

South African Reserve Bank Occasional Bulletin of Economic Notes OBEN/18/01

South African Reserve Bank Economic Notes are typically short economic analyses initially written for internal discussion and to stimulate debate. They are written by staff members of the South African Reserve Bank or visiting fellows and are released publicly on an occasional basis.

**Authorised for publication by:
Chris Loewald and Rashad Cassim**

February 2018



South African Reserve Bank

SARB Occasional Bulletin of Economic Notes

February 2018

Contents	<i>Page</i>
1. Making sense of neutral real interest rates <i>Chris Loewald</i>	3
2. Has the South African economy run out of fiscal space? <i>Alain Kabundi and Luchelle Soobyah</i>	11
3. Onwards and downwards – The changing role of administered prices in headline inflation <i>Erik Visser, David Fowkes and Theo Janse van Rensburg</i>	16
4. Is our core rotten? <i>Franz Ruch</i>	22
5. Crowding out: diagnosing South Africa’s stubborn current account deficit <i>David Fowkes, Thulisile Radebe and Sihle Nomdebevana</i>	27

The views expressed in these Economic Notes are those of the author(s) and should not be attributed to the South African Reserve Bank or South African Reserve Bank policy. While every precaution is taken to ensure the accuracy of information, the South African Reserve Bank shall not be liable to any person for inaccurate information, omissions or opinions contained herein.

Information on South African Reserve Bank Economic Notes can be found at [http://www.resbank.co.za/Research/Occasional Bulletin of Economic Notes/Pages/EconomicNotes-Home.aspx](http://www.resbank.co.za/Research/Occasional%20Bulletin%20of%20Economic%20Notes/Pages/EconomicNotes-Home.aspx)

Enquiries

Head: Research Department
South African Reserve Bank
P O Box 427
Pretoria 0001

Tel. no.: +27 12 313-3911
0861 12 SARB (0861 12 7272)

© South African Reserve Bank

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means without fully acknowledging the author(s) and these Economic Notes as the source.

Has the South African economy run out of fiscal space?

October 2017

Alain Kabundi and Luchelle Soobyah

Abstract

This note provides an empirical estimation of the primary balance sustainability gap for South Africa for the period 2000 to 2018. The results show that the South African primary balance sustainability gap has remained under severe strain since the global financial crisis. We estimate a negative sustainability gap at -1% of gross domestic product for 2016, which suggests little space for fiscal policy. The contributing factors are low growth and rising fiscal debt as a result of expansionary fiscal policy, a decline in commodity prices, and a decrease in revenue growth.

1. Introduction

Prior to the global financial crisis (GFC), many emerging market and developing economies (EMDEs) experienced strong and sound fiscal positions, mainly due to rising commodity prices. This, in turn, helped to abate the magnitude or impact of the crisis on these economies. Like most other EMDEs, especially commodity exporters, South Africa used countercyclical fiscal policy as a tool to curtail the negative effects of the financial crisis. Consequently, the fiscal positions in numerous EMDEs have deteriorated considerably since the GFC. Kose, Ohnsorge, and Sugawara (2017) find that both pre-crisis improvements and post-crisis deteriorations have been particularly noticeable among commodity-exporting EMDEs in line with the pre-crisis run-up and post-crisis slide in commodity prices. Contrary, the fiscal positions in the advanced economies (AEs) have improved significantly, back to mid-2000 levels.

In his 2014 speech at the Jackson Hole, Mario Draghi emphasised the importance of having room to manoeuvre in fiscal policy. In addition, he argued that it was economically desirable to be able to steer the overall fiscal policy stance.

This note estimates the primary balance sustainability gap using the method recently proposed by Kose et al. (2017) in order to determine whether South Africa currently has fiscal space.

The sustainability gap measures the evolution of debt dynamics or fiscal solvency risk. It estimates the fiscal space in an economy, which is important to ensure debt sustainability and government's continued ability to implement countercyclical fiscal policy.

