financial stability.

Significant pricing pressures in funding markets

Mid bank funding spreads [mid bps]

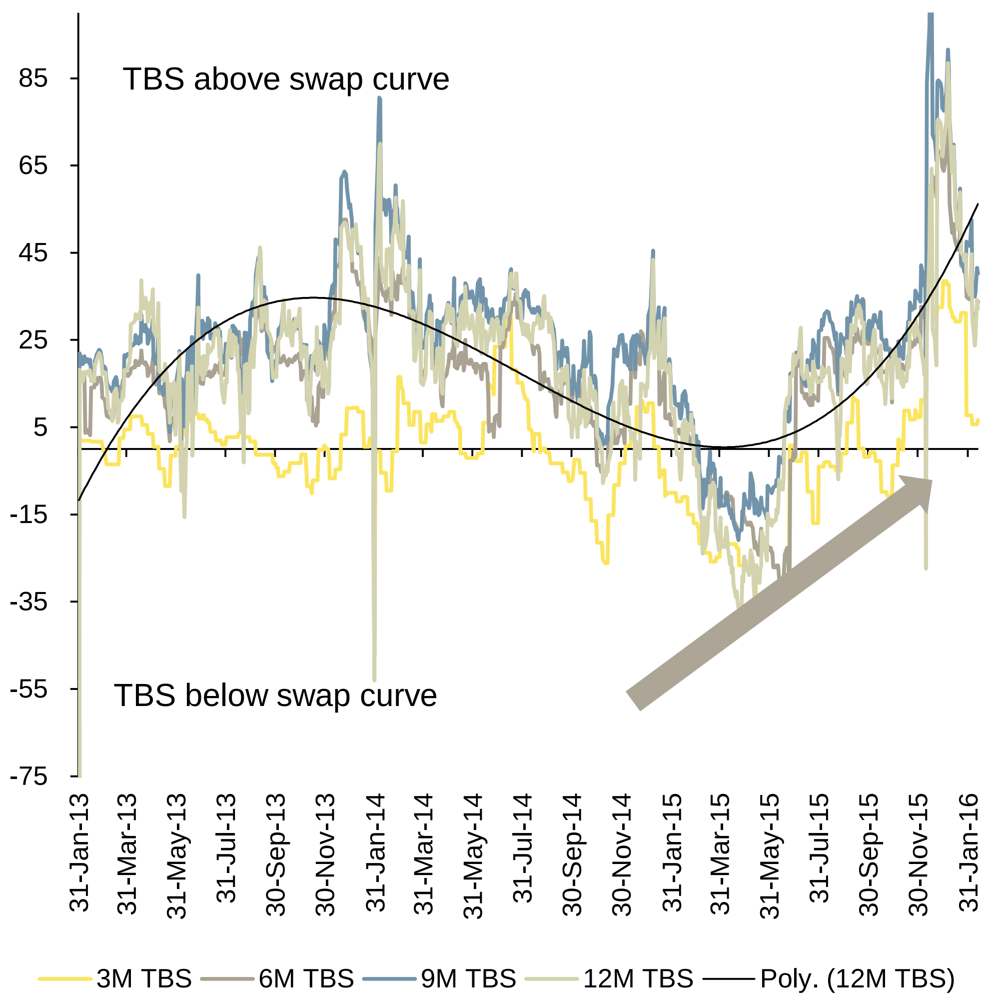


Liquidity pricing at level seen in the crisis as consequence of misaligned market forces, economic conditions, regulation and market operations

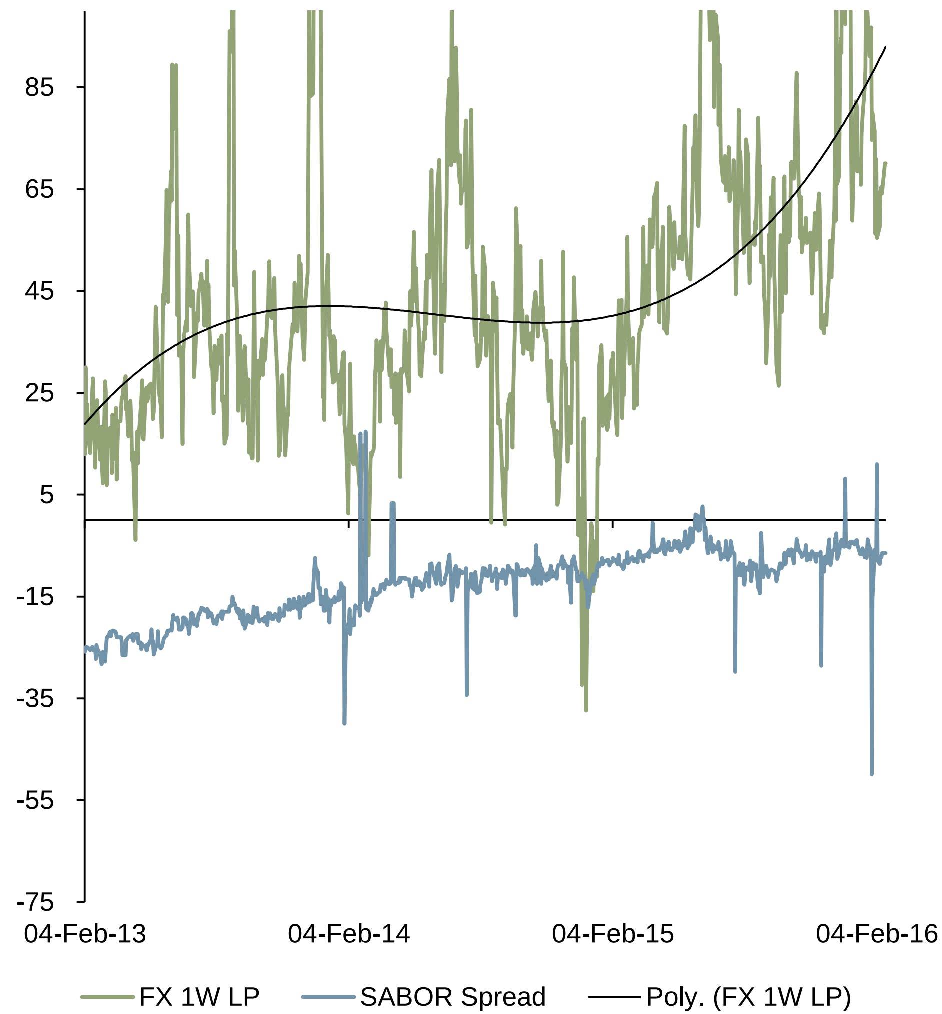
Source: Bloomberg <RMBP> and <OTC ZAR>.

