



NOTE ON THE REVISION OF NAMIBIA'S NOMINAL AND REAL EFFECTIVE EXCHANGE RATE

1. INTRODUCTION

Since 2017, Namibia's international trade patterns have changed significantly, and these developments have necessitated a review of the effective exchange rate series. The effective exchange rate indices that are compiled by the Bank of Namibia (BoN) are normally revised every three years to keep track of significant changes in international trading patterns. The note briefly explains the revisions made to Namibia's effective exchange rate indices using recent trade data to update the trade weights that were last revised in 2017. The results of that revision were described in the BoN Quarterly Bulletin of June 2017, pages 64-68.

2. KEY CONCEPTS AND RESULTS

An effective exchange rate provides a better indicator of the macroeconomic effects of exchange rates than any single bilateral rate. This includes the Nominal Effective Exchange Rate (NEER) and Real Effective Exchange Rate (REER). The former measures the value of the Namibia Dollar against a weighted average of several foreign currencies. An increase in the NEER indicates an effective appreciation of the Namibia Dollar against the weighted basket of currencies of its trading partners. The latter measures the changes in a country's international competitiveness and adjusts the nominal effective exchange rate for inflation, using the ratios of foreign to domestic prices. An increase in the REER represents an effective appreciation of the national currency and implies that Namibia's exports become more expensive and imports become cheaper. Hence, an increase in the REER signals a loss in trade competitiveness.

When compiling the effective exchange rate indices, the most important trading partners are identified based on their relative importance in Namibia's bilateral merchandise trade. Trade patterns change on account of numerous forces that shape global and domestic supply and demand. These changes necessitate periodic revision of Namibia's effective exchange rate indices. The previously published effective exchange rate was computed using Namibia's total bilateral merchandise trade for the period 2014 to 2016 (Table 1). Trading partners whose bilateral trade with Namibia constituted more than 2.0 percent of total trade for the period 2014 to 2016 were included in the basket.

Table 1: Previous trade weights

	Import (M) weight	Export (X) weight	Total trade (X+M) weight (2014 to 2016)
South Africa	0.739	0.214	0.538
Botswana	0.047	0.233	0.118
Euro Area	0.058	0.184	0.106
Switzerland	0.019	0.159	0.070
Zambia	0.028	0.059	0.040
Angola	0.000	0.061	0.023
China	0.055	0.044	0.050
USA	0.054	0.054	0.054
Total	1.000	1.000	1.000

The revised weights are based on the merchandise trade between Namibia and its largest trading partners for the period 2017 to 2019. As customary, a three-year period was selected to ensure a representative pattern as a single year may have fluctuations and outliers in the trade data. The number of trading-partner countries incorporated into the calculations was revised from eight to seven on the basis that for inclusion the bilateral trade with Namibia had to constitute more than 2.0 percent of total trade (Table 2).

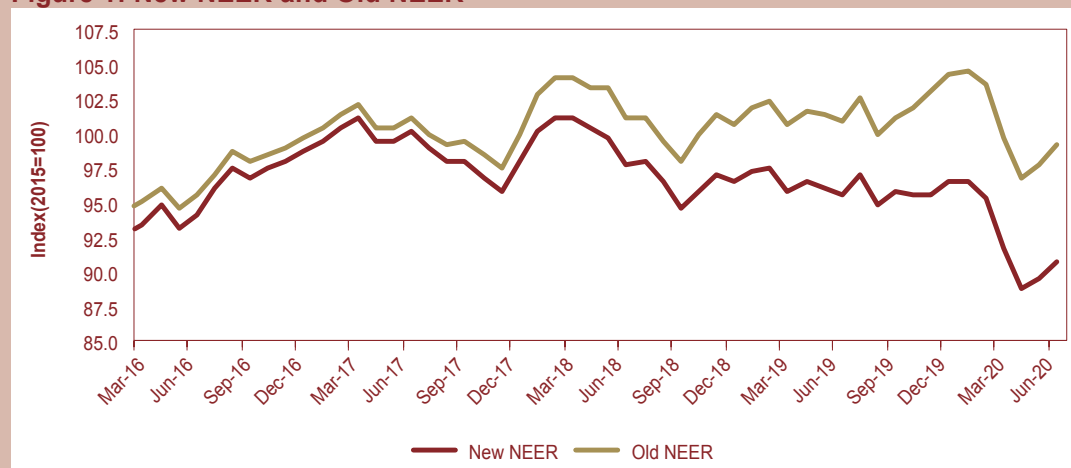
The total trade weight of each currency in the new effective exchange rate basket is not exactly equal to the average of that currency's import weight and export weight. This is because the overall value of Namibia's imports exceeded that of its exports in 2017-2019, so that the total trade weighting pattern was somewhat skewed towards that of imports.

