Managing Currency Risk within Global Real Estate

This paper summarizes our findings with regards to the impact of currency hedging within an unlisted global real estate strategy. Unlisted global real estate comprises of privately-owned real estate assets, which are more suitable for longer-term investors willing to be compensated for the private (i.e. illiquidity) premium.

Executive Summary

Our research determines that there is not a uniform approach to managing currency risk: both academics and practitioners have arrived at no firm consensus on how to effectively manage currency risk in a global real estate portfolio.

Our findings conclude that while currency fluctuations may affect returns in the short term, they do not materially impact returns of an unlisted global real estate strategy in the long term, as currencies tend to revert to their historic levels. There are also costs associated with currency hedging that may outweigh the benefits (i.e. lower volatility) of hedging.

Additionally, investors can naturally hedge currency exposure and limit the amount of formal hedging required over the longer term by diversifying across a broader basket of currencies, using leverage in local currencies, and having a long-term investment horizon, which an open-end fund structure can facilitate.

Finally, we believe that hedging should not be done in isolation within a single asset class, but should be done with consideration to all foreign currency exposure within a broader multi-asset class portfolio, which can include equities, fixed income, real estate, infrastructure, and private equity. Therefore, the TD Greystone Global Real Estate Fund L.P. will not implement currency hedging. For clients who wish to hedge their currency exposure, TD Asset Management has the ability to design and implement currency hedging strategies to help meet specific objectives.

Research and Industry Practice on Mitigating Currency Risk

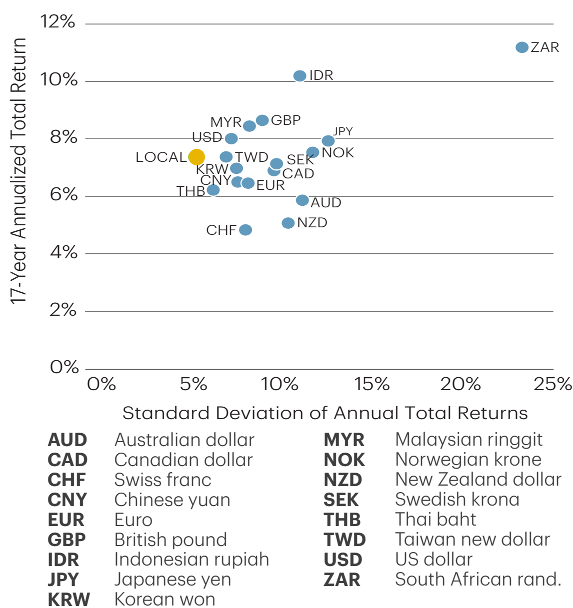
There is no conclusive approach to managing currency risk in a global real estate portfolio. However, there have been numerous studies that both support and oppose currency hedging.

Academic studies have found that there is no significant difference between hedged and unhedged returns and that hedging a well-diversified portfolio of international property investments may not be cost effective.[2] Industry practitioners have used approaches that range from remaining unhedged, being partially hedged, or adopting fully hedged strategies. One study has showed that hedging only the capital return rather than the total return can help minimize volatility.[3] These widely varying management practices reflect a variety of factors, including investment objectives, investment constraints, and beliefs about currency markets.

Impacts of Currency Volatility

A global real estate portfolio can provide stable risk-adjusted returns and offer diversification benefits relative to a traditional equity and fixed income portfolio. A challenge facing global real estate investors is that foreign exchange movements can have a substantial impact on performance when returns denominated in local currency are translated back to an investor's reporting currency The chart below depicts the MSCI Global Property Index in local currency terms and in several different reporting currencies.

Chart 1 — MSCI Global Property Index, 2001–17



Source: MSCI Global Intel PLUS. As at 2017.

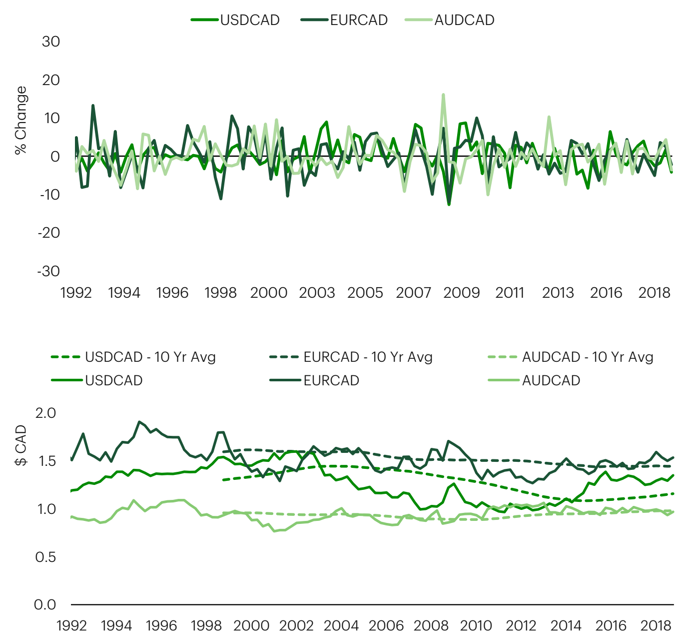
[2] International Diversification of Property Stock, Kwame Addae-Dapaah, Choo Boon Kion.