Liquidity market reflect inefficiencies

TB Swap Spreads "TED" spread



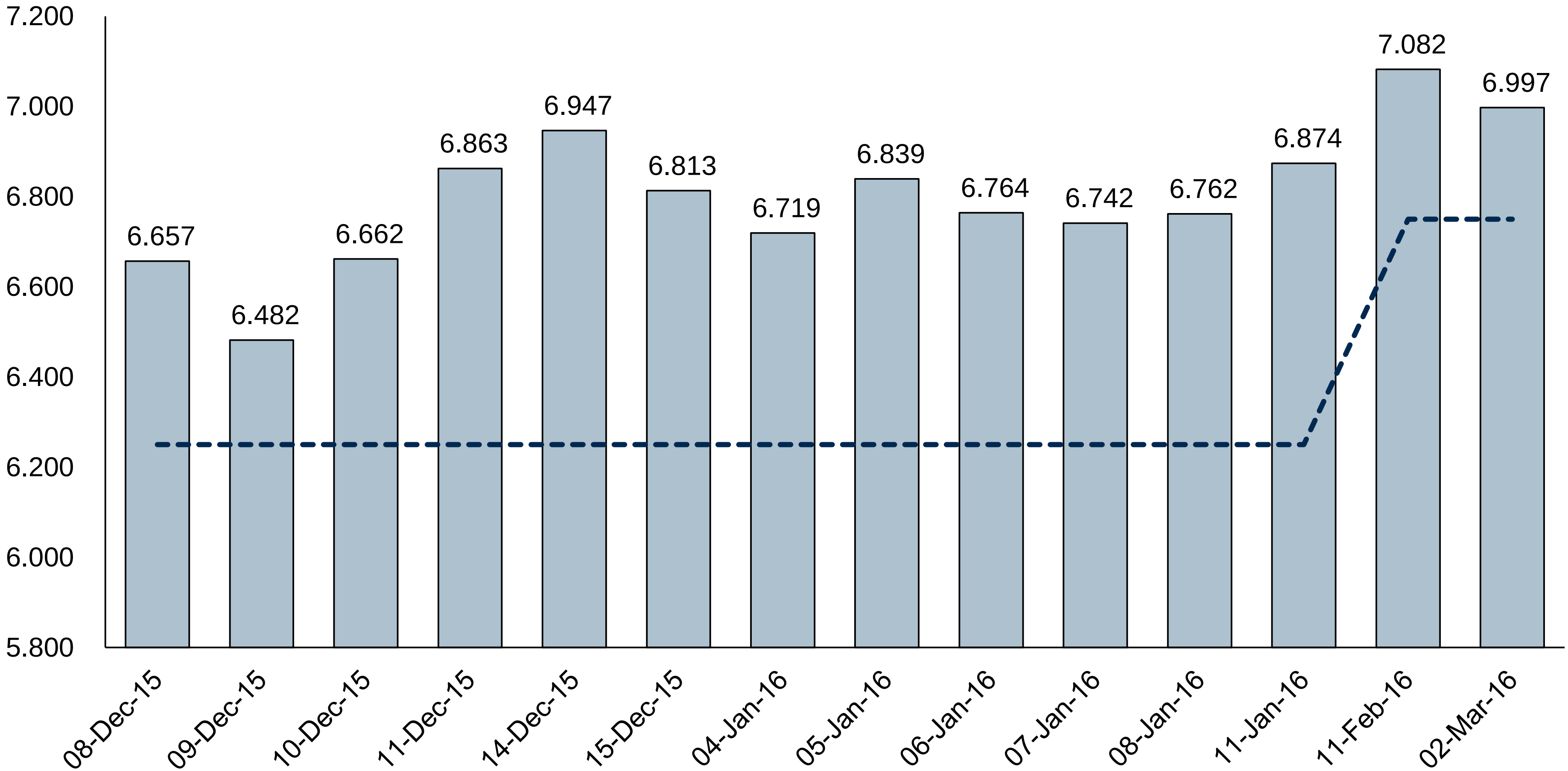
FX implied and SABOR spread



Source: Bloomberg.

Repo financing market similarly reflects liquidity inefficiencies

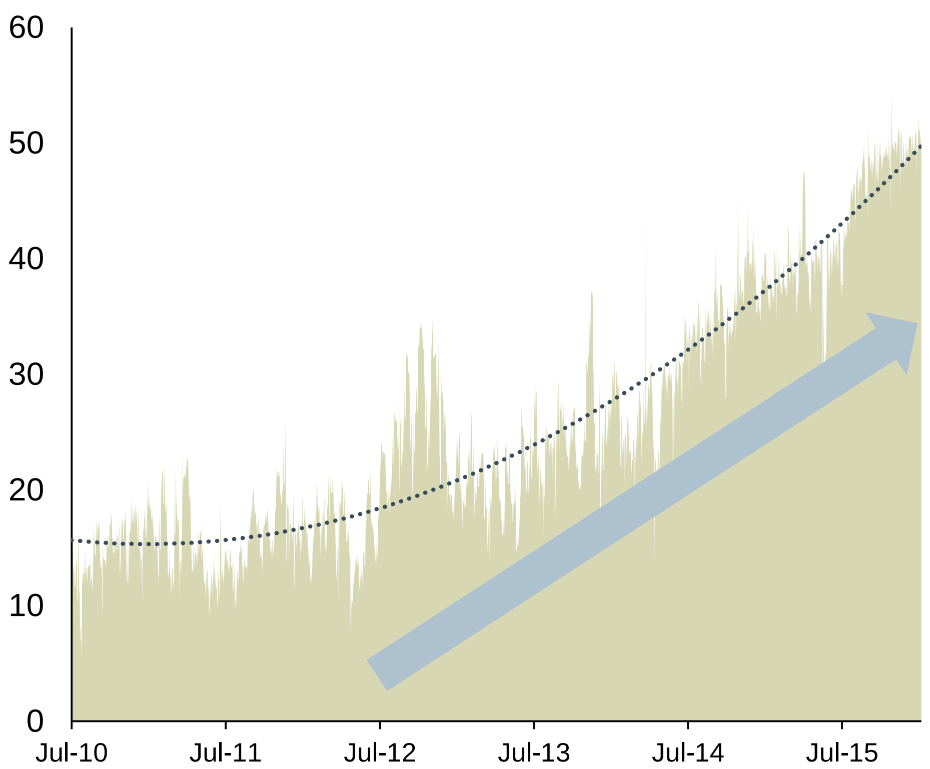
Average traded repo rate in government collateral
(%)



Source: JSE, Trade Detail 2 March 2016.

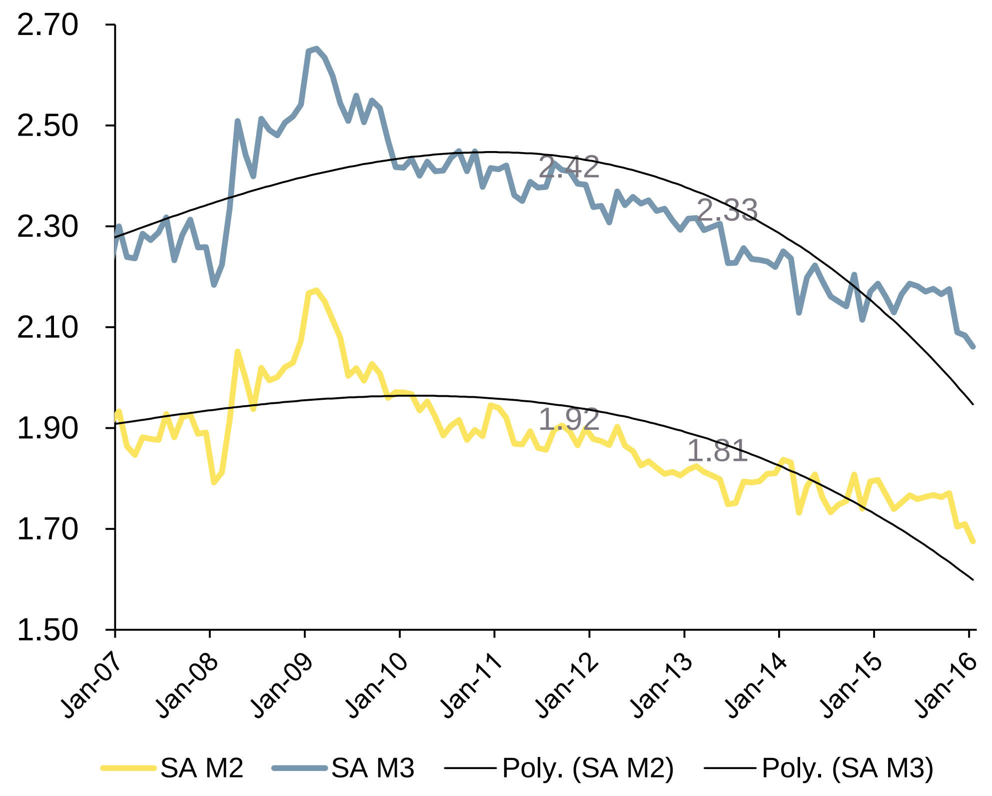
Shortage, liquidity reserves and money creation

SARB-administered shortage



Source: SARB.

