Basel III and the supply of bank credit in South Africa

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Abstract

Keywords: Bank capital, Bank regulation, Credit

JEL Codes: G01, G18, G28, G32, G38

1 Introduction

The paper investigates the impact of Basel III regulation on bank lending in South Africa. This introduction is an overview of the paper

2 Context

A review of policy context, with focus on South Africa but also reference to other emerging markets. Further detail in Appendix 1 and 2a.

3 Literature

Osborne et al. (2017)

Jokipii and Milne (2008)

Gambacorta and Mistrulli (2004)

Schwert (2018)

Kim and Sohn (2017)

Carlson et al. (2013)

Tabak et al. (2011)

Altunbas et al. (2004)

Gambacorta and Shin (2018)

Berrospide and Edge (2010)

4 Developments in South African Banking

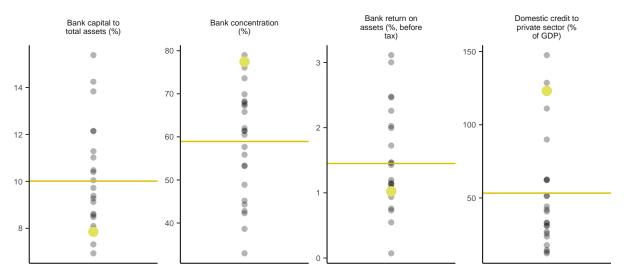


Figure 1: Internatinal Comparison. Source: World Bank (2022)

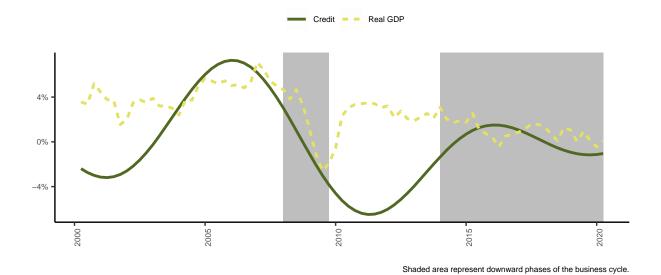


Figure 2: Credit Cycle. Source: South African Reserve Bank (2022)

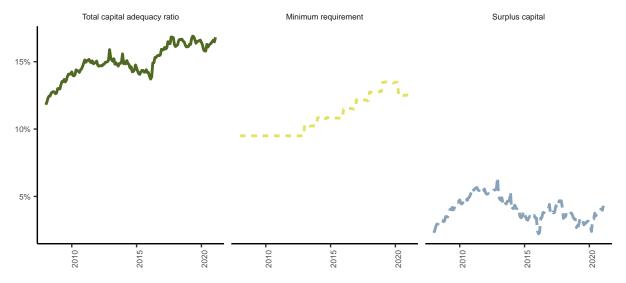


Figure 3: Capital Buffers. Source: South African Reserve Bank (2022)

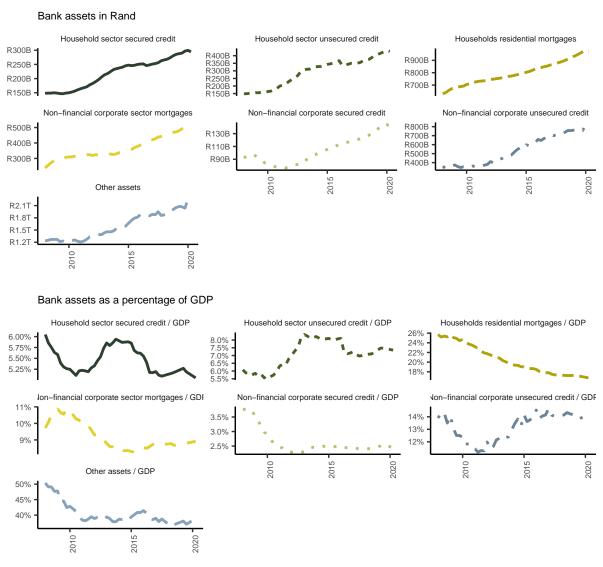


Figure 4: Bank assets. Source: South African Reserve Bank (2022)

