Foreign Currency Exposures: Out of the Twilight Zone

by | **Ela Karahasanoglu**

Now is a good time for pension plans to review their currency exposure and investment policies on currency. This article offers tips for trustees with an advanced understanding of investments.

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Increased volatility in currency markets, and its visible impact on the underlying portfolios, has left many pension plan sponsors, in Canada and globally, scratching their heads with a major lingering concern: what to do with foreign currency exposures? The need to shift foreign currency management out of the twilight zone and onto the agenda of pension committee meetings has become increasingly common.

After enjoying a decent run up to parity with the U.S. dollar (USD) in the period after the 2008 economic crisis, the Canadian dollar (CAD) has toppled. Its decline against the USD has been deepening since mid-2014 (Figure 1).

The CAD has fallen from $0.93 USD in mid-2014 to a low of $0.75 by the end of September 2015—a decrease of roughly 20% over just 15 months. A Canadian dollar devaluation of such magnitude has meaningful implications and translates to an appreciation of some 25% to any USD-denominated holdings in the plan portfolio, due to currency exposure. However, if the CAD starts to appreciate versus the USD, the opposite occurs. Hence currency moves require plan sponsors' close attention.

The cumulative extent of the impact depends on the size of *all* foreign currency exposures in an underlying portfolio. According to the latest data by the Pension Investment Association of Canada (PIAC), Cana-

dian pension plans held an average of 27% exposure to non-Canadian equities as of December 31, 2014 (Figure 2). While this is a good starting point to gauge average foreign currency exposure in a pension plan portfolio, 27% does not accurately represent the total assets denominated in foreign currencies.

Many plans maintain meaningful levels of non-CAD-denominated alternative investments. Although a breakdown by currency of alternative investments is not available, PIAC data shows Canadian pension plans have an average exposure of 26% to alternative investments. As such, we would expect a representative institutional portfolio to have more than 30% of its investments denominated in foreign currencies. However, for the purposes of this paper, we assume 30% as our average base case scenario.

Examining the Impact of Foreign Currencies on Portfolio Returns

When a pension plan invests in foreign currency-denominated equities, the plan in fact buys both the equities and the foreign currency exposure as a package. Therefore, if the value of the foreign currency exposure versus CAD goes up over a certain period, and we assume the value of the equities remains unchanged during that time, the value of the plan's investment would increase because of the foreign currencies in that portion of the portfolio.

To illustrate the impact of foreign currency exposures, we turn to a simple example. Taking our previous conservative assumption of 30% exposure to non-CAD-denominated equities and alternatives, and factoring in a 10% increase or decline in the CAD, an institutional portfolio would experience a 3% impact on total returns:

30% Non-CAD Currency Exposure
× 10% Move in CAD
= 3% Impact on Portfolio Total Return

The extent and the direction of the impact on total returns depend on three factors:

1. Whether the CAD appreciated or depreciated
2. Whether the plan has some form of a hedge[1] in place
3. The extent and the timing of the hedge if one is in place.

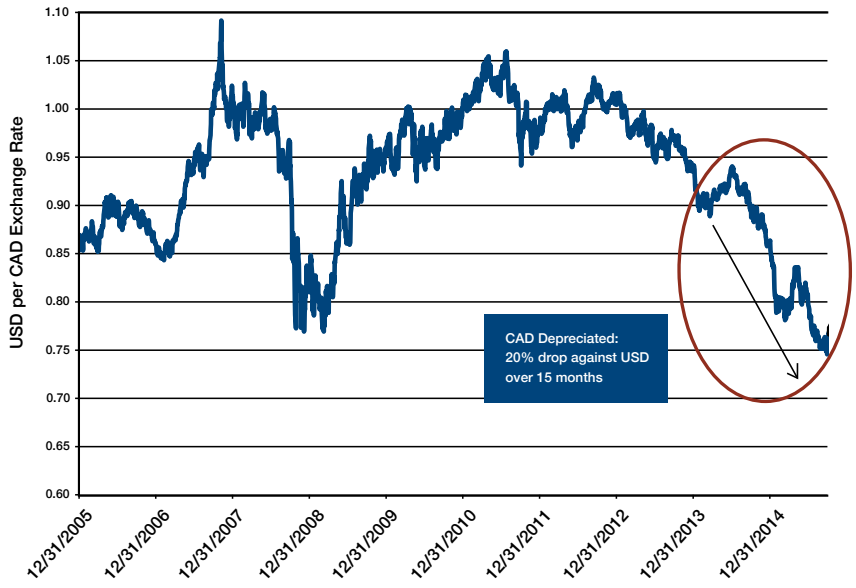
Putting the above into perspective, an investor with a 30% foreign currency exposure would see his or her portfolio appreciate by roughly 3% if the CAD depreciated by 10% against the same basket of foreign currencies in his or her portfolio, assuming the plan didn't have a currency hedge in place. While the numbers might seem somewhat high at first, this scenario accurately reflects recent market action.

