Tending the *Hedge*

Strategies for effective currency management.

BY DINO BOURDOS

The prevailing belief, based on market observation over several decades, is that currencies tend to revert to mean over time and deliver a zero expected rate of return. Therefore, unless there is a deliberate speculative call on the future status of a currency, a decision to hedge primarily means an intention to reduce risk. Yet, given the complexities of the factors involved, it is not always clear which action—or inaction—will result in the desired risk reduction. The answer depends on what type of asset is hedged and where the hedging occurs.

For example, the benefits of currency hedging of developed market equity and fixed income investments depend on the pension plan's home country. If the plan's home currency appreciates in value relative to other currencies when global economic conditions are good, and equities are performing well, a plan may benefit by *not* hedging foreign currency exposures. This is due to the diversification benefits to plans that hold foreign currencies in their portfolios.

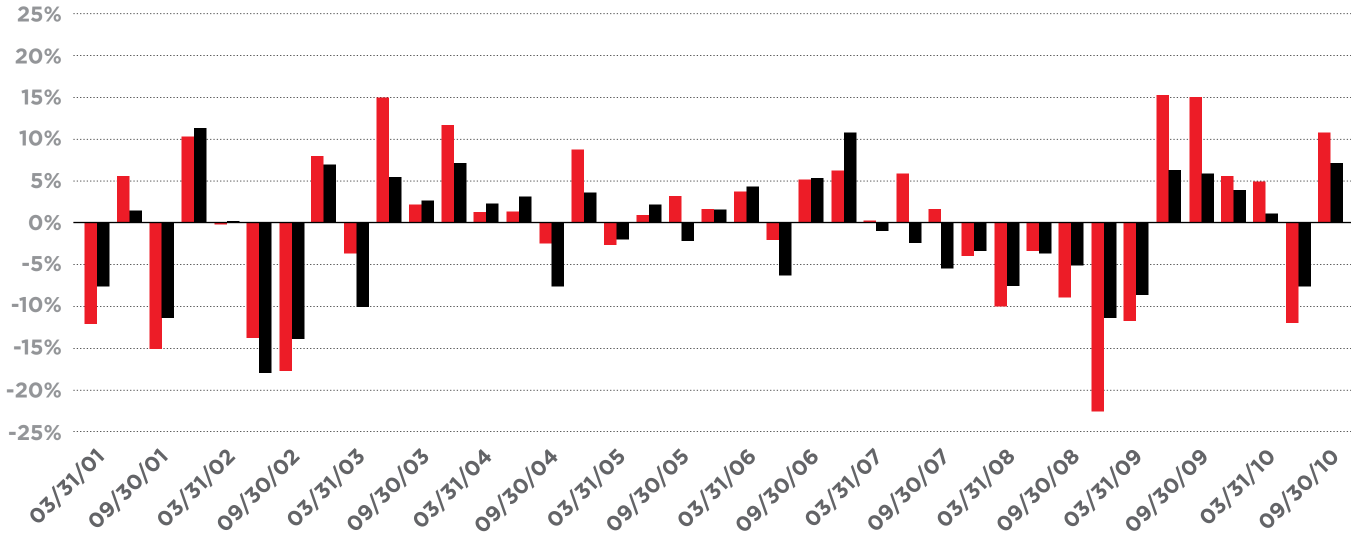
This relationship between the currency market and the equity market means that the returns from foreign investments will be less volatile because the currency translation dampens the overall returns. The effect reduces the foreign market return when times are good and reduces the impact of poor equity market return when conditions are bad. Figure 1 (on page 45) compares hedged and unhedged investments of S&P 500 returns, showing why it may be advisable *not* to hedge in developed equity markets. Here, the unhedged performance is less volatile than the hedged performance, simply because the currency translation effect dampens the extreme highs and lows of the returns.

The Canadian Context

Based on this data, from a Canadian pension plan's perspective, it is difficult to make a strong case for incorporating a policy decision for hedging global developed market equity exposures over the long term. Nevertheless, during shorter periods, large movements in currencies can have a large positive or negative impact on the total return of the portfolio when translated into Canadian dollars. As a result, many investors hedge some of their foreign developed market equity exposure and leave the rest unhedged—the "decision of least regret."

But as more Canadian plans add foreign fixed income investments to their portfolios, they need to decide whether or not to hedge currency in that market. Unlike equity markets, risk reduction is not the same with an unhedged portfolio (see Figure 1). The reason is that the volatility of the foreign currency is larger than the volatility of the underlying fixed income securities. A significant negative correlation is needed to provide diversification benefits, and that did not materialize for Canadian-based plans. This, then, is a strong case for Canadian plans to hedge foreign fixed income investments. In fact, TD Asset Management's analysis suggests that 100% of a foreign fixed income portfolio should be hedged.