Table 2: New trade weights

	Import (M) weight	Export (X) weight	Total trade (X+M) weight (2017-2019)
South Africa	0.761	0.278	0.551
Eurozone	0.067	0.306	0.171
Botswana	0.034	0.181	0.098
People's Republic of China	0.062	0.143	0.097
United Arab Emirates	0.024	0.047	0.034
India	0.037	0.011	0.025
United States	0.016	0.034	0.024
Total	1.000	1.000	1.000

As presented in Table 2, South Africa continued to lead in importance in Namibia's external trade, followed by the Eurozone, Botswana and China. South Africa, the Eurozone, Botswana and China continued to dominate Namibia's foreign trade. Switzerland, Angola and Zambia that previously were of sufficient importance in Namibia's foreign trade to be included in the effective exchange rate basket, fell out in the new basket. A change in trade dynamics resulted in India and the United Arab Emirates (UAE) becoming more prominent as trading partners, thereby qualifying for inclusion in the basket. This was due to the imports of pharmaceutical products from India and fuel from the UAE while Namibia's exports to these destinations were primarily processed and rough diamonds respectively.

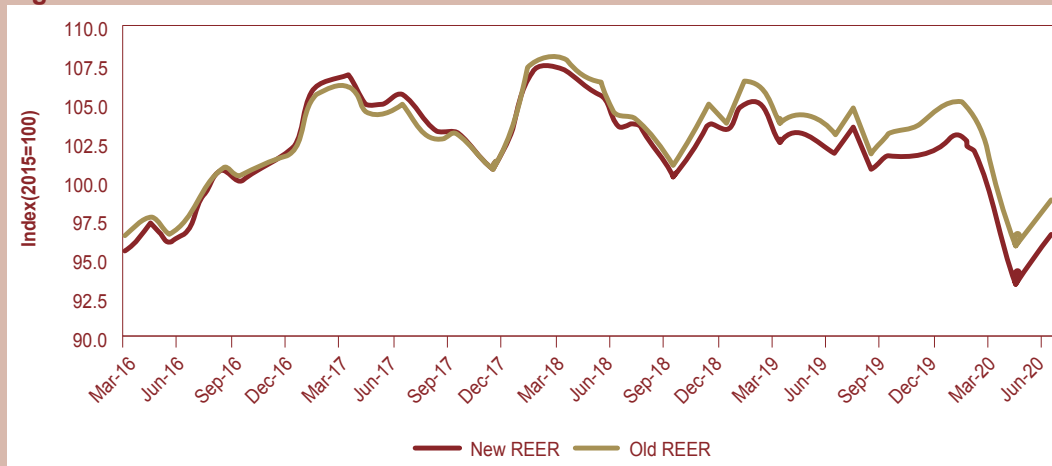
Figure 1: New NEER and Old NEER



The revision of the weights and inclusion of new currencies show a more depreciated nominal effective exchange rate. The new NEER depreciated more compared to the old NEER as it is linked to more stronger currencies with low inflation rates (Figure 1). The new basket now includes the India Rupee, with domestic inflation in India having been at single-digit rates since 2015, and the United Arab Emirates Dirham which is generally considered to be a stable currency.

The New REER presented similar patterns when compared to the previous REER. The new and old indices exhibited similar patterns of measuring competitiveness. However, the differences displayed was primarily due to the inclusion of trading partners with low domestic inflation and the exclusion of Angola and Zambia that have double-digit inflation (Figure 2).

Figure 2: New REER and Old REER



3. LINKING WITH HISTORICAL EFFECTIVE EXCHANGE RATE SERIES

The newly calculated effective exchange rate series utilising 2017-2019 weights are replacing their predecessor series back to 2015. Before 2015 the previously published series have been linked to the new series by applying the ratio of their values in January 2015 to the predecessor series from the 1990s up to December 2014. This procedure is adopted to ensure that the description of effective exchange rate changes in the distant past remains valid, so that the whole exchange rate history does not have to be rewritten each time the currency basket is updated. Long-term monthly and annual NEER and REER time series going back to 1990 are available, and may be downloaded from the BoN website using the link <https://www.bon.com.na/Economic-information/Statistical-information/Exchange-Rates-and-Indices.aspx>

4. CONCLUSION

The revised effective exchange rates indices incorporate currency weights associated with Namibia's recent international trading patterns. The revised effective exchange rate series trace the value of the Namibia Dollar against a basket of seven currencies using currency weights based on external trade patterns in the period 2017 to 2019. Namibia's revised effective exchange rate will improve the assessment of exchange rate movements and changes in the country's competitiveness in global markets. The next revision of nominal and real effective exchange rates is expected to take place in 2023.