[3] Pension Real Estate Association.

In the short term, exchange rates are difficult to forecast and may exhibit volatility (see **Chart 2**). For example, countries that have commodity-dependent economies, such as Canada and Australia, tend to have more volatile currencies as currency values tend to fluctuate with commodity prices. Nevertheless, we tend to see currency volatility decline over the longer term (see **Chart 3**).

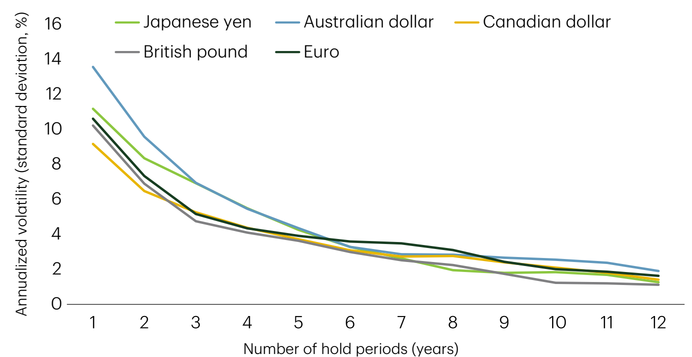
Currencies may also be subject to sharp movements during severe economic events. Such periods are marked by a "flight to safety" to reserve currencies. Examples include the Mexican crisis in 1994, the Asian crisis in 1997, and the European Sovereign Debt Crisis in 2010. However, currencies tend to revert to the mean over the long term (see **Chart 2**).

Chart 2 — Foreign Exchange Rate



Source: Bloomberg Finance L.P. TD Asset Management. As at 2018.

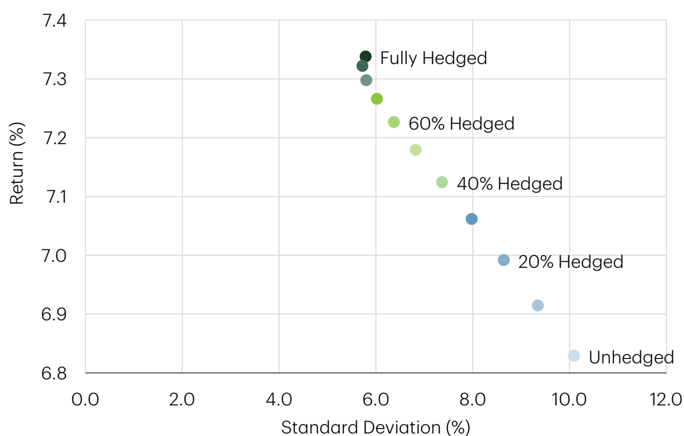
Chart 3 — Annualized Volatility of Currency Impact over long hold period (Exchange Rate to USD)



Source: Bloomberg Finance L.P.; data as at December 2016. Volatility estimates are based on historical U.S. dollar-denominated currency exchange rates data between 1999 and 2016. Annualized return volatility calculated using annualized returns on quarterly exchange rates.

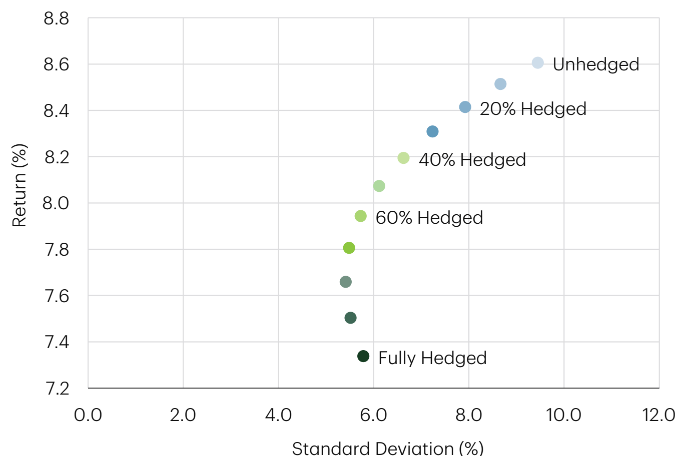
To understand how currency fluctuations affect an investor, we analyzed a global real estate portfolio (using the MSCI Global Annual Property Index as a proxy for global real estate) on a hedged and unhedged basis for Canadian, U.S., U.K. and Australian domiciled investors. Over the longer term, there was no significant difference in returns between the unhedged and hedged portfolios. In fact, with regards to volatility, the study shows that there are diminishing marginal benefits as an investor moves from unhedged to a fully hedged portfolio (i.e. moving from 0% to 20% versus 60% to 80%) (see **Charts 4 and 5**). The associated hedging fees were not considered in the analysis. These fees, which in some cases can be significant, would ultimately lower the expected return.

