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Blessing or curse? Emerging market debt and inflation



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Local currency emerging market sovereign debt has grown to dominate the asset class, with over USD 800b outstanding.

Introduction

Inflation is one of the biggest worries for bond investors. But when it has to do with emerging market debt, the traditional relationship between returns and inflation changes. In some cases, inflation can even be a benefit.

Investors generally fear inflation because rising prices reduce the real return on fixed rate debt and normally lead central banks to raise policy rates in order to manage expectations of future inflation. Emerging markets in particular have a reputation for allowing inflation to run at higher rates than in developed markets. Several had episodes of hyperinflation, though this was over ten years ago and is not a scenario we foresee for any major issuer. Buyers of emerging market debt need then to be very conscious of the risk of inflation when evaluating the attractiveness of the asset class.

Just as there are different types of emerging market debt, there are different types and sources of inflation, and the relationship between inflation and the returns on these investments is complex. Of course inflation is not the only or the most important factor that affects debt prices. Company specific issues, emerging market risk aversion, liquidity, etc., all play a role. But in this paper, we will examine just the impact of emerging market, US, and investor home country inflation on the different components of fixed income spreads and returns.

Index	EMBI Global Diversified	CEMBI Broad Diversified	GBI-EM Global Diversified
Debt type	USD sovereign	USD corporate	Local currency sovereign
Countries	41	36	15
No. of issues	252	493	182
Market cap (USD b)	\$248	\$134	\$817
Average rating*	Baa3/BBB-/BBB-	Baa2/BBB-	Baa2/BBB+
Stripped YTM	6.2%	6.1%	7.1%
Stripped spread	262 bps	295 bps	nm
Duration (Spread/YTM)	6.5 yrs	5.3 yrs	4.5 yrs

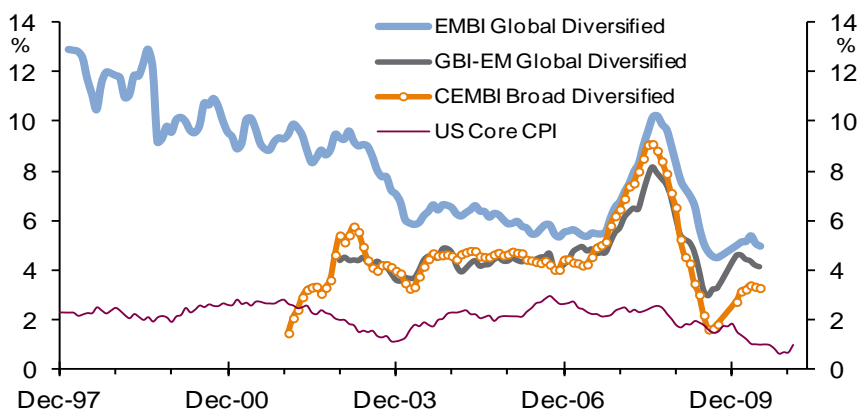
EMBI = Emerging Markets Bond Index; CEMBI = Corporate Emerging Markets Bond Index; GBI-EM = Government Bond Index – Emerging Markets. * Moody's / S&P / Fitch. Source: J.P. Morgan.

Inflation sensitivity

Though the composition of each of the three emerging market debt indices is different, index-weighted inflation rates move roughly in line.

The importance of inflation for the three types of debt that we are evaluating depends partly on the issuers of the debt. The most significant sources of US dollar sovereign debt, and hence the countries with the largest weightings in the EMBI Global Diversified Index¹, tend to be countries with higher inflation rates than for either the GBI-EM or CEMBI indices (see table on previous page for key characteristics of the three indices). The membership of the EMBI index is more concentrated than it is for the other two indices, and the countries with the heavier EMBI weights (Mexico, Russia, and Brazil), have higher inflation rates than some of the more important countries in the CEMBI, such as Hong Kong and South Korea. The trend in inflation across the three indices is broadly similar, however, as **Exhibit 1** illustrates.

Exhibit 1 – Index-weighted index annual inflation rates



Latest data January 2011. Source: US Bureau of Economic Analysis, FactSet, J.P. Morgan.

An investor in emerging market debt has to consider not only inflation in the issuing country, but also US inflation and inflation in their own country.

Fixed income investors traditionally do not like rising inflation for two reasons. First, the real yield they anticipated when a bond was purchased turns out to be lower than expected. Second, rising market yields will cause the bond price to fall, meaning investors will suffer a capital loss if they sell the bond before maturity. But which country's inflation matters? A eurozone-based investor who buys a US dollar denominated emerging market bond from Russia, say, may need to worry about the inflation rate in three countries: their own, the United States, and Russia. We will consider each in turn.

¹ From now on, references to EMBI will be specifically for the EMBI Global Diversified Index, to CEMBI for the CEMBI Broad Diversified Index, and to GBI-EM for the GBI-EM Global Diversified Index. Any references to EMBI data prior to 1998 refer to the EMBI Index.

