

# ESTIMATING THE EQUILIBRIUM REAL EXCHANGE RATE AND MISALIGNMENT FOR NAMIBIA

by

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### **SUMMARY**

## ESTIMATING THE EQUILIBRIUM REAL EXCHANGE RATE AND MISALIGNMENT FOR NAMIBIA

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The exchange rate is one of the most challenging macroeconomic policy issues in any economy. There is a general agreement that policymakers should aim at avoiding real exchange rate misalignment. To avoid real exchange rate misalignment, it is important to identify the equilibrium real exchange rate. To identify the equilibrium real exchange rate it is necessary to understand the drivers of the real exchange rate, and investigate the extent to which the real exchange rate is driven by various determinants.

Despite the fact that the real exchange rate is a very important component of macroeconomic policy, empirical investigation of the real exchange rate in Namibia is very limited. It is against this background that the objective of this study is to estimate the equilibrium real exchange rate and the resulting real exchange rate misalignment for Namibia during period 1970 to 2004. It also investigates the impact of real exchange rate misalignment on economic performance and competitiveness. The equilibrium real exchange rate and resulting real exchange rate misalignments were estimated using theoretical models and the application of time series econometric techniques. The fundamental approach model and the model of real exchange rate and real prices of commodities exports were estimated using the Johansen full information maximum



likelihood technique. According to the estimation based on the fundamental model the real exchange rate is determined by terms of trade, openness of the economy and ratio of investment to GDP. Equilibrium real exchange rate was estimated and the results showed that the real exchange rate was misaligned. Since Namibia is a commodity exporting country the relationship between the real exchange rate and prices of commodities was also investigated. The analysis revealed that there is a long-run co-movement between real exchange rate and prices of commodity exports. Increase in prices of commodities causes the real exchange rate to appreciate. There was some overvaluation and undervaluation.

The VAR methodology was implemented to test the impact of real exchange rate misalignment on economic performance and competitiveness. The analysis revealed that real exchange rate misalignment hampers economic growth and competitiveness. It is important for policymakers to monitor the real exchange rate and ensure that it does not diverge significantly from its equilibrium value. Reduction in real exchange rate misalignment is also important to ensure that the country achieves a high level of export and remains competitive in order to have a sustainable level of growth. As a commodity exporting country, Namibia can have either a flexible nominal exchange rate regime which facilitates slow change of relative inflation rate, or price and wage flexibility to facilitate the maintenance of the nominal exchange rate peg. Alternatively, Namibia is a good candidate for pegging the currency to the prices of export commodities because its export is concentrated on few products. This option implies that Namibia leaves the CMA. However, it is important to note that Namibia is a proponent of regional integration and a move away from the CMA will not be consistent with the plans of SADC to establish a monetary union by 2016.



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## LIST OF ACRONYMS

BMA Bilateral Monetary Agreement

CMA Common Monetary Area

ERER Equilibrium real exchange rate

FIML Full Information Maximum Likelihood

GDP Gross Domestic Product

IMF International Monetary Fund

LAGRIC Log of agricultural output

LEXPORT Log of total export of goods and services

LGOV Log of government expenditure

LINVGDP Log of the ratio of investment to GDP

LOPEN Log of openness of the economy

LRCOMP Log of real commodity prices

LREER Log of REER

LRESBAL Log of resource balance

LRPERCAPI Log of real GDP per capita

LTOT Log of terms of trade

LTUNITCOST Log of total unit labour cost

MISALIGNMENT Real exchange rate misalignment

OPEN Openness of the economy

PPP Purchasing Power Parity

REER Real Effective Exchange Rate

RER Real Exchange Rate

TOT Terms of Trade

VAR Vector Autoregression

VECM Vector Error Correction Model