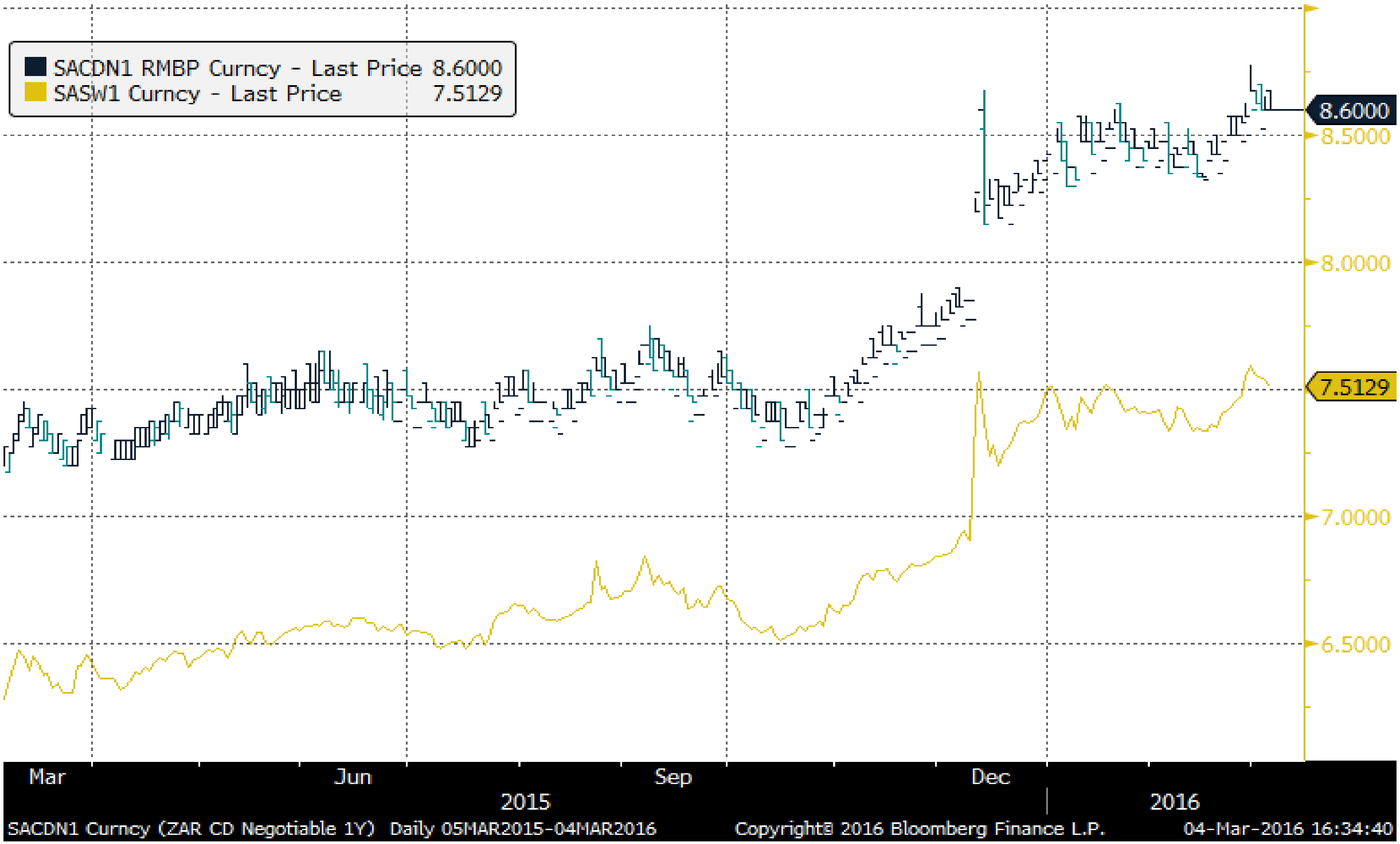
SA ratio of M3 and M2 to M1



Source: Bloomberg.

Regulation, savings, monetary policy and mechanical implementation of monetary policy stance compounds to tighten liquidity conditions