Chart 4 — MSCI Global Annual Property Index for a CAD Investor, 2001–17



Source: MSCI Global Intel, PREA, TD Asset Management. As at 2017.

Chart 5 — MSCI Global Annual Property Index for a GBP Investor, 2001–17



Source: MSCI Global Intel, PREA, TD Asset Management. As at 2017.

Cost Associated with Currency Hedging

There are several expenses associated with currency hedging that must be borne by the portfolio. These costs can range between +/-200 basis points and depend on several factors, including:

Bid-offer spread: although the bid-offer spread is narrow for most currencies, the rebalancing to the target hedge ratio can add to the overall cost and detract from performance.

Currency options: the cost associated with buying options may outweigh the benefits of the hedging strategy (i.e. long currency options may expire “out of the money”).

Forward contracts: forward contracts need to be “rolled” (i.e. renewed) to maintain the hedge position. This will generate a cash inflow or outflow. When investors wish to hedge a foreign currency exposure, they implicitly pay the foreign cash rate and receive the domestic cash rate.

Administrative: currency hedging may involve overhead costs related to back-office operations, technology systems and/or maintaining cash accounts to receive foreign currency payments.

Our rationale is that currency effects are negligible in the long run, as exchange rates revert to historical means or their fundamental values. It is unlikely that investors will experience long-term gains by speculating in currencies, especially after netting out management and transaction costs. Therefore, both currency hedging and actively trading currencies represent a cost to a portfolio with little prospect of consistently positive active returns.

Natural Hedging Characteristics Embedded within Global Real Estate

Investors choosing to employ an active currency hedging strategy need to account for the natural hedging characteristics that offset currency volatility when investing in direct real estate. Natural hedges include currency diversification, the use of local leverage, the non-linear relationship between currency and real estate values, and fund structure (i.e. open-end vs. closed-end).

Similar to being diversified across multiple property types, locations and risk strategies, being diversified across multiple currencies can help reduce overall risk at the portfolio level. The varying cross-currency correlations among countries act as a natural hedge and decrease currency volatility over the long term.

Given the use of leverage in real estate, local debt can offset fluctuations in currency. A natural hedge is achieved when foreign exchange fluctuations impact both an investor's assets (property) and liabilities (mortgages), and thus can partially cancel out currency effects.

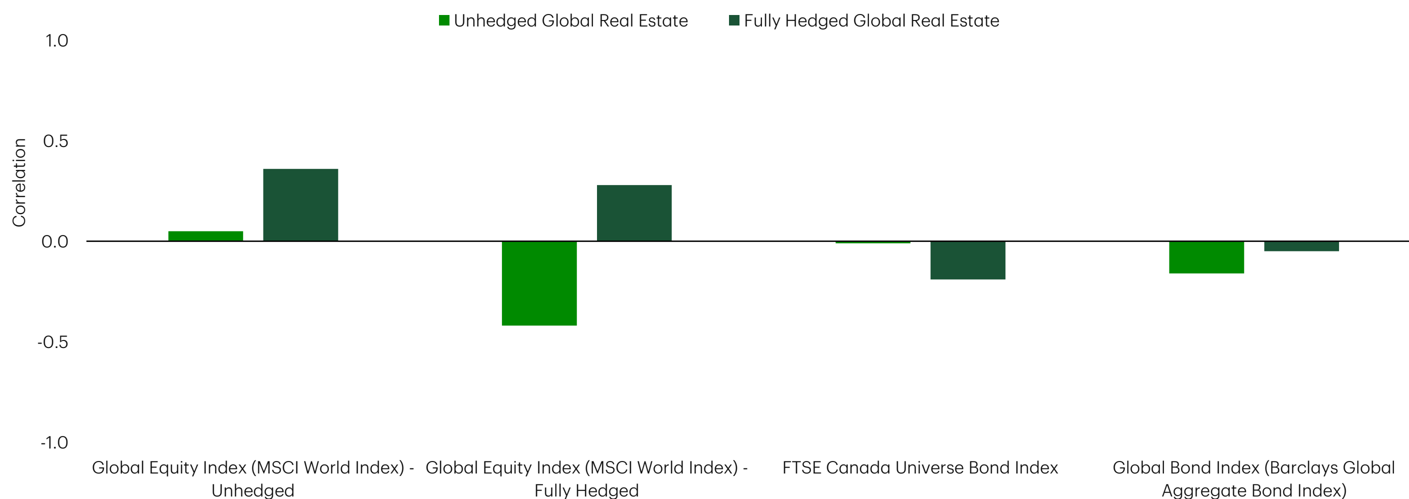
Foreign currency devaluation in the short term can be a headwind on reported returns for investors, as the property value and income of the asset decreases. However, currency devaluation may also cause exports to grow due to the higher foreign demand for that country's goods (i.e. goods become relatively inexpensive given currency devaluation). This is likely to stimulate the economy, which in turn supports rental growth and stronger property fundamentals in the mid-term.

