



## The What-Why-When-How Guide To Owning Emerging Country Debt

Tina Vandersteel

### Introduction

As GMO looks forward to its 20th year managing emerging debt portfolios, we offer our perspectives on the frequently-asked questions that have come up over the years, including:

- What is meant by emerging debt (external, local, corporate)?
- Why and when to own it: portfolio fit considerations, alpha, and absolute and relative value.
- How to own it: dedicated external, local, or corporate; “blended”; or “multi asset” (including emerging equities).

### What is meant by emerging debt (external, local, corporate)?

“Emerging debt” is a mixed bag of U.S. dollar, local currency, and corporate debt, and what’s considered “emerging” varies across the sub-types and across time.<sup>1</sup> Below are the most important features helpful for our discussions about value. Importantly, credit rating is not used as a criterion for any of the types, different from the common distinction in credit markets among high-yield and investment-grade issuers. We focus on the features of the benchmark used most commonly for the type of debt.

Emerging *external* debt is issued by countries with material default risk, in foreign currency (generally U.S. dollars) under foreign jurisdiction. The relevant index is the J.P. Morgan Emerging Markets Bond Index Global (EMBIG).<sup>2</sup> J.P. Morgan defines “emerging” for EMBIG to be low- and middle-income countries as well as those that have restructured their external or local debt during the past 10 years or currently have outstanding restructured external or local debt. Therefore, either because of the income status or default history, it is expected that external debt has material default risk. The EMBIG’s average S&P rating is currently BBB-, and there are 46 countries in the index. In addition to sovereign debt, debt issued by companies either 100% government owned or whose debts are 100% government guaranteed is also included (“quasi sovereigns”).

Emerging *local currency* debt is denominated in the local currency of the issuer, regardless of jurisdiction. The relevant family of indexes is the J.P. Morgan Global Bond Index-Emerging (GBI-EM), of which there are three main types based on their investability to foreigners: GBI-EM, GBI-EM Global, GBI-EM Broad. All three are restricted to low- and middle-income countries, as with EMBIG, although there’s no criterion related to a country’s default history.

<sup>1</sup> In fact, some on the sell-side, trying to distinguish “emerging” from the more fiscally challenged “developed” or “advanced” country counterparts, are promoting a less pejorative re-branding. Instead of “emerging,” these are “growth” markets rather than “mature” markets. “Frontier” markets are being re-branded “Next Generation” markets in an attempt to remove the Wild West image. Regardless of the branding, we view these as “risk” assets not “risk-free” or even “relatively less risky than mature country debt” markets. Lucky for us, however, it’s generally been the case that investors in “emerging” have been more than compensated for the risks entailed.

<sup>2</sup> J.P. Morgan separately quotes a EUR EMBIG and prior to May 2002 had included local law instruments. The asset class has its origins in the bonds issued out of restructured bank loans from the 1980s and 1990s (“Brady bonds”), although today Brady bonds are only 5% of the EMBIG market value.

The GBI-EM Broad includes all eligible debt (fixed-rate and zero-coupon), regardless of investability to foreigners (16 countries). The GBI-EM Global restricts the universe to only those countries accessible by a majority of foreign investors (14 countries), and the GBI-EM further restricts the universe to that subset freely accessible by foreigners (12 countries).<sup>3</sup> Due to the small number of countries, some of which would have large market-capitalization-based weights, investors focus on the “diversified” versions of these, which cap each country at 10%. The average S&P index ratings of the three (diversified) versions currently are: GBI-EM Broad (A-), GBI-EM Global (BBB+), GBI-EM (BBB+).

Emerging *corporate* debt is issued by corporates domiciled in emerging countries. So far, the relevant index is the J.P. Morgan Corporate Emerging Markets Bond Index Broad Diversified (CEMBIB-D), although this exclusively captures the U.S. dollar (USD) segment (ignoring, as EMBIG does, other major currencies like euros or yen, and completely ignoring local currency corporates). Interestingly, J.P. Morgan departs from its EMBIG/GBI-EM method for defining “emerging countries” in this context, adopting a regional-based approach. In CEMBIB-D’s case, companies headquartered in Latin America, Eastern Europe, Middle East, Africa, or Asia ex-Japan are considered eligible, as are those with 100% of their operations there (as long as the bonds are guaranteed by the local operation). Quasi-sovereigns of the variety eligible for EMBIG are specifically excluded, but a company can migrate from one index to the other based on nationalizations/privatizations. The index contains issues from 32 countries spanning AAA-rated Singapore down to single-B rated Venezuela and Jamaica. The average S&P rating is currently BBB.

### **Why and when to own it: portfolio fit considerations, alpha, and absolute and relative value**

#### ***Portfolio fit***

As with any risk asset, the time to own it in risk-seeking portfolios is when its prospective returns adequately compensate you for its risks, taking into account the relationship with other risky assets you already own or may want to buy (“portfolio fit”).

We are assuming emerging debt is fair or under-valued, an assumption we’ll return to. From a portfolio fit perspective, we observe:

- As shown in Exhibit 1, emerging external debt has a lower statistical correlation than local currency debt with other common portfolio holdings (equities, credit, global bonds). External debt’s lower correlation is mostly explained by offsetting responses of its two main drivers (spreads and USD rates) to other risky assets. Spreads generally rise and fall in tandem with other risk assets, but U.S. rates generally move in the opposite direction, muting the asset class’s total response to moves in risk assets. Local debt, on the other hand, doesn’t have this dampening USD rate exposure as its two main drivers are FX and local bonds. The FX tend to move with risk assets in the way credit spreads do on external, but local emerging bonds’ responses have varied over time. In severe crises, they act like risk assets, compounding the correlations; other times they act more like “rates” markets, with a similar dampening effect as the USD rates in external debt. Therefore, if statistical correlation is a factor important in your determination of portfolio fit, it’s more likely that external debt will be your answer if you already have exposures to typical risk investments.
- If, instead, a strategic need to diversify away from the USD (or, via hedging, other major currencies) is important for your portfolio fit, then emerging local currency debt is more likely your answer. External debt doesn’t help on this.
- Investors interested in emerging corporate debt need to examine ways they may already have such exposure in their portfolios. Increasingly the corporate bond management practice, whether investment grade or high yield, is going global at least in opportunity set, and a number of emerging corporate issuers find themselves there.

<sup>3</sup> The local debt index these days contains just fixed-rate (including zero-coupon) bonds, although in the past it had included Chilean inflation-linked bonds. Barclays produces a global inflation-linked index, including emerging issuers Chile, Korea, South Africa, Mexico, Brazil, Colombia, Poland, and Turkey, although Brazil dominates the index by a wide margin. In local debt there is also a host of very interesting other instruments: floating-rate notes, foreign-currency linked, etc., that are not currently captured by the index.