Implementation and live monitoring by SARB of JIBAR code of conduct

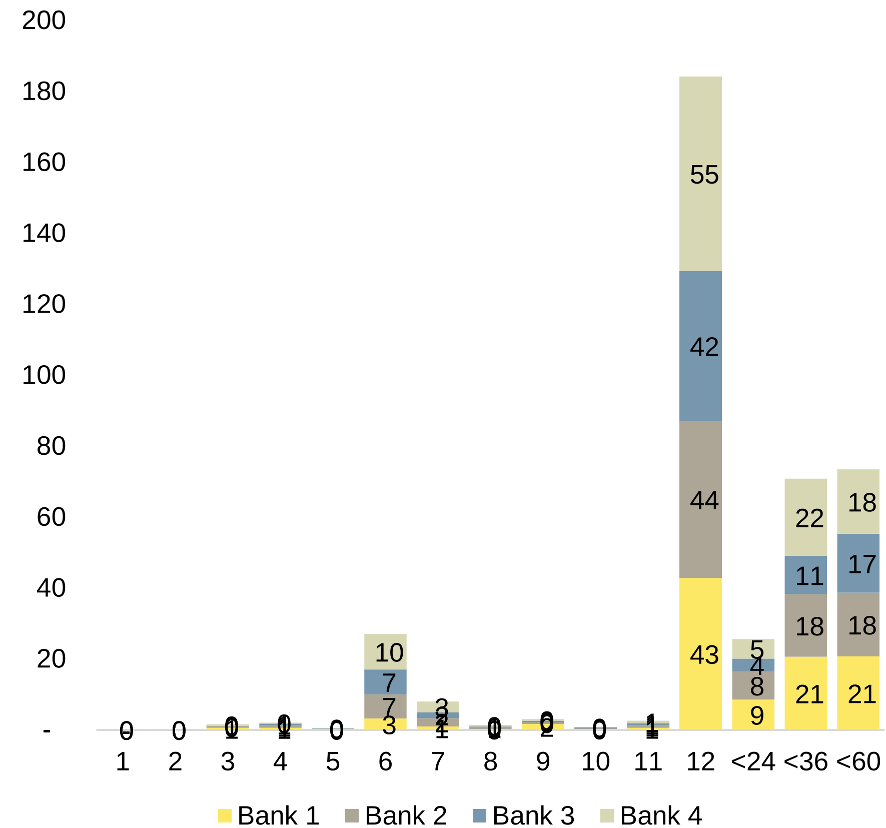


Full real-time intra-day transparency into the money market

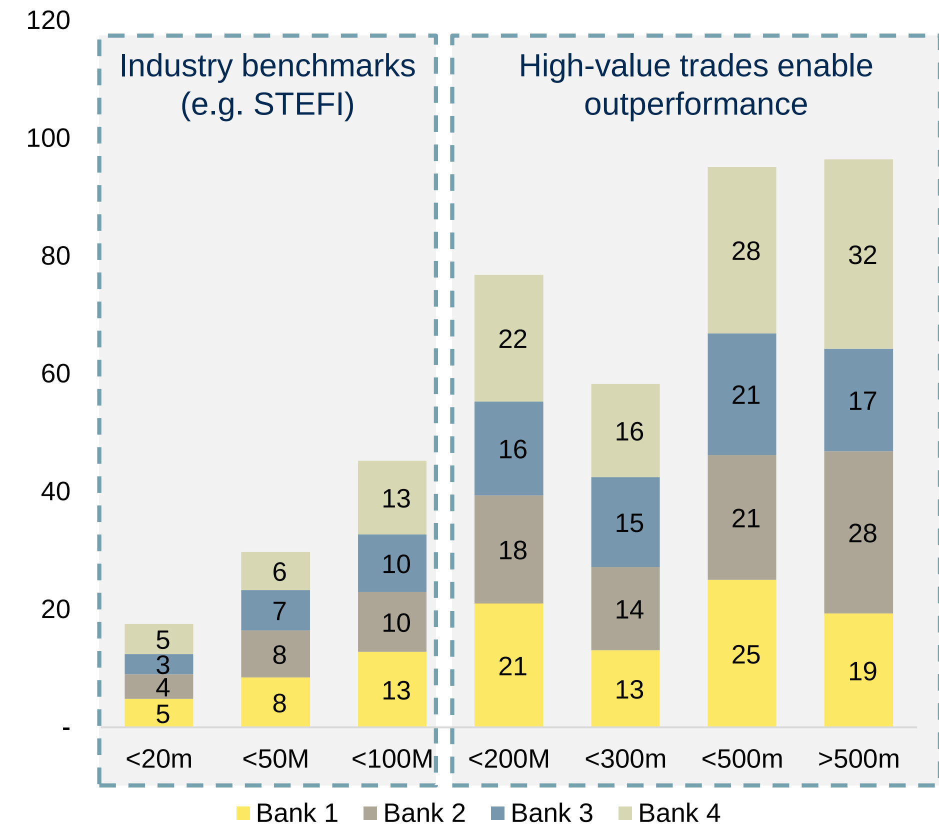
Source: Bloomberg <RMBP 3>, Intraday Tick.

Money market trade statistics

NCD distribution by issued tenor (months)



NCD distribution by size of issuance (months)

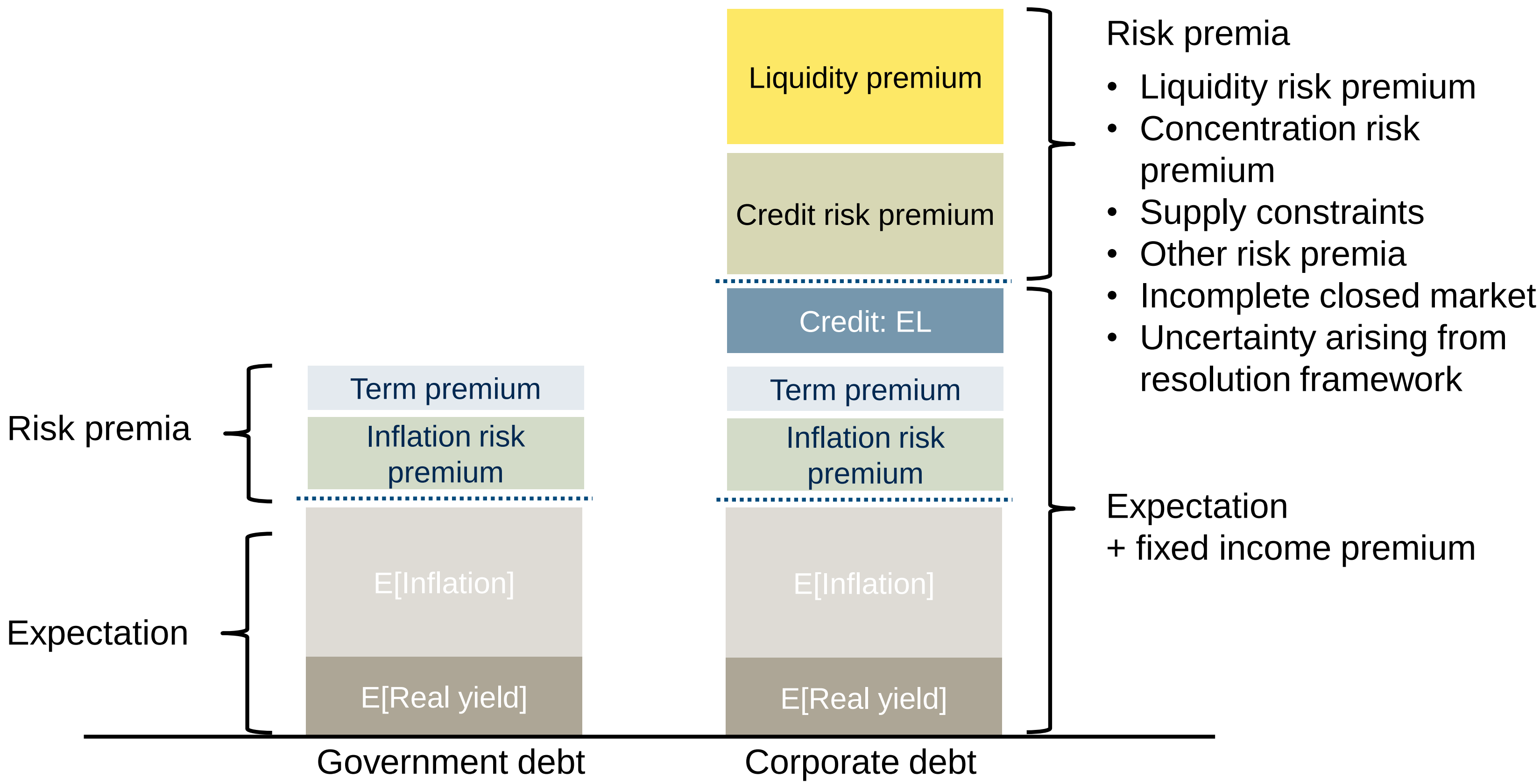


Market statistics infer that money market investors appear to run a rolling 12m strategy

Source: STRATE.

FUNDING AND LIQUIDITY
What's in the spread?

