TD Global Investment Solutions

Investor Knowledge 20 Minutes

Currency Hedging Considerations for Canadian Investors

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- **Currency risk management is a key investment decision when investing in foreign assets.**
- **The currency hedging decision depends on the asset, with less risky assets usually requiring higher hedge ratios.**
- **How the asset and currency risks correlate is of particular importance for riskier assets. The key economic characteristics driving a currency hedging policy are investment horizon, asset and currency volatility and the correlation properties between the foreign asset and the currency pair.**

When investing in foreign assets, managing currency risk is a key investment decision. For Canadian institutional investors, the currency hedging decision depends on the type of asset, with less risky assets generally requiring higher hedge ratios. For assets with higher risk, how the asset and currency risks are correlated matters. Not hedging currency risk is an investment decision that impacts the domestic risk-and-return profile of a foreign asset for a Canadian investor.

This article reviews the rationale for making an optimal currency hedging decision, taking as an example the three main families of foreign equity investments relevant to most Canadian portfolios – stocks from Europe, Australasia and the Far East (EAFE), Emerging Market (EM) stocks and U.S. stocks. For Canadian investors, it has historically paid off to currency-hedge EAFE equities, while leaving exposure to EM and U.S. equities unhedged. However, U.S. equities may benefit from a dynamic currency hedging strategy which is underpinned by the assumption that the U.S. and Canadian dollar pair will continue to maintain the broad price range from the past 54 years.

Domestic Returns of Foreign Investments

A foreign investment's domestic return is a function of the return on the foreign asset and the return on the foreign currency exchange rate. Currency volatility adds noise to the domestic return of an investment in a foreign asset. The higher the currency volatility compared to the volatility of the foreign asset, the more consideration must be given to the currency hedging decision so that the currency risk profile does not substantially affect the risk of the foreign asset in Canadian dollar terms.

Figure 1: Drivers of a Foreign Investment's Return in Domestic Currency

Let's take as an example a Canadian asset manager investing in U.S. equities such as the S&P 500. Canadian dollars (CAD) are sold to purchase U.S. dollars (USD), which are then used to invest in the S&P 500. The investor has a long position in the S&P 500 and in the USD and CAD currency pair (USD-CAD). From then on, a stronger U.S. dollar enhances the Canadian-dollar-denominated domestic return of the S&P 500, while a weaker U.S. dollar lowers the domestic return in Canadian dollars.

Purpose of Currency Hedging

Currency hedging can serve two purposes: enhancing returns or reducing risk. Not hedging currency risk means implicitly making an investment decision to be long foreign currency exposure. Staying unhedged during sustained episodes of foreign currency weakness may suppress the return of the investment. A portfolio manager's expertise in foreign asset investment doesn't always translate into an ability to assess the economic merits of currencies. Hedging away the currency risk potentially allows the manager to realize the return of the foreign investment. However, currency hedging comes with explicit costs (the cost of carry and the transaction cost) that will need to be part of the decision process.

Four criteria generally play a role when designing an optimal currency hedging policy with the stated objective of risk reduction. The first one is the volatility of the underlying asset and currency pair. The second criterion is the cost of currency hedging. The third one is the expected correlation between the foreign asset and the currency pair. The fourth criterion is the currency pair's expected range boundedness and mean-reversion properties.

Optimal

Currency Hedging Toolkit

Currency forwards and futures are the commonly used financial instruments to hedge currency risk. Each comes with its pros and cons. Currency forwards are generally considered the better alternative thanks to their combination of higher liquidity, better customization and capital efficiency advantage. Figure 2 summarizes the main features of currency forwards and futures.

Figure 2: Main Features of Currency Forwards and Futures

	Currency Forwards	Currency Futures
Transaction Mechanism	• Traded over the counter (OTC)	• Traded on an exchange
Choice of Currency Pairs	• Fully customizable	• Standardized
Time of Transaction	• Continuous trading	• During exchange hours
Tenor	• Fully customizable	• Standardized tenors offered on an exchange
Liquidity	• Higher	• Lower compared to currency forwards
Credit Risk	• Counterparty risk management required	• No counterparty risk

Hedging Costs

Cost is an important factor to consider when deciding on a currency risk hedging strategy. There are two main types of costs associated with currency hedging.

