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Understanding Risk and Return in EM Local Currency Debt

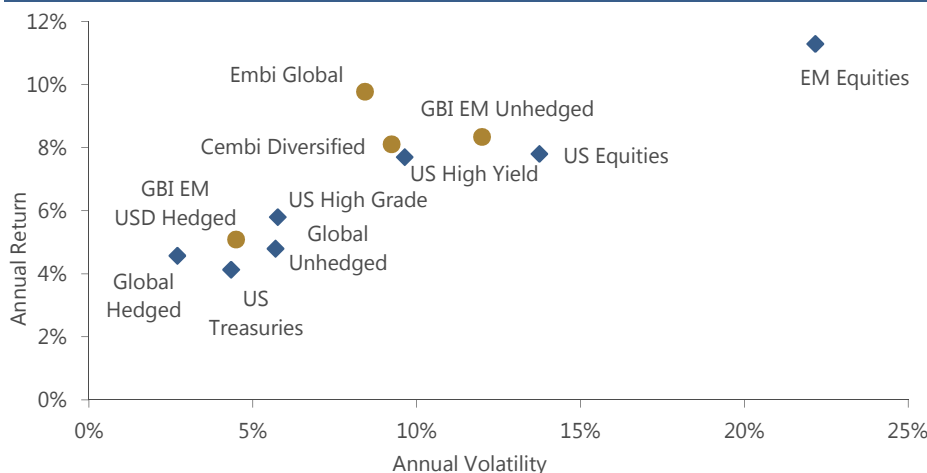
for US dollar based investors



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Emerging-market debt (EMD) denominated in local currency has been very volatile over the last few years. After falling by 33% in USD terms from May 2013 to January 2016, the asset class has rebounded strongly since and now attracts renewed interest from global investors. Over its history—from 2003 to 2016—its annualized return, as measured in USD, is 8.34%. Over the same period, it has also recorded annualized ex-post volatility of 12%, as well as rolling three-year annualized volatility between 8% and 16%. That level of volatility gives the local-currency EMD a risk profile that fits between those of the US High Yield Corporate Index and the S&P 500.

Chart 1: Long Term Risk Return Profile for Various Asset Classes



Source: Standish as of September 30, 2016. Benchmark returns from January 2003 through September 2016. Global Hedged and Unhedged (Barclays Global Aggregate Index), GBI EM Hedged and Unhedged (JPM GBI EM Global Diversified Index), US High Grade (Barclays US Corporates Index), US High Yield (IBOXX US High Yield Index), Embi Global (JPM EMBI Global Index), Cemb Diversified (JPM CEMBI Diversified Index), US Equities (S&P 500 Index), EM Equities (MSCI EM Index). Monthly data from Jan 2003 thru Sept 2016.

While it is the most volatile fixed income asset class, it also has one of the highest total return potentials. Investing in an asset class with this risk-return profile requires a comprehensive understanding of the sources of risk and return. With this goal in mind, we break down the total return of the asset class into three main components we categorize as duration, carry and currency. Table 1 presents the results for various statistics. Next, we will describe each of these components and explain their main driving factors.

The duration component includes the return of local currency bonds after hedging out the currency risk using currency forwards.

Table 1: EMD Local Currency (USD) Total Return Decomposition

	GBI EM Global Diversified Unhedged Index			
	Total Return in USD	Duration	FX	Carry
Annualized Return	8.34%	5.08%	-0.73%	3.87%
Annualized Volatility	12.00%	4.49%	9.16%	0.74%
Worst Drawdown	-29.32%	-7.42%	-45.23%	-0.43%
Return per Unit of Risk	0.70	1.13	(0.08)	5.24

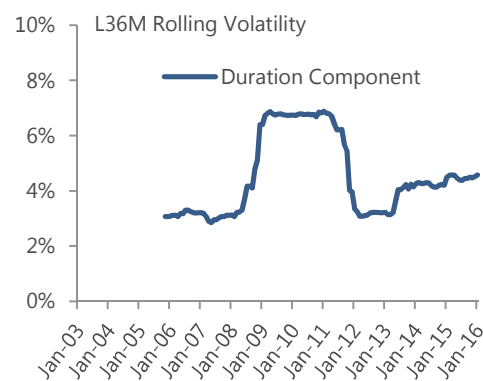
Source Standish as of September 30, 2016

DURATION COMPONENT

The duration component includes the return of local currency bonds after hedging out the currency risk using currency forwards. It can be thought of as the compensation for taking on interest rate and term premia risks exclusively. Historically, this component has contributed 5.08% to the return of the asset class, with 4.49% annualized volatility. These are very efficient results, even when compared to highly risk-efficient fixed income asset classes, such as US Treasuries and Global Aggregate hedged into USD. The rolling three-year volatility of the duration component has fluctuated between 3% and 7%, while the rolling one-year return has fluctuated between -5% and +15%.