So, if you're looking for something *fundamentally* different, check to see if you already have it. Another way you may already have exposure to this set of issuers is via your emerging equities holdings, and here the issuer overlap is very high indeed. Box 1 details our observations on this topic.

**Alpha**

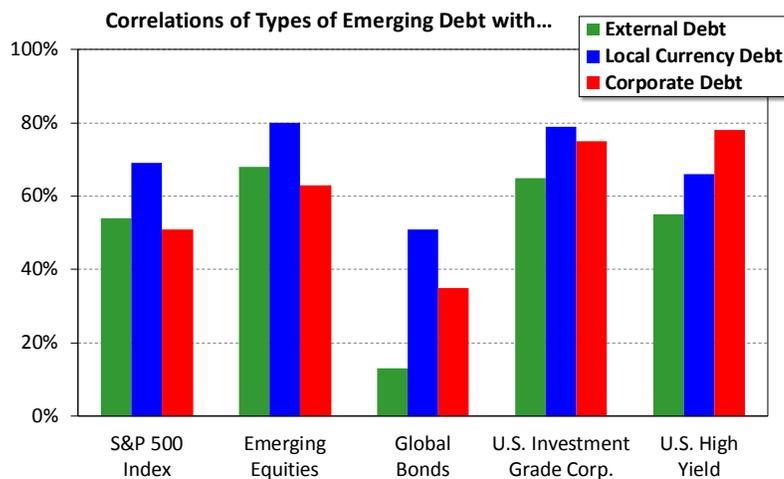
Emerging debt is one of the asset classes in which active managers have most consistently generated alpha over the past two decades. Exhibit 2 shows the long-run returns for median and 5th percentile managers tracked by eVestment as well as the benchmark. We use the external debt asset class to make this case, since it has a longer history for active management. If ever there were an asset class in need of active management, this is it. Of course some of this outperformance is due to deficiencies in the benchmarks for the asset class, which suffer from all of the known ones listed by one of my colleagues in his paper “Bond Benchmark Baloney.”

The asset class is stunningly inefficient, likely due to the heterogeneous mix of its active investors. Relatively patriotic (or at least captive) domestic investors drive prices for their own country's bonds to irrational heights, and total-return oriented investors can outperform simply by avoiding them once that happens. “Crossover” buyers (from domestic or global aggregate or, lately, global high yield) of fixed income styles arrive and leave in herds, often with poor timing. In local currency debt, capital controls and other regulations segment the markets. Therefore, sensible, value-oriented investors can buy the bits of the market that are cheap, and avoid those that aren't. We include ourselves in the class of managers that are simply “benchmark aware,” regarding tracking error as a senseless indicator of risk.

(For this reason alone, we think ETFs make no sense in this market, because they buy “what's available” rather than “what's cheap.” Anyway, emerging debt ETF fees are hardly a bargain relative to the discounts available in equities.<sup>4</sup>)

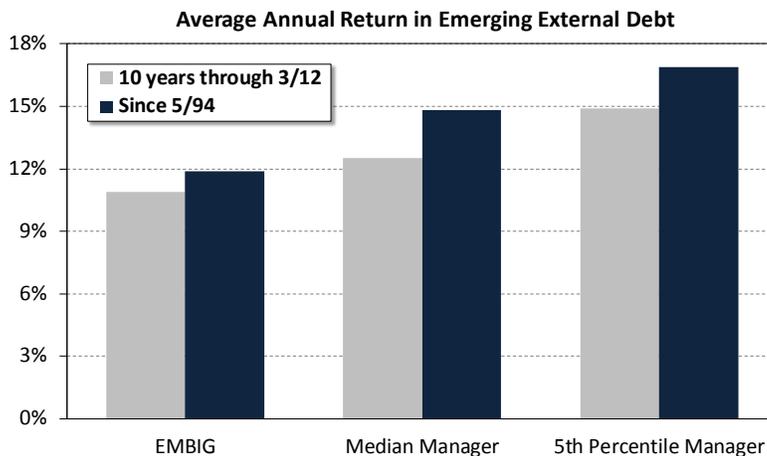
<sup>4</sup> Another weakness of the emerging debt ETF is its need to provide a high level of liquidity to buyers of the product. As you will see later in Box 2, Figure 2.2, emerging debt at best has poor liquidity, and sometimes it is truly dreadful. No investment vehicle can make an illiquid underlying market liquid, although it can try by using, as emerging debt ETFs do, restricted benchmarks that include only the most liquid (or, in the case of local debt, most accessible) bonds. Investors are likely to be surprised when the discount to NAV rises sharply during a market disruption. Instead, funds ought to carry purchase and redemption fees (paid to the fund shareholders) to highlight to investors the need to be long-term oriented in the asset class. After all, separate accounts pay these implicitly when they buy assets at the offer and sell at the bid. Figure 2.2 shows the large and sometimes very large transactions costs inherent in emerging debt markets.

**Exhibit 1**  
Emerging External Debt Has Had a Lower Correlation with other Major Asset Classes



Source: GMO, based on data from J.P. Morgan, MSCI, S&P  
Data as of April 2012

**Exhibit 2**  
Even the Median Manager Has Easily Outperformed EMBIG



Source: eVestment  
Data as of March 2012

This is why GMO's Asset Allocation team includes the expected alpha to its assessment of the attractiveness of emerging debt, since emerging debt alpha has been higher and more persistent.

### ***Absolute and relative value***

To determine absolute value, we begin with the prevailing yields on the three sub-classes, divide those up into payment for known risk factors, and then ask ourselves: is it enough?

Box 2 identifies the principal risks disclosed in typical offering documents. When examining absolute value, we're most concerned with the long-term drivers of return, which are credit risk for external and corporate bonds, and currency valuation risk for local currency bonds. Over shorter horizons, which we'll discuss in the upcoming section on relative value, other factors (credit spread volatility for external and corporate debt, currency volatility for local debt, and liquidity for all three) can dominate, but generally these are short-lived.

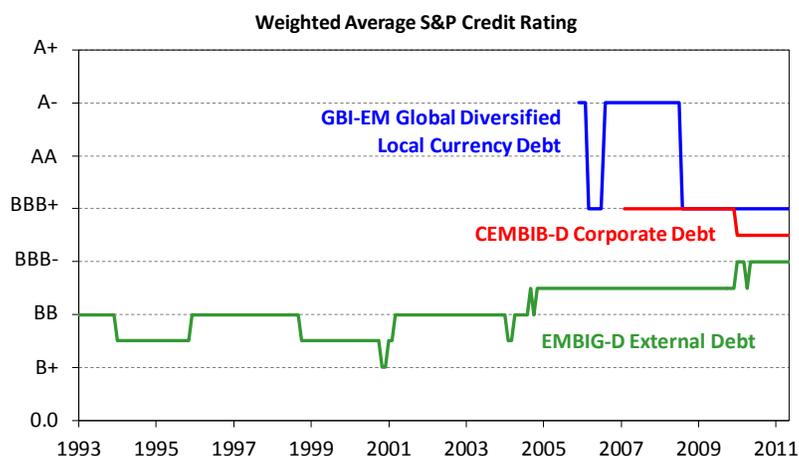
When examining the absolute value of credit spreads, we need to evaluate whether their current level adequately compensates the investor for the expected losses due to default. Given that neither the sovereign nor the corporate index is defined with respect to credit rating, there's no reason that expected losses should be stable over time. Looking at the average credit rating of EMBIG over time, Exhibit 3 shows that there's been a general upward drift, meaning expected losses have been declining.

