Dynamic hedging a good option for managing currency risk

Many people grow up with the notion that it’s not good to take risks. However, it doesn’t take too much to realize that risks are everywhere and we should definitely try to avoid those that compromise our safety. It’s also common to hear that risks are opportunity or that it’s important to take them in order to succeed.

In the investment world, risk and return form a duet of concepts that permeate every decision made with respect to an investor’s portfolio. As everybody knows, it’s great when we can maximize return or minimize risk. For more than 50 years, modern portfolio theory has stated the combination of two risky assets can produce a similar return with lower risk than if you held only one of them. The secret is to have a low (or, better yet, a negative) correlation between the selected assets: their returns will then behave in such a way that the gains from one partly offset the losses from the other. The assets’ low correlation is said to diversify away their risk.

One way to increase the diversification of an investment portfolio is to add foreign securities. The globalization of financial markets makes it easier to invest in the capital markets of dozens of countries in both developed and emerging markets. Canadians have jumped on the opportunities, with a substantial portion of the typical pension fund portfolio invested outside of the country. Estimates put the allocation of Canadian pension fund assets to foreign public equity and fixed-income instruments at about 30 per cent, as of the end of 2014. While that still represents a significant domestic bias, it’s a major improvement on the 10 per cent share during the early days of globalization in the 1990s.

There are obviously some risks inherent in investing in foreign assets, including the currency risk. The risk is due to the uncertainty of returns on a foreign asset due to variations in the exchange rate between the time of purchasing and selling the asset. At its heart is the proven fact that exchange rate movements are extremely difficult to predict.

Consider a Canadian pension fund that decided to allocate $1 million to a U.S. equity fund on Jan. 1, 2015, and then terminated that investment mandate on Dec. 31, 2015. At the beginning of the year, the assets were converted to U.S. dollars and then deposited with the asset manager. While the Standard & Poor’s 500 index returned about 1.4 per cent in 2015 (in U.S. dollars), the Canadian dollar depreciated against the U.S. currency by about 19 per cent during the same period. When the Canadian pension fund terminated the mandate, it converted all of the assets back to Canadian dollars and, therefore, had about $1.21 million. Of the 21 per cent return it achieved on the investment, 19 per cent was due to currency effects alone.

That sounds like a pretty good deal. But the reverse could also have happened. If the Canadian dollar had appreciated against the U.S. currency, the pension fund would then have realized a loss of about the same magnitude. And even after incurring the gains, if the Canadian pension fund hadn’t terminated the mandate and did nothing else with its currency exposure, those increases may evaporate if the Canadian dollar fully reverses its 2015 movement (which actually started happening in the first quarter of 2016).

Options for pension funds

So what can pension funds do to control the currency risk? And, more importantly, how are Canadian pension funds answering the following questions: How much currency risk should they hedge? How should they go about doing that? And when should they take action?

Traditionally, a common answer was that plans weren’t hedging currency risk. Hopefully, that was because the plan sponsor was simply unaware of the implications. More plausibly, pension funds may be using a natural hedge property of the Canadian dollar. Historically, the U.S. currency has often appreciated against the Canadian dollar when the U.S. stock market had poor returns. The result is that currency gains generally offset U.S. stock losses and vice versa. But this natural hedge property of the Canadian dollar doesn’t work perfectly.

The approach may sound interesting because it decreases currency risk at no cost. However, it misses out on opportunities to consolidate currency gains, as would be the case with the example above, where the Canadian pension fund decided to keep its investment in U.S. stocks in 2016 and beyond.

Another common answer is that, due to the near impossibility of predicting exchange rate movements, plans fully or partially eliminated exposure
to currency risk. A common choice in that scenario is the 50 per cent static hedging or least-regret approach. While the static hedging approach is easy to understand and simple to implement, it has sometimes produced worse results, in part due to higher costs. Hedging currency risks involves the use of derivatives instruments that, for a cost, artificially introduce the desired negative correlation with the currency returns. The approach also misses out on opportunities related to current exchange rates.

There have also been some pension funds that have hired currency managers and given them discretion to implement directional and unrestricted positions based on their views on future currency movements in search for added value, an approach that effectively manages a portfolio of currencies as an asset class. However, very few investment managers have a solid track record in active currency management after fees.

Finally, there have been some recent innovative techniques in currency hedging that apply a disciplined approach where the level of hedging may vary in time according to certain criteria. This dynamic hedging approach uses exchange rate thresholds for changing hedging levels according to the portfolio’s exposure and historical exchange rates. It’s easy for plan sponsors and pension committees to understand and is simple to implement, while naturally avoiding behavioural biases that may result from allowing emotions to interfere with investment decision-making. Our research has indicated that dynamic hedging produces superior results from a risk and reward perspective as it takes current exchange rates into account, as well as long-term mean-reverting currency patterns.

The right answer for a given pension fund will nonetheless depend on many case-specific factors. It’s important to include strategic considerations of currency risk management in a fund’s investment policy and review them on a regular basis. The current market environment presents an excellent opportunity for pension funds to implement a currency hedging program, and the dynamic hedging approach can be the optimal solution for many of them.

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