Quay Real Estate Advisors
Preserve + Create

Investment Perspectives

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Key Points

When considering foreign exchange, hedging doesn't necessarily reduce risk

Our analysis would suggest that for a portfolio of international stocks being unhedged can

- reduce inter portfolio correlations,
- lowers long term volatility, and
- can act as a buffer in times of shock

Additionally, when currency moves adversely against a hedge a liquidity squeeze can also develop, potentially forcing a Fund to sell into what may be a falling market

Foreign exchange

Hedged or unhedged?

When thinking about investing in foreign markets what is the correct approach to foreign exchange risk – hedged or unhedged? In the design of the Quay Global Real Estate Fund we spent a lot of time considering this issue. In the end it came down to what we believe provides the least risk and allows the investors in the Quay Global Real Estate Fund the best opportunity to preserve capital through all cycles. The answer in our opinion was unhedged.

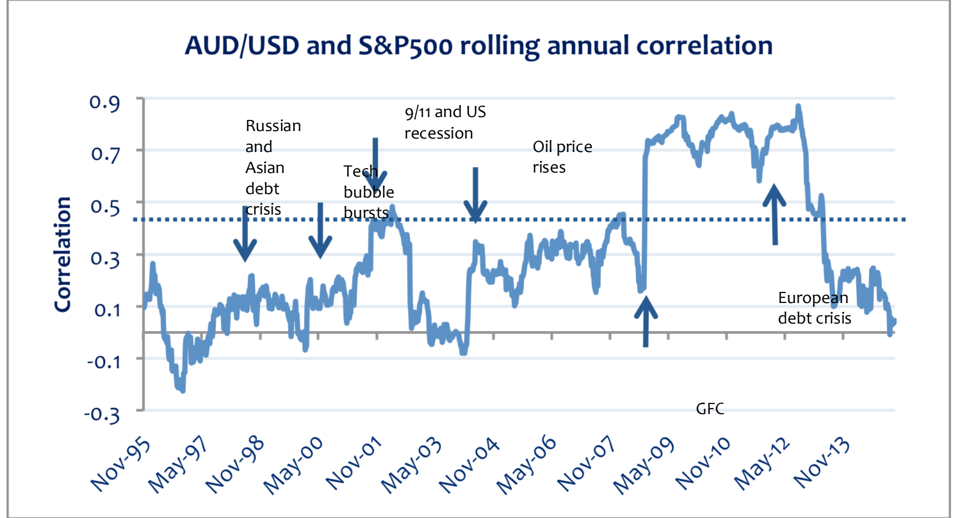
Our analysis would suggest that for an Australian investor with a portfolio of global listed real estate assets, being unhedged actually delivers a lower overall risk outcome in the context of:

- Reduces portfolio volatility and acts as a buffer in times of 'risk off',
- Reduces inter regional portfolio correlations, and
- Avoids the potential for a liquidity squeeze through margin requirements in times of 'risk off'.

Additionally, currency impact on total returns diminishes over time and as a country that imports a large proportion of its goods and services there is also a diversification argument for an Australian investor to invest in non-$A assets.

