

[Home](#) > [Capital Flows, Credit Markets and Growth in South Africa](#) > Chapter

# In Which Direction Is There a Momentum Effect in the Changes in the Spread Between the Repo Rate and Federal Funds Rate?


| Chapter | First Online: 12 December 2019

| pp 121–140 | [Cite this chapter](#)



## Capital Flows, Credit Markets and Growth in South Africa

[Nombulelo Gumata](#) & [Eliphas Ndou](#)

 203 Accesses

## Abstract

Evidence in this chapter shows that there are varying degrees of synchronisation between the repo rate and the Federal Funds Rate (FFR) adjustments. We establish a cointegration relationship between the repo rate and the FFR, and the estimated the long-term repo rate is close to 7 per cent. The results indicate asymmetry in the repo rate adjustments to increases versus decreases in the repo rate-FFR spread. There is evidence of higher momentum in the adjustment of the repo rate when the repo rate-FFR spread is narrowing. The results show that the increases in the repo rate-FFR spread are very aggressive from a very low

point. The repo rate response to inflation is the main driver of the repo rate-FFR spread than movements in the FFR. The policy implication is that low and stable inflation has benefits for the level of the repo rate-FFR spread. Hence, the argument for the lowering of the inflation targeting band is further strengthened by these findings.



This is a preview of subscription content, [log in via an institution](#) to check access.

Access this chapter

Log in via an institution →

Chapter

EUR 29.95

Price includes VAT (Poland)

- Available as PDF
- Read on any device
- Instant download
- Own it forever

Buy Chapter →

eBook

EUR 58.84

Price includes VAT (Poland)

- Available as EPUB and PDF
- Read on any device
- Instant download
- Own it forever

Buy eBook →

Softcover Book

EUR 74.89

Price includes VAT (Poland)

- Compact, lightweight edition
- Dispatched in 3 to 5 business days
- Free shipping worldwide - [see info](#)

Buy Softcover Book →

Hardcover Book

EUR 106.99

Price includes VAT (Poland)

- Durable hardcover edition
- Dispatched in 3 to 5 business days
- Free shipping worldwide - [see info](#)

Buy Hardcover Book →

Tax calculation will be finalised at checkout

Purchases are for personal use only

## Notes

---

1. This aspect is a simplified model and does not take into account the multilateral relationships and the potential effects of the divergence in global policy rates at a time when central banks also use un-conventional monetary policy tools.
2. Partly responding to the scepticism in Hamilton et al. ([2015](#)), Laubach and Williams ([2015](#)) fail to establish evidence that the natural rate has adjusted and increased in line with the recovery of the US economy from the Great Recession. Similarly, Rachel and Smith ([2015](#)) establish that the global neutral real rate may have fallen. Lower expectations for trend growth, shifts in desired savings and investment preferences appear to be important in explaining the long-term decline. Fischer ([2015](#)) is of the view that the equilibrium real interest rate will probably remain low for the policy relevant horizon.
3. In addition, the Fed Chair Yellen clarified that “gradual” does not mean mechanical, evenly timed and equally sized interest rate changes.
4. Since the T-max exceeds the statistics given by Enders and Granger ([1998](#)). In addition, based on Phi-value, we reject the null hypothesis of no cointegration.
5. However, they show that the emerging market real interest rate has increased sharply and diverged from the advanced economies and world real interest rate since the beginning of 2015. This may largely reflect cyclical and structural country-specific factors that could result in temporary or persistent equilibrium rates higher than the global level.

# References

---

Ahmad, H., and Hernandez, R.M. 2013. Asymmetric Adjustment between Oil Prices and Exchange Rates: Empirical Evidence from Major Oil Producers and Consumers. *Journal of International Finance Markets, Institutions and Money*, 27(C), 306–17.

[Article](#) [Google Scholar](#)

Brainard, L. 2015. The US Economic Outlook and Implications for Monetary Policy. Speech at the Centre for Strategic and International Studies, Washington DC, 2 June 2015.

