

Sounding Off

DEALING WITH CURRENCY EFFECTS ON PRIVATE MARKET PORTFOLIOS

By Mike Ryan, Head of Research

"A dollar is just not worth what it used to be." Often uttered in reference to movie tickets or penny candy, this phrase is equally true in the world of investments. The value of a U.S. dollar relative to the euro, pound or yen can change on a daily basis - and with that change can come consequences for an investor's returns on international investments.

Over the last five years, the euro has been generally weak against the dollar. During this period, returns of European PE in USD terms have trailed those in euro terms by 480 basis points per annum! Certainly an unhappy outcome for U.S. investors in European private assets. Of course, the other side of this trend is that European investors into the U.S. have enjoyed currency gains of comparable size. Ten years ago, the situation was reversed during a prolonged period of euro strengthening.

Local Currency vs. USD Returns of European PE



Given the occasional risk of these adverse currency moves, it is natural for investors to seek a solution. We regularly field LP guestions on hedging currency fluctuations in their private markets portfolios. This typically happens after a given LP's home currency has appreciated, resulting in a currency adjustment loss on their foreign holdings. Most inquiries are general in nature: "What are the options for currency hedging?"; "What are the benefits and costs?"; and the most common, "How do other LPs deal with this?"

Currency hedging is very common in other asset categories, such as tradable fixed income. Here, the asset characteristics are more favorable to placing a currency hedge. When a fixed income investor purchases a non-callable foreign bond, the investor can match the maturity and principal amount of the hedge to that of the bond. High-quality bonds exhibit low volatility in local currency terms, so most of the risk to a foreign investor comes from the currency impact. A high-quality bond trading in a liquid market could be used to collateralize the hedge, and any losses on the hedge could be offset by comparable currency gains on the principal of the bond.

The characteristics of private asset portfolios are very different from tradable fixed income, however. With private markets portfolios, the challenges of hedging are greater and the potential benefits more limited. As a result, most LPs we've seen do not implement a large-scale currency hedging program on their private markets portfolios.

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Examples of Currency Hedging Effects in Different Asset Classes

Tradable Fixed Income

Known maturity and principal amount of bonds Most volatility comes from currency component Many bonds can serve as collateral for the hedge Bonds can be sold to cover hedge loss gain on the bond offsets hedging loss

Private Assets

Uncertain timing and amount of cash flows Most volatility comes from equity and asset-specific risk May need to post cash collateral on hedge - a drag on returns May need to call additional cash to cover hedge losses

How much do I hedge?

Investors can enter a hedging transaction by purchasing an option or entering a forward contract. In either case, the investor must determine how much currency exposure to hedge and for how long. This matches well to the nature of fixed income investments, but not to private markets investments. In most cases when an investor makes a private markets investment, he or she has only a rough idea of the exit timing and just a best guess on exit proceeds. This creates an inevitable mismatch of timing and size between the hedge and the underlying investment.

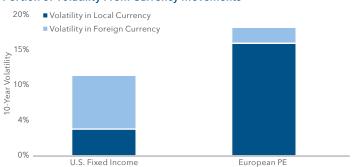
While this mismatch is an important source of residual risk, it is not the only challenge to placing an optimal hedge. An LP cannot fully quantify its currency exposure by simply looking at the reference currency of the fund, since the GP may make unhedged investments in other jurisdictions. Even assessing the corporate headquarters location of a portfolio company does not uniquely determine that company's exposure to currency movements. A company could have significant export revenues or even operations overseas. In an extreme example, a Belgian company who reports its financials in Euros may nonetheless see both its raw material inputs and its exported outputs priced in USD. An LP who hedges based purely on the reference currency of a fund or even the locations of portfolio companies could overestimate or underestimate the optimal hedge.

How big is the risk reduction?

The goal of any hedging transaction is reduction of portfolio risk, so it is worth assessing how much risk reduction actually can be achieved. Going back to our example with a global bond investment, we observe that currency fluctuations drive the bulk of volatility in such portfolios. This is because high-quality bonds have relatively low volatility in local currency terms. This is not the case in most private equity investments, where the dispersion of potential return outcomes is much broader.

Hedging currency only addresses one source of risk in the portfolio. Among developed markets investments, the volatility seen by a global investor may not be much greater than that of local investors. The example of U.S.-based LPs investing in European private equity can illustrate this point. Over the last 10 years, 12% of the annual volatility experienced by these LPs comes from currency fluctuation, with the remaining 88% reflected in the local currency returns of PE. Even when one hedges the currency component, the investor is still exposed to the equity risk.