Using the MSCI All Country World Index (MSCI ACWI) as an example of a Canadian institutional investor's international equity exposure, the equity index return was −3.4% in local currency terms (i.e., excluding any foreign currency impact) over the first three quarters of 2015 (Figure 3).

If the foreign exposure in MSCI ACWI was not hedged over this time period, the investor would have experienced a return of +8.5%. The 11.9% swing [i.e., 8.5% −(−3.4%)],

FIGURE 1

USD per CAD Exchange Rate Over the Last Ten Years



Source: Thomson Reuters Datastream, CIBC Asset Management Inc.

which more than offsets the equity returns, reflected by the red bars in Figure 3 comes from the non-CAD currency exposures in the MSCI ACWI Index. In other words, foreign currencies have been a significant driver of returns lately.

The impact over the long run is not always positive. Figure 3 also illustrates how the impact could be positive or negative and small or significant enough to offset the positive returns from the underlying equities. For instance, in 2007, the MSCI ACWI equity index return of +7.8% was more than offset by a currency impact of −12.7%, resulting in a net negative performance of −4.9%.

The cumulative impact of foreign currency exposures does not necessarily wash out or sum up to zero in the long run. Indeed, it could be sizable and negative or positive depending on the time period. For example, as of September 30, 2015, the five-year cumulative impact of foreign currencies in the MSCI ACWI was 16.1%, as denoted by the red line in Figure 4, compared with −34.7% at the end of 2007.

Remembering the Impact on Portfolio Volatility

In addition to considering the impact of foreign currencies on portfolio returns, investors should not ignore the effect on portfolio volatility. We acknowledge the wealth of research in the industry supporting an unhedged USD exposure given its diversifying capabilities for a Canadian investor. This is indeed the case as the USD offers safe-haven characteristics that could provide long-term negative correlation with global equities and portfolio diversification during periods of negative equity returns (Figure 5).

The benefits of negative correlation, however, tend to accrue over longer time frames, and negative correlation may not necessarily hold over shorter periods, such as from 2003 to 2007 and very recently. Time periods such as this can result in a reduced level of diversification for a portfolio with unhedged USD exposure. Hence, the volatility impact, similar to the return impact, fluctuates over time.

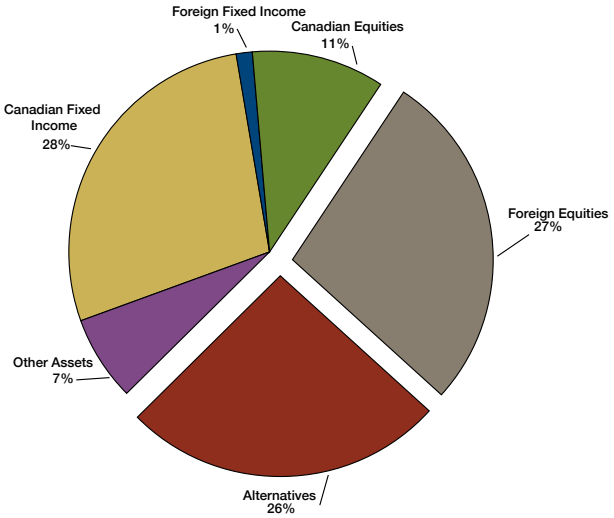
Managing Currency Exposure: Not a Matter of *If,* Rather *How*

If currencies have a meaningful and dynamic impact on portfolio returns as well as volatility, and not necessarily to the benefit of the portfolio, then the real question is not whether but ***how*** to manage currency exposures.

