



CAPTURED BY HEDGE RATIOS

Too often, discussions about foreign currency in investment portfolios get boiled down to one question: What is your hedge ratio?

Presumably, this question is aimed at an investor's global equity portfolio. The answer is generally somewhere around 50/50 for those with a neutral view on currency (or alternatively the 'hedge ratio or least regret') or linked to the current level of the AUD/USD rate for those with a more active bent. This is taken as received wisdom and the discussion moves on, usually without any further question.

In Context Capital's view, to reduce the discussion around currency exposure to a question of what percentage of global shares are hedged or unhedged is to miss the forest for a single tree.

Why, in the context of the total portfolio, is this question important? What about all the other asset classes? Which currencies do we or should we have exposure to? And ultimately, why do we have foreign currency in our portfolios at all? Is it just a consequence of most portfolios having some global exposure, or is there some problem we are trying to solve?

In this paper, we hope to encourage investors to shift their view of foreign currency away from global equities to a broader perspective. We start by examining the role of currency in a total portfolio setting. Next, we offer Context's perspective on how to measure and monitor currency exposure in a multi-asset portfolio.

We end with a discussion of how our approach can be implemented in adviser portfolios and offer some points for further consideration.





THE ROLE OF CURRENCY IN MULTI-ASSET PORTFOLIOS

In our view, the primary reason it is desirable for Australian investors to have exposure to foreign currency is because it provides portfolio-level diversification benefits resulting from the generally negative correlation of developed market foreign currency exposures relative to equity market performance.

The Australian dollar (AUD) has historically been a volatile "risk-on", or pro-cyclical currency. It tends to appreciate in equity bull markets and sell-off during economic stress events. This behaviour provides a natural hedge against equity downturns; as the value of the AUD falls, assets held in (some) foreign currencies appreciate, offsetting some equity losses.

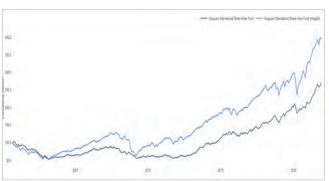
The benefits of the downside protection afforded by currency exposure must be weighed against the historical underperformance of unhedged returns relative to hedged. Currency hedging has generally provided a return benefit attributable to positive interest rate differentials, although we note that this "carry" effect has been much reduced or even eliminated in recent years as the RBA's monetary policy in recent years has caught up to the rest of the developed economic world.

This may seem like an academic point, but it is worth stressing. The excess return attributable to currency hedging is a mostly a function of positive interest rate differentials in Australia relative to other countries, not to movements in the spot exchange rate price. This is because the prices of currency forwards, the standard instrument used to implement currency hedging, are derived purely from the interest rate differential between two countries. That is to say, the price of a currency hedge has nothing at all to do with market sentiment or forecasts of where future exchange rates could be. This means that hedging has structurally rewarded Australian investors because rates have historically been higher in Australian than in other developed markets.

The graphs below demonstrate these effects. The first shows the performance of investments (via Vanguard index funds) in the MSCI World ex-Australia index, hedged and unhedged, from August 2000 to November 2021:



Hedged vs Unhedged Global Share Performance



Source: Vanguard, Jacobi

We see that, over the long run, hedging has added to total returns. As discussed above, it is important to note that this result is a function of interest rates; it does not necessarily depend on the movement of the Australian dollar against other major currencies. See for example the behaviour of the AUD against the US dollar over the same period noting the relatively narrow trading band for most of this period, and that the AUD/USD spot price in November 2021 was roughly the same as it was in August of 2004:



Source: au.investing.com

Examining the drawdowns of the two strategies though, we see that hedged global equity investments have offered significantly less protection against severe drawdowns:







Hedged vs Unhedged Global Share Performance in Selected Stress Periods

Portfolio	Max Drawdown during GFC (May 2007 – December 2009)	Max Drawdown During COVID (Feb – July 2020)
MSCI World ex Aus Unhedged	-37.4%	-12.8%
MSCI World ex Aus Hedged	-51.4%	-21.1%

Source: Vanguard, Jacobi

The information above is a demonstration of the general principle – for Australian investors, hedging tends to increase returns, while having unhedged foreign currency exposure adds downside protection. Extending this analysis beyond global equities to the total portfolio level is the next step.

BEYOND HEDGE RATIOS – TARGETING NET FOREIGN CURRENCY EXPOSURE

The analysis in the previous section prompts a larger question – how should we think about currency exposure in the context of a multi asset portfolio? We know that in general, most of the time, hedging increases our return expectation (because we pick up a carry benefit due to interest rate differences) but significantly underperforms in periods of extreme market stress (because we "give away" carry as the cost of our expected, though uncertain, tail hedging benefit).