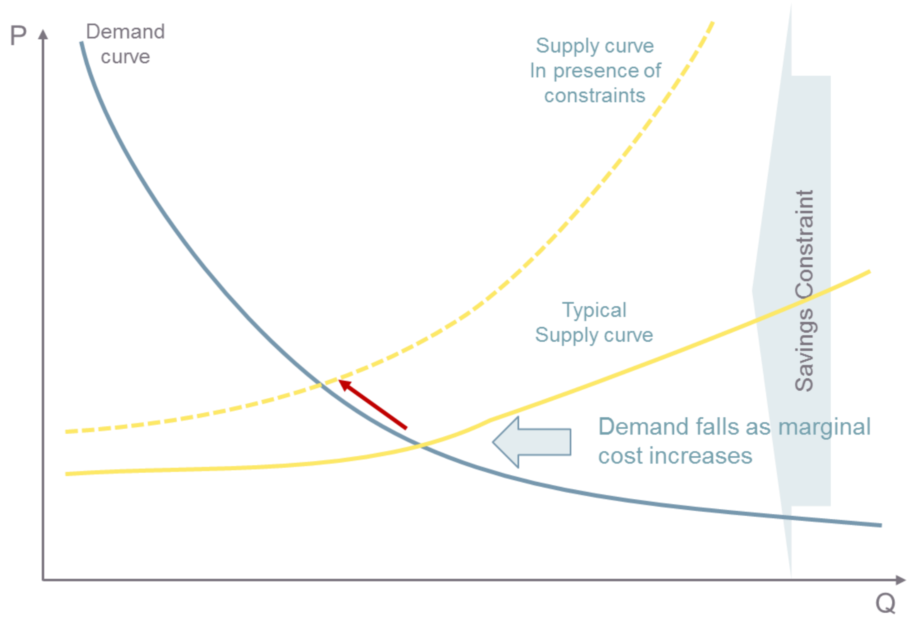
Components of fixed income risk premia



Depending on the nature of the risk premium the market action to restore equilibrium would be very different

Two structural breakdowns in the theory

1.The presence of supply/savings constraints, with operational inefficiencies



2. Presence of concentration risk making it difficult to diversify specific risk combined with perceived information asymmetries

$$E[R_i] = R_f + \beta_i\left(E[R_m] - E\left[R_f\right]\right) + E[\epsilon_i]$$

Expected return — Risk free — Amount of risk — Price of risk — Idiosyncratic risk factor

Correlation problem so unexpected loss in highly negatively skewed

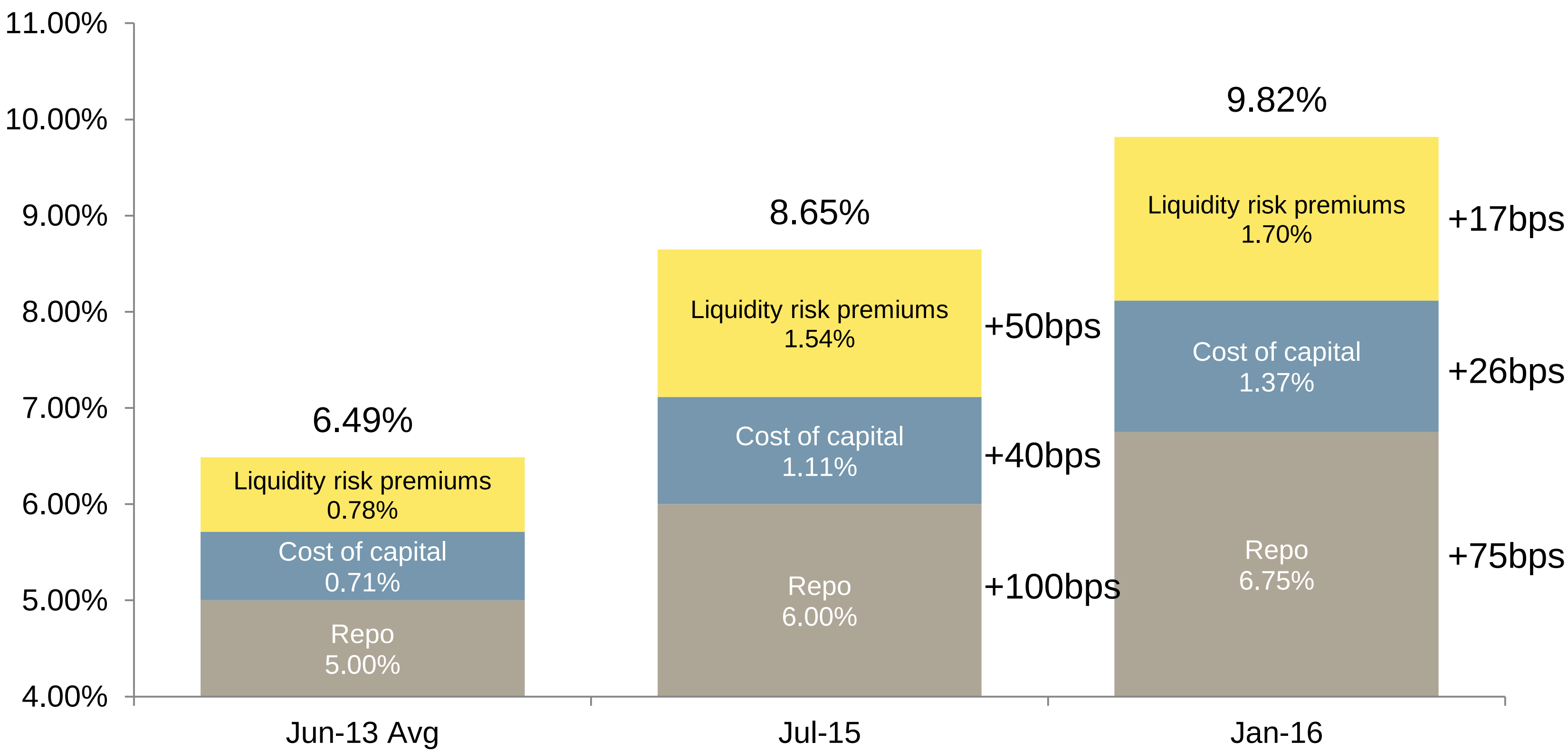
You cannot get a well diversified debt securities portfolio in SA

This impacts efficient resource allocation ….

Source: Adapted from the "Credit Spread Puzzle", BIS Quarterly Review, Q4, 2013.

It all transmits to the price of credit

Hypothetical example showing credit carrying cost has already increased 333bps since June 2013 before credit loss ratio



Assumptions

Risk free rate

- 2013 7.5%
- 2015 8.25%
- 2016 9.25%

Regulatory capital requirement

- 2013 9.5%
- 2015 14%

- Average bank RW 60%
- Asset term 36m

Funding plans

- Funding levels have approached sub economic levels
    - Need to disambiguate risk profile, and reduce risk premium
        - Secured notes program
        - Securitisation
        - Liquidity
- Large debt roll overs for 2016
    - Already accommodated Jan, Feb and June - EMTN
- Need to evolve funding instruments to incorporate call features to reduce regulatory volatility

APPENDIX

FIRSTRAND BANK

Glossary of terms

Term	Definition
ASF	Available Stable Funding
E[“x”]	Statistical expectations operator
EL	Expected loss
FI	Financial Institution
LCR	Liquidity Coverage Ratio
NCOF	Net Cash Outflows
NSFR	Net Stable Funding Ratio
RSF	Required Stable Funding
TB’s	Treasury Bills

