

ERSA Research Brief

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The behaviour of the real effective rate of South Africa: is there a misalignment

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The debate about the equilibrium level of the South African rand and the factors driving the currency is ongoing, with a concomitant lack of consensus on the most appropriate level of the exchange rate. The New Growth Path Framework (2011), which provided government's blueprint for economic growth and job creation, calls for a more competitive exchange rate that should support government's initiatives, indicating that policymakers have a vested interest in seeing the exchange rate at a level that would support South Africa's economic growth. Against this background, the aim of this study was to determine the extent to which the rand's real effective exchange rate (REER) is misaligned from its equilibrium level. Cointegration techniques in the behavioural equilibrium exchange rate (BEER) framework of Clark and MacDonald (1988) were applied to estimate the equilibrium value of the rand consistent with economic fundamentals, and to interpret the deviation of the observed exchange rate from this level as REER misalignment. This study adds to the literature in the following aspects: firstly, we apply more recent data to estimate the equilibrium REER and exchange rate misalignment. Secondly, the subject of exogeneity in the equilibrium exchange rate model is addressed to ensure a proper specification is obtained. Finally, the study uses non-linear regime switching methodology to model the misalignment behaviour.

Results endorse the existence of a cointegrating relationship between the exchange rate and terms of trade (including gold), external openness, capital flows and government expenditure. A 1% increase in the country's terms of trade leads to an appreciation in the real effective exchange rate of about 0.82%. A similar directional relationship is observed between capital flows and the exchange rate. Increases (1%) in external openness and government expenditure however cause depreciation in the exchange rate of 0.85% and 0.37% respectively. We also confirm that the exchange rate deviates from its equilibrium level over time with the historical misalignment pattern witnessed confirming similar observations from previous studies including De Jager (2012), Saayman (2010) and MacDonald and Ricci (2004). The Markov Switching Model correctly captures the misalignment over the sample period (1985-2014) as distinct episodes of overvaluation and undervaluation.

Four overvaluation episodes are identified (1986-1988; 1997-1998; 2003-2006 and 2010-2012) with the study indicating that the exchange rate was undervalued (to deferring extents) over most of the period studied. Extreme undervaluation in the exchange rate is recorded in 1998-2003, and during the midst of the global financial crisis in 2007/2008. Results of the study also indicate that the currency was undervalued between 2013 and 2014. An interesting observation from the study

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is that the exchange rate tended to be more undervalued than overvalued over the period studied with undervaluation episodes lasting longer than overvaluation periods. A closer look at the trade figures over the sample period indicates that South Africa's imports have been growing faster than exports thus feeding into the current account deficit problem. On the one hand, such developments should have been expected to be inflationary, but inflation on average came down over this period mainly due to a successful inflation targeting monetary policy framework by the South African Reserve Bank. The challenge for the SARB is the ability to deal with abrupt exchange rate misalignment episodes that are accompanied by high levels of nominal exchange rate volatility.

With an undervalued currency seen as supportive for growth through higher exports (Rodrik, 2008a), the question is why has the country failed to take advantage of such misalignment episodes? From a policy perspective, this means policymakers have to look at other factors in an effort to boost export performance since there is no clear evidence that the exchange rate has been detrimental to exports. Rodrik (2008b) notes that South Africa's unsatisfactory growth and employment path realized since the democratic transition is a function of an under-performing, non-resources tradable sector, in particular manufacturing. With the country's unemployment rate very high (especially amongst unskilled labour), having more flexible labour laws where wages are linked to productivity could be one way of boosting the manufacturing sector and hence more exports. There is a need for government, organized labour (unions) and the private sector to work together to find sustainable solutions to these challenges. In terms of further research, it would be interesting to formally ascertain the impact of such a misalignment on economic indicators such as growth, exports and the current account deficit. Since the study merely sought to measure if the exchange rate was misaligned over time, another future area of research would be to determine the factors that drive such a misalignment within a regime switching context.

References:

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