- **Cost of Carry:**

  Conceptually, using forwards and futures to hedge currency risk is, for a period, akin to borrowing in the foreign currency and selling that currency in exchange for the local currency, which is then invested at a rate that is around the risk-free rate. The carry cost of this transaction fluctuates based on market conditions, and it is the difference between the interest rates of the borrowed and invested currencies.

- **Transaction Costs:**

  This relates to the bid-ask spread and broker fees associated with transacting futures or forwards. Currency forwards are some of the most liquid derivative contracts. They usually trade at an annualized cost which ranges from 1 basis point (bp) to 4 bps for most developed market currency pairs.

Almost always, the cost of carry dominates the transaction costs. Currencies with higher interest rates, such as EM currencies, tend to have a higher hedging cost (net debit to the hedger). Recent history has showed a positive hedging cost against the Canadian dollar (net credit to the hedger) for low-yielding currencies such as the Japanese yen and the euro but a negative hedging cost against the U.S. dollar. Figure 2 shows the estimated cost of carry for the G10 currencies against the Canadian dollar as of March 31, 2025.

Figure 3:
Cost of Carry for G10 Currencies

G10 country	Currency Code	Cost of Carry
British Pound	GBP	-1.8%
Norwegian Krone	NOK	-1.8%
United States Dollar	USD	-1.7%
Australian Dollar	AUD	-1.5%
New Zealand Dollar	NZD	-0.9%
Euro	EUR	0.3%
Danish Krone	DKK	0.6%
Swedish Krona	SEK	0.4%
Japanese Yen	JPY	2.3%
Swiss Franc	CHF	2.5%

Currency Forwards

A currency forward is an OTC derivative instrument. At inception, the market value of the forward is set to zero. Over time, the value of the forward will move with the fluctuations in currency value and interest rates. Mark-to-market exposure (MTM) may or may not be collateralized. Developed market foreign exchange forwards are usually not collateralized, but non-deliverable forward currencies are. The terms of the forward contract are flexible. The biggest advantage of currency forwards is the ability to completely customize the position (notional and maturity date) based on an investor's preference. Generally, no upfront margin or MTM collateral is required for G7 currencies on short tenors. At inception, counterparties mutually determine the notional, maturity date and collateralization rules.

