

The hedge premium revisited

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We probably get more questions on currency hedging than any other topic. In this note we revisit the subject, briefly explaining what it is and why it exists. We conclude the benefits of hedging largely outweigh the costs and that hedge premium is a significant addition to offshore asset expected returns, especially in a 'low yield' environment.

What is the hedging premium?

The hedge premium is essentially the difference between New Zealand and global short term interest rates. It equals the excess return earned on hedged versus unhedged assets, absent a permanent devaluation in the currency:

$$\text{NZ hedge premium} \approx \text{NZ cash rate premium} = \text{NZ cash rate} - \text{global cash rate}$$

The MSCI weighted New Zealand cash rate premium over the last 20 years is close to 3.0%. Looking at a much longer time-frame, the difference between the New Zealand and US cash rate since 1900 has been 1.6%.

Why the hedge premium equates to the interest rate differential

Say an investor has \$100 in US assets and wants to hedge it against a rise in the NZD/USD.

One way to do it would be to borrow \$100 from a US bank at the prevailing US cash rate and invest it in New Zealand bank at the prevailing New Zealand cash rate.

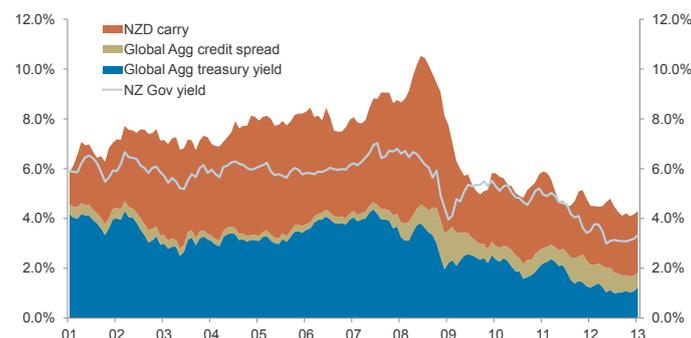
Now the investor would have no US dollar currency risk (the \$100 US asset is offset by the \$100 US liability) and they earn the spread on the New Zealand/US interest rate differential.

Arbitrage in the currency markets ensures forward currency contracts are priced to reflect the interest rate differential between respective cash markets. New Zealand domiciled investors wanting to hedge their US assets could purchase three month USD/NZD forwards at a discount to the spot currency rate approximately equal to the difference between three month New Zealand and US interest rates.

One reason the New Zealand cash rate is higher than offshore is that New Zealand needs relatively higher cash rates to attract short term foreign capital to fund persistent current account deficits. Another interpretation is the current account deficit simply reflects New Zealand's low level of saving relative to investment, and a higher interest rate is needed to contain inflation in the face of high domestic spending.

This hedge premium or 'carry' explains why global bonds have a higher running yield than domestic bonds, even though domestic bonds have a higher *market* yield.

Global aggregate v domestic bond yield



Source: Barclays, AMP Capital

AMP Capital estimates a hedge premium of 2.0% in our long term strategic asset allocation assumptions. This is because the current account deficit appears to be a permanent feature of our landscape. Even without it, small country risk should warrant some premium for investing in domestic versus offshore cash markets.

Is 2.0% enough to compensate investors for missing out on the diversification benefits of unhedged assets, particularly global equities? One way to answer this is to compare the historical beta of unhedged with hedged global equities, in order to estimate the required return differential of unhedged versus hedged global equities. Unhedged global equities had a beta of 0.75 with hedged global equities over the last 20 years. If the long term global equity risk premium is assumed to be 4.0%, the unhedged equity risk premium would be 3.0% (0.75 x 4.0%). This means the 'required' New Zealand hedge premium is only 1.0% per annum. In other words, the diversification gains of including unhedged equities over hedged should cost the unhedged investor 1.0%. As we have seen, it has cost them much more.

Summarising the costs and benefits

- > The currency hedge premium is a significant addition to offshore asset expected returns, especially in a 'low yield' environment.
- > Foreign currency does bring some diversification and downside improvements to portfolios, but with an opportunity cost of 2.0% per annum this is an expensive form of portfolio insurance.
- > On balance we believe investor portfolios should have some allocation to foreign currency, although a modest one. The diversification benefits do not appear to justify the high premium and we judge a permanent currency devaluation to be a low probability event. In contrast, there is a very high probability of earning the hedge premium.

While we conclude the benefits of hedging largely outweighs the costs, flexibility around the currency exposure provides scope to add value from mean reversion of the New Zealand dollar when it is judged to be materially mispriced.



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