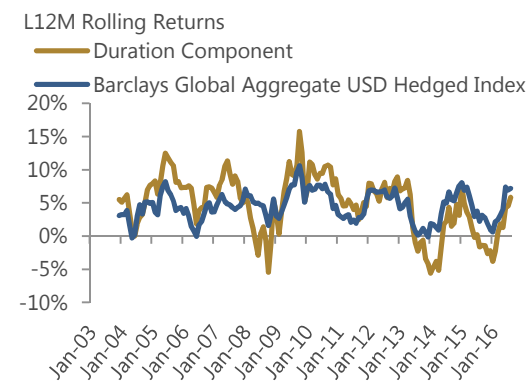
As shown in Chart 3, where we plot the trailing 12-month return for this component versus that of the Global Aggregate USD hedged, the duration component is primarily driven by the direction of global rates: US Treasuries, German bunds, and Japanese JGBs. Domestic considerations for EM countries (such as inflation outlook, policy expectations, and sovereign risk) also matter at times but it is typically global rates that determine the overall direction of this component.

Chart 2: Duration Component, Rolling Volatility



Source: Standish as of September 30, 2016

Chart 3: Duration Component and Global Aggregate USD Hedged



Source: Standish, Barclays as of September 30, 2016

CARRY COMPONENT

The carry component captures the differential between money market rates in emerging markets and those in the base currency of the investor (for the purpose of this paper, the US dollar). Positive rate differential between emerging and developed currencies typically reflect differing inflation paths and credit quality between emerging and developed economies. For example—in 1997, a wave of devaluations across Asia and Russia boosted the positive carry as risk premiums moved materially higher. In the following decade and a half, however, carry diminished as the creditworthiness of many EM governments improved, more flexible exchange-rate regimes reduced the threat of abrupt devaluations, foreign capital flowed in and policy rates were cut. More recently, declining commodity prices (among other factors) have slowed EM growth, capital has flowed out, currencies depreciated, and EM central banks were forced to hike rates to fight inflation. As a result, carry has risen again.

Currently the positive carry in the JPM GBI EM Global Diversified Index is 4.75% in USD terms. Historically, this component has contributed almost 4% to the total return of the asset class, with very little annualized volatility. The catch is that the only way you can have exposure to the carry component is by taking on EM currency risk, which takes us to the third and last component.

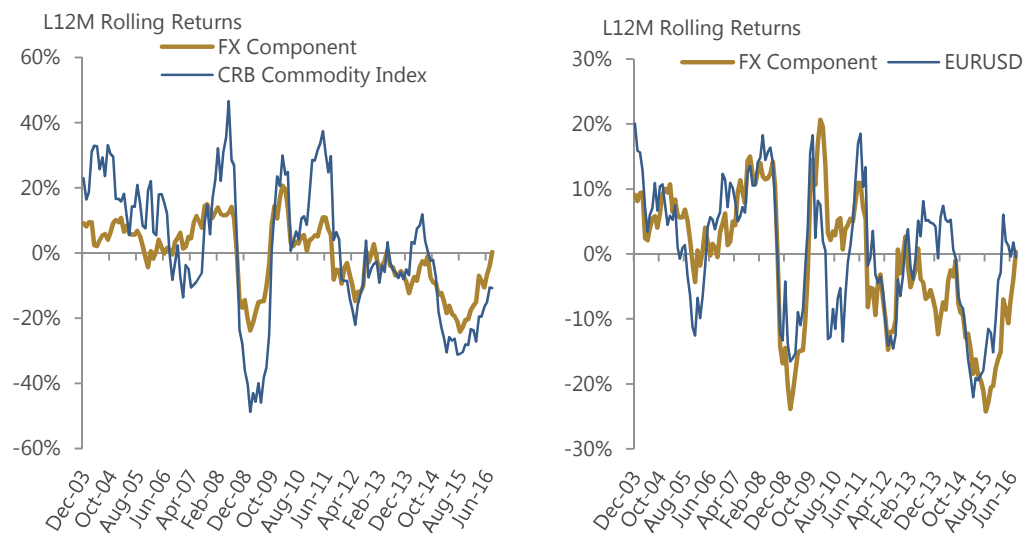
CURRENCY COMPONENT

This component captures changes in spot exchange rates in EM currencies versus the base currency. As seen in Table 1, this component is the single greatest source of volatility in local-currency EMD. Over the full history of the asset class (2003-2016), it has contributed relatively little to the total return with over 9% of annualized volatility. Rolling three-year volatility has fluctuated between 6% and 12%, while the rolling one-year return has fluctuated between -25% and 20%. While this may appear to be a relatively inefficient return per unit of risk taken, an investor who takes the volatility from EM currencies will also enjoy the benefits of the positive carry, as explain in the prior component. Therefore, the impact of currency on return needs to be considered in investment decisions—not in a vacuum, but as part of a bundle.