It is important to note that a one-size-fits-all solution for managing currency exposure is not effective and does not exist. Every portfolio has a unique DNA shaped by the investor's expectations and beliefs, the constraints of the underlying investment policy and the portfolio's specific composition and target objective. Hence, each specific case requires

FIGURE 2

Asset Mix of Canadian Pension Plans as of December 31, 2014



Source: Pension Investment Association of Canada, CIBC Asset Management Inc.

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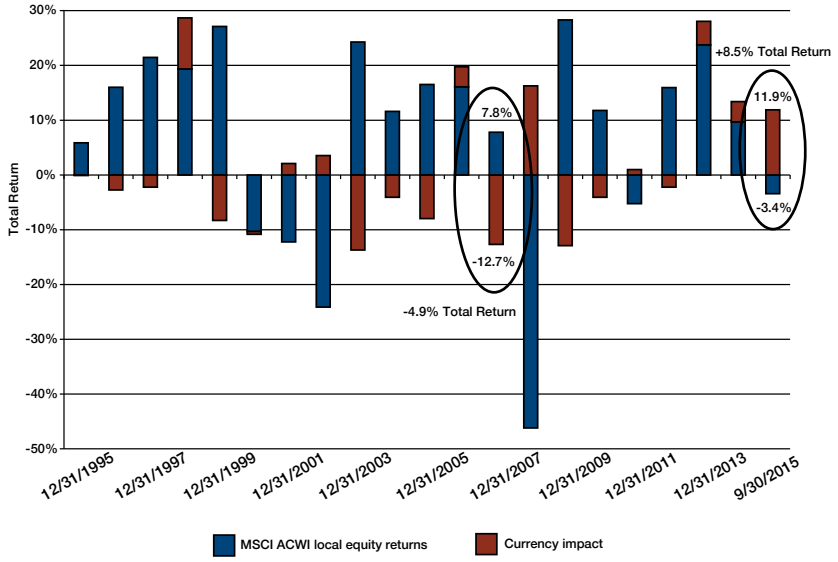
FIGURE 3

MSCI ACWI Local Equity and Currency Returns

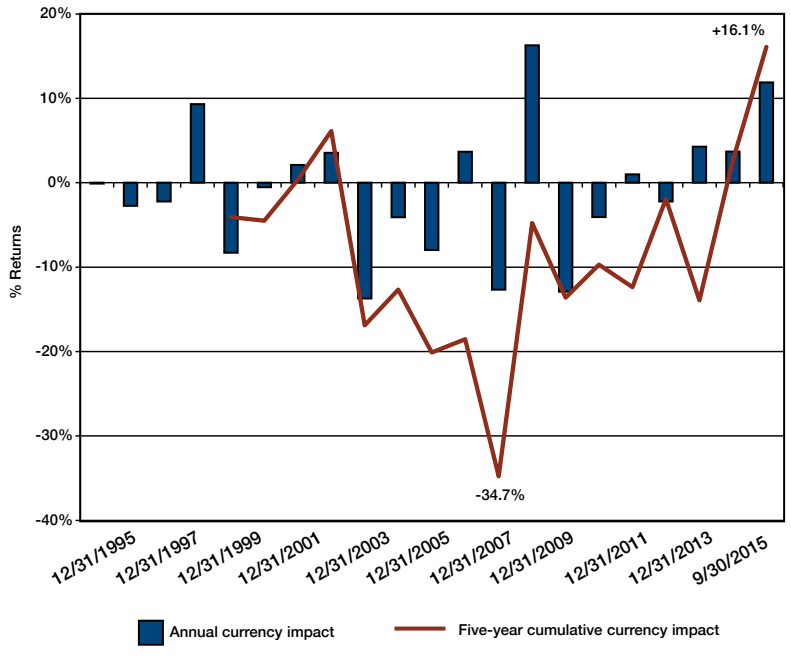


Source: Thomson Reuters Datastream, CIBC Asset Management Inc.

FIGURE 4

Impact of MSCI ACWI Currency Returns

Based on monthly observations from September 1995 to September 2015



Source: Thomson Reuters Datastream, CIBC Asset Management Inc.

a unique and bespoke solution. That said, currency management approaches could be classified under three main categories:

1. Passive Hedging

Passive hedging is the application of a strategic (i.e., long-term) hedge ratio, such as hedging 0% (i.e., leaving all foreign exposures unhedged), 50% (also known as a 50/50 hedge) or 100% (i.e., hedging all currency exposures back to CAD). The goal is to reduce both losses and gains on the foreign exposure. If the objective of a pension plan is to cover near-term liabilities, then eliminating the impact (positive or negative) of foreign exposure on those pension assets will help to control the funded status volatility of the pension portfolio.