However, newer issuers have tended to be lower quality ones (in 2011, for example, single- or double-B rated Jordan, Senegal, Namibia, and Nigeria debuted in EMBIG), so this drift is periodically counteracted through compositional effects. This has also been the case in CEMBIB-D, where recently the "reach for yield" mentality of the market has allowed junkier credits to issue into the index. Therefore, we examine the credit spread offered relative to the expected loss of the index constituents at the time to gauge "excess" spread over expected losses. This is as laborious as it sounds, but we believe it is the correct approach to evaluating credit for its long-term fundamentals.<sup>5</sup>

What we find for EMBIG is that there has been a lot of variability in the "extra" spread one has received over the expected credit losses. Sometimes it is very high – say, after the Lehman collapse – and sometimes it is low – say, summer of 2007 when our Asset Allocation team was screaming that everything was overpriced. Looking back over history, the average "extra" spread is 300% over and above the EMBIG's expected default loss. Given EMBIG's current composition, we compute the expected default losses to be 68 bps per annum, which means that an average "fair" spread for EMBIG is  $4 \times 68 = 272$  bps. With EMBIG's current spread near 400 bps, we'd say this represents good value – from a credit perspective.

We haven't made a similar computation for CEMBIB-D, although given the extra risks outlined in Box 2, as conservative credit managers we'd be inclined to say that an extra 100% on top of EMBIG's 300% sounds reasonable. If the extra risks weren't enough to justify this extra margin of safety, we'd instead appeal again to our "portfolio fit" reasoning and say there's an extra hurdle for adding something so fundamentally indistinguishable from emerging equities.

**Exhibit 3**  
**Emerging Debt Is Not Defined by Rating, So Average Ratings Can Shift Over Time**



Source: J.P. Morgan  
Data as of April 2012

<sup>5</sup> Fortunately for us, because we don't believe in the portfolio fit of corporates, we've saved ourselves some labor on this score!

For local currency debt, the primary risk factor is currency risk rather than credit risk. We'll focus here just on currency valuation risk: the risk that the investor will suffer declines in the value of local-currency denominated assets if they are purchased when the currency is overvalued. This is the most directly comparable risk factor to the expected loss due to the credit question in EMBIG and CEMBIB-D. The fact is, it's hard to estimate a currency's fundamental value, although of course we take a stab at it when constructing our local debt portfolio. Luckily, we can appeal to the *fundamental* relationship between a country's credit spread and its currency level to back it out via relative value to external debt. Next, we cross-reference this with our independent estimate of the currency's fundamental value. So, rather than define an absolute level of yield that is "enough" for local currency debt, we'll make the case relative to external debt.

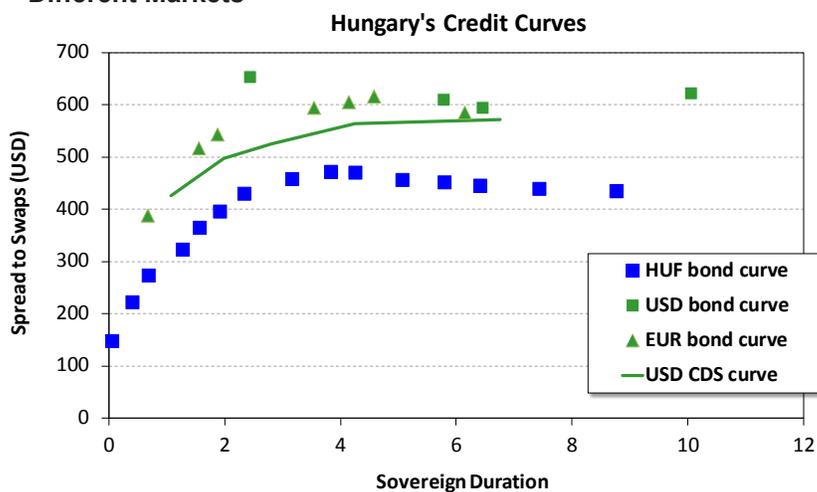
Also luckily, this is, in fact, the question we're asked most often: which is better to buy right now, external or local? Box 3 highlights the relationship between credit spreads and FX, showing that, at the country level, the relationship is strong, and rarely is there "relative value." In other words, if we can show that credit spreads are cheap (using the expected loss method above), it's likely the case that the currency is cheap, too.

But the comparison is never asked at the country level. Instead it's asked at the asset class level. This is a harder question to answer chiefly because of compositional differences (remember EMBIG has 46 countries and GBI-EMD 12, an "apples to pears" issue). Also, EMBIG contains bonds rather than pure credit instruments (CDS), and bonds themselves can diverge from the same-country CDS (the so-called bond-CDS "basis"). Therefore, to answer the question "which is better, relative value external or local?" you need to know:

- Which kind of bond (external or local) offers the best credit spread when fully hedged of its other risks (USD interest-rate risk for external, and currency and local interest-rate risk for local)? This isolates the credit dimension and is achieved mathematically by factoring the costs of the various hedging dimensions. Exhibit 4 illustrates four ways to take Hungarian credit exposure, for example. Some assumptions will be required, but because the assumptions are used the same way for all of the bonds, they shouldn't have an effect on the estimation of *relative* value;
- Is there a relative value discrepancy between the level of the currency and the level of credit spreads for the country? This can be estimated empirically as shown in Box 3; Hungary's plot is in Figure 3.1. The main assumption is that of mean reversion: that if the FX is exceptionally weak or strong for the current level of credit spreads, the relationship will revert to the mean over time (generally the time horizon here is quite short, usually hours or days, absent a credit event).

Don't be discouraged, though. There are occasional switching opportunities between external and local currency debt that survive the large transactions costs of doing so, usually motivated by differential asset class flows. For the reasons outlined above, these can't be seen as "pure" relative value but rather compositionally-motivated statistical relative value. Exhibit 5 depicts the credit spread of the EMBIG and the FX-rebased level of the GBI-EMD. Notice that occasionally there are outliers where mean reversion might be expected (but again, not guaranteed by fundamentals due to the differential compositions).