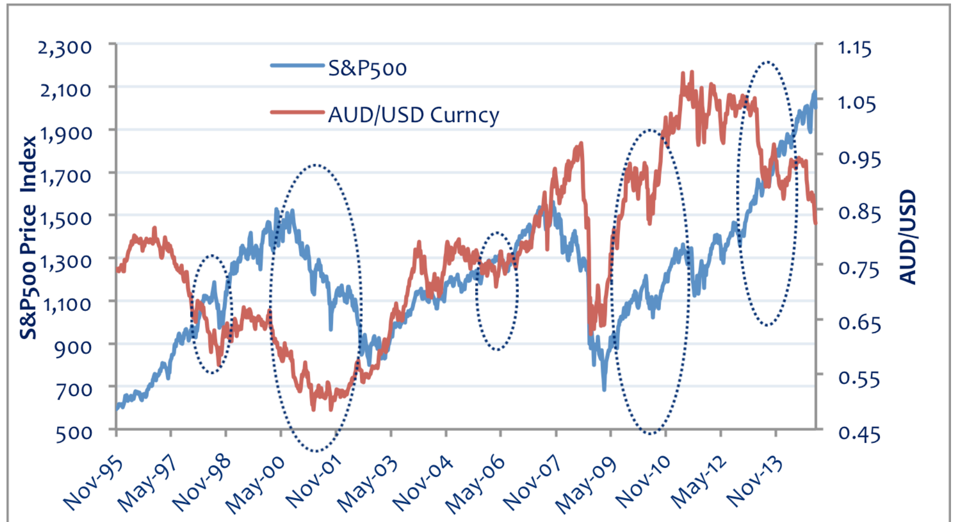
Portfolio volatility

Historically and especially at times of heightened risk aversion i.e. 'risk-off', the Australian Dollar ('AUD') / US Dollar ('USD') relationship has exhibited high levels of correlation to the S&P500.



Source: Bloomberg data, Quay estimates
Correlation calculations based on weekly price data

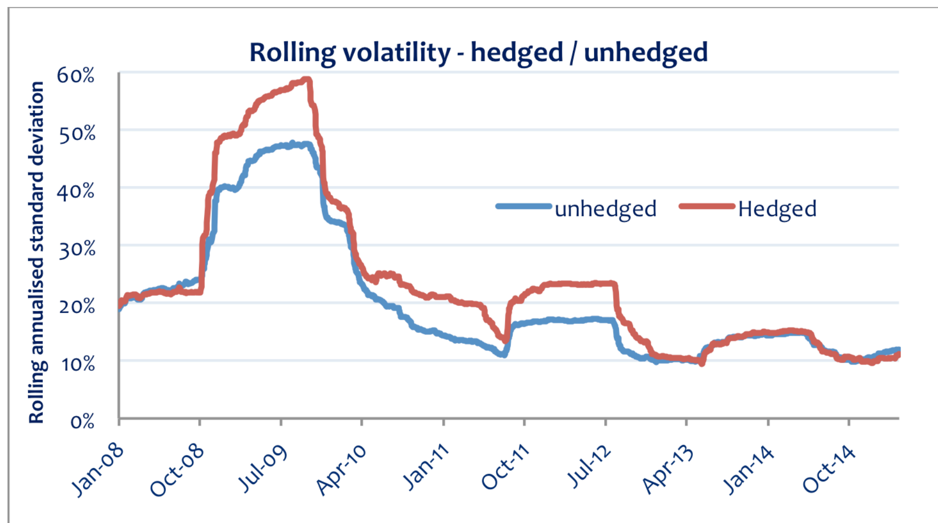
To express another way, the AUD is inclined to sell-off against the USD in times of 'risk off' or when markets are volatile. For an Australian investor, an unhedged currency exposure can act as a buffer against adverse share price movements in such times. This is not a recent phenomenon, as the chart above and below demonstrates, this relationship has been ongoing for 20 years.



Source: Bloomberg data, Quay estimates
Correlation calculations based on weekly price data

This relationship has the effect of reducing long term volatility for an un-hedged portfolio and importantly at the times when you need the protection the most.

This is illustrated in the chart overleaf. It represents Quay's current portfolio (backdated until 2008 to include the GFC) and measures annual volatility of weekly price returns.



Based on current portfolio back dated from Jan 2008 - Mar 2015
Source: Quay Real Estate Advisors

Inter-regional portfolio correlations

An unhedged portfolio also exhibits generally lower inter-regional correlations, offering greater diversity amongst portfolio holdings.