Plans with limited resources to internalize or outsource more dynamic currency management are ideal candidates for this approach. Passive hedging can be implemented at a relatively low management fee with typically minimal oversight, but it requires some cash management to cover the potential cash flows from managing foreign currency exposures through forward contracts.[2] If there is a loss when the forward contract matures, the plan would need a small amount of cash to settle the forward contract.

Also, while a passive hedge would not detract from portfolio performance, it relinquishes the ability to improve the risk-adjusted performance of the underlying foreign currency exposures by exploiting potential opportunities in currency markets. Another important consideration is the application of a single static hedge ratio across

all foreign currency exposures. This may not be suitable considering the safe-haven characteristics of some currencies, which may behave differently during various market environments.

2. Active Hedging (a.k.a. Dynamic Hedging)

This more dynamic form of hedging aims to manage the foreign currency exposures over a short- to medium-term horizon rather than the longer term horizon used in passive hedging. While there is a broad range of applications and interpretations of this concept, the end goal is the same: to improve the impact of the nonlocal exposures (for a Canadian investor, this would be the non-CAD exposures).

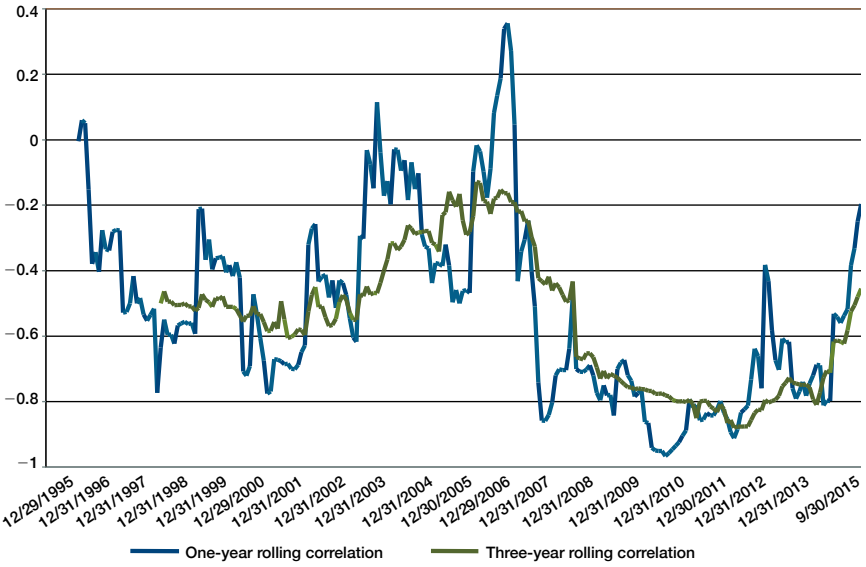
The potential solutions range from managing all or a select subset of major exposures in relation to the base currency (i.e., CAD) to using a broader set of currencies with an ability to cross-hedge (i.e., hedge a currency exposure back to a nonbase currency). In other words, if the portfolio has 10% euro (EUR) exposure and the view on EUR is negative, but the view on the CAD is equally negative, then the strategy might sell the EUR exposure and buy the British pound, which may not be in the underlying portfolio (also known as *out-of-benchmark position*).

While the former solution (i.e., managing exposures only in relation to the base currency) is a more restrictive format that seeks to eliminate the impact of currencies only in relation to the CAD, the latter allows for access to a broader set of opportunities and, thus, tends to result in a higher realized value-add for a given level of risk (or tracking error).

FIGURE 5

MSCI ACWI Local Equity Returns vs. USD/CAD Returns Correlation

Based on monthly observations from September 1995 to September 2015



Source: Thomson Reuters Datastream, CIBC Asset Management Inc.