[Google Scholar](#)

Chan, K.S. 1993. Consistency and Limiting Distribution of the Least Squares Estimator of a Threshold Autoregressive Model. *Annals of Statistics*, 21, 520–33.

[Article](#) [Google Scholar](#)

Enders, W., and Granger, C.W.J. 1998. Unit-Root Tests and Asymmetric Adjustment with an Example Using the Term Structure of Interest Rates. *Journal of Business & Economic Statistics*, 16, 304–11.

[Google Scholar](#)

Enders, W., and Siklos, P.L. 2001. Cointegration and Threshold Adjustment. *Journal of Business and Statistics*, 19, 166–76.

[Article](#) [Google Scholar](#)

Engle, R.F., and Granger, C.W.J. 1987. Cointegration and Error Correction: Representation, Estimation and Testing. *Econometrica*, 55, 251–76.

[Article](#) [Google Scholar](#)

Fischer, S. 2015. Central Bank Independence. Speech at the 2015 Herbert Stein Memorial Lecture National Economists Club, Washington, DC, 4 November 2015.

[Google Scholar](#)

Hamilton, J.D., Harris, E.S., Hatzius, J., and West, K.D. 2015. The Equilibrium Real Funds Rate: Past, Present, and Future. Presented at the US Monetary Policy Forum, New York, 27 February 2015.

[Google Scholar](#)

Johansen, S. 1988. Statistical Analysis of Cointegration Vectors. *Journal of Economic Dynamics and Control*, 12(2-3), 231-54.

[Article](#) [Google Scholar](#)

Johansen, S. 1996. *Likelihood-Based Inference in Cointegrated Vector Autoregressive Models*. Oxford University Press: New York.

[Google Scholar](#)

Laubach, T., and Williams, J.C. 2015. *Measuring the Natural Rate of Interest Redux*. Federal Reserve Bank of San Francisco Working Paper 2015-16.

[Google Scholar](#)

Li, J., and Lee, J. 2013. ADL Tests for Threshold Cointegration. *Journal of Time Series Analysis*, 31, 241-54.

[Google Scholar](#)

Ndou, E., and Gumata, N. 2017. *Inflation Dynamics in South Africa: The Role of Thresholds, Exchange Rate Pass-Through and Inflation Expectations on Policy Trade-offs*. Palgrave Macmillan. ISBN 978-3-319-46702-3.

[Google Scholar](#)

Rachel, L., and Smith. T.D. 2015. *Secular Drivers of the Global Real Interest Rate*. Bank of England Staff Working Paper No. 571.

[Google Scholar](#)

## Author information

---

### Authors and Affiliations

**South African Reserve Bank, Pretoria, South Africa**

Nombulelo Gumata & Eliphas Ndou

**Wits Plus, University of the Witwatersrand, Johannesburg, South Africa**

Eliphas Ndou

**School of Economic and Business Sciences, Johannesburg, South Africa**

Eliphas Ndou

## Rights and permissions

---

[Reprints and permissions](#)

## Copyright information

---

© 2019 The Author(s)

## About this chapter

---

### Cite this chapter

Gumata, N., Ndou, E. (2019). In Which Direction Is There a Momentum Effect in the Changes in the Spread Between the Repo Rate and Federal Funds Rate?. In: Capital Flows, Credit Markets and Growth in South Africa. Palgrave Macmillan, Cham. [https://doi.org/10.1007/978-3-030-30888-9\\_7](https://doi.org/10.1007/978-3-030-30888-9_7)

[.RIS↓](#) [.ENW↓](#) [.BIB↓](#)

DOI	Published	Publisher Name
<a href="https://doi.org/10.1007/978-3-030-30888-9_7">https://doi.org/10.1007/978-3-030-30888-9_7</a>	12 December 2019	Palgrave Macmillan, Cham
Print ISBN	Online ISBN	eBook Packages
978-3-030-30887-2	978-3-030-30888-9	<a href="#">Economics and Finance</a>
		<a href="#">Economics and Finance (R0)</a>

## Publish with us

[Policies and ethics](#)

## Search

Search by keyword or author



## Navigation

Find a journal

Publish with us

Track your research