Unhedged Portfolio

	US	AU	LN	CA	HK	EU
US	1.00					
AU	0.18	1.00				
LN	0.24	0.09	1.00			
CA	0.16	0.02	0.22	1.00		
HK	0.28	0.11	0.15	0.05	1.00	
EU	0.28	0.16	0.42	0.28	0.22	1.00

Based on current portfolio back dated from Mar 2005 – Mar 2015

Hedged Portfolio

	US	AU	LN	CA	HK	EU
US	1.00					
AU	0.25	1.00				
LN	0.36	0.15	1.00			
CA	0.18	0.03	0.24	1.00		
HK	0.45	0.18	0.26	0.11	1.00	
EU	0.24	0.25	0.34	0.31	0.19	1.00

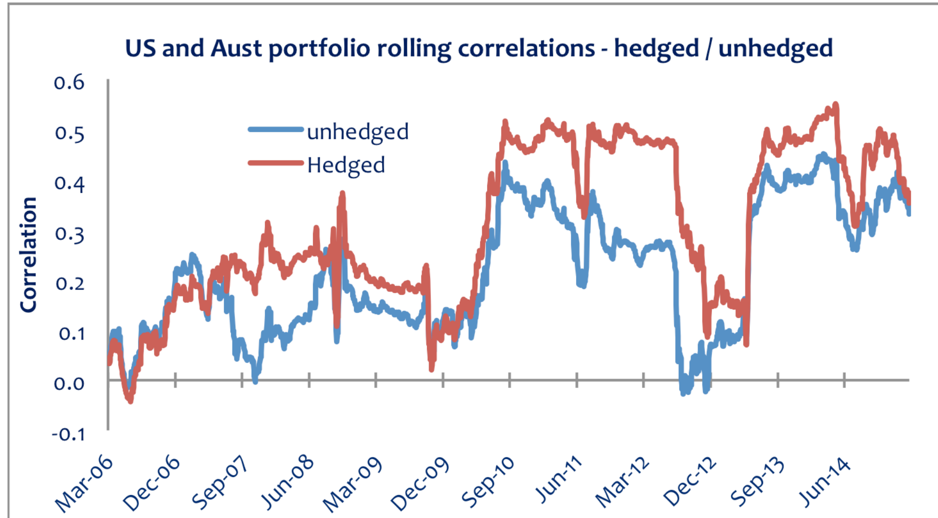
Based on current portfolio back dated from Mar 2005 – Mar 2015

The above tables represent Quay's current portfolio back dated 10 years and compares the inter-regional portfolio correlations.

The exception seems to be between the Euro/USD, GBP/USD and HKD/USD where there are marginally higher correlations for an unhedged portfolio. This would imply that in times of 'risk off' the respective currency generally doesn't fall as much as

the underlying securities. This may also be a function of our narrow number of holdings in those currencies.

Graphically the rolling correlations between the US and Australian portfolios are illustrated below.



Based on current portfolio back dates from Mar 2005 – Mar 2010

Liquidity

The experience of some global investors with hedged currency exposures during the GFC was not pleasant. Not only did they miss out on the cushioning effect of a depreciating AUD in the face of falling share prices, they also found themselves in a situation where losses on the hedge book needed to be covered with liquidity. In many cases distributions couldn't be paid and in fact investments had to be sold into a falling market to meet the mark to market requirements on the hedge book.

The tables following illustrate scenarios for a hypothetical hedged and unhedged portfolio. To keep it simple only 2 geographies have been used.

Hedged Portfolio		1. Status quo	2. Currency Falls 30% - Stocks unchanged	3. Currency Falls 30% - Stocks fall 50%
Geography	Weights	$ exposure	$ exposure	$ exposure
Aust.	50%	50.0	50.0	25.0
USA	50%	50.0	71.4	35.7
Stock - AUD	100%	100.0	121.4	60.7
Hedge				
Cash - AUD		50.0	50.0	50.0
Debt - AUD equivalent		(50.0)	(71.4)	(71.4)
Net Hedge contract position		**0.0**	**(21.4)**	**(21.4)**
NAV		1.00	1.00	0.39
Portfolio LVR (debt / (total assets)		33.3%	41.7%	64.5%

When the AUD falls a hedged portfolio becomes leveraged as the hedge contract moves "out of the money" (see column 2 above). This leverage creates 2 risks.