**Exhibit 4**  
**A Single Country's Credit Risk Is Often Priced Differently in Different Markets**



Source: Deutsche Bank  
 Data as of May 2012

**How to own it: dedicated external, local, or corporate; “blended”; or “multi asset” (including emerging equities)**

The next question we’re generally asked is whether the best way to own emerging debt is through dedicated funds targeting one of the sub-classes or via “blended” strategies that bundle any or all of the above. We believe that for those investors with the time and ability to manage their asset allocations actively, owning the individual sub-classes makes most sense, because it gives the investor the most freedom to align his investments according to his portfolio fit. Some investors would prefer to give the manager timing authority, and we’re fine with that, too. For the reasons just mentioned, though, we temper these investors’ expectations with respect to how active such a switching program likely will be.

“Multi-asset” strategies extend the mix to include emerging equities. These are targeted at investors who would like to have more “emerging” exposure but are worried about adding to their emerging equities given the volatility. Based on research by our Asset Allocation team, we believe that such strategies should be able to offer lower overall volatility with similar returns to equities through the judicious use of somewhat less volatile emerging debt.

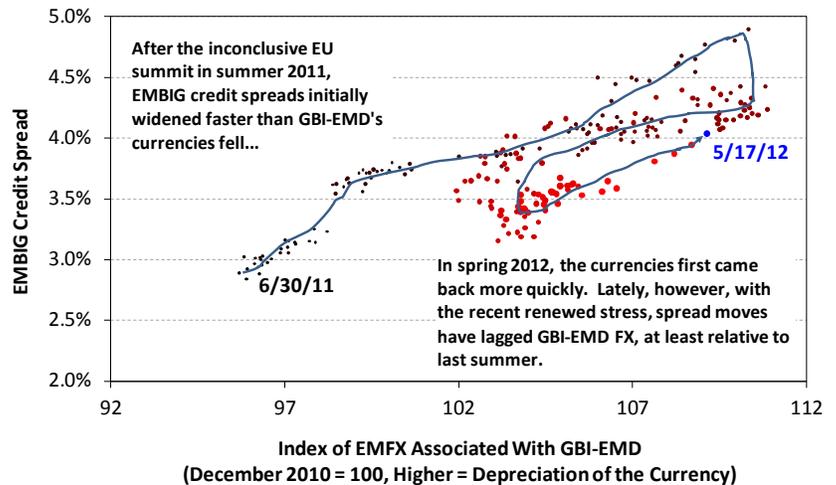
**Summary**

Emerging debt is a mixed bag of U.S. dollar, local currency, and corporate debt. The dollar debt has a broad group of countries. The local debt has a narrow group of many of the same countries. Corporate debt is essentially “emerging equities lite.”

Any or all should be owned in risk-seeking portfolios when they’re cheap to their fundamentals in proportion either to their relative value or portfolio fit.

They can be owned in an unbundled fashion, which gives the investor greater flexibility on the portfolio fit angle. Or, they can be owned in various types of pre-arranged bundles, where the manager then has flexibility to focus on relative value in a portfolio-fit agnostic fashion.

**Exhibit 5  
Occasionally External and Local Debt Diverge in Pricing  
Fundamental Risks**



Source: GMO, based on data from J.P. Morgan  
Data as of May 2012

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### Box 1 Emerging Corporates: Chances Are, You Already Own Them!

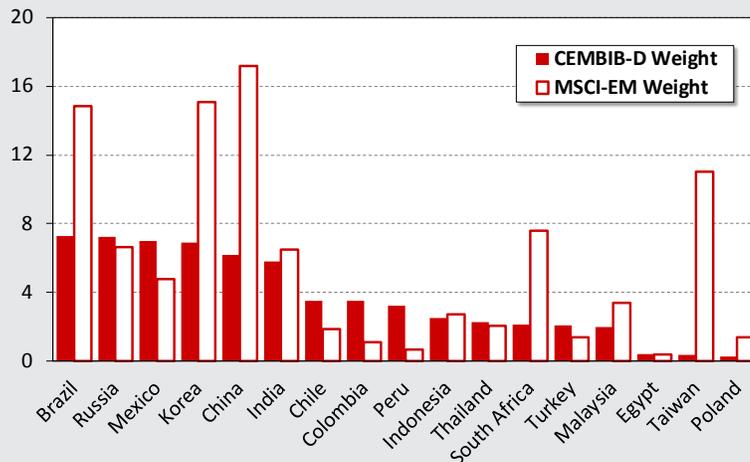
For investors with long horizons, the fact that the statistical correlation between two assets you might own is high is less relevant the more fundamentally different they are. A classic example is the high statistical correlation that catastrophe bonds have with the S&P when the S&P is declining precipitously. However, nothing about the S&P's decline has raised the likelihood of, say, an earthquake in California, which ought to have a negative impact on a California earthquake-related catastrophe bond. They are fundamentally different assets.

Corporate bonds and equities are fundamentally the same thing, except that corporate bonds are a more senior claim and have term-structure exposure, and only through that fact is their fundamental and statistical relationship diluted. Emerging corporate bonds are no different in this regard.

Think of emerging markets corporate bonds as a hybrid instrument combining issuer-specific default risk and USD term structure risk. Unbundled this way, it's clear that the issuer-specific risks ought to be compared with other like risks, which in this case would be emerging equities, while USD term-structure risk can be evaluated relative to U.S. interest-rate swaps or U.S. Treasuries.

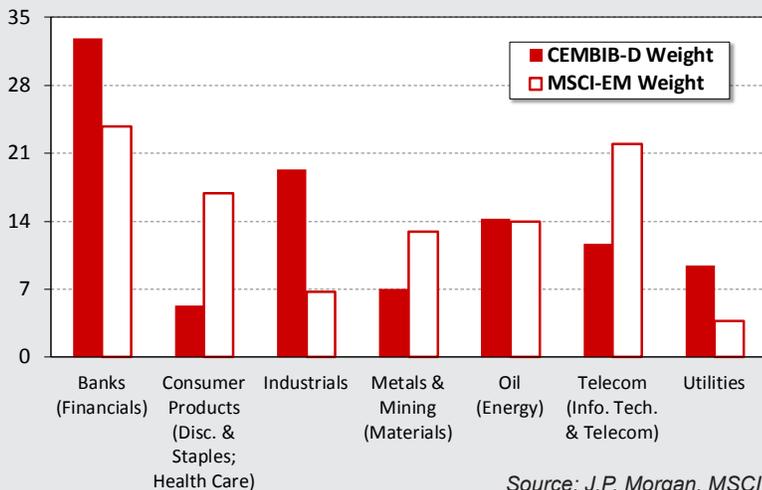
From a portfolio fit perspective, the issuer-specific risk ought to have at least one of the following properties: (1) it's the better value relative to its equity counterpart; or (2) it's diversifying given that it exists in circumstances where public equity doesn't exist for that issuer. On the first issue, we're often amused that the comparable presented for corporate bonds in general (not just emerging ones) is Treasuries or perhaps other forms of debt (loans, for example) rather than equities. Our hypothesis is that corporate bonds allow investors to "sneak in" more equity risk when they're constrained at the policy level from doing so.