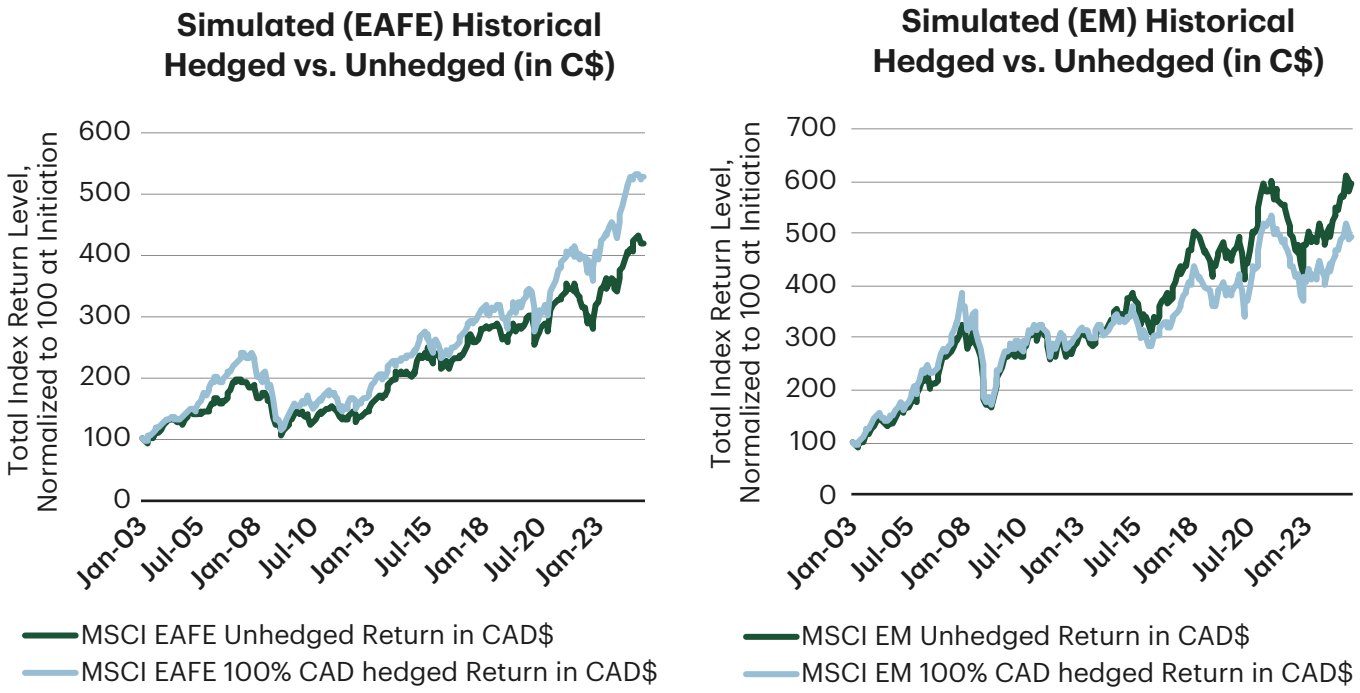
Currency Futures

A currency future is a standard derivative instrument listed and traded on an exchange. The terms of a future contract are standardized and determined by the exchange. Upfront margin requirements for G10 currency futures vary, but they generally fall from around 1% to 10% of the contract notional. Currency futures are deemed to have no or little counterparty risk as the contract is guaranteed by the exchange. That is one of the main advantages of currency futures compared to forwards. Currency forwards generally offer more flexibility, such as around-the-clock trading, fully customizable features, deeper liquidity and greater capital efficiency.

To Hedge or Not to Hedge: Historical Analysis

When considering whether to hedge or not to hedge currency risk, it can be helpful to look at the historical domestic Canadian dollar returns of unhedged and fully hedged investments in three major equity indices: EAFE, EM and S&P 500. Let's first look at EAFE and EM equities; the next section will focus on the S&P 500.

Figure 4: Historical CAD Return of Currency-Hedged vs Unhedged Investments in EAFE and EM



Source: Bloomberg finance L.P., TDAM calculations. As of December 31, 2024.

The analysis indicates that fully hedging the currency risk for EAFE equities has historically produced superior returns and lower risk. The likely reason for this outcome is the beneficial currency hedging cost of carry, explained mostly by the lower funding rates in European and Japanese currencies compared to Canadian rates.

For EMs, leaving the equity exposure currency unhedged has generally produced similar or better returns and similar risks, a result partly driven by the generally high cost of carry due to the higher funding rates of EM currencies.

Hedge or Not to Hedge U.S. Equities

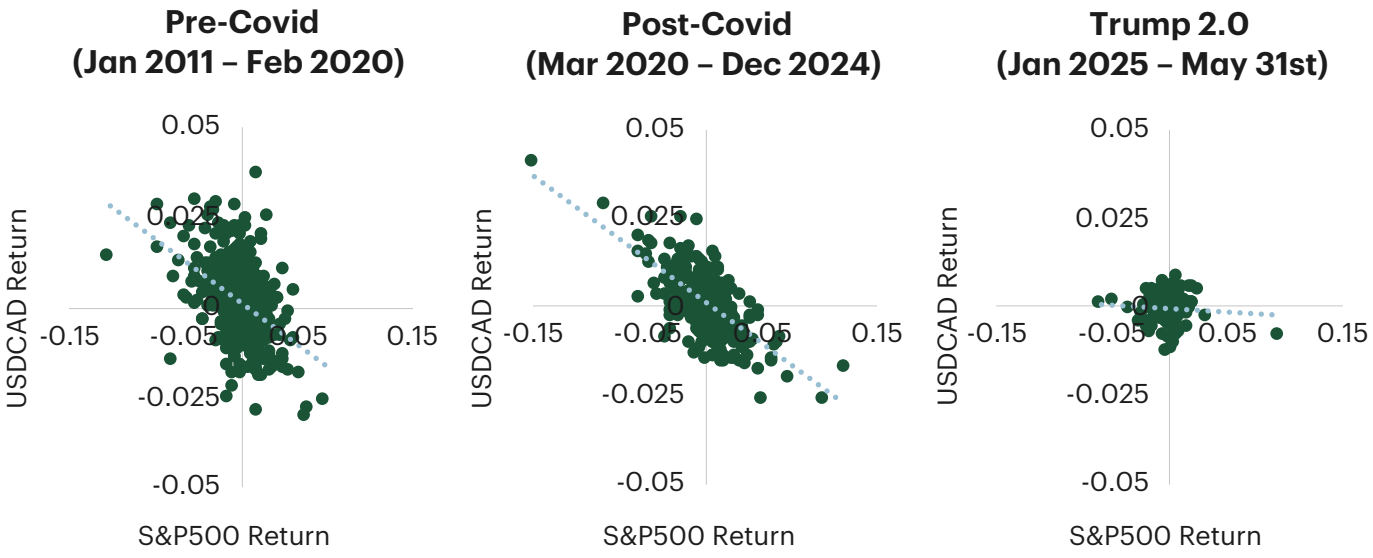
Counterintuitively enough, not hedging currency risk for U.S. equities has historically produced better returns, both on an absolute and risk-adjusted basis. This is due to a stronger U.S. dollar during periods of equity market weakness, when investors worldwide tend to flock to the U.S. dollar because of its status as reserve currency of the world. By staying unhedged, the negative correlation between S&P 500 and the USD-CAD pair has historically provided a natural hedge to Canadian investors exposed to U.S. equities. This is because weakness in the equity market has historically occurred at times of a stronger U.S. dollar and vice versa.

