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1 INTRODUCTION

Mercer considers currency hedging an essential part of any long-term strategy and believes that a hedging policy should be in place. However, a 'set and forget' approach to currency hedging is not considered to be appropriate. Investors should manage their currency exposure from a total portfolio level and adapt their approach in different market conditions.

The aim of this paper is to re-assess currency hedging policies from the total portfolio perspective and how it affects Dynamic Asset Allocation in a low interest rate environment and late market cycle. For the first time in around 20 years Australian interest rates are now lower than their US counterparts, and this triggers a consideration of the role that hedging the Australian dollar plays in the total portfolio.

We compare the volatility of different Australian dollar currency pairs relative to the equity markets, look at currency hedging from a total portfolio perspective, and analyse how different levels of foreign currency exposure affect the overall portfolio return.

The analysis involves looking into the historical data that gives an insight into interest rate differentials, demand and supply for a currency via capital flows, current account deficit/surplus and compositions of Australian foreign debt. The paper elaborates how the valuation will impact on the decision on currency policies. The Australian Dollar is now moving to a low yielding currency, and is no longer a carry trade destination. But it is also not considered a reserve currency like the US Dollar.

The flipside is that once the transition is complete, the amount of speculative capital in the Australian Dollar will be far less than in prior periods of equity market volatility. The past relationship between unhedged overseas equity returns and the Australia Dollar may change to have less negative correlation.

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CURRENCY STRATEGY: OVERALL APPROACH

Foreign exchange (FX) exposure can be a material source of portfolio volatility and essential to understand. A strategic currency hedging policy should be kept in place. However, it is not always maintained with the care and attention it deserves. Mercer believes that a 'set and forget' approach of currency hedging is not appropriate. Institutional investors should manage their currency exposure and currency hedging periodically.

There are a number of factors that can drive currency movements over the medium term, which may include interest rate differentials, central bank monetary policy, demand and supply for a currency, the current account deficit, foreign currency reserves and in Australia, commodity prices. Their importance can vary over time. These issues make currency movement difficult to forecast, especially in the short term, which leads to return patterns generated by hedged and unhedged approaches deviating often by a significant amount and for significant periods of time.

As the foreign exposure rises in an investor's portfolio, currency management becomes more important. The optimal long term strategic foreign currency exposure is investor specific and dependent on an investor's specific circumstances, including but not limited to base currency, composition of the underlying portfolio views on whether foreign exchange risk is rewarded, risk budget and cost or practicality of implementation.

These beliefs are distilled into the following guiding principles:

- Currency hedging can be helpful when the volatility of hedged overseas asset returns is lower than the volatility of unhedged overseas asset returns, for the period under consideration
- Currency hedging can be helpful when the returns from hedged overseas assets are greater than the returns from unhedged overseas assets, for the period under consideration
- Some clients will prioritise risk reduction over return enhancement and vice versa
- Clients with different base currencies will see various effects of hedging. For example, in the US, currency hedging has tended to reduce risk, while in Canada and Australia it is seen as increasing risk.

In the course of developing currency hedging policy investors need to first establish the objectives of the policy and can apply the overall approach from four perspectives as shown in Figure 1.



Figure 1. Overall approach to foreign exchange management

1. FOCUS ON RISK MANAGEMENT

In this stage investors identify the risk minimising FX exposure, which will be conditional on the base currency, portfolio composition and modelling assumptions and beliefs. The optimal position may also be dependent on time horizon and tail risk sensitivity. The result may be reasonably broad range and should be reflected in the strategic benchmark (SAA).

2. CONSIDER RETURN GENERATION

The investors decide whether to seek additional returns from currency positions. This may include SAA or DAA positions, in the case when there is a view that one or more currencies are likely to have a persistent return premium, or shorter term tactical positions which can be managed directly or outsourced (or both). If tactical positions are going to be outsourced, the returns can be achieved through appointing specialist FX managers or as part of a wider liquid alternatives allocation in accordance with a risk budget.

