OFFSHORE SERIES:

Utilising offshore allowances to protect global purchasing power

analytics CONSULTING FX SOLUTIONS

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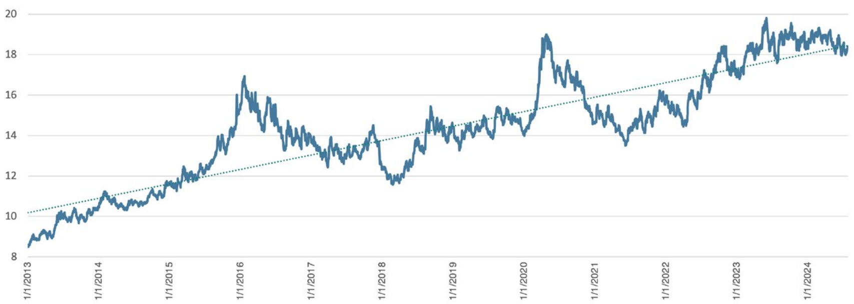
Introduction

Over the past ten years to date, the SA Rand has declined by a cumulative -43% against the US Dollar. Vice versa, the US Dollar has strengthened by a cumulative 74% against the Rand over the same period. On average, the Rand has depreciated by -6.1% a year. While it is important to be aware of short-term trends in the value of the Rand to try and maximise the value of each offshore transaction, it is also useful to be mindful of the Rand's long-term behaviour and the importance of systematically increasing offshore investment exposure.

The average annual depreciation of the Rand/Dollar exchange rate over the past 10 years has been -6.1%. This does not mean that the Rand will depreciate every year, but it does demonstrate that the Rand has a strong weakening bias. In fact, the Rand depreciated in all the past ten years, while over the past 65 years, the Rand has weakened in 43 of the years which is two thirds of the time. Importantly, during the past six decades the Rand has experienced bouts of significant strength, especially during 2002/2003. However, these periods of strength have typically followed periods of substantial weakness. The charts reflect the number of years and extent of Rand/Dollar appreciation or depreciation for specific years. During most years the Rand oscillates between a gain of 5% and a loss of 10%, with the bias to the downside.

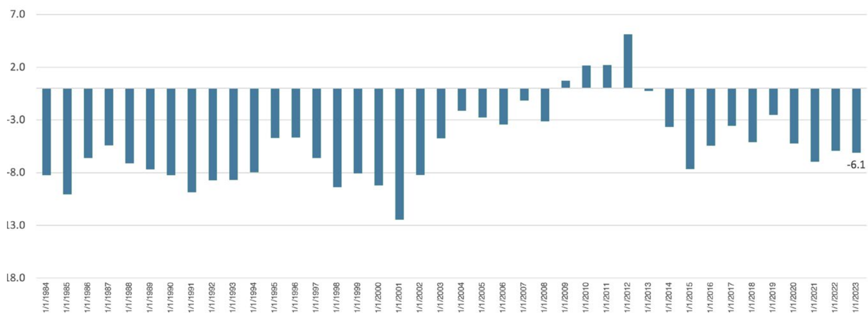
The Rand continues to rank as the 7th worst performing emerging market currency in the past 10 years. The worst is Argentina, followed by Turkey, Eqypt, Columbia, Brazil and Russia. Each country has had its own unique set of circumstances that contributed to the extensive currency weakness.

SA Rand vs US Dollar – past 10 years
Daily



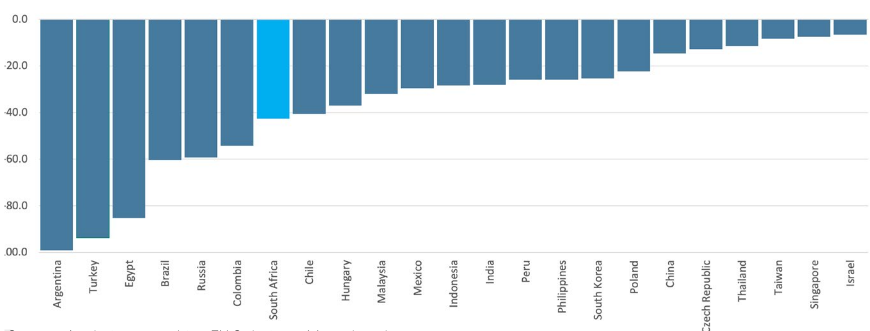
Source: Analytics Consulting, Macrobond, 01 January 2024