**Figure 1.1**  
Index Overlap for Emerging Corporates and Emerging Equities By Country



Source: J.P. Morgan, MSCI  
Data as of April 2012

**Figure 1.2**  
Index Overlap for Emerging Corporates and Emerging Equities By Industry



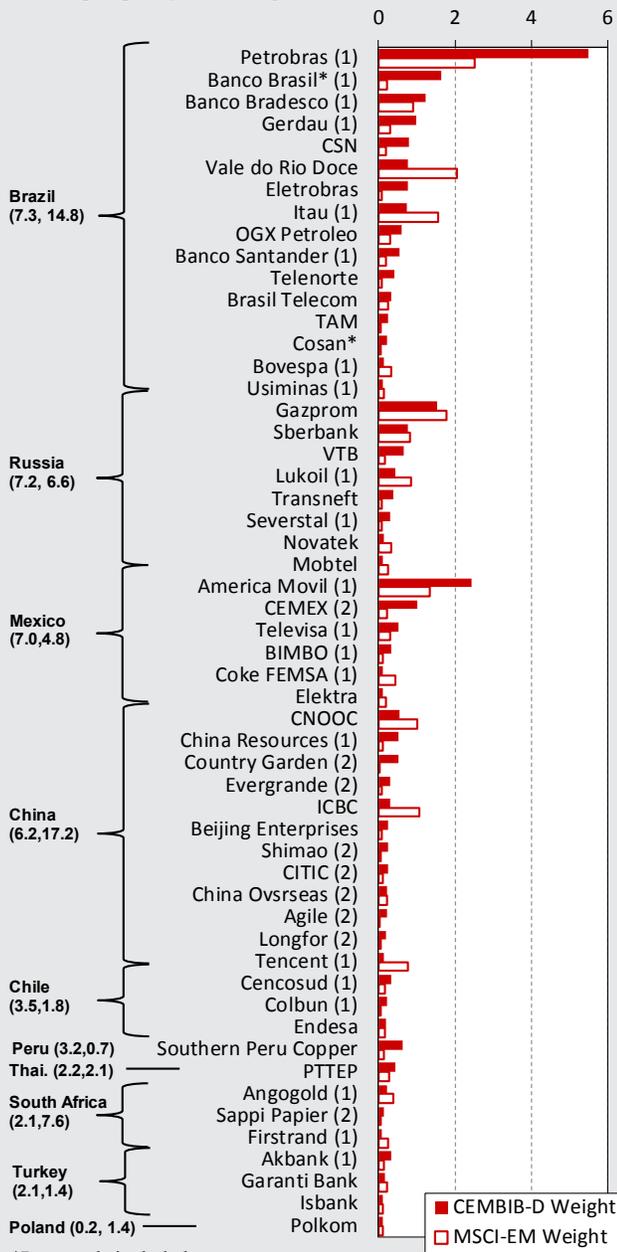
Source: J.P. Morgan, MSCI  
Data as of April 2012

As value-oriented investors, we find this unconvincing from an asset-allocation perspective: buy what's cheap. On the second issue, we took a peek at the composition by country, by industry, and by issuer of the CEMBIB-D and the MSCI-EM equity index. This is what we found.

By country (Figure 1.1) the name overlap is high, although CEMBIB-D caps country weights and so is a bit less lumpy. BRICs plus Mexico and Korea comprise 40 and 65%, respectively. By industry (Figure 1.2)

Box 1 (continued)

**Figure 1.3**  
**Index Overlap for Emerging Corporates and Emerging Equities By Issuer**

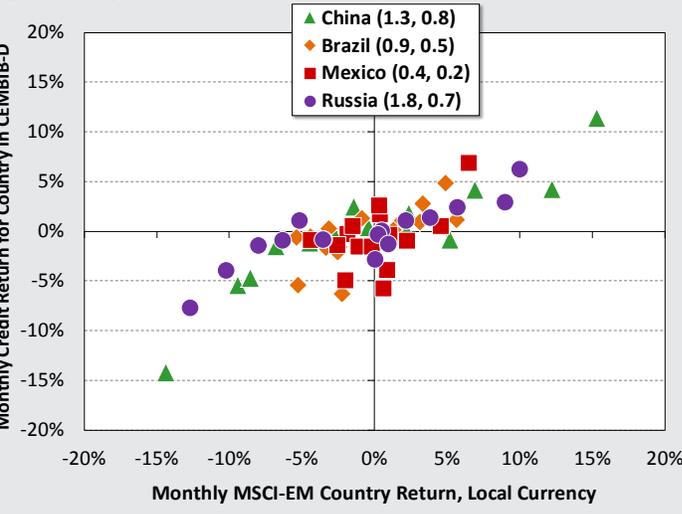


\*Perpetuals included  
 (1) Included in Barclays U.S. and/or Global Investment Grade Credit Indices  
 (2) Included in Barclays U.S. and/or Global High Yield Credit indices  
 Source: J.P. Morgan, MSCI  
 Data as of April 2012

– allowing for the different industry classifications mysteriously propagated by the debt vs. equity underwriters – the overlap is also high. Banks (boy, do the underwriters like to underwrite their colleagues’ issues) are the biggest in both. Among the larger countries in both indexes, the overlap by individual issuer (Figure 1.3) is amazingly high, and we note with some alarm that perpetual bonds are included in CEMBIB-D. Perps are about as close to equity as we bond folks can get. We’ve also noted in Figure 1.3 the bonds included in investment-grade and high yield indexes. Chances are, you have it!

This overlap leads to a fairly robust relationship between the CEMBIB-D’s *credit* return (removing the USD rates return), and the corresponding country’s MSCI-EM equity index. Figure 1.4 plots the monthly return of the MSC-EM local currency country index for four of the big countries against the credit return for the CEMBIB-D of that country. The legend provides the beta and the r-squared, respectively, of the relationship. For China and Russia especially, these figures are high, leading us to wonder: why would anyone already invested in equities also buy corporate debt? After all, par’s the limit on corporate debt, and the downside is as real as in equities.