3. IDENTIFY RETURN DRIVERS

When investors manage active positions directly, a relatively simple approach is recommended with a focus on fundamental factors such as carry and value. However, absent conviction in these drivers it would be more appropriate to concentrate on risk management and outsourcing tactical positioning. Base currency and underlying portfolio composition may not directly influence active positions, but correlation and tail risks would do.

4. IMPLEMENT EFFICIENTLY

Both strategic and directly managed tactical positions can be aggregated to determine target FX hedge ratios. This process includes reviewing portfolios to identify those which can be most efficiently switched between FX hedged and unhedged status. A currency overlay may be required if there is a shortfall of portfolio where FX hedges can be adjusted, or if active positions cannot otherwise be efficiently managed.

The rest of this paper will focus on the first stage i.e. risk management.

RISK CONSIDERATIONS

Risk management is about to get the right hedge positions and minimise the risks. In this stage, returns are not relevant while risk minimisation is the sole objective. The key consideration is the correlation between the base currency and the unhedged underlying portfolio assets under both normal and stress conditions. The AUD is a so-called "Risk on" currency (explained further in the next section) which has tended to depreciate in times of crisis. Figure 2 shows the MSCI currencies against AUD tend to move in the opposite directions to overseas equity returns. Although it does not help in every down equity market, unhedged foreign currency exposure for Australian investors often softens the impact of falling foreign equity markets, such as during the Global Financial Crisis and the dot com bubble crash.

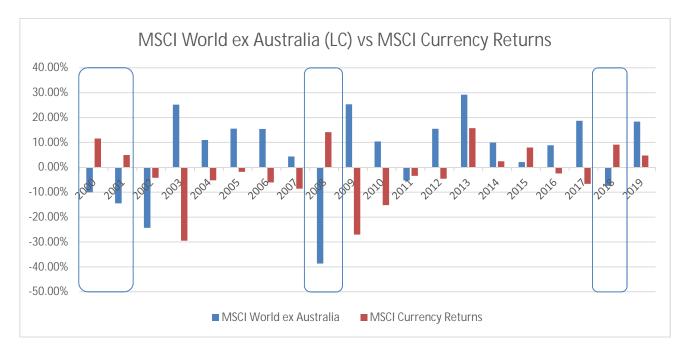


Figure 2: Movements in the MSCI World and a basket of MSCI currencies against the AUD

Over the past 20 years, the major currencies' returns versus the AUD tended to negatively correlate with MSCI ex Australia equity returns, which can be observed from Figure 3.

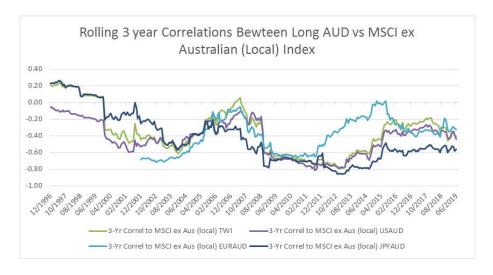


Figure 3: Three year rolling correlations

Figure 4 examines the rolling volatility of different AUD currency pairs, apart from around the GFC time, when all the pairs' volatilities went to the peak, different currency pairs tend to move dramatically relative to others at different timing. For instance, during the European debt crisis, the Euro became increasingly volatile compared with others versus AUD and around the time of the Brexit referendum result, the British pound became more volatile.

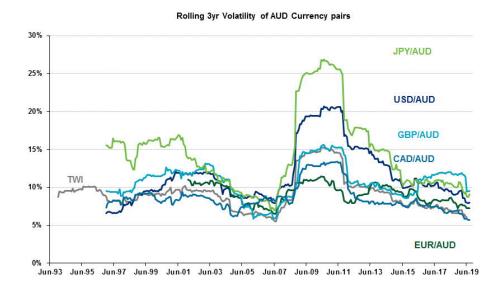


Figure 4: Three year rolling volatility

Fully hedging would have increased the portfolio risk for Australian investors through time. Using a typical Growth Fund based on the Chant West survey industry average asset allocation as an example, fully hedged or fully unhedged positions do not necessarily optimise the result of the volatility minimisation, and 20-40% represented the optimal hedging range at the "whole of portfolio" level.