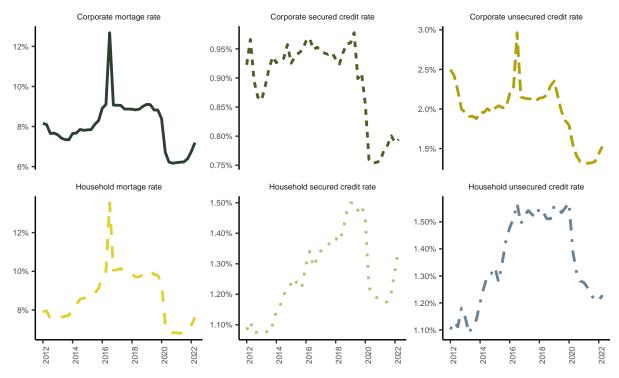


Figure 5: Lending Rates. Source: South African Reserve Bank $\left(2022\right)$

5 Specification

6 Estimation Results

		Median	SD	Min	Max	Obs
Lending Rates (%)		-				
3 ()	Corporate mortage rate	8.3	1.0	6.7	12.7	34
	Corporate secured credit rate	0.9	0.0	0.8	1.0	34
	Corporate unsecured credit rate	2.1	0.2	1.6	3.0	34
	Household mortage rate	9.2	1.2	7.3	13.5	34
	Household secured credit rate	1.3	0.1	1.1	1.5	34
	Household unsecured credit rate	1.5	0.2	1.1	1.6	34
Regulatory Capital (%)						
	Minimum requirement	10.7	1.4	9.5	13.5	50
	Surplus capital	3.9	0.9	2.3	5.8	50
Total Assets (R Billions)						
` ,	Household sector secured credit	236.3	51.0	146.5	299.6	50
	Household sector unsecured credit	327.7	92.1	148.9	435.4	50
	Households residential mortgages	781.3	93.9	630.1	981.0	50
	Non-financial corporate sector mortgages	334.1	73.6	238.1	519.2	50
	Non-financial corporate secured credit	98.9	20.7	76.5	144.1	50
	Non-financial corporate unsecured credit	530.5	164.7	340.4	823.2	50
	Other assets	1,550.3	327.8	1,200.6	2,266.7	50
Total Assets/GDP (%)						
(,	Household sector secured credit / GDP	5.4	0.3	5.1	6.0	44
	Household sector unsecured credit / GDP	7.1	0.9	5.6	8.4	44
	Households residential mortgages / GDP	20.2	2.9	16.7	25.7	44
	Non-financial corporate sector mortgages / GDP	8.8	0.9	8.3	10.9	44
	Non-financial corporate secured credit / GDP	2.5	0.4	2.3	3.8	44
	Non-financial corporate unsecured credit / GDP	13.5	1.1	11.2	14.6	44
	Other assets / GDP	39.1	3.5	36.4	50.4	44

Table 1: Descriptives

7 Conclusion

8 Appendix: Descriptive Analysis

- 8.1 Data
- 8.1.1 Capital Buffers
- 8.1.2 BA 900 Quartelty Data
- 8.1.3 BA 900 to GDP

9 Appendix: Detailed Literature Review

More detailed literature review

References

- Altunbas, Y, De Bondt, G and Marques-Ibanez, D. 2004. 'Bank capital, bank lending, and monetary policy in the euro area'. *Kredit und Kapital*.
- Berrospide, J M and Edge, R M. 2010. 'The effects of bank capital on lending: What do we know, and what does it mean?' \cdot
- Carlson, M, Shan, H and Warusawitharana, M. 2013. 'Capital ratios and bank lending: A matched bank approach'. *Journal of Financial Intermediation* 22: 663–687.
- Gambacorta, L and Mistrulli, P E. 2004. 'Does bank capital affect lending behavior?' *Journal of Financial intermediation* 13: 436–457.
- Gambacorta, L and Shin, H S. 2018. 'Why bank capital matters for monetary policy'. *Journal of Financial Intermediation* 35: 17–29.
- Jokipii, T and Milne, A. 2008. 'The cyclical behaviour of european bank capital buffers'. *Journal of banking & finance* 32: 1440–1451.
- Kim, D and Sohn, W. 2017. 'The effect of bank capital on lending: Does liquidity matter?' Journal of Banking & Finance 77: 95–107.
- Osborne, M, Fuertes, A M and Milne, A. 2017. 'In good times and in bad: Bank capital ratios and lending rates'. *International Review of Financial Analysis* 51: 102–112.
- Schwert, M. 2018. 'Bank capital and lending relationships'. The Journal of Finance 73: 787–830.
- Tabak, B M, Noronha, A C and Cajueiro, D. 2011. 'Bank capital buffers, lending growth and economic cycle: empirical evidence for brazil', in 2nd BIS CCA Conference on "Monetary policy, financial stability and the business cycle, Citeseer, 12–13.