Fiscal multipliers and financial sector dynamics

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Two examples of different views of the current fiscal situation

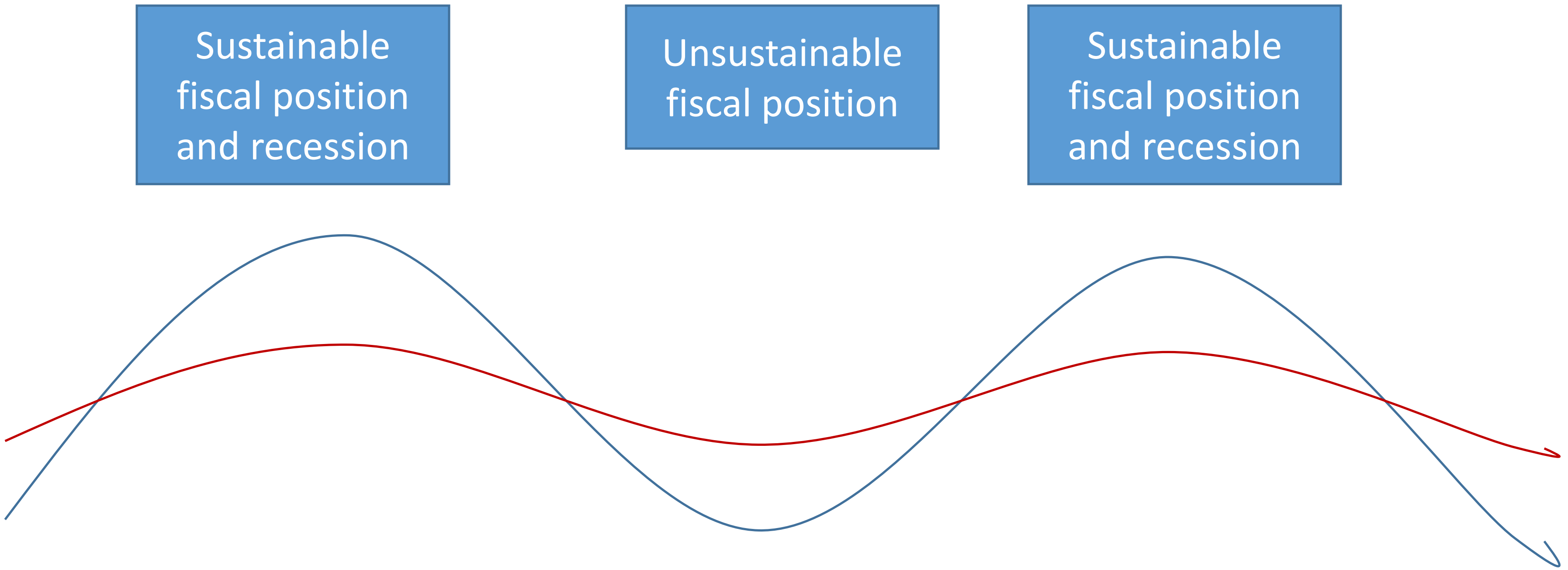
- “Faced with sky-high debt, a stagnant economy and disappointing tax collections, South Africa is on an unsustainable fiscal path. Difficult choices have to be made that can no longer be postponed**”-** Sandy McGregor, Business Report , 3 February 2019

- “Several economists have been arguing for a shift in macroeconomic perspectives away from old orthodoxies and in line with international trends. The speech hints at a shift in government thinking, although it might have been more bold. **The performance of the economy means we cannot continue with a rigid adherence to fiscal discipline of the kind we have been pursuing**” –Ben Turok, Business Day, 24 June 2019