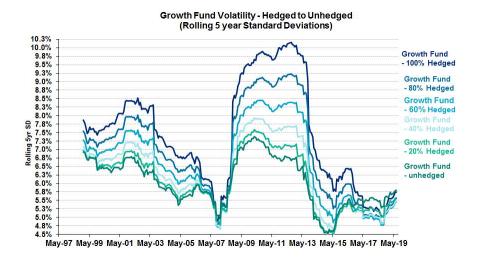


Figure 5: Hedged versus Unhedged Growth Fund volatility

Drilled down to the optimal ranges by time period, the result may still be reasonably broad as shown in the below 'smile chart', given that the plot of risk against FX hedge ratios may be quite shallow. This would extend the optimal proxy growth portfolio hedging range to between 20-50%.

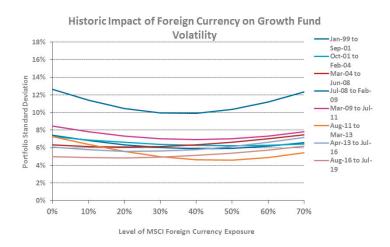


Figure 6: Hedged versus Unhedged Growth Fund volatility

WILL THE RELATIONSHIP BETWEEN INTERNATIONAL EQUITIES AND THE AUSTRALIAN DOLLAR BE MAINTAINED?

The big question is whether the AUD has become less risky. Measures of absolute and relative AUD volatility have fallen, when comparing the AUD to the VIX and within currency pairs. This has coincided with substantial changes in Australian fundamentals.

1. IMPACT OF AUSTRALIAN INTEREST RATE DIFFERENTIALS

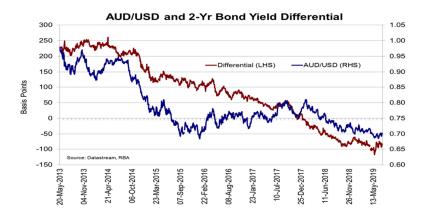


Figure 7: Interest rate differentials versus the USD (source: Datastream, RBA)

As shown in Figure 7, Australia has lost its high yielding "carry currency" status which has important implication for short term capital flows. Previously during "Risk On" periods, money would flow into the currency to capture the higher interest rate structure, and correspondingly flow out during "Risk Off" periods which have usually coincided with falls in International equity markets. In the future we will see less capital flows which are likely to reduce the volatility of the Australian dollar but not the overall direction. Going forward the AUD is a low yielding currency and not a carry trade destination. However the AUD is not considered a funding or liability currency. We are in a transition stage which means that as relative Australian interest rates fall, investors are leaving the AUD. The flipside is that once the transition is complete the amount of speculative capital in the AUD will be far less than in prior periods of equity market volatility. This may mean that the past relationships between overseas equity returns and the AUD may change to have less negative correlation.

2. IMPACT OF THE AUSTRALIAN CURRENT ACCOUNT SURPLUS

The Australian Current Account has moved from a deficit to a surplus, the first surplus since 1975 and the capital account flows have changed significantly with increased foreign direct investment inflows and increased portfolio outflows by Australian Superannuation funds.

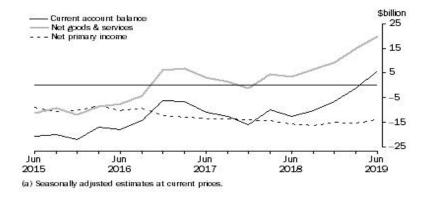


Figure 8: Current account balance (source: ABS)

The AUD hasn't fallen as much despite the falling interest rates due to a rapidly improving current account. This is partly because of the recent commodity price boom. China ramped up construction to stimulate a struggling trade-war-ravaged economy and many Brazilian iron ore mines stopped production amid the threat of further dam collapses. This has pushed up the price of our main exports.

The composition of trade is also important. The composition of trade in the last few years has seen greater diversification of the current account and a higher services component compared to 10 years ago. The current account is now the best since AUD float, and with an improved current account Australia is now becoming more self- sufficient in funding its net foreign debt. We consider it is reasonably safe to assume that the current account deficit will spend much of the next few years in a 0-2% of GDP range.

As far as the balance of payments is concerned, a large part of the commodity export revenue that comes into Australia goes straight out again as dividend to the big resources firms that are majority foreign-owned.