**Figure 1.4**  
**Relationship between CEMBIB-D's Credit Return and the MSCI-EM Equity Return for Major Overlapping Countries**



Source: GMO based on data from J.P. Morgan, MSCI  
 Data as of January 2010-April 2012

## Box 2 Typical Risk Disclosures For Emerging Debt Funds

Figure 2.1

		External Debt		Local Currency Debt		Corporate Debt	
Principal Risk	Description (Plain English Translation)	Importance	Why	Importance	Why	Importance	Why
Market Risk – Fixed Income Securities	As bond yields fluctuate, prices do, too. Since the fund is invested in bonds, as yields go up, prices go down. Interest-rate sensitivity is known as duration.	High	Duration = 7	Medium	Duration = 4.5	High/Medium	1 for CEMBIB-D Inv. Grade (Duration = 5.6); 2 for CEMBIB-D HY (Duration = 4.3)
Credit Risk	You lent \$100 and now you expect to get less than \$100 back.	High	Average S&P Rating = BBB-	Medium	Average S&P Rating = BBB+	High/Medium	1 for CEMBIB-D: HY (average rating BB); 2 for CEMBIB-D: IG (average rating BBB)
Liquidity Risk <sup>1</sup>	You might not be able to sell your bonds for recently-observed prices (or at all) soon.	Depends	Average bid-offer on EMBIG = 0.8	Depends	Average bid-offer on GBI-EMD (Est.) = 1.0	Depends	Average bid-offer on CEMBIB-D = 1.1
Foreign Investment Risk <sup>2</sup>	Prices of many foreign securities fluctuate more than those of U.S. securities.	Low	Technically, most external debt instruments are U.S. securities issued under U.S. or English law.	High	Local debt instruments involve more of the typical risks associated with this category.	High	Although the bonds may be U.S. or other foreign jurisdiction, the assets generally aren't (implying the possibility of low recovery values for foreigners). Further, countries with capital controls use offshore SPV structures that effectively transform a bond investor's stake into an equity one.
Currency Risk	FX rates go up and down, and from time to time can become non-convertible or transferrable.	N/A	EMBIG is a USD index	High	About 75% of the volatility of the GBI-EMD's daily return comes from FX movements.	Unknown	Although the bonds are USD bonds, the issuer's earnings may not be; giving rise to unknown contingent credit risks.

<sup>1</sup> Liquidity risk is time-varying. Sometimes the asset classes are liquid, and sometimes they aren't (see Figure 2.2). Sometimes investors prize liquidity, sometimes they don't. The longer one's investment horizon, the less this is viewed as a risk.

<sup>2</sup> Foreign investment risk captures a range of possible risks, including: inferior disclosure and regulatory standards, opaque securities markets (including high and variable custodial services costs), macroeconomic instability including high and variable inflation, political uncertainty with regard to the rules of doing business domestically and abroad, industry or commodity concentration (lack of a diversified economy), heightened possibility of expropriation or confiscatory taxation, imposition of withholding or other taxes, etc.

Source: GMO

### Taking the principal risks in order:

**Market risk:** For the purposes of this discussion, we're limiting this concept to interest-rate sensitivity in order to distinguish it from the other risks that can drive a bond's value up or down (credit, liquidity, currency, etc.). For the two USD classes (external and corporate), "duration" (interest-rate sensitivity) references the USD term structure. In other words, these bonds can fluctuate due to changes in U.S. interest rates. Since this risk factor can be easily hedged, we don't discuss it here, preferring instead to focus on the "emerging" parts of the asset classes.<sup>1</sup> Note that higher (credit) quality USD bonds have (all else equal) more interest-rate sensitivity, generally because they have lower coupons, although both EMBIG and CEMBIB-D encompass investment grade as well as junk-rated bonds.

For local currency debt, the sensitivity here is to the goings-on in the local debt market, which respond to local inflation, supply/demand, and other considerations. As is the case with all international bond portfolios, the single duration figure wraps up in its calculation the heroic (and not terribly realistic) assumption that all of the underlying country markets' yield curves move simultaneously and in a parallel fashion. While this may make sense when comparing German and Swedish rates, or U.S. and Canadian ones, this is less true in emerging domestic debt markets either because of latent credit risks (discussed below) or capital controls that limit cross-border "arbitrage" (more accurately: statistical relative value trading) among them. Therefore, it's hard to apply the kinds of rules of thumb that guide "developed markets" rates folks, where curve slopes and levels behave in fairly predictable *relative* ways.

**Credit risk:** Put simply, this is the risk that, due to non-payment by the issuers, you get back less than you invested. Of course this is a buy-and-hold way of thinking: you buy and hold to maturity or default. Along the way credit spreads can widen and narrow, resulting in mark-to-market losses or gains, but for long-term investors, failure to pay is the real risk. The key to investing is to earn more ex-post credit spread than would be justified by ex-ante expected losses. After all, if you buy a bond at 17 expecting immediate default with a recovery of 20, that's an 18% expected gain. If instead, recovery is below 17, then you will have suffered a loss.

<sup>1</sup> For those with a view about USD interest rates, the decision to hedge should be independent of the decision to hold external or corporate debt for the "emerging" pieces. In other words, don't throw the (emerging) baby out with the (USD interest rate) bathwater.

## Box 2 (continued)

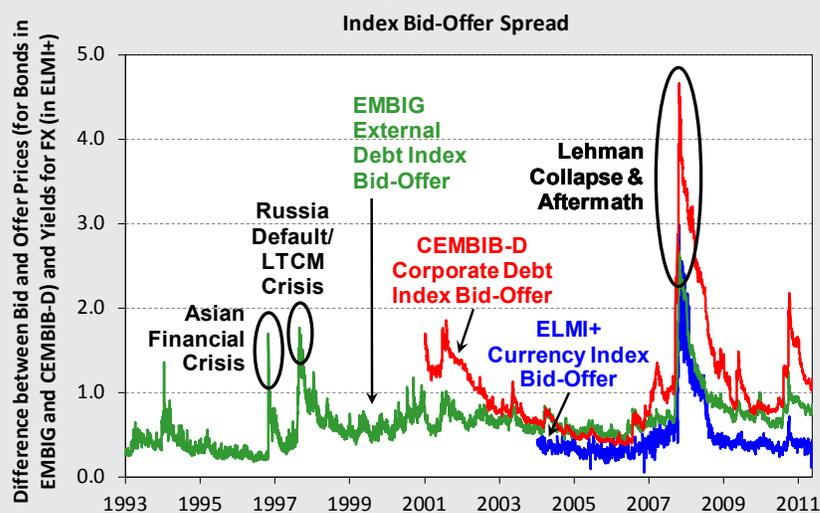
Each of the three sub-classes exhibits credit risk to a greater or lesser extent. For sovereign debt, willingness to pay is often as important as ability to pay, and this has a number of implications. First, it muddies the case often heard that “there’s no credit risk in local currency debt because the issuer can always print as many [insert currency name here] as are needed to pay it.” We’ve observed selective defaults in Russia (1998) and Jamaica (2010) where the sovereign selectively defaulted only on its local debt instruments. Second, as was highlighted recently in the case of Greece, the jurisdiction (local law or external law) of the instrument also matters. Local law instruments give the debtor more latitude to punish creditors, and credit spreads should (and generally do) reflect this. After all, a sovereign might be less willing to pay debts as promised if it can change the rules of the indentures retroactively. Third, a straight numerical evaluation of a sovereign’s debt position (debt/GDP, fiscal balance) isn’t enough to understand likelihood of default. Ecuador defaulted in 2008 because the newly-elected president chose to repudiate obligations incurred by his political opponents despite reasonably good fiscal indicators. In other words, take nothing for granted when lending to sovereigns!