Credit spread puzzle

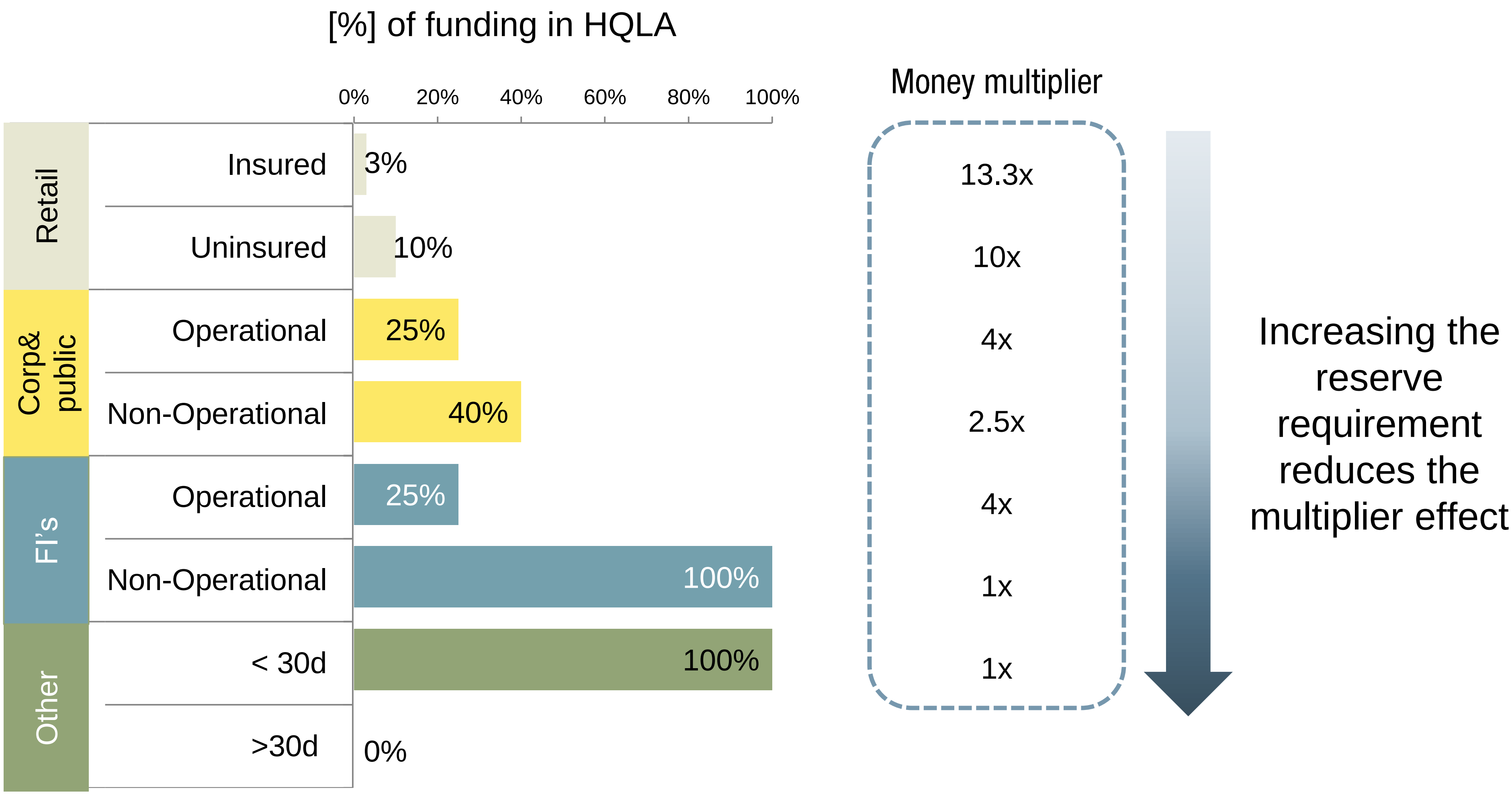
Spreads and expected default losses[1]

Rating	Maturity							
	1–3 years		3–5 years		5–7 years		7–10 years	
	Spread	Expected loss	Spread	Expected loss	Spread	Expected loss	Spread	Expected loss
AAA	49.50	0.06	63.86	0.18	70.47	0.33	73.95	0.61
AA	58.97	1.24	71.22	1.44	82.36	1.86	88.57	2.70
A	88.82	1.12	102.91	2.78	110.71	4.71	117.52	7.32
BBB	168.99	12.48	170.89	20.12	185.34	27.17	179.63	34.56
BB	421.20	103.09	364.55	126.74	345.37	140.52	322.32	148.05
B	760.84	426.16	691.81	400.52	571.94	368.38	512.43	329.40

[1] In basis points. Spreads are averages over the period January 1997–August 2003 of Merrill Lynch option-adjusted spread indices for US corporate bonds. See text for details on computation of expected loss.

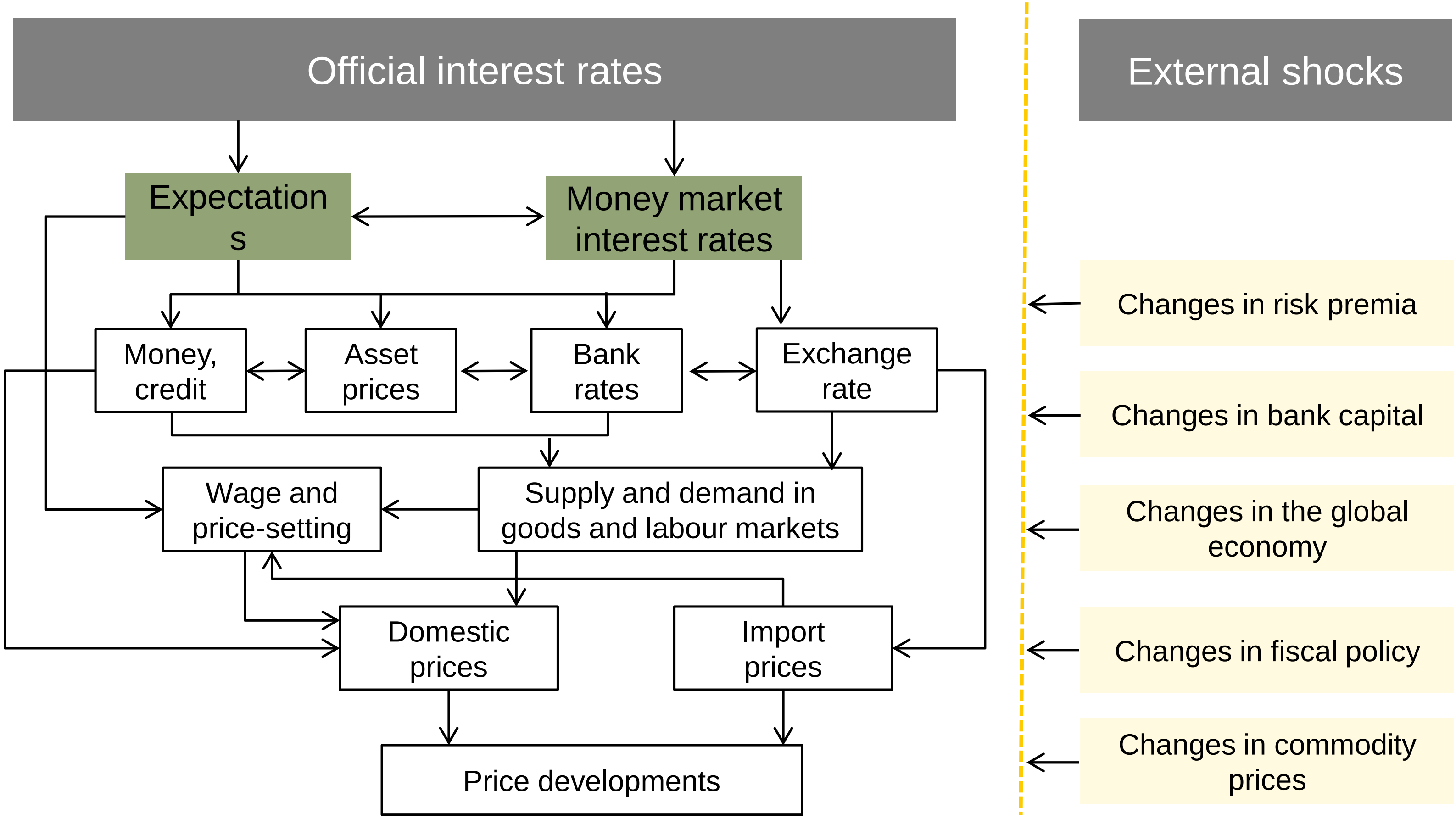
Source: BIS Quarterly Review, 2003.