Investors who expect this negative correlation to continue going forward could leave unhedged most of their currency exposure to U.S. equities, thus organically benefitting from risk reduction in weak equity markets. However, it's important to note that the historically positive long-term correlation between the S&P 500 and the USD-CAD pair may not always hold.

Take early 2025 as a recent example: in the wake of the Trump administration's tariff policies, the U.S. dollar weakened during a U.S. equities sell-off. The U.S. dollar's track record of being the world's reserve and safe-haven currency is unlikely to change in the long run, as long as America's status as an economic and innovative technological powerhouse persists. However, some periods of breakdown in the negative correlation between the U.S. dollar and the U.S. stock market may be expected in the future. In the long term, short of the U.S. economy underperforming massively compared to the rest of the world, the case for the continued negative correlation between the S&P 500 and the USD-CAD pair cannot be easily dismissed.

For investors unwilling to bear the historical correlation breakdown risk over the short run, a higher currency hedge ratio for U.S. equities will likely be more appropriate.

Figure 5: S&P 500 vs USD-CAD Pair Returns

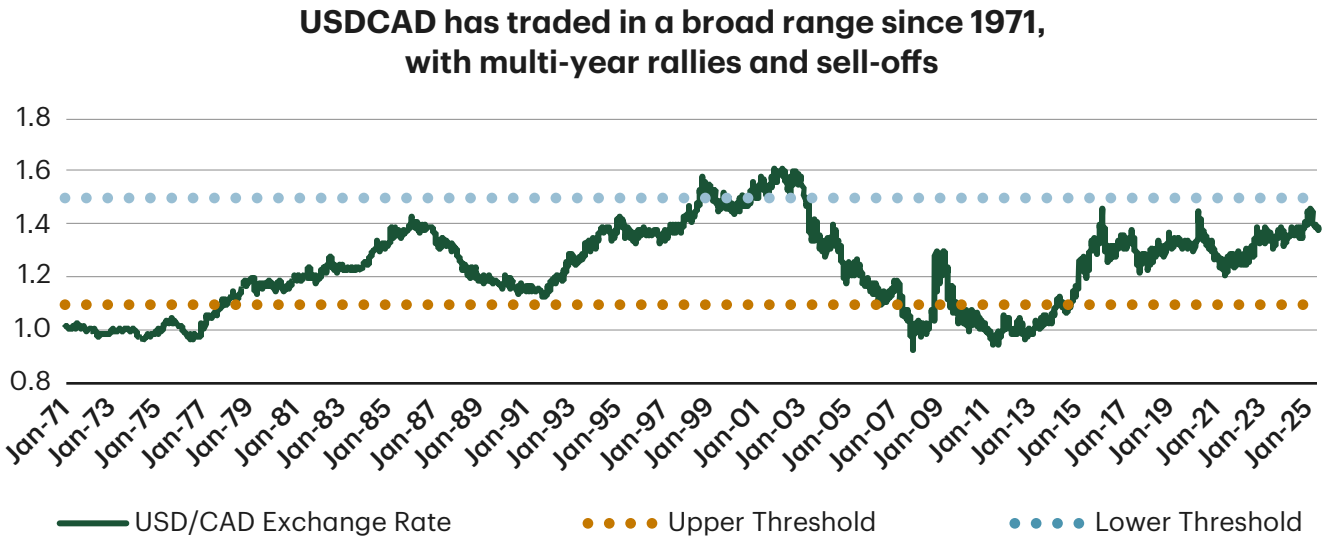


Source: Bloomberg finance L.P., TDAM calculations. As of May 31, 2025.