Active hedging strategies can have exposure constraints that dictate the level of potential deviation from the underlying currency exposure. To illustrate, for a 10% USD exposure, the strategy could have the ability to reduce the exposure by 1% (i.e., a 10% hedge) or the entire 10% (i.e., a 100% hedge). Similar to using a broader set of currencies, the more relaxed the constraints, the better the chance of achieving a higher value-add objective for a given risk level.

Considering the intricacies of devising and implementing hedging, these strategies are typically only offered by specialized currency managers. Managers operating in this group will offer a broad spectrum of solutions ranging from discretionary to systematic (or rules-based) or a combination of the two. The time horizons are also equally broad with short-term (i.e., multiple days or weeks) and long-term (i.e., multiple quarters) strategies.

Active hedging takes market conditions and prospects for each currency into consideration. It is particularly appropriate for investors who don't want to be locked into a specific hedge ratio over the long term or the same hedge ratio across all currencies. In addition, the active component of an active hedging strategy signifies the investor has effectively assigned a small amount of risk to an alpha[3] source that allows for diversification.

The fees and time required for oversight in active hedging are slightly more onerous than for passive hedging. The negative cash flows on hedging through

forwards must be managed and, depending on the trading frequency, transaction costs could be higher.

3. Pure Active

A pure active strategy does not limit or link currency allocations to the foreign currency exposures in the underlying portfolio. The strategy seeks to exploit positive returns from the currency markets that are uncorrelated to traditional as well as nontraditional asset classes and, hence, is a diversifying alpha source to the broader portfolio. By expanding the opportunity set and the constraints, a pure active approach provides a better return to risk compared with an active or dynamic hedging mandate.

Pure active currency management is appropriate for investors seeking to diversify sources of returns in their portfolios and improve the return to risk in the return-seeking portfolio. Fees are scaled by the risk assigned to the strategy and are typically higher than passive but lower than hedge fund fees. Regardless of implementation, the negative cash flows must be managed and, depending on the trading frequency and the level of target risk, the transaction costs could be higher than for a hedging strategy.

Conclusion

With more visible moves in the currency markets, particularly in the CAD, the prevalent and increasingly important question for Canadian institutional investors has been what to do with foreign currency exposures. And without fully understanding the impact of foreign currencies on portfolio return and volatility, many institutional investors mistakenly believe the matter of managing currencies lies in the ***if*** and not the ***how*** of managing foreign exposures.

Managing currency exposure is a matter of how, and implementing a successful approach cannot be found in a one-size-fits-all solution. Effectively managing currency exposure should be based on an individualized strategy that begins with fully understanding the unique DNA of the portfolio's composition as well as the goals and constraints of the investor. With this understanding in place, the strategy should focus not only on protecting the portfolio from negative currency moves but also on improving the portfolio's risk-return characteristics while diversifying its sources of returns.

Endnotes

1. A *hedge* is an investment to reduce the risk of adverse price movements in an asset. Normally, a hedge consists of taking an offsetting position in a related security, such as a futures or a forward contract. Read more at www.investopedia.com/terms/h/hedge.asp#ixzz3rNo5Sn3D.
2. A *forward contract* is a customized contract between two parties to buy or sell an asset at a specified price on a future date. A forward contract can be used for hedging or speculation, although its nonstandardized nature makes it particularly apt for hedging. Unlike standard futures contracts, a forward contract can be customized to any commodity, amount and delivery date. A forward contract settlement can occur on a cash or delivery basis. Read more at www.investopedia.com/terms/f/forwardcontract.asp#ixzz3rNjoNhv8.
3. *Alpha,* often considered the active return on an investment, gauges the performance of an investment against a market index used as a benchmark, since it is often considered to represent the market's movement as a whole. The excess returns of a fund relative to the return of a benchmark index is the fund's alpha. Alpha is most often used for mutual funds and other similar investment types. It is often represented as a single number (like 3 or −5), but this refers to a percentage measuring how the portfolio or fund performed compared with the benchmark index (i.e., 3% better or 5% worse). Read more at www.investopedia.com/terms/a/alpha.asp#ixzz3rNm0wU1P.

BIO

Ela Karahasanoglu, CAIA, CFA, is vice president of currency and asset allocation at CIBC Asset Management in Toronto, where she works with the portfolio management team responsible for currency management, asset allocation and absolute return strategies. She was previously a principal and senior manager consultant in the alternatives boutique unit at Mercer Investments and has an M.B.A. degree from Georgetown University.