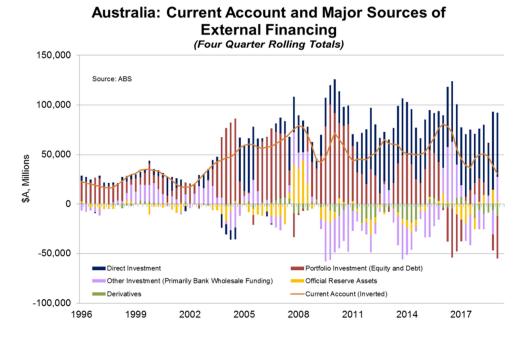


Figure 9: Current account and sources of financing (source: ABS)

Prior to the GFC most of the funding was via Australian Trading banks undertaking offshore loans. After the GFC most of the funding was mining related due to the substantial increase in mining investment. More recently the underlying flows have become more diversified.

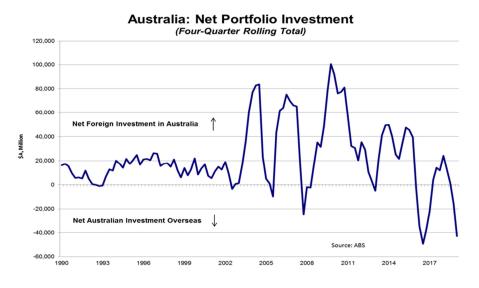


Figure 10: Net portfolio investment (source: ABS)

The nature of Australia's capital flows has changed in recent years with increased overseas investments by local superannuation funds into overseas assets (the AUD 2.7 trillion superannuation industry has around AUD 636 billion in overseas assets as of March 2019).

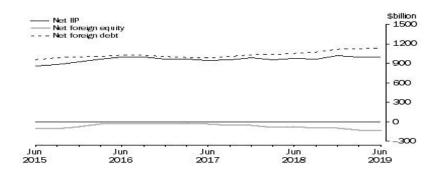


Figure 11: Australian Net foreign equity and debt (source: ABS)

Australians still owes AUD 1.1 trillion in foreign debt with net international liabilities passing through a trillion dollars for the first time, despite another AUD 10 billion increase in net overseas shareholdings.

Moreover, 68 per cent of Australia's foreign debt is in Australian dollars and a further 17 per cent is hedged, or protected, against currency moves. In contrast, the holdings of overseas shares are usually denominated in their local currency. So the recent fall in the dollar to decade lows has greatly assisted the current account.

"Australia's net foreign liabilities, that is, how much we owe foreigners less how much foreigners owe us, have been declining for the past decade to be at their lowest as a share of GDP since the early 2000s."

- Guy Debelle, Deputy Governor, Reserve Bank of Australia

CONCLUSIONS AND RECOMMENDATIONS

Foreign currency exposure can be a material source of portfolio volatility. However, it is not always managed with the care and attention it requires. For investors, the appropriate currency positioning varies depending on their base currency, composition of the underlying portfolio, views on whether currency risk is rewarded, overall risk budget and cost/practicality of implementation.

This paper gives an introduction of an overall approach of the Australian dollar currency strategy including risk management, return generation, return drivers and implementation efficiency.

Mercer believes that policies in respect to risk management and return generation should be set independently. With regards to risk management, fully hedging would increase the portfolio risks as the Australian dollar has tended to move together with the equity markets. The optimal hedge ratio based on historical analysis is between 20-50% at the "whole of portfolio" level for a representative growth portfolio. Additional care and considerations should be given to individual portfolio objectives and hedging costs prior to implementation.

The Australian dollar is transitioning to a lower yielding currency with a more stable current account outlook. Capital flows will continue to work against the Australian dollar in the short term but are less likely to be driven by movements in overseas equity markets. We therefore expect overseas currency exposure to be less defensive than in prior periods of equity market stress and clients should bear this in mind going forward.

Mercer considers a 'set and forget' approach to currency hedging no longer appropriate, especially with the current negative carry against the USD. Investors should manage their currency exposure from a total portfolio level and adapt this approach during different market conditions.

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