South African studies tend to find small multipliers

Author & date	Country	Multiplier (Number or range)	Comments
Jooste, Liu, and Naraidoo (2013)	SA	**0.77**	Period: 1970 - 2010.
Jooste and Naraidoo (2017)	SA	**0.6**	DSGE model
Mabugu et al. (2013)	SA	**0.73 - 0.76**	Depending on method of financing expenditure. CGE model
Akanbi (2013)	SA	**0.82**	With respect to investment. Period: 1970–2011
Makrelov et al (2018)	SA	**-1.7(expansion) to 2.5(recession)**	Sustainable fiscal stance,, large output gap and low financial frictions, low and negative multipliers otherwise, financial sector amplifies impacts
Auerbach and Gorodnichenko (2012a)	OECD countries	**-0.2 (expansion) and 0.5 (recession)**	. Period: 1985 - 2012 (Old OECD members). Mid-1990s - 2012 (New OECD members).
Auerbach and Gorodnichenko (2012b),	United States	**0 (expansion) and 1.7 (recession)**	Sample 1947 to 2008
Owyang, Ramey, and Zubairy (2013)	Canada	**0.4 (expansion) and 1.6 (recession)**	Effects are amplified by financial dynamics.
Canzoneri and others, 2012	Canada	**0.9 (expansion) and 2.25 (recession)**	Effects are amplified by financial dynamics.
Riera-Crichton, Vegh, and Vuletin (2015)	OECD countries	**1.3 (expansion) and 2.3 (recession)**	Long-run 4 period multipliers, control for direction of government expansion during recessionary or expansionary periods
Christiano et al. (2011)	United States	**3.7**	Under zero lower bound conditions and 1.1 otherwise
Huidrom et al. (2016)	34 countries (19 advanced and 15 developing)	**Ranges from almost 1 to negative**	Depending on strength of fiscal position
Nickel and Tudyka (2014)	17 European countries	**Ranges from 1.2 to negative**	Depending on strength of fiscal position.