Given the limited access of retail investors to explicit tail hedging strategies and the challenges facing bonds as an asset class in the current interest rate environment (see our "Using the Toolkit" paper, available on request or on our website), it stands to reason that we want some degree of exposure to foreign currency as a part of a broad approach to mitigating tail loss. But how much do we need, where do we get it, and how do we measure it?





MEASUREMENT

The major conceptual shift that we advocate is the move from thinking in terms of hedge ratios to net foreign currency exposure (FCE). That is, the thing that matters for multi asset class investors is what percentage of a portfolio, after accounting for any hedging, is exposed to foreign currency movements? Viewed this way, the hedge ratio for a given asset classes is not an end in itself; it is the means to achieve the end.

As an example, consider two investors both wishing to maintain a net FCE of 20% for their portfolio. Both completely hedges all asset classes except for international shares. Depending on the relative weighting of different asset classes, the hedge ratio of the global equity asset class needs to be adjusted to maintain the 20% FCE target:

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CALCULATING HEDGE RATIO EXAMPLE

Portfolio 1, 40% Allocation to Global Shares					
Asset Class	Allocation = A	Hedge Ratio = B	Contribution to net FCE = A x (1-B)		
Australian Shares	20%	N/A	0%		
Global Shares	40%	50%	20%		
Real Assets	10%	100%	0%		
Alternatives	5%	100%	0%		
Bonds	15%	100%	0%		
Cash	10%	100%	0%		
		Net FCE:	20%		

Portfolio 2, 60% Allocation to Global Shares					
Asset Class	Allocation = A	Hedge Ratio = B	Contribution to net FCE = A x (1-B)		
Australian Shares	15%	N/A	0%		
Global Shares	60%	66%	20%		
Real Assets	5%	100%	0%		
Alternatives	5%	100%	0%		
Bonds	10%	100%	0%		
Cash	5%	100%	0%		
		Net FCE:	20%		

Using this framework, it is clear why we do not believe that hedging ratio is the critical question; it is simply an input to help us achieve a given net FCE.





HOW MUCH?

With a clear currency measurement framework now at hand, the question then becomes how much foreign currency exposure do I need? Unfortunately, there is no clear-cut answer to this question.

Given our view that the primary role of currency exposure in multi asset portfolios is to manage risk, it follows that the main factor in determining an appropriate range of F/X exposure is the amount of growth assets in a portfolio. Broadly speaking, portfolios with lower growth assets require less currency to manage downside protection. At the other end of the spectrum, for portfolios that are entirely invested in growth assets, research indicates that the risk reduction benefits of net FCE begin to diminish around 30%. The range that is appropriate for a given investor will depend on a number of factors, not just the proportion of growth assets and it is therefore difficult and likely unhelpful to be proscriptive about a "correct" FCE.

We address our final consideration, being where should foreign currency exposure come from and what should it look like, in the next section.



IMPLEMENTATION CONSIDERATIONS

In practice, most retail investors will not have a large tool kit available when it comes to targeting currency exposure. Forward contracts on currency pairs are not a viable solution. There are not many investment products designed specifically to target currency. This means that currency exposure will very likely come from investing in unhedged funds or exchange traded products.

Given that global shares are usually a significant portfolio allocation, they are the most natural "lever" to control total portfolio exposure to FCE. While other asset classes may have unhedged vehicles available, they are unlikely to have a large enough allocation to move the dial at the total portfolio level. Also, the effects of currency explored in the first section of this paper are more significant for equities than for other asset classes.

Therefore, for most investors, the simplest and most effective solution will be to use the global share hedge ratio as their tool to control net FCE, while fully hedging all other asset classes. Using this approach, we recommend leaving passive MSCI World or ACWI exposures unhedged to gain exposure to a broad basket of currencies that roughly reflect the country weightings of the underlying stock holdings.

Sophisticated investors with more resources and a higher tolerance for complexity can take this approach a step further. We note that, when it comes to downside protection, not all currencies are created equal. Some currencies, such as the AUD and JPY, have historically offered better protection in stressed markets than others. By carefully choosing which products to leave unhedged, investors can take a more nuanced view on which currencies they would like exposure to. This approach requires careful, ongoing monitoring of underlying stock exposures and a view as to which currencies are likely to appreciate against the AUD in stressed markets going forward.

IMPORTANT INFORMATION

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