2. Measuring the sustainability gap

The primary balance sustainability gap is the difference between the primary balance and the debt-stabilising primary balance. The debt-stabilising primary balance captures the long-term cumulative impact of sustained fiscal deficits on debt stocks under assumed macroeconomic and financial conditions.¹ We calculate the overall primary balance sustainability gap as follows:

$$pbgap_t = p_t - \left(\frac{i-\gamma}{1+\gamma} \right) d^* \quad (1)$$

where p represents the primary balance (on the main budget) as a percentage of gross domestic product (GDP), γ represents nominal GDP, d^* is the targeted debt ratio, and i is the long-term interest rate.² The results of the primary balance sustainability gap for South Africa from 2000 to 2018, under historical market conditions, are shown in Figure 1. A positive gap indicates a fiscal balance that, if sustained, would over time diminish government debt to below its historical median. A negative gap suggests that the fiscal balance would increase the stock of debt to above d^* . Some countries may be able to support this level of debt for extended periods of time. But other countries may be forced by financial markets to reduce debt to below d^* as it may not be possible to sustain these levels without adverse implications. More precisely, d^* for AEs is higher, at 52.3% of GDP, than that for EMDEs, which is estimated at 45.2% of GDP. This suggests that AEs tend to have a higher level of debt tolerance than EMDEs.

Figure 1 shows that the sustainability gap improves from 2000 to 2001, reaching a high of 3.6%. This is followed by a steep fall in the gap, albeit still positive, between 2001 and 2003. This fall is due to a decrease in the primary balance as a percentage of GDP resulting from declining growth and hence lower revenue growth. Thereafter the sustainability improves from 2003 until 2007, reaching 3.2% in 2007. This trend is similar to the dynamics in most EMDEs, where strong fiscal positions were recorded due to falling debt stocks and narrowing deficits. The reasons for this improvement in South Africa include declining interest rates to historically low levels and the primary balance registering surpluses. High growth as well as fiscal consolidation also played a role in widening the gap. This signals countercyclical fiscal policy, whereby government expenditure growth was contained and large improvements in revenue growth were observed, thus reducing the deficit. Unfortunately, the GFC then triggered a sharp fall in the gap from 2007 to -2.4% in 2009, owing to fiscal stimulus to support the economy. Since then the sustainability gap has recovered slowly, standing at -1% in 2016. The World Bank attributes the sharp erosion of fiscal sustainability in commodity-exporting countries mainly to four factors: the fall in commodity prices after the GFC, a contraction in revenue growth, rising interest rates, and low economic growth since 2007.

The forecast period (2017 and 2018) is based on the primary balance forecast values obtained from the National Treasury.³ This shows that even though the sustainability gap improves slightly in 2018, it is still below the neutral level, and far below the historical average of 2.6% observed prior to the

¹ The debt-stabilising primary balance is a primary balance that allows debt to converge to a target or median debt-to-GDP ratio.

² We use the historical median of the debt-to-GDP ratio, i.e. 38.2% over the period 1998-2016, as the targeted debt ratio. The long-term average nominal GDP growth rate is 10.09% over the same period. The long-term interest rate is proxied by the average of the 10-year government bond yield from 1998 to 2016, which amounts to 10.1%.

³ National Treasury revised its projections in the 2017 *Medium Term Budget Policy Statement* presented on 25 October 2017. It now projects a deterioration to the primary balance (compared to previous estimates tabled in the main budget in February) with a deficit of -1.2% in 2017/18 and a slight improvement to -0.8% in 2018/19. Previous estimates showed a deficit of -0.1% in 2017/18 and a surplus of 0.2% in 2018/19.

GFC (2000 to 2007). Primary balances and debt balances would need to improve significantly, which would be quite challenging in an already constrained fiscal environment.