Figure 1: S&P 500 Returns (Quarterly) March 2001 to September 2010



Source: S&P, Bloomberg, TD Asset Management

However, non-traditional investments such as hedge funds, foreign real estate and infrastructure and emerging markets are more complex. As with foreign fixed income, these investments are gradually becoming a larger proportion of many pension plans' portfolios. The opportunities and challenges associated with hedging the foreign currency exposure of the investments are worth exploring, especially in light of the challenges associated with trading, rebalancing and assessing the embedded currency exposures within these investments.

Non-traditional Investments

Hedge funds, foreign real estate and infrastructure have traditionally been used to provide a steady rate of return with moderate volatility over time. However, when these non-traditional investments are denominated in foreign currency, the volatility can be materially impacted by large swings in currency. The benefits experienced by plans of foreign developed market equities do not apply in these circumstances. In fact, these investments would be better hedged in their entirety.

Hedging can also have an impact on returns for real estate and hedge fund investments. In both cases, hedging can help to dampen the unpredictability and

variability that currencies introduce to an otherwise steady return. This is because the reduction in volatility associated with the correlation of the underlying asset return and the currency return is not sufficient to offset the incremental risk that the foreign currency introduces.

Unfortunately, currency hedging tends to be more complex when dealing with non-traditional investments because they are less liquid, valued less frequently and often less transparent. But there are ways to resolve these issues.

- **Less liquidity** – Liquidity can be generated from other areas of the portfolio to fund the mark-to-market payments from the currency hedges.
- **Infrequent valuations** – This results in lags in rebalancing the currency hedges, which leads to a mismatch between the hedges and the actual currency exposures in the portfolio. That said, if the main objective of these investments is to deliver stable, less volatile returns over time, the mis-weightings may be relatively small and inconsequential.
- **Lack of transparency** – This can be addressed by obtaining a breakdown of the geographical exposures within these investments on some pre-specified frequency and adjusting the currency hedges accordingly. Again, there may be some lags introduced; however, this will likely be minor relative to the benefits of hedging the bigger currency risk.

Emerging Market Equities

According to TD Asset Management, more and more pension plans are moving toward an All Country World Index benchmark for their foreign equity exposure; thus, emerging markets are becoming a more significant part of their investment portfolios. Providing insights on the potential benefits of hedging emerging market equities is more challenging because data on hedging is not as robust for emerging markets as it is for developed markets. Analysis is further hampered by the fact that many emerging market governments impose a number of controls to modify the free and open trading of their currencies in the capital markets.

Nevertheless, in an analysis of the volatility of emerging market returns and the impact of foreign exchange translations back into Canadian dollars, the outcome was similar—though not as compelling as the case with developed market equities. In both cases, plans must be prudent to maintain the foreign currency exposures in the portfolio because they provide diversification benefits. Not surprisingly, emerging market equities tend to perform well when the global economy is performing well, and this contributes to the strength of the underlying currencies within these emerging markets.

Simply considering the relationship of emerging markets' performance and their

currencies shows a negative correlation, but it is not as pronounced as the correlation for developed markets. So diversification benefits can be obtained by leaving some of the foreign currency exposure in the portfolio. In addition, the long-term secular uptrend in growth that many plans expect to persist in emerging markets may also warrant maintaining an exposure to emerging market currencies.

However, it is not uncommon for emerging markets to go through bouts of extreme volatility. Such a scenario could result in significant positive and negative impacts on the performance of the emerging market portfolio when translated into Canadian dollars. Again, to mitigate the "regret" factor, plans can implement a currency hedging policy that hedges a proportion of the foreign currency risk similar to policy decisions made with respect to developed markets.

Furthermore, plans need to consider a number of factors when trading and hedging emerging market currencies, and each emerging market must be evaluated on a case-by-case basis.

First, some emerging markets have restrictions and capital controls that make it challenging to trade in these markets without the appropriate account set-up at the custodian or local market broker. Often, there are complicated, time-consuming application processes, which can be costly and delay the set-up process.

Second, different time zones and language barriers can create obstacles that do not typically exist for developed market currencies.

Finally, the vehicles and documentation for hedging currencies may be more cumbersome and, therefore, create more strain on the processing, confirmation and settlement of these transactions. This is the case in restricted markets where there isn't an open and free market to trade currency forwards, requiring instead the use of non-deliverable forwards.

A Complex Decision

In deciding to hedge the non-traditional investments in their portfolios, plans will ask many of the same questions when deciding to hedge the traditional developed market foreign currency exposures. What is the optimal hedge ratio? Does hedging reduce risk? What are the complexities associated with hedging? From a risk reduction standpoint, hedging some or all of the currency exposure that is embedded in non-traditional investments seems to be warranted in pension plans—in certain cases.

Once pension plans decide to hedge, there are a number of complexities introduced with these investments that require additional consideration. Partnering with an experienced custodian and currency overlay manager is important to help plans navigate through the hurdles and cross-currents, and to assist with the set-up, implementation and ongoing management of the program. **BC**

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