Finally, open-end fund structures can help mitigate currency risk relative to closed-end structures; open-end funds have longer-term investment horizons (i.e. lower turnover), which provide greater control over timing of acquisitions and dispositions within local markets.

Measuring Currency Impact within a Multi-Asset Class Portfolio

From a multi-asset class perspective, investors need to consider how an unhedged and hedged global real estate portfolio can impact the risk, cross-asset correlation and return profile of the broader portfolio. As **Chart 6** illustrates, an unhedged global real estate allocation tends to be less correlated with other asset classes. The unhedged portfolio's lower correlation can serve as a strong diversifier within a multi-asset portfolio. This can help investors reduce total portfolio volatility despite greater short-term volatility within an unhedged global real estate allocation.

Chart 6 — Correlation to Other Asset Classes



Source: MSCI, Bloomberg Finance L.P. As at December 1998 - December 2017.

Perspective

Conclusion

Based on our analysis, we believe that the TD Greystone Global Real Estate Fund L.P. (the "Fund") can best serve its clients' objectives as an unhedged fund. The Fund's exposure to a diversified basket of currencies in developed markets should result in lower currency volatility versus an international fund largely focused on one or two countries. Moreover, given the longer-term investment horizon, open-end structure and expected low portfolio turnover of the Fund, we expect that the impact of currency fluctuations will be muted over the long term. The use of leverage within local real estate markets can also act as a partial hedge to currency fluctuations.

If reducing portfolio volatility is a client's primary objective, we believe that the decision should be made in the context of the investor's broader multi-asset class portfolio and not in isolation of a single investment strategy (i.e. global real estate allocation).

Ultimately, the decision to hedge should be determined by individual investors and their preferences for risk and return, domicile, cost, and any regulatory barriers that may be in place. ■

Contact us to find out how TDAM can bring new thinking to your most important challenges.

1-888-834-6339 | inst.info@tdam.com | tdaminstitutional.com

Numbers may not add due to rounding.

The information contained herein has been provided by TD Asset Management Inc. and is for information purposes only. The information has been drawn from sources believed to be reliable. Graphs and charts are used for illustrative purposes only and do not reflect future values or future performance of any investment. The information does not provide financial, legal, tax or investment advice. Particular investment, tax, or trading strategies should be evaluated relative to each individual's objectives and risk tolerance.

Certain statements in this document may contain forward-looking statements ("FLS") that are predictive in nature and may include words such as "expects", "anticipates", "intends", "believes", "estimates" and similar forward-looking expressions or negative versions thereof. FLS are based on current expectations and projections about future general economic, political and relevant market factors, such as interest and foreign exchange rates, equity and capital markets, the general business environment, assuming no changes to tax or other laws or government regulation or catastrophic events. Expectations and projections about future events are inherently subject to risks and uncertainties, which may be unforeseeable. Such expectations and projections may be incorrect in the future. FLS are not guarantees of future performance. Actual events could differ materially from those expressed or implied in any FLS. A number of important factors including those factors set out above can contribute to these digressions. You should avoid placing any reliance on FLS.

All products contain risk. Important information about the pooled fund is contained in their offering circular, which we encourage you to read before investing. Please obtain a copy. The indicated rates of return are the historical annual compounded total returns of the funds including changes in unit value and reinvestment of all distributions. Yields, investment returns and unit values will fluctuate for all funds. All performance data represent past returns and are not necessarily indicative of future performance. Pooled Fund units are not deposits as defined by the Canada Deposit Insurance Corporation or any other government deposit insurer and are not guaranteed by The Toronto-Dominion Bank. Investment strategies and current hold¬ings are subject to change. TD Pooled Funds are managed by TD Asset Management Inc.

Bloomberg and Bloomberg.com are trademarks and service marks of Bloomberg Finance L.P., a Delaware limited partnership, or its subsidiaries. All rights reserved.

TD Asset Management Inc. is a wholly-owned subsidiary of The Toronto-Dominion Bank.

All trademarks are the property of their respective owners.

® The TD logo and other trade-marks are the property of The Toronto-Dominion Bank.