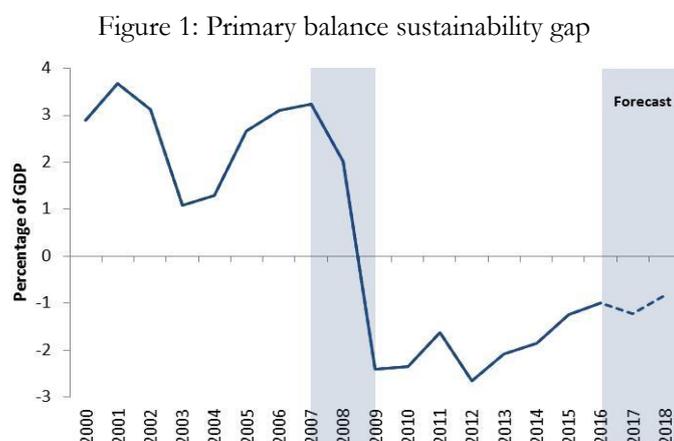
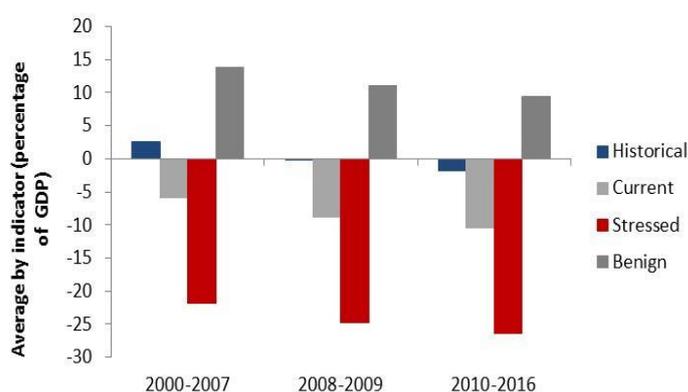


Figure 2 depicts primary balance sustainability gaps under historical, current, stressed, and benign conditions.⁴ The historical condition is the one estimated above in Figure 1. The current condition is based on an interest rate and growth rate at their current levels. In our case, we have 9.18% for interest rates and 7.30% for the growth rate. The stressed condition is the pessimistic scenario in which long-term interest rates are high, at around 11.78%, and nominal growth is extremely low, in this case at 6.79%. The benign situation represents the optimistic scenario, with minimum interest rates and the maximum economic growth rate for the period under investigation. For this ideal situation, we set the interest rate at 8.27% and nominal growth at 12.32%. In addition, we divide our sample into three periods, namely 2000-2007 (which represents the pre-crisis period), 2008-2009 (which coincides with the GFC), and 2010-2016 (representing the post-crisis period).

From Figure 2, we have a positive primary balance sustainability gap in benign conditions in all three subsamples. The sustainability gap is larger and more positive in the pre-crisis period but relatively small in the post-crisis period. Conversely, the stressed case depicts large and negative gaps in all three periods. Even though these measures are comparable, the post-crisis period registers a relatively larger gap. They suggest that if the current situation worsens, the fiscal space will deteriorate even further. The current conditions follow the same pattern, albeit with smaller magnitudes.

⁴ Refer to Kose et al. (2017) for an explanation of each measure.

Figure 2: Primary balance sustainability gap under different conditions



3. The stance of fiscal policy

This section looks at two other measures of the stance of fiscal policy, namely the overall budget balance and government consumption. It sheds light on the conduct of fiscal policy since 2000.

Figure 3 depicts the overall budget balance and the output gap. If both the budget balance and the output gap move in the same direction, i.e. if they are both improving or both worsening, the policy is countercyclical. Conversely, the policy is deemed procyclical when they move in opposite directions such as that reflected in 2000-2002 (whereby the budget balance and output gap move in opposite directions). We observe from Figure 3 that over several periods the budget balance and output gap move in the same direction. This countercyclical behaviour occurs in the following periods:

- (1) 2003-2007: the budget deficit narrowed from -2.4% to a surplus of 0.75% and the output gap improved from -1.7% to 4%;
- (2) 2007-2009: the budget surplus eroded sharply from 0.75% to a deficit of -4.6% together with the output gap falling from 4% to -1.1%;
- (3) 2009-2011: the budget deficit declined from -4.6% to -4% while the output gap also improved from -1.1% to -0.7%.

However, in more recent years (i.e. 2012 to 2016), the country has reverted to a procyclical fiscal policy. This is reflected in the budget deficit narrowing from -5.2% in 2012 to -4.2% in 2016, while the output gap continues to fall from -0.9% to -1.3% over the same period. The National Treasury's forecast of an improving deficit despite the weak environment also indicates a more procyclical stance. This is possibly due to the tight fiscal space SA is currently in. The current procyclical stance/behaviour is also contrary to that observed in EMDEs. The new regime of low growth, high interest rates, and high sovereign debt, has hindered the prospect of following countercyclical fiscal policy to support the real economy.