The financial sector amplifies the size of the fiscal multipliers



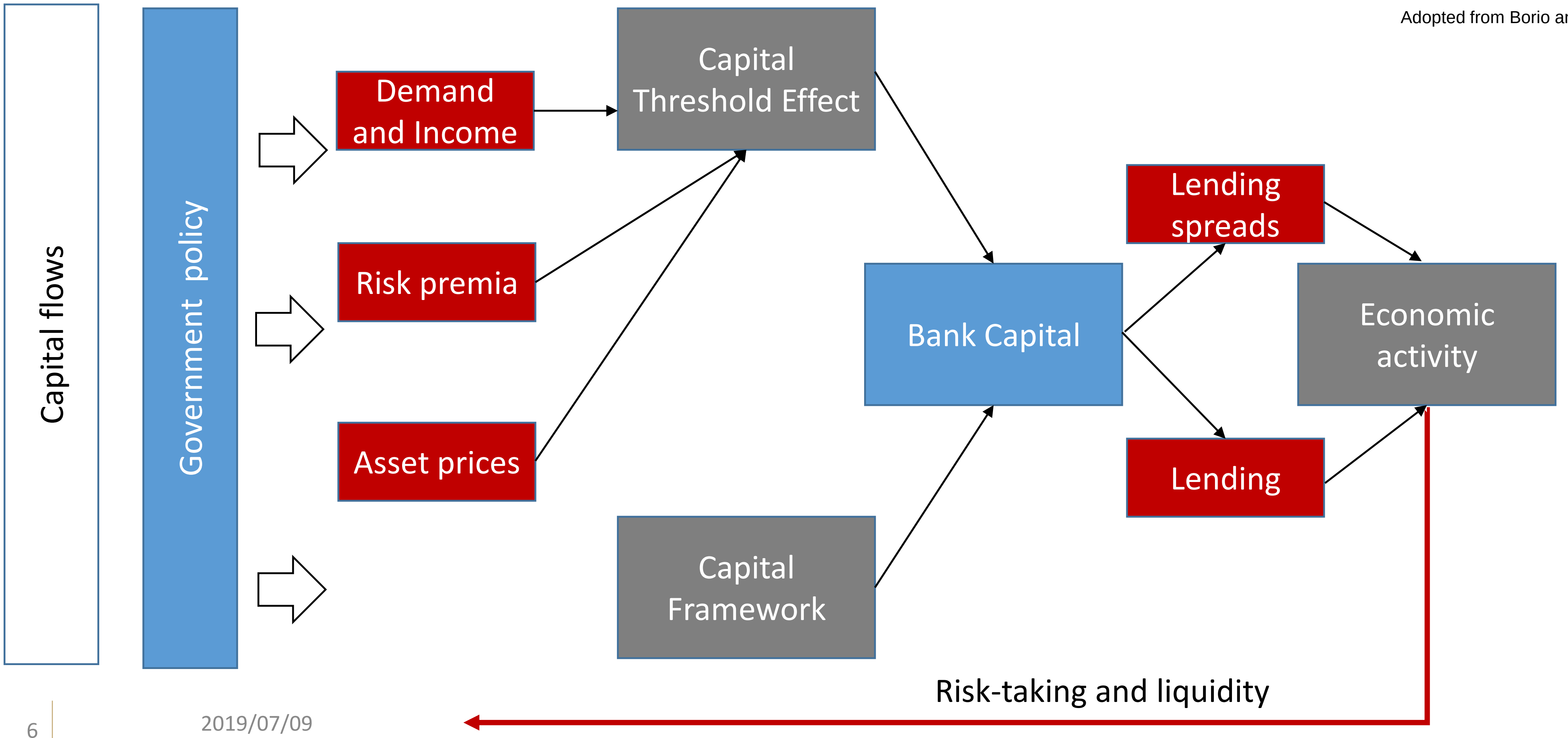
Multipliers under different conditions

A bit of literature background

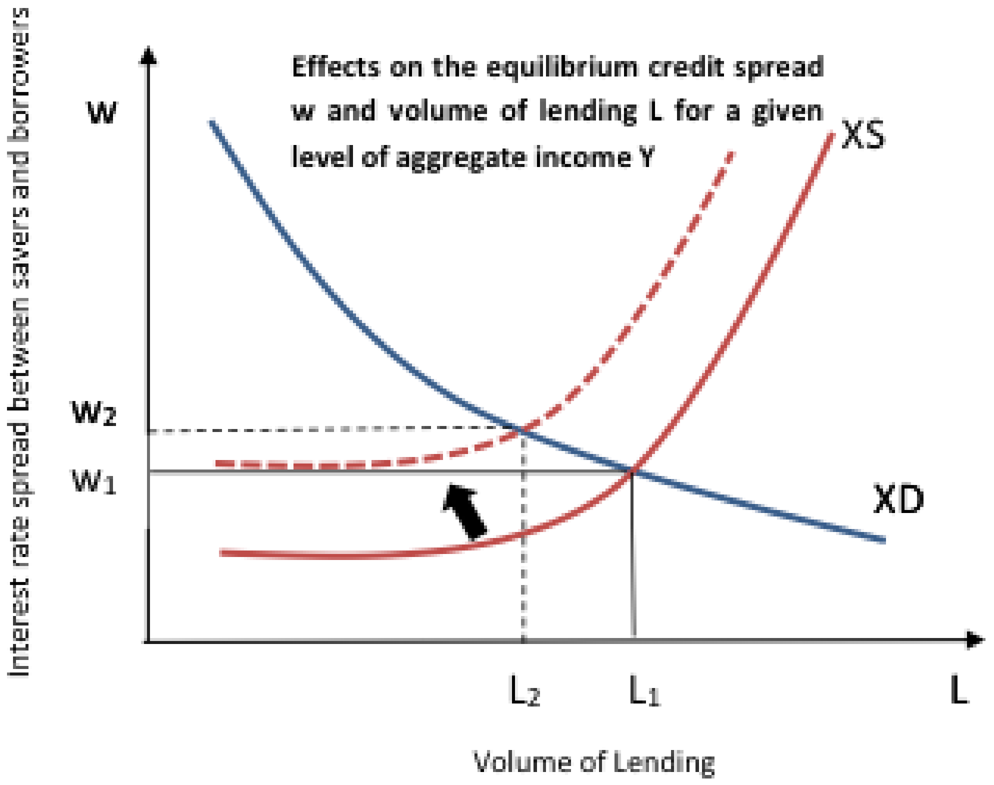
- The decisions of financial institutions **were ignored** in most macroeconomics until the financial crash
- Output losses, measured as deviation from trend GDP, **are on average 20 per cent during** the first four years (Laeven and Valencia 2008; Laeven and Valencia 2010)
- Recessions caused by financial crisis **tend to be more severe and to be followed by weaker recoveries** (Reinhart and Rogoff 2009).
- Three channels: **the borrower balance sheet channel, the bank balance sheet channel, and the liquidity channels** (Basel Committee on Bank Supervision 2011).
- **Disaggregated balance sheet dynamics are important** for studying the impacts of sudden stops, fiscal policy, and general risk behaviour of agents in the economy (Calvo, Izquierdo, and Mejia 2004; Eggertsson and Krugman 2012; and Borio and Zhu 2012).