Dynamic Currency Hedging

For Canadian investors, relying on the negative correlation between the S&P 500 and the USD-CAD pair could generally be expected to provide strong risk-adjusted performance for an unhedged U.S. equity portfolio. However, the risk of correlation breakdown exists. This is why another hedging strategy can be explored, which relies on the USD-CAD pair to maintain the broad range it has held since 1971.

Figure 6: Historical Levels of USD-CAD Pair



Source: Bloomberg Finance L.P. As of May 31, 2025.

As can be seen from figure 6, the USD-CAD has been a range-bound currency pair, holding the range of approximately 0.95 to 1.60 from 1971 to 2025. There are several reasons for this broad range. Both countries' economies are joined at the hip and generally move in lockstep. Expectations for Canadian economic underperformance tend to manifest in the form of a greater difference between the two currencies' values. The USD-CAD pair's price tends to absorb the relative performance gap between the two countries. If the performance of the two economies stays within its historical norm, the USD-CAD pair can be expected to keep fluctuating within its broad historical range.

If the USD-CAD broad range cyclicality is maintained going forward, investors could benefit from a simple dynamic currency hedging strategy which

rebalances its hedge notional exposure based on the concurrent USD-CAD levels. The key assumption behind this strategy is that the historical range of 0.95 to 1.60 between the U.S and the Canadian dollar will largely hold in the future. If the broad range is to persist going forward, then higher hedge ratios are appropriate at expensive USD-CAD levels and vice versa. Figure 7 illustrates the form that such a threshold-based, active USD-CAD hedging strategy can take.

Figure 7: Threshold-Based Dynamic USD-CAD Hedging Strategy

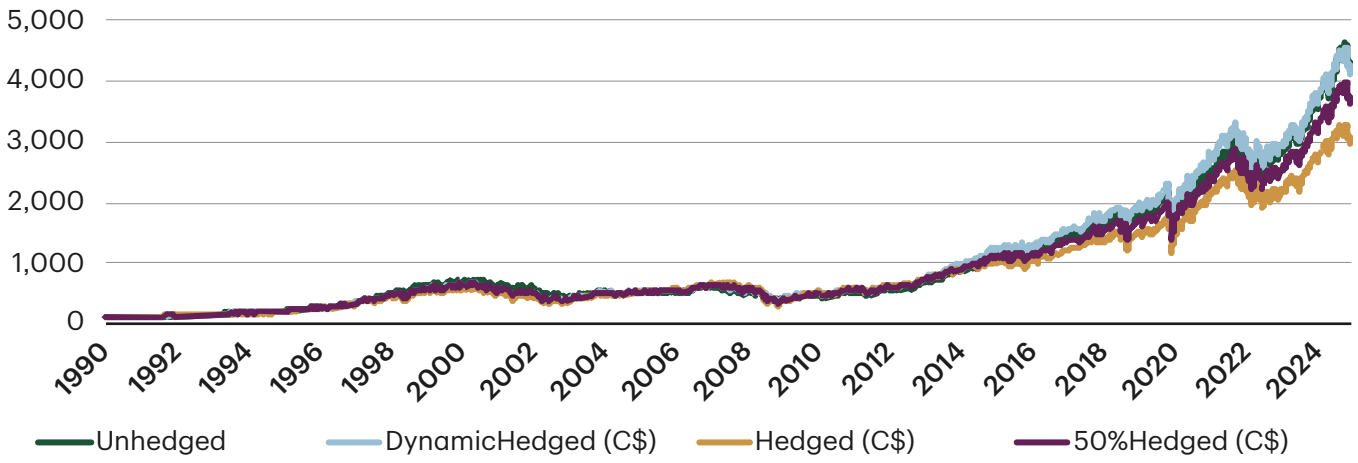
Threshold (USD-CAD Terms)	Hedge Notional Per Tranche (USD)	Cumulative Hedge Notional (USD)
Less than 1.10	0%	0%
Between 1.10 and 1.20	20%	20%
Between 1.20 and 1.30	20%	40%
Between 1.30 and 1.40	20%	60%
Between 1.40 and 1.50	20%	80%
Greater than 1.50	20%	100%

The hedge notional exposure is gradually increased as the Canadian dollar weakens against the U.S. dollar. Full exposure happens near the highest historical USD-CAD level of 1.5. Conversely, the hedge is decreased as the Canadian dollar strengthens and the USD-CAD falls through the thresholds, effectively monetizing the currency pair's mean reversion properties via the dynamic management of the hedge notional exposure. No hedge exposure occurs below a USD-CAD level of 1.1, which approaches the pair's lowest historical level of near-parity around 1.0.