We compare these results with the correlation between real GDP growth and the growth rate in consumption expenditure by government. A positive correlation is evidence of a procyclical fiscal policy while the opposite is true for a negative correlation. The results in Figure 4 confirm our findings in Figure 3. They suggest that fiscal policy was countercyclical both before and during the GFC, as

illustrated by the negative correlation between the two variables. This coincides with the period when South Africa had a positive sustainability gap and thus fiscal space, as depicted in Figure 1. It shows that fiscal space matters for the effectiveness of fiscal policy. Thereafter, fiscal policy turned procyclical in 2010 and has remained there ever since. This was as a result of excessive fiscal stimulus, which depleted the fiscal space previously accumulated.

Figure 3: Cyclically adjusted balance vs output gap⁵

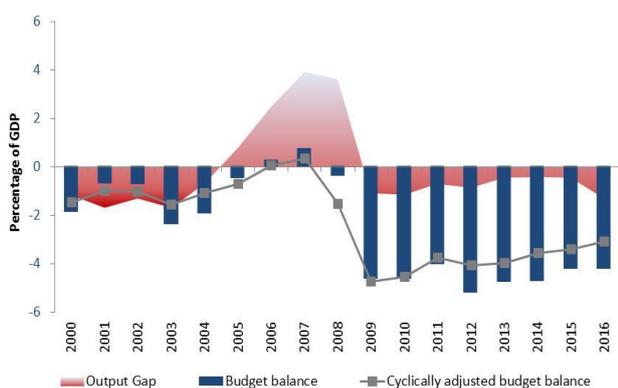
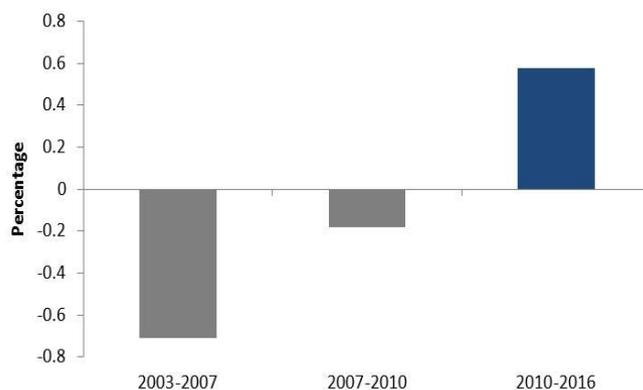


Figure 4: Correlation between government consumption and GDP



4. Conclusion

This note uses the method recently proposed by Kose et al. (2017) to estimate the primary balance sustainability gap for South Africa. Before the global financial crisis (GFC), many economies had built up fiscal space by reducing debt and closing fiscal deficits. This allowed fiscal policy to act as a countercyclical tool and boost growth when the recession hit. The results of our investigations show that, following stress episodes such as the GFC of 2008, debt dynamics deteriorated, causing fiscal balances and sustainability gaps to weaken. The recovery since then has been slow. Although the primary balance sustainability gap for South Africa shows a slight improvement in 2018 (subject to primary balance projections), it remains below the neutral level and far from its historical levels. Since the GFC, mounting government debt has brought risk to financial shocks. Fiscal positions therefore need to be strengthened. This will create fiscal space for fiscal policy to ensure the appropriate timing and effectiveness of countercyclical fiscal policy. Fiscal space, even in a low-debt environment, can erode rapidly during periods of financial stress. This emphasises the importance of creating fiscal space, which appears to have run out at the moment.

References

Kose, M. A., Kurlat, S., Ohnsorge, F. L. and Sugawara, N. 2017a. 'A cross-country database of fiscal space'. Policy Research Working Paper 8157. World Bank Group.

Kose, M. A., Ohnsorge, F. L. and Sugawara, N. 2017b. 'Debt dynamics in emerging market and developing economies: a time to act?' *Global Economic Prospects, Special Focus 1*. World Bank Group.

⁵ The cyclically-adjusted budget balance is obtained from the World Bank Fiscal Monitor. The output gap is provided by the macroeconomic modelling unit.