Liquidity reserves and money multiplier



Multiplier can only expand in a specific way - term savings is required or credit extension via capital markets/shadow banking

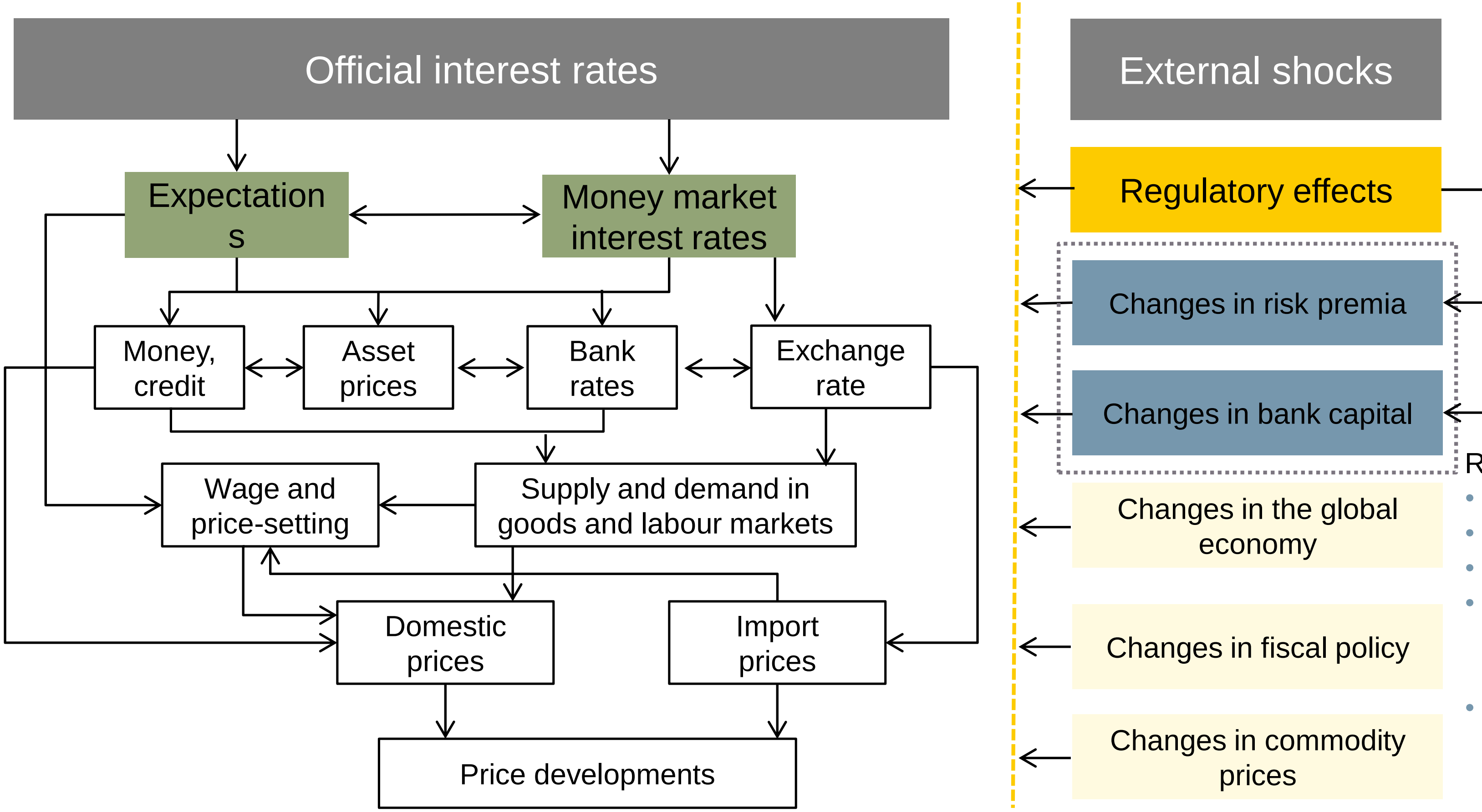
Many channels acting on the price of money



Textbook monetary policy transmission map;
new regulatory regime impacts the credit channel

Source: https://www.ecb.europa.eu/mopo/intro/transmission/html/index.en.html.

Many channels acting on the price of money



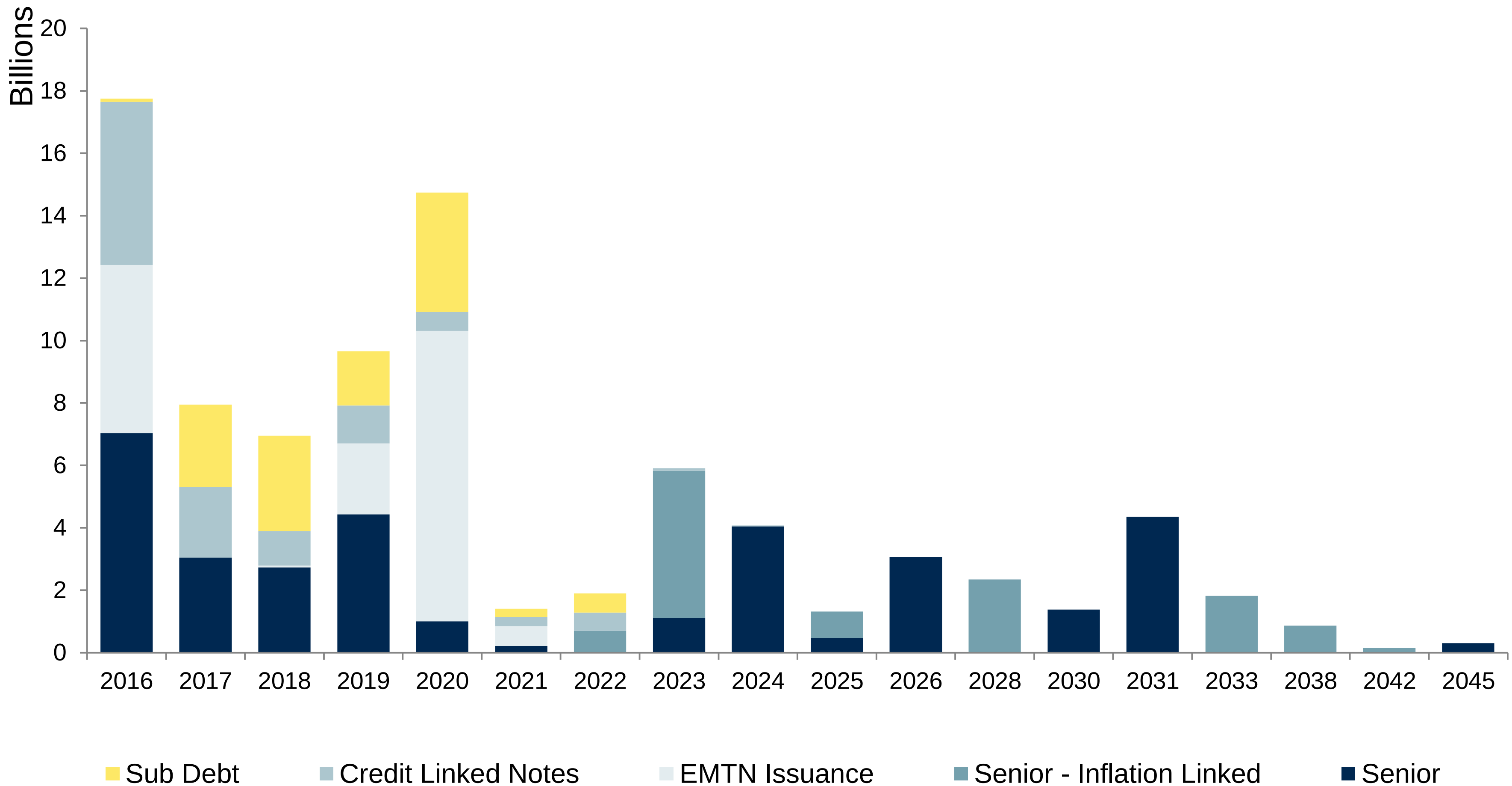
Regulatory factors include:

- LCR
- NSFR
- Leverage ratio
- Capital coverage
  - D SIB
  - Capital conservation
- Capital quality
  - Resolution
  - Write off
  - Convertibility

Post GFC regulatory effects have been powerful, impacting price, availability and risk appetite; significant observable effects on credit transmission channel

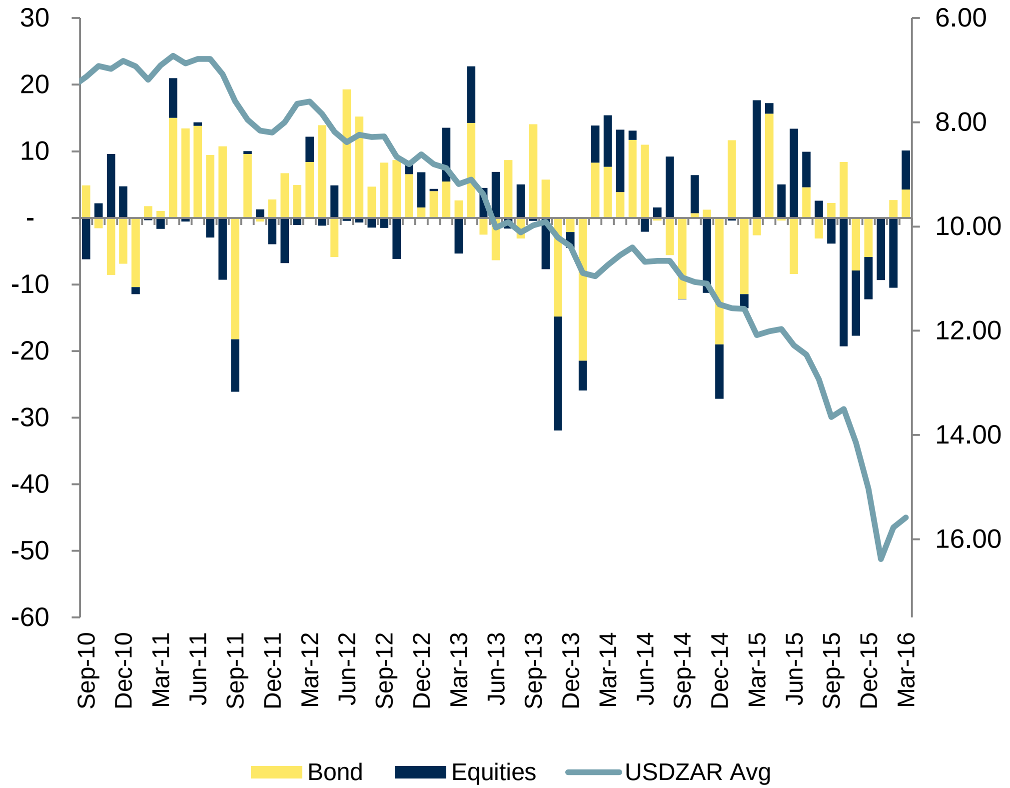
Source: https://www.ecb.europa.eu/mopo/intro/transmission/html/index.en.html & FirstRand edit.

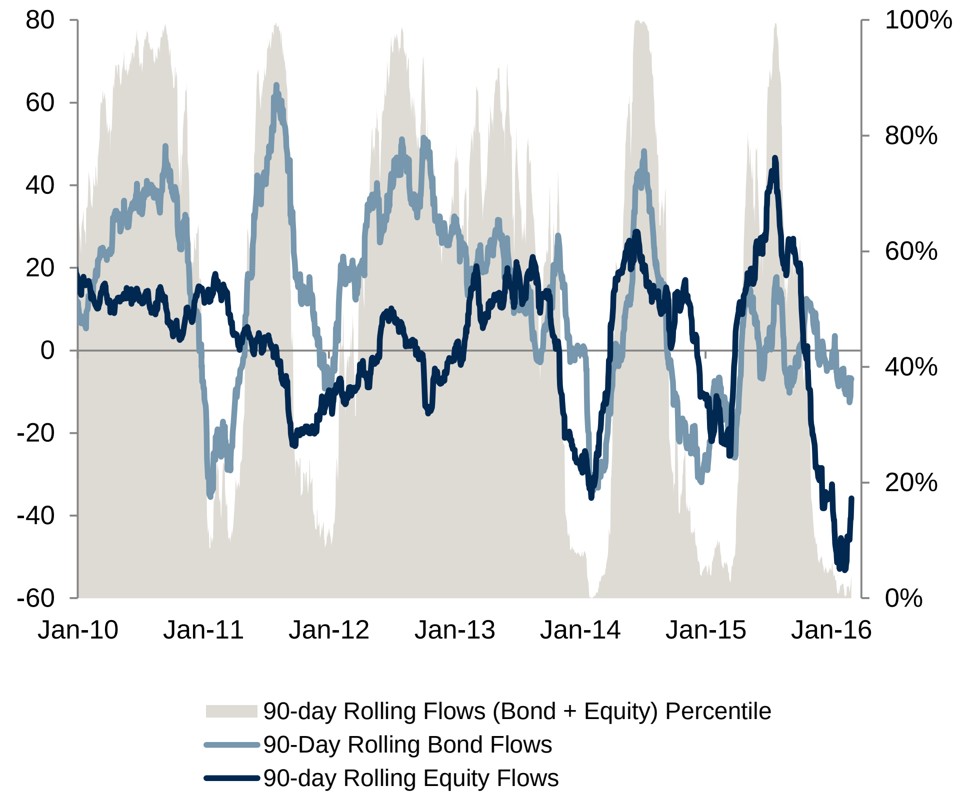
Listed debt securities profile – R85 billion



Source: JSE, Dec 2015.

Foreign flows have slowed, net negative for 7 months





Source: Bloomberg <SABO Index>.

Notes

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