Myth #1: Currency diversifies an international asset portfolio

Fact: Correlations matter

The purchase of a foreign investment is preceded by a currency transaction of the same notional size, and vice versa for an investment’s redemption. The choice of investment is most often made with a consideration of the investment’s characteristics in local terms—not for the currency in which it is denominated. Therefore, although keeping the currency exposure is a default, it is in many ways unnatural. And yet this is a convention among many investors; it is thought that the investment can be diversified by the currency. However, whereas the underlying investment may be subjected to rigorous examination, including its degree of diversification, the currency exposure is rarely subjected to the same. Worse, often the two investments are reported together, and the intrinsic qualities of the two investments cannot be distinguished.

When we begin looking at the relationship between the equity, bond or other investment and the currency in which it is denominated, this myth of ‘currency as diversifier’ breaks down even further. Currency volatility’s magnitude dwarfs that of bond volatility, and thus there is no way to think of currency as a diversifier for bonds. That is why it is conventional to hedge the currency exposure associated with developed market bonds.

For equity investments, the argument is different. Owing to market uncertainty, few safe haven assets, and the leveraged investors that drive much of the global flows, we have observed a strong trend of risk-on/risk-off trading—especially in the last few years. Because US Treasuries and Dollars are the most common safe haven assets, this creates a correlation between risky assets and foreign currency. For a US Dollar-based equity investor, when foreign equities rise, the foreign currencies tend to rise in step—and vice versa. Currency is not a diversifier, but rather magnifies asset volatility. Moreover, this correlation tends to pick up in the most turbulent markets—when you least want it.

Even before the onset of the predominant risk-on/risk-off trade, currency exposure increased portfolio volatility. Using the equation $Var(A + B) = Var(A) + Var(B) + 2 \times Covar(A, B)$ and characteristic volatility
levels, we can derive the correlation levels for which currency is in fact a diversifier. Using long-run volatility measures of foreign (hedged) equities and foreign currency—weighted by the MSCI World-ex-US Index weights—of 15% and 8% respectively, we find that correlations between the two exposures would need to be less than -0.37 for the default currency exposure to have reduced volatility. However, correlations historically (last 25 years) have been about close to zero, and in the past five years have been greater than 0.5! In the past five years, hedged equity volatility has been 12.2%; currency volatility has been lower than usual at 7.1%, but with the higher correlations, that currency exposure has increased unhedged equity volatility by almost 5% to 17.0%. For a Dollar based equity investor, currency is not a diversifier.

Myth #2: Currency exposure does not matter because it all evens out in the long run

Fact: The long run is too long

It is true that developed market currencies have an expected return of zero over the very long run. This follows primarily from comparable inflation levels, monetary institutions, and productivity levels, and the free flow of goods and capital between them. However, these currencies run in cycles that may last up to two decades, but tend eventually to revert to an historical equilibrium. This phenomenon is created by the lagged response of capital flows and long-term investment projects, and augmented by the behavioural effects of financial markets.

For institutions with an investment horizon exceeding multiple decades, developed market currency exposure is not really a worry. Many institutions may have this sort of horizon in theory—such as endowments and pension funds—but they often do not in practice. Performance is measured at a much shorter horizon, annually or even quarterly. Not only marked-to-market performance, but even funding and cash flows can be crucially hurt or helped by the portfolio’s medium-term volatility. Careers and large-scale policy decisions can hinge on these interim evaluations. In effect, even these lasting institutions are affected by the volatility of their investments at a much shorter horizon.
The volatility of a currency pair within a single year can be tremendous. See below for the maximum and minimum rolling 12-month spot move of the G10 currencies against the US Dollar, over the last quarter-century or so.

Maximum 1 Year Spot Up/Down Move vs. USD
(Jan-90 to May-14)

Source: Macrobond, Record Currency Management

Judged on marginal contribution to portfolio volatility, currency can be the third or fourth largest risk factor in an institutional portfolio. For more information, see the article ‘The Hidden Risk Factor’ written by Record’s Research staff for the Journal of Mathematical Finance, October 2013 (http://dx.doi.org/10.4236/jmf.2013.33A003). Moreover, judged on its own merits, by information ratio or a similar measure, the currency basket inherited from an equity investment makes for an undesirable investment—zero expected return with volatility between 7-9%.

In a Dollar bear market, with currency exposure adding value to the portfolio, it is easy to dismiss currency risk under the guise of a rather distant preconception. But were the Dollar to rise, this preconception would quickly be exchanged for serious attention to the problem of currency. For large institutions which may require some time to make and enact policy decisions, it may be prudent to consider this in advance.

To illustrate the length of currency cycles, we show a graph of a real (inflation-adjusted) trade-weighted Dollar index. One can see the strength and length of Dollar cycles, as well as our current position in them. The length of these cycles certainly exceeds most de facto investment horizons, and it can be seen that we find ourselves at a historic low in terms of Dollar valuation. We would be happy to communicate the reasons that trend might reverse upon request.
Conclusion

All things considered, there is little justification for ignoring currency risk. The solution to the question of what should be done is specific to the institution, and must be tailored with careful thought. Investment horizon and objectives, default exposures, tactical and strategic views, cash flow capabilities, and many other aspects must be taken into consideration, and the result can take a variety of forms. The right solution may even be to do nothing. But the inherent risk in unhedged international portfolios must be evaluated and understood, and the solution ought to be, we argue, pursued intentionally—not as a default.
Risk Warnings

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