The table and the chart comprising figure 8 compare the historical performance of unhedged, dynamic, full hedge and 50% hedge currency strategies. While the unhedged strategy delivered the strongest long-term returns, in most part due to the USD-CAD and S&P 500 negative correlation discussed above, the dynamic strategy performance was not too far off in terms of returns and risk. By adjusting the currency hedge notional exposure around the concurrent USD-CAD level, the dynamic strategy reduced the cost of hedging associated with a constant full hedging strategy. It also allowed for unhedged currency exposure, a position that generates more return than a full hedge strategy at times when the USD-CAD rises from historically lower levels.

Strategy

Figure 8: Simulated S&P 500 Historical Currency Hedging Scenarios (in CAD) 1990-2025



Simulated Performance (1990-2025)	No Hedge	Dynamic	100% Hedge	50% Hedge
Annualized Return (Compound Annual Growth Rate)	**11.4%**	**11.4%**	10.3%	10.9%
Volatility	**16.6%**	**16.8%**	18.5%	17.1%
Risk-Adjusted Return	**69%**	**67%**	56%	64%
Max Recovery Period (months)	**155**	**153**	80	154
Max Drawdown	**-54.2%**	**-47.7%**	-57.1%	-52.3%

Source: Bloomberg finance L.P., TDAM calculations. As of May 31, 2025.
Note: Please treat the analysis as an approximate estimate.

It's also helpful to explore the historical performance of the different U.S. equity currency hedging approaches (no hedge, passive full hedge, and an active hedging strategy) to see which one performed best in each decade.

Figure 9: Currency Hedging Strategies Across Periods

Time Period	No Hedge	100% Hedge	Dynamic Hedge	50% Hedge
1990-2025	✓		✓	
1990-1999	✓			
2000-2009		✓		
2010-2019	✓			
2020-2025	✓			

When analyzing the results by decade, it becomes clear that no strategy has worked best in all market environments. Hedging during the 2000s was the better option given the U.S. dollar's sustained weakness due to the tech bubble and great financial crisis emanating from the U.S. Partial hedging, or 50% hedging, represents the middle ground between the unhedged and hedged strategies, and as such it will never be the best or worst performer. Therefore, the 50% hedging approach is sometimes also described as the path of least regret strategy. Deciding between currency hedging strategies can be made easier by considering their outcomes across different market cycles.

Figure 10:
Pros and Cons of U.S. Equity Currency Hedging Strategies for Canadian Investors

Strategy	Pros	Cons
No Hedge	• No cost of carry = no return drag • S&P 500: benefits from the historical natural hedge properties if USD remains a safe-haven currency • Tailwind at times of sustained USD strength	• S&P 500: U.S. policies and fiscal situation is putting the USD status at risk in 2025 • Underperforms at times of sustained USD weakness (2004 to 2011)
100% Hedge	• Beneficial at times of USD weakness • The 2000s were a decade when hedging provided better returns • Protects against a possible weakening of the USD status as world reserve currency	• Negative cost of carry can be a drag on returns • Over time, it has generally performed worst on a risk-adjusted basis • Negates the historical natural hedge provided by the USD flight to safety in risk-off environments
Dynamic Hedge	• Conceptually suited for range-bound currencies • Higher hedge ratio at weaker CAD and vice versa • Cost-effective compared to 100% hedge	• Reduced effectiveness if currency dynamic breaks and currency starts trending out of long-term range • More operationally intensive
50% Hedge	• Its properties fall between the no hedge and 100% hedge strategies • Path of least regret	• Its properties fall between no hedge and 100% hedge strategies • Path of least regret

Conclusion

Investors can benefit from currency hedging to better control foreign investment risk. TDAM's proposed approach to mitigating currency risk is to overlay the equity exposure with a currency forward. The amount of currency forward hedge is periodically rebalanced according to the fluctuating market value of the asset. A personalized approach is optimal when it comes to determining the best currency hedging strategy. Choosing to hedge a foreign asset investment actively, passively or not at all requires thoughtful analysis. This analysis should take into account investment objectives, risk tolerance and the macroeconomic environment - as well as the volatility and correlation dynamic of the portfolio's assets and currencies. ■

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