SA Rand vs US Dollar – 10 year averages
End year



Source: Analytics Consulting, Macrobond, 01 January 2024

Emerging market exchange rate vs USD – past 10 years
% change



Source: Analytics consulting FX Solutions, Macrobond

In trying to estimate the likely value of the Rand over the next 10 years, we use the following guidelines:

1

Economic Theory

The simplest economic model used to explain the movements of any exchange rate over time is purchasing power parity (PPP). In essence, the PPP model argues that the value of one currency will depreciate against another currency in line with the difference in inflation between the two countries. So, for example, over the past 10 years, SA consumer inflation averaged 5.2% per year while US consumer inflation averaged 2.9%, therefore the Rand should have depreciated by 2.3% a year against the Dollar per year to maintain the currency's relative purchasing power. In theory, this would have ensured that R100 buys as much in South Africa as R100 worth of dollars buys in the US.

However, in reality, the Rand depreciated against the Dollar by an annual average of -6.1%, more than twice as much as one should have expected in terms of relative purchasing power. This, together with similar calculations done for prior decades, highlights that the Rand tends to weaken by more than what theory or PPP suggests.

Therefore, we can assume a base rate of depreciation for the Rand/Dollar of at least the inflation differential between South Africa and the United States for the next ten years - assuming there are no structural changes to the South African Reserve Bank or US Federal Reserve's interest rate policy and that the respective inflation targets remain unchanged. Correspondingly, we have assumed that SA's inflation rate at the mid-point of the target band being 4.5% for the next 10 years, while the US inflation rate is projected at their target of 2%. This implies a minimum average annual depreciation of the Rand in the order of 2.5% for the next 10 years - purely based on inflation differentials.

US and SA Headline Consumer Inflation
% y/y

Source: Analytics Consulting FX Solutions, Macrobond

2

Using the Analytics Currency Decoder as a starting point to extrapolate the exchange rate in 10 years

When forecasting the Rand it is important to adjust for the starting point from which these calculations are made, in other words, adjust for the fact that the Rand might already be under or over-valued. Currently, most Rand fair-value models (including from the South African Reserve Bank) reflect the fact that the rand is undervalued, but not significantly. The extent of the undervaluation varies depending on the specifics of the fair value model. The trade weighted Rand also provides a measure of fair value but against a basket of South Africa's major trading partners. These models reflect that the Rand has very seldom been at fair value or stronger over the past years.

Fortunately, Analytics Consulting FX Solutions has the expertise of Dr Lance Vogel, Director of Investments at Analytics, who has developed a proprietary model to determine the Rand's estimated fair value across any currency pair at any given point in time. The Analytics Currency Decoder has the benefit of not needing a starting point as it is based on a mathematical mean reverting algorithm to estimate fair value and has proved to be a useful validator of fundamental reasoning. It therefore provides an unbiased starting point for the calculation.

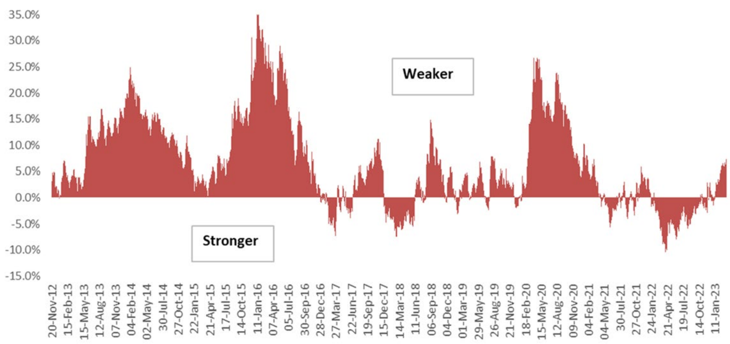
3

Adding an estimated country risk premium to the inflation differential (from the starting point)

Rand fair value models, including those compiled by the South African Reserve Bank, show that over long time periods the Rand tends to remain below fair value, implying that the Rand is structurally weak. This structural weakness if often referred to a "political risk premium" or "policy uncertainty premium". The outcomes of the Analytics Currency Decoder also reflects this over the long term.

The deterioration in South Africa's overall economic performance over the past 10 years has resulted in the Rand maintaining a weakening bias that stretches beyond mere inflation differentials. In other words, market participants have factored in a weaker economic environment due to sustained low growth, rising unemployment, deteriorating infrastructure, policy uncertainty and problematic government debt. Consequentially, we assume that the Rand will weaken by an additional percentage amount on top of the inflation differential for the next ten years due to the political/ policy risk premium, but this can be adjusted.