The risk behavior of the financial sector amplifies shocks

Adopted from Borio and Zhu (2012)



How does the mechanism work?



Source: Woodford (2010)

South Africa has a very well developed financial sector

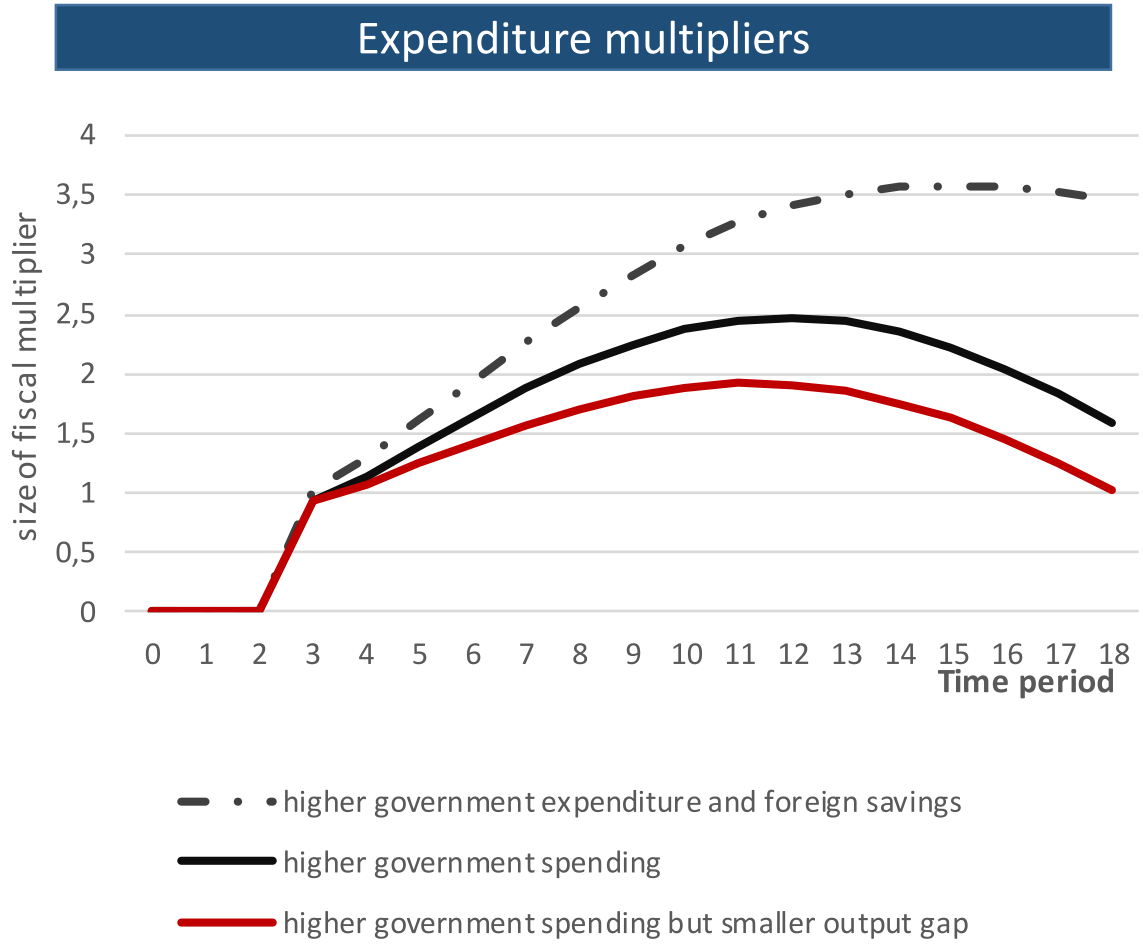
- SA's financial sector is not typical of middle income developing countries. It is characterised by highly developed banks, investment funds, markets, regulatory and legal institutions, and financial ecosystem.
- Some indicators :

➢ South Africa has the world's 20th most highly developed financial sector (WEF Global Competitiveness Report 2016)

➢ The Johannesburg Stock Exchange is ranked 18th globally in terms of its market capitalisation.