For emerging corporate (non quasi-sovereign) debt, the credit fundamentals are even more challenging to establish. First of all, when the sovereign is having difficulty servicing its foreign-pay debts, local corporates will, too (the so-called “sovereign ceiling”). In some cases, corporates that earn foreign currency (oil exporters, say), may be able to continue to service foreign debts with foreign earnings, but others will struggle, particularly those with local currency earnings and therefore balance-sheet mismatches. Even those firms that swap their foreign currency borrowings into local currency (therefore creating “synthetic” local currency borrowing) may run into difficulties. Although they will be insulated from the balance-sheet mismatch, in situations where there is a foreign currency shortage, they will still need to convert their hedged local currency into foreign currency, which they may be unable to do if the sovereign is suffering from a shortage of foreign currency.

*Foreign investment risk:* As the footnote to Figure 2.1 details, this is a broad concept, and it’s mostly applicable to local currency and corporate debt. For local currency debt, the relevant risks have to do with the local market itself (structure, regulation, transparency, custodial costs); the macroeconomic framework (inflation, etc.); political uncertainty (regarding taxation of local bond investments, among others). For corporate debt, the relevant risks include inferior disclosure and regulatory standards, creditor-unfriendly bankruptcy laws (if such laws exist at all), macroeconomic instability, political uncertainty, industry or commodity concentration, and the possibility of expropriation or confiscatory taxation. For external debt, any of these relevant factors has already been captured in credit risk. The securities themselves are, by definition, in a foreign jurisdiction.

Whether or not foreign investment risk is important can only be uncovered by reading the indenture. For example, some local-currency denominated instruments are issued as “global bonds,” in foreign markets. These have less foreign investment

**Figure 2.2**  
**Emerging Debt Transactions Costs:**  
**High, and Sometimes Very High!**



Source: J.P. Morgan  
Data as of May 2012

**Box 2** *(continued)*

risk than their pure local debt counterparts. Some corporates set up special-purpose vehicles (SPVs) offshore, and these become the issuing entities, precisely because capital controls or some other factor precludes the raising of foreign funds directly by the local corporate. In these cases, the SPV brings the money onshore as equity, which adds additional risk in terms of recovery values to creditors of the SPV. Anyway, the devil is in the details!

*Currency risk:* Local currency debt distinguishes itself from the other two in that currency risk is its principal risk. From a foreign investor's (long-term) perspective, currency risk is really two things: currency valuation risk, but also currency convertibility risk. Currency valuation risk is simply the risk that in purchasing a local currency bond whose currency is overvalued, the investor will suffer declines in the value of his overall investment due to losses as the currency declines toward its fair value. Currency convertibility risk is actually more serious: when trying to get out of a local market, the investor is prohibited from buying foreign exchange at all, leaving him stuck in the local market. This is a rare risk, and of course it is tightly related to credit risk. Like local law risk, though, investors should demand compensation for this additional risk. In certain markets, "convertibility swaps" trade alongside credit default swaps, the market's acknowledgement of the risk's importance.

*Liquidity risk:* Emerging debt of all three varieties shares with its other fixed income asset class brethren the same problem: when you don't need it, it's plentiful, but when you need it, it's absent. Figure 2.2 is instructive: here we show the weighted-average price bid-offer for the bonds in the external debt index (EMBIG), the corporate debt index (CEMBIB-D), as well as the yield bid-offer for passive emerging currency investments (ELMI+).<sup>2</sup> As buy-and-hold managers, we don't think of liquidity as being a risk generally, but rather an opportunity, because sometimes illiquidity causes credit spreads wider than justified by their fundamentals, which we consider an opportunity. At the end of the day, whether or not liquidity is a "risk" or an "opportunity" is a function of your liquidity preference, which is of course a function of your time horizon.

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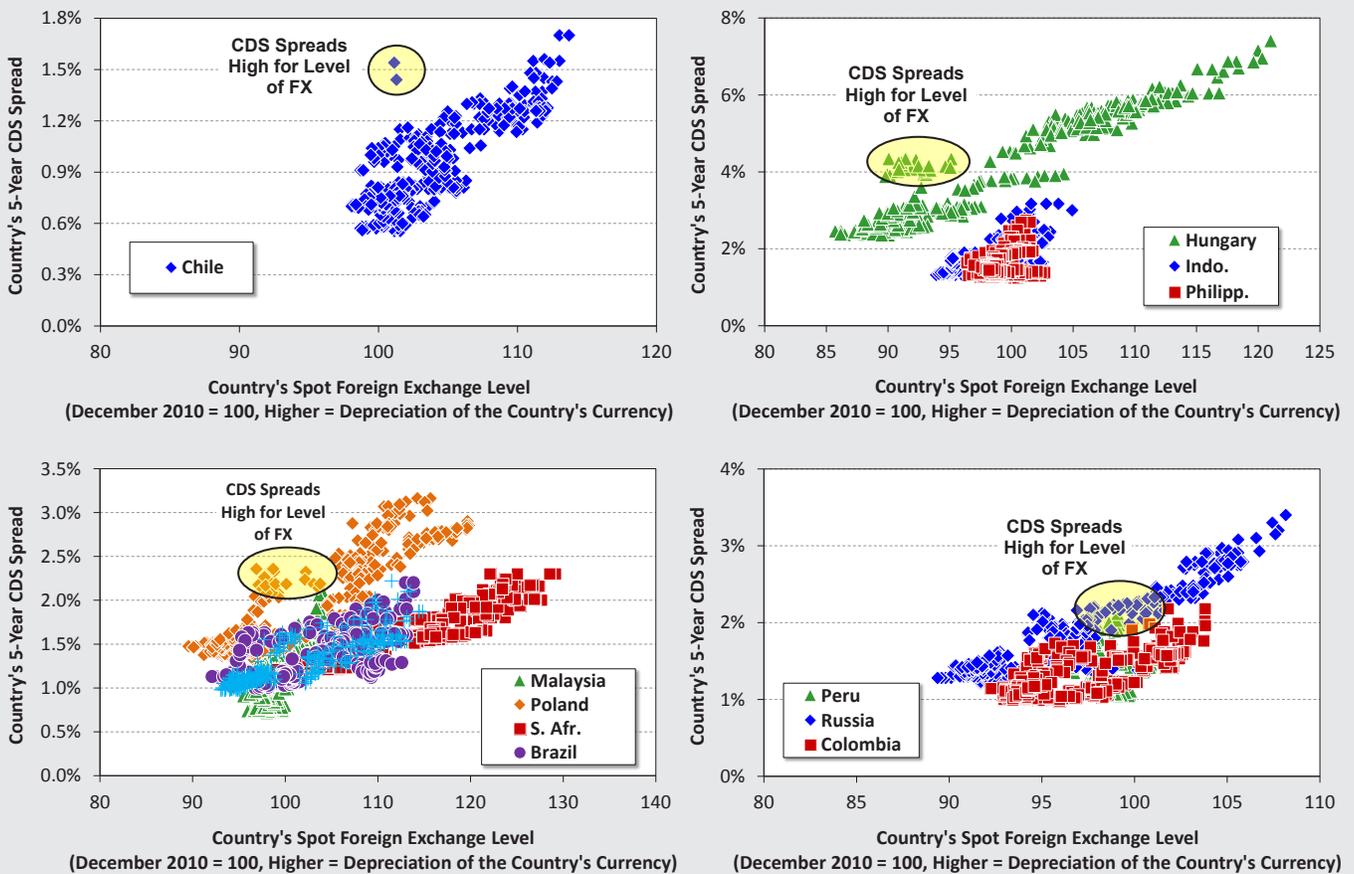
<sup>2</sup> J.P. Morgan does not produce a price bid-offer for its flagship GBI-EM local debt series, unfortunately. In observing the bond price runs we're presented each day, we'd estimate these to be at least as high as those of the EMBIG, give or take, with a wide variation on a country-by-country basis.