What is the source of volatility of this component? As shown in Charts 4 and 5, the currency component is driven primarily by two main external factors: commodity prices and the EUR/USD exchange rate. Many of the countries in the EM local currency universe are commodity producers and the prices of these commodities have major impact on their external and fiscal accounts. Also, many of the countries have close commercial ties with the EU and hence the EUR/USD exchange rate is critically important in the determination of the Real Effective Exchange Rate which in turn impacts their external competitiveness. As explained with the duration component, domestic considerations for EM countries also matter at times but typically these two external drivers are the main explanatory variables of the currency component contribution to the total return of the asset class.

Therefore, the impact of currency on return needs to be considered in investment decisions—not in a vacuum, but as part of a bundle.

Chart 4 and 5: Currency Component vs EUR/USD Exchange Rate & Commodity Prices

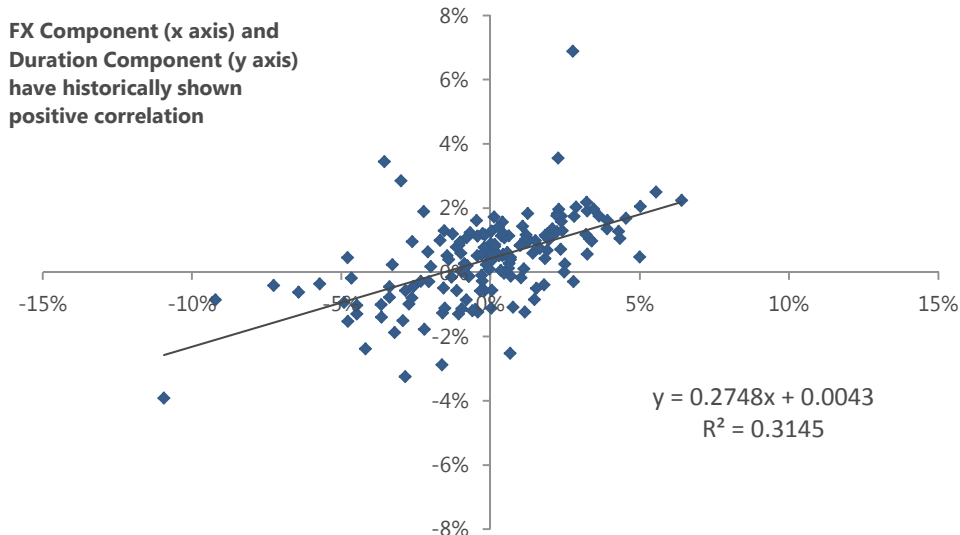


Source: Standish as of September 30, 2016

The return decomposition into duration, carry and currency and the analysis of the factors that drive each of these three components helps understand the sources of the volatility of EMD local currency as an asset class.

Finally, the currency and duration components have historically shown positive correlation as indicated by Chart 6. Intuitively, the more volatile a nation's currency the higher the risk premium the local-currency bond market typically needs to offer. Also, both components are strongly influenced by, in the end, the same set of external and domestic factors as explained previously. The external drivers include monetary policy in developed countries, the rise or fall in the price of commodities (particularly oil) and expectations for growth in the global economy. The domestic drivers include expectations for domestic growth and inflation, as well as sovereign risk.

Chart 6: Relationship between Currency and Duration Components



Source: Standish as of September 30, 2016

LOOKING FORWARD

The return decomposition into duration, carry and currency helps understand the sources of the volatility of EMD local currency as an asset class. And a good understanding of the factors that drive each of these components is critically important to forecast the returns of the asset class into the future.

We believe the combination of (1) a high level of positive carry, (2) an attractive external environment (Standish's base case is that global rates will remain low and commodity prices will be more stable) and (3) improving fundamentals in many of the countries that are part of the universe, provide strong tailwinds for the asset class to continue to show strong performance over the coming quarters.

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