➢ The SA rand is the 20th most traded currency globally (BIS Triennial Survey 2016).

… which can generate large multipliers

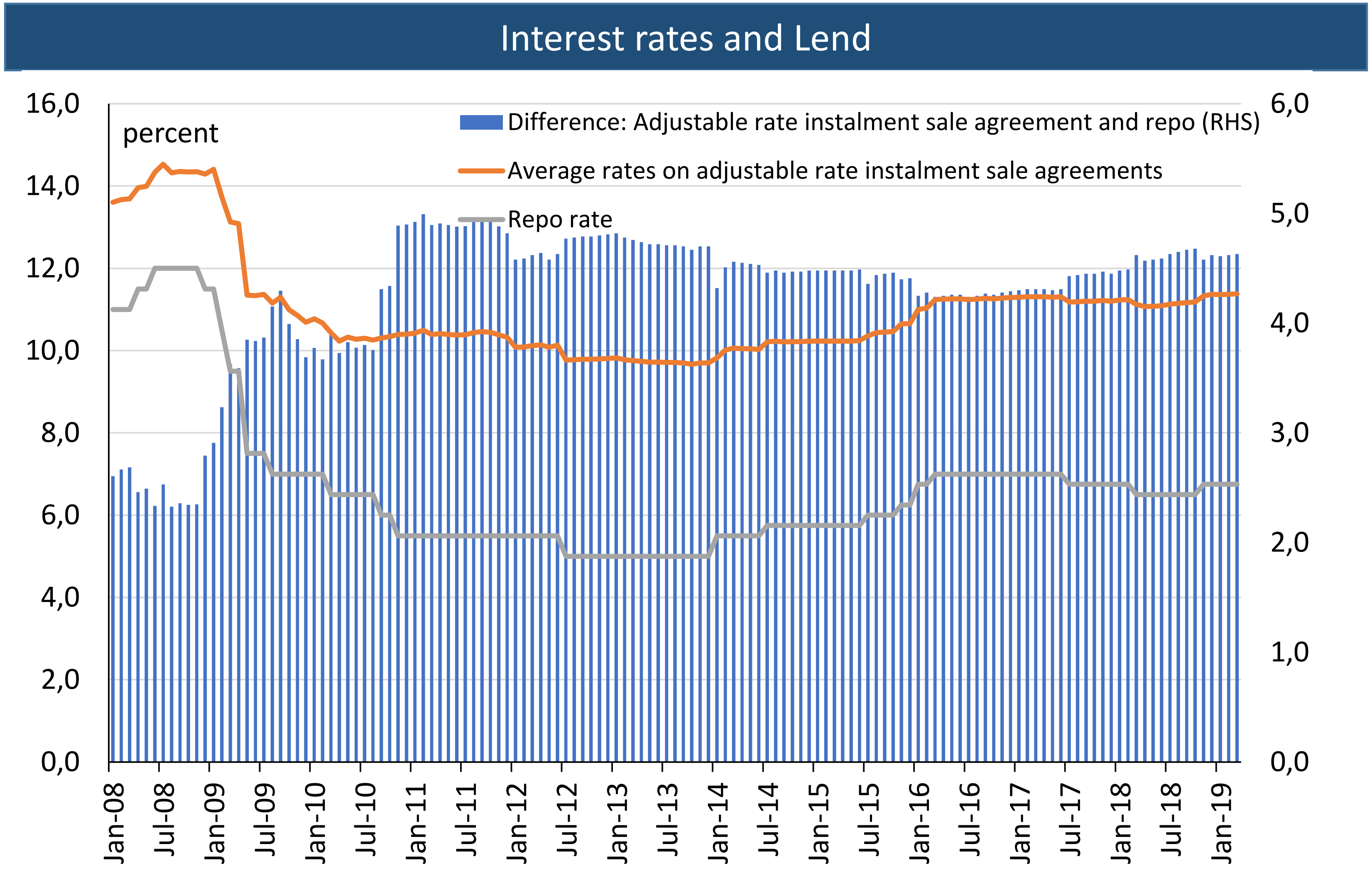


Source: Model simulations

The impacts depend on:

1. Size of output gap
2. Capital flows
3. Health of balance sheets, particularly the financial sector
4. Sustainability of the fiscal framework

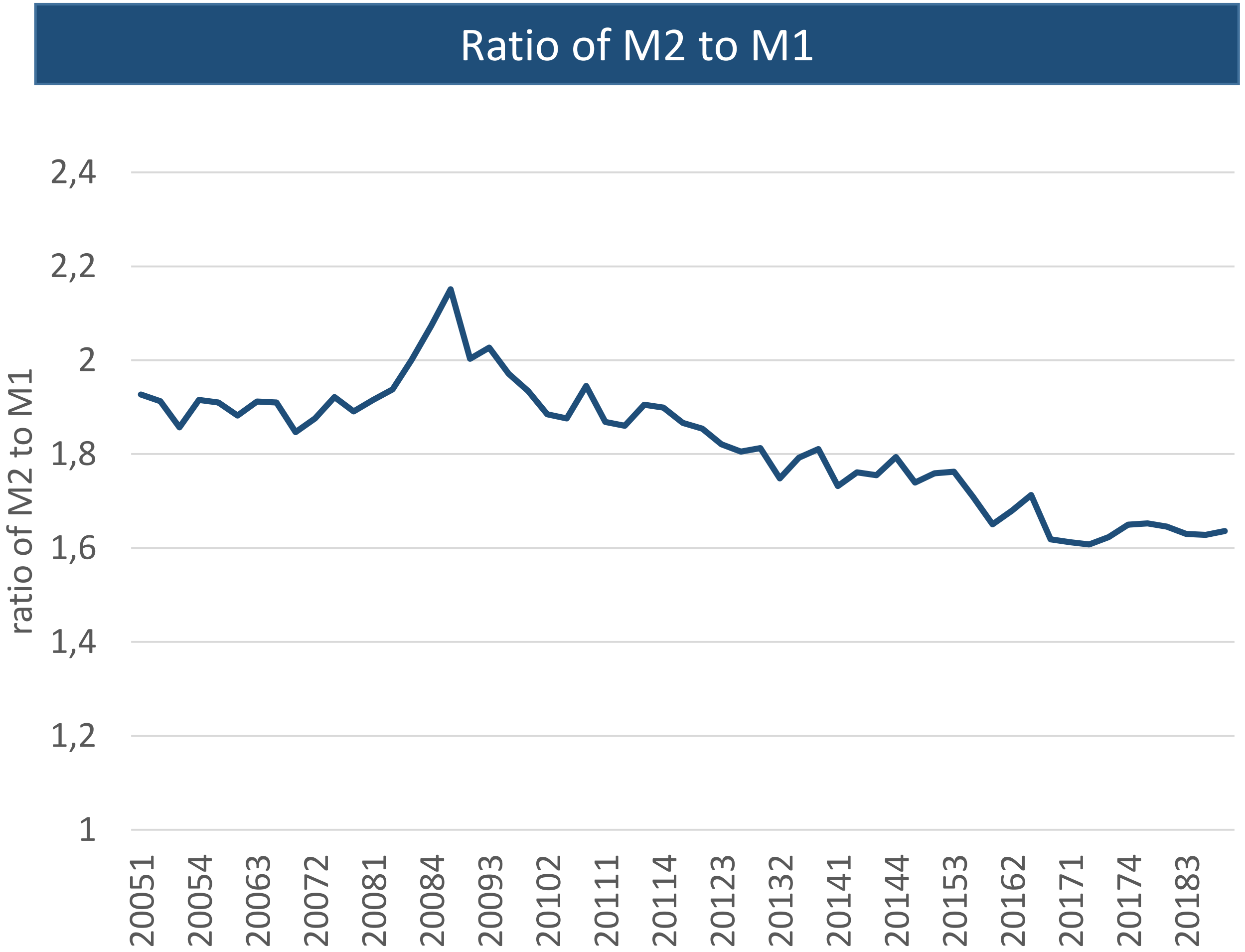
Lending spreads have increased suggesting higher capital cost and risk aversion….