Portion of Volatility From Currency Movements



Source: Bloomberg and Hamilton Lane data via Cobalt U.S. Fixed Income represents the 10 year annualized volatily of the Bloomberg Barclays U.S. Aggregate in USD terms (local currency) and in Euro terms (Foreign Currency) $European\ PE\ represents\ the\ 10\ year\ volatility\ of\ annual\ returns\ of\ Cobalt\ Europe\ -\ Western\ aggregate\ for\ all\ private\ strategies\ in\ Euro\ terms\ (local\ currency)\ and\ in\ USD\ (foreign\ currency)\ description of\ the private\ priva$

How much does currency hedging cost?

Whether a private markets investor decides to use forward contracts or options, hedging can be costly.

Forward contracts can compensate for adverse moves in the currency; but, if the currency moves in the opposite direction, the LP will have to post cash collateral for the unrealized loss on the hedge. Even if the counterparty extends credit to the LP for collateral purposes, any losses need to be settled in cash at the expiration of the hedge. At that time, it may not be possible to sell the private assets for an offsetting profit.

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Long positions in options can allow an LP to forego potential large hedging losses, but they require cash upfront to pay option premiums. Private markets investing is already cash inefficient for an LP given the nature of capital calls and distributions, so funding a hedging program would be another draw on portfolio liquidity, and the costs could provide a drag on overall returns.

In emerging markets such as South Africa or Brazil, LPs can face significant currency exposure. Unfortunately, the dynamics of these currency markets make hedging costs prohibitive. Specifically, emerging markets tend to have higher interest rates than G7 markets, and the volatility of some emerging markets' currencies against the USD is much higher than that of five major reserve currencies. Without getting into the particulars of pricing models, let it suffice to say that these factors combine to make emerging markets currency hedges so expensive that most long-term investors don't even bother.

The table below shows that a U.S. investor in Brazil or South Africa would need to pay more than 14% of the investment amount to buy a two-year option struck at the current spot exchange rate.

Cost to hedge USD 1 million of exposure back to dollars at the current spot price			
USD vs.	Cost of two- year option	LTM volatility	Two-year interest rate
Euro	\$29,496	8.5%	-0.68%
Japanese Yen	\$35,334	9.5%	-0.64%
S. African Rand	\$147,555	16.5%	7.63%
Brazilian Real	\$141,744	13.9%	8.09%

Source: Bloomberg as of June 30, 2017.

Table reflects cost of an option struck at the current spot price and not the futures price

Private Markets for the Long Term

If an LP is able to lock up a portion of its overall assets for five or more years of illiquidity, then perhaps daily or even quarterly volatility is not the most relevant risk measure. In terms of currency exposure for LPs, the typical five-year holding period for private investments may understate the true time horizon. For an LP wishing to maintain exposure to the major global economies, any distribution from a maturing investment is likely rolled into a new commitment in the same geography. This stretches the true investment horizon to decades. Many LPs find that over this extended time horizon, the costs of hedging outweigh the risk reduction gains.

What to do?

Of course, even investors with a long-term focus often are assessed on their results over much shorter intervals. But, given all of the challenges of hedging, what are private markets investors to do about currency risk? LPs can still be thoughtful in how they approach the risk of cross-currency private investments.

Institutions assess their private asset performance relative to their benchmark, which is typically an index of listed assets plus a premium for illiquidity. Investors should be thoughtful in selecting a benchmark with similar exposures to geography and currency as the expected portfolio. For example, a German investor building a global private markets portfolio might select the MSCI All Country World Index total returns in euros as the basis of its benchmark. That way, any currency movements that will impact the private portfolio won't lead to relative underperformance, since they also will be reflected in the benchmark.

Assessing risks to absolute returns, rather than benchmarking relative returns, is still a tricky matter. Most investors that choose not to hedge instead underwrite the expected returns and the risk of a private investment in the reference currency of the investor. Specifically, a U.S. investor in a Brazilian fund would assess the risk of the investment in USD over the holding period.

On some occasions, the amount and timing of private market cash flows are known within a narrow band where currency hedging may make sense. For example, a European GP who has agreed to sell a U.S. asset in four months may seek to hedge the risk of a sharp currency move before closing. In this example, the exception proves the rule. Here, the GP has a known sales price, and the short duration limits the cost of hedging. Also, to the extent the investment has grown to a significant portion of the fund, currency mismatch may be a significant driver of overall fund risk. Such hedging at the GP level represents the bulk of what we see in private investments.

In summary, while the benefits of hedging can be obvious and overstated in hindsight, most long-term private markets LPs still find that costs, liquidity drag and complexity outweigh the potential risk reduction benefits.

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