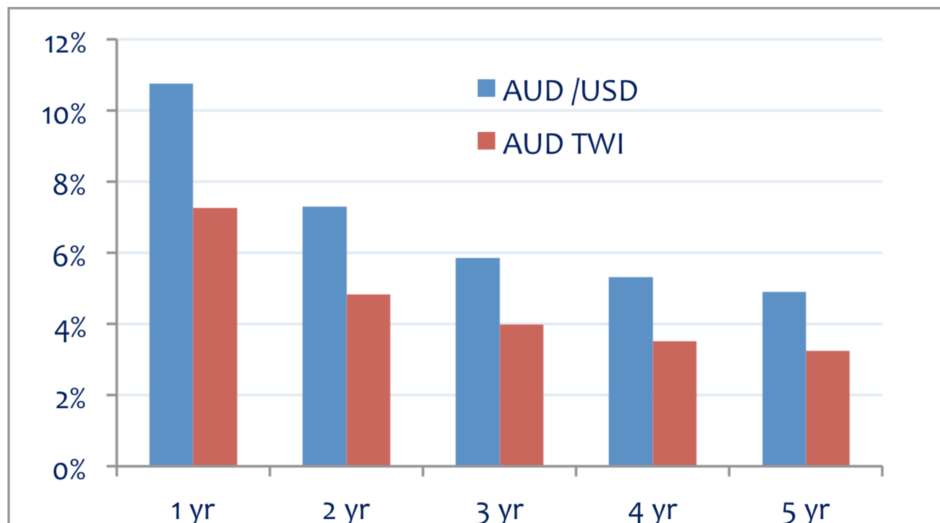
1. It accentuates the decline in the AUD NAV if the underlying assets fall in local currency terms (see column 3), and
2. Results in an over hedged position creating a liquidity event that may require funding by way of asset sales in a depressed market.

Unhedged Portfolio		1. Status quo	2. Currency Falls 30% - Stocks unchanged	3. Currency Falls 30% - Stocks fall 50%
Geography	Weights	$ exposure	$ exposure	$ exposure
Aust.	50%	50.0	50.0	25.0
USA	50%	50.0	71.4	35.7
Stock - AUD		100.0	121.4	60.7
Hedge				
Cash - AUD		0.00	0.00	0.00
Debt - AUD		0.00	0.00	0.00
Net Hedge contract position		0.0	0.00	0.00
NAV		1.00	1.21	0.61
Portfolio LVR (debt / (total assets)		0.0%	0.0%	0.0%

An unhedged portfolio has no such liquidity risk and the fund will never need to sell securities at a depressed price to fund a currency hedge contract and can remain patient.

Currency impacts diminish over time

In the graph below we have charted the absolute change in the AUD against the USD and the Trade Weighted Index ('TWI').



Source: Bloomberg, Quay Real Estate
TWI Weighted: USD (35%) Renminbi (25%), Yen (13%), Euro (9%), SKW (6%), UK pound (4%), Other (33%)

It highlights that over the long term stock picking and portfolio management will have a far greater impact on total return. Currency risk diminishes when

- Investment time frames increase, and
- Currencies are diversified

Quay's approach to currency management is

1. Diversify across currencies via portfolio constructions, and
2. Structure investment product with a recommended timeframe of 5+ years so that stock picking and portfolio management account for most of the total return

Concluding thoughts

At Quay we want our investors to enjoy a better standard of living in the future compared to today. Not only does this philosophy form the basis for benchmarking the Quay Global Real Estate Fund to an investment objective of CPI + 5%, it is also consistent with the decision to remain unhedged. This is because

- Australia imports $330bn of real goods and services per annum, accounting for approximately 20% of GDP;
- For an average Australian, approximately 20-30% of real goods and services consumed are produced offshore (cars, holidays, electronics, etc.); and
- According to the RBA, around 30% of inflation is defined as 'tradable' and subject to currency movements.

Therefore a fall in the AUD increases the cost of consuming imports and therefore represents a real loss of purchasing power for AUD denominated savings. Investing in an un-hedged Global Real Estate Fund can provide some protection against such loss of purchasing power. This would be particularly important during a tail risk event (i.e. currency crisis). Regardless, we think having some non-AUD investments makes good risk diversity sense.

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