Source: South African Reserve Bank

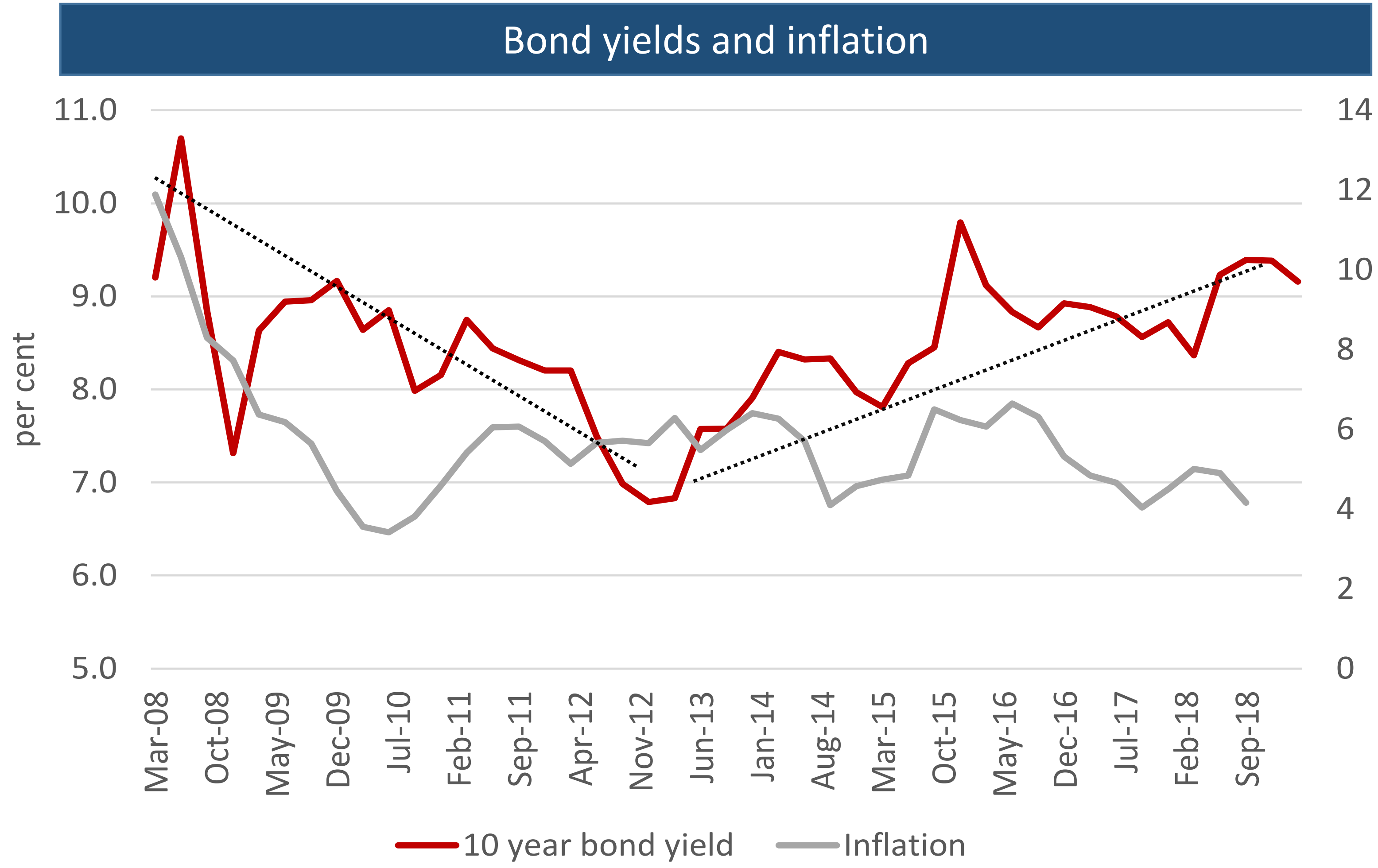
South African Reserve Bank

…also the money multiplier has been decreasing



Source: South African Reserve Bank

Bond yields and the risk premium are rising



Source: Haver

Conclusion

- Fiscal multipliers, neutral interest rates, output gaps are all in the same group of unobservable, important for policy and difficult to calculate economic indicators, subject to a lot of disagreement.

- The fiscal multipliers can be more positive or negative than previously estimated.

- The financial sector behavior amplifies economic shocks through its risk taking behavior, extension of loans and pricing.

- Financial sector risk aversion is rising