Analytics Currency Decoder last 10 years
USDZAR relative to fair value



Source: Dr Lance Vogel, Analytics Consulting

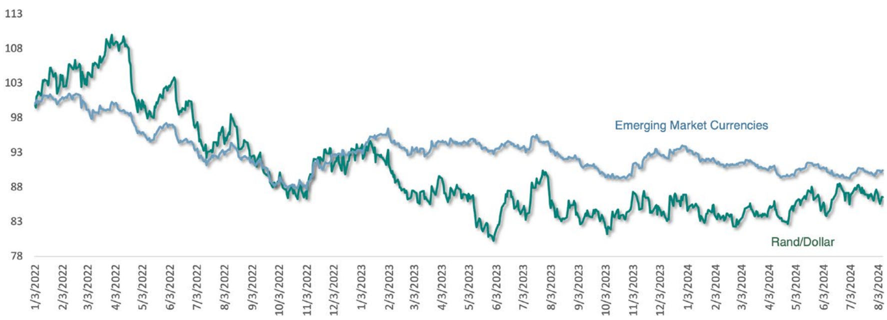
Other factors:

There is little doubt that over the next ten years the performance of the Rand will remain volatile, and at times highly volatile. This is partly because on a relative basis, the Rand is a highly traded and liquid currency, which means that pricing is readily available. Under normal circumstances this would be good news for Rand, however the accessibility of the Rand currency market tends to attract a disproportionally larger number of foreign currency speculators with deep pockets – which leads to bouts of significant currency volatility.

Many analysts regard the Rand as a proxy for developments in emerging markets, which highlights that the Rand often weakens or strengthens due to factors that are largely unrelated to domestic economic conditions. Analytics Consulting FX Solutions has created an additional proprietary model to establish a more informed analysis of the fundamental factors that could be driving currency behaviour.

The Analytics Emerging Market Currency Index is measured relative to the performance of the Rand/US dollar exchange rate. This helps us to tangibly identify, especially in times of heightened volatility, whether currency movements are a result of domestic economic conditions or other global factors impacting emerging market currencies in general. The recent narrowing of the SA risk premium reflects South Africa's improved economic outlook following the formation of the GNU in early June 2024.

Analytics Emerging Market Currency Index vs Rand/US Dollar
Index 1 Jan 2022 = 100



Source: Analytics Consulting FX Solutions, Macrobond data

Conclusion

Generally, most currency market participants have grown to accept that the Rand has a tendency to weaken by more than inflation differentials. Forecasting the Rand in the short-term (3, 6 -12 months) entails taking into account how economic conditions may change, seasonal factors, some specific capital flow factors, global sentiment towards emerging markets, how risk parameters around the world are evolving and interest rate developments. Beyond 12-18 months, these factors play less of a role. Instead, we focus on inflation differentials, as well as structural economic developments. And in South Africa's case, one would need to price in an additional risk premium.

In practice, we use the existing inflation targets as a benchmark for inflation differentials and add the 10-year average of South Africa's country risk premium. This suggests an annual average depreciation of 5-6% for the Rand/US dollar over the next ten years outlined in the following table. Should you wish to adjust for a narrowed country risk premium or a structural change in inflation differentials, the same methodology can be applied and to all currency pairs. This is updated regularly for Analytics Consulting FX Solutions clients. Importantly, the path for the Rand over the next 10 years will, no doubt, be erratic.

With a long-term methodology in place, the table below provides the estimate value for the Rand / US dollar in ten years, depending on your choice of risk premium.

Rand per US Dollar Depreciation per year	August 2024 Decoder FV	10 years time
3.0%	17.78	24.11
4.0%	17.78	26.75
5.0%	17.78	29.70
5.5%	17.78	31.31
6.0%	17.78	33.01

While a Rand/ US dollar exchange rate of around R30.00/USD from current levels seems extreme, it is important to remember that 10 years ago the Rand was trading at R10.48/US dollar, and yet it ended 2023 at R18.29/US dollar. Even with varying degrees of depreciation, guarded optimism on the country future risk premium or a structural change in the inflation differential, ultimately the Rand is very likely to maintain a weakening bias.

Projections of the Rand vs the US dollar over the long term
10 years time

As an emerging market, South African businesses and households need to have access to international goods and services to remain competitive as well as retain their current standard of living. If the Rand depreciates by more than the inflation differentials each year, which has happened over the past three decades, our global purchasing power can only be protected by diversifying our assets and/or income offshore.

Analytics Consulting FX Solutions partners with wealth managers to assist their clients with efficient, cost-effective, and bespoke currency solutions for all clients. AC FX Solutions leverages its collective institutional scale to disarm all pricing ladders associated with international transactions.

Source: Analytics Consulting FX Solutions

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