### Box 3 A Step-by-Step Guide to Assessing Relative Value Among External and Local Debt

Isolating the big drivers of returns – credit for external, and currency for local – we ask: which is better relative value? As the exhibit below shows, they’re related statistically, as they should be given the fundamental link. Unless the currency is pegged or heavily managed, when the currency’s value rises, the credit spread narrows, and vice-versa. In the exhibit, the x axis shows an index of the country’s nominal USD-numeraire exchange rates, with higher values meaning depreciation. On the y axis, we plot the 5-year credit spread for the country from the CDS market. Each dot is a single day’s observation for the period January 2011 to present.

We show single-A Chile; double-A Malaysia, Poland, South Africa, Brazil, and Mexico; triple-B Peru, Colombia, and Russia; and double-B Hungary, Indonesia, and the Philippines. Seen this way, the choice of relative value is really confined to situations where for, say, a given level of FX, the CDS spread is “too high” or “too low” compared with an average for that approximate level of FX.

**Figure 3.1**  
**A Country's FX Rate and Its Credit Spread Are Fundamentally Related, So Correlation Is Generally High**

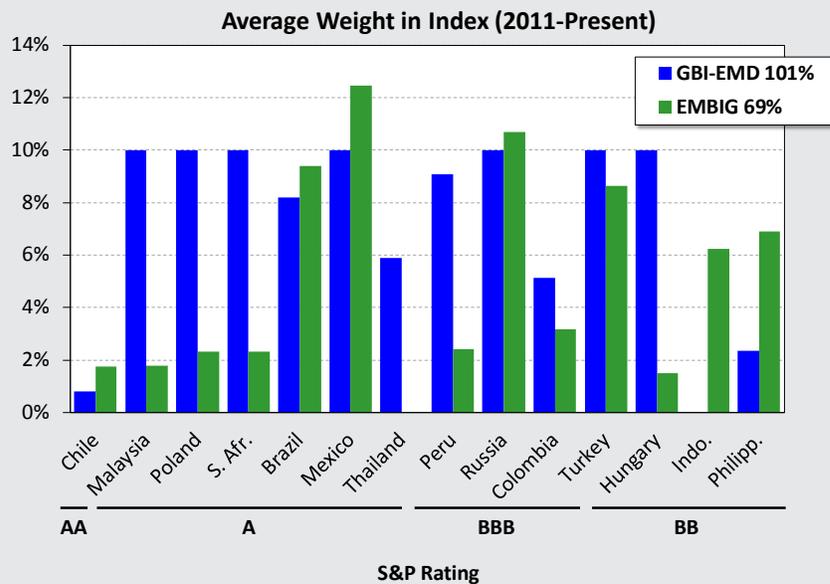
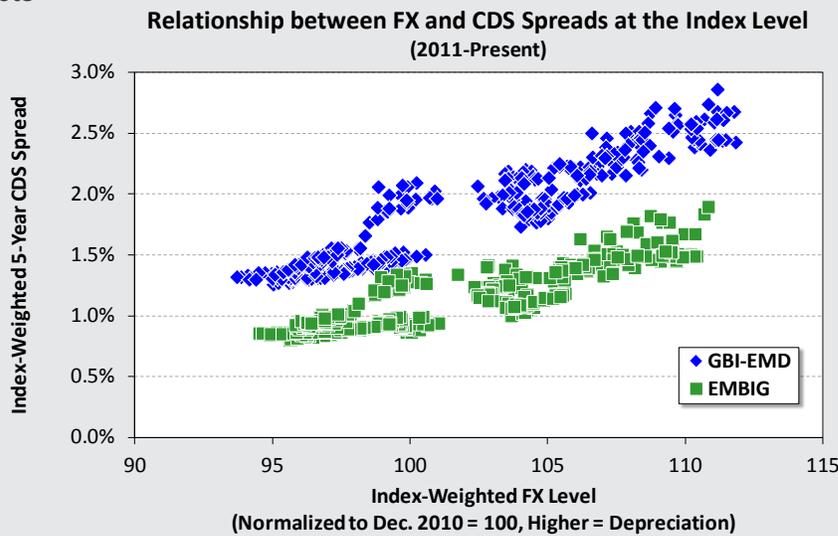


Source: GMO, based on data from J.P. Morgan  
 Data as of January 2011-April 2012

**Box 3 (continued)**

At the index-aggregated level, the picture is further complicated by compositional effects. Here we show these same figures, but now aggregated using the benchmark country weights for the external debt (EMBIG) index and the local debt (GBI-EMD) index for those countries present in both indexes. The fact that the plots lie at different y-axis levels is a reflection of this compositional effect, which can be seen by comparing the country index weights on the subsequent exhibit. Here it becomes very obvious that a decision to move from, say, external debt to local currency debt is mostly a statement of country preference, and a broad switch among the two sub-classes is an inefficient way of making such statements.

**Figure 3.2**  
**Relationship Between a Country's Exchange Rate and Its Credit Spread for Various Credit Rating Buckets**



*Source: GMO, based on data from J.P. Morgan, Reuters, S&P  
 Data as of December 2010-April 2012*