Inflation and US dollar debt

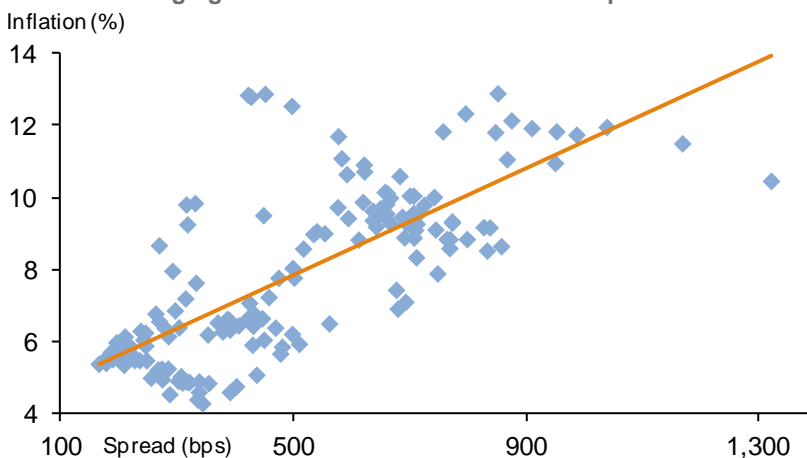
By purchasing a US-dollar denominated fixed income security, the traditional link between inflation and bond yields is broken for the investor.

In theory, by purchasing US dollar-denominated debt an investor shields themselves from inflation in the issuing country. The traditional relationship between inflation and a bond issue's yield-to-maturity is broken by the use of an intermediate currency. The reality is that an investor still faces issuing country inflation risk in two ways. If one considers an economy with high inflation, risk for a bond investor is, broadly speaking, probably high as well. The high inflation may be the result of poor fiscal management or an overheating economy, and bond spreads over US Treasuries will reflect that. Consequently, as the **Exhibit 2** illustrates, there is a correlation between periods of high inflation and spreads.

But if the spread when the bond was purchased accurately accounted for risk and inflation, the high spread itself is not a problem for the investor. In fact it is the primary source of their return. As long as the increase in inflation does not cause the yield to rise in step, the investor will not suffer a price decline. And since the coupon is paid in US dollars, there is no impact on the investor's real return. As we noted, countries with higher inflation generally do tend to have higher spreads. A change in inflation rates, however, is not always or necessarily reflected in a change in spreads. Another way of stating this is that the correlation between the change in inflation and the change in spreads is weak. It is actually negative over a three month period, zero over six months, and just +34% over one year. There have been numerous instances when country inflation rose but risk spreads were constant or declined. For example, Brazil's inflation has risen over 200 bps from 4.1% to 6.2% since August 2010, while the spread on the country's USD sovereign debt has *fallen* by 50 bps. So an investor must consider whether a change in inflation is signalling a change in country risk, as that will affect spreads and therefore returns, but an increase in local country inflation does not by itself lead to rising spreads.

Often high inflation simply reflects high market risk, and this is reflected in debt spreads over US Treasuries.

Exhibit 2 – Emerging market inflation rates and EMBI spreads



Note: Regression from 1998-2011. Latest data January 2011. Source: FactSet, J.P. Morgan.

One risk for a foreign investor is the potential impact of local market inflation on exchange rates.

The other means by which local country inflation can ultimately impact an investor's return is indirectly through the currency. If high inflation rates lead to a rapidly depreciating currency, it is conceivable that a country (or company) would run into difficulty meeting its interest payments in dollars. This was an issue during the Asian financial crisis in 1997. In this situation, the high inflation rates would be occurring simultaneously with higher risk, even if it was not inflation itself that led to the elevated spreads.

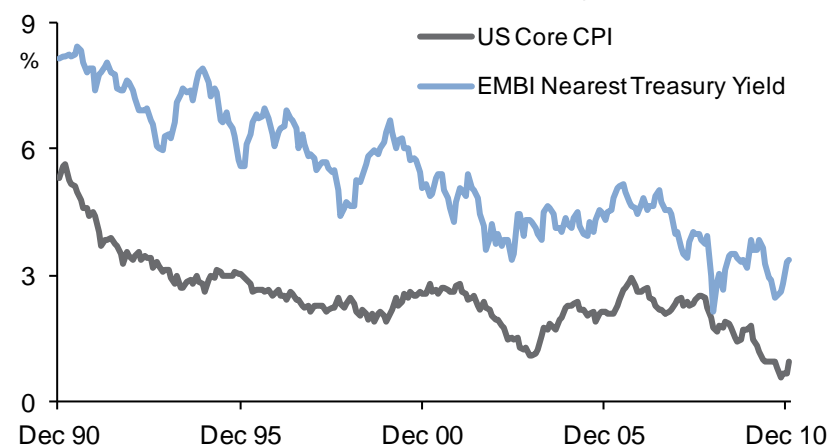
But it is not only emerging market inflation that matters. An increase or decrease in US inflation will likely change the yield on the underlying Treasury benchmark and so feed through to the nominal yield-to-maturity on emerging market debt, *even if spreads remain constant* (see **Exhibit 3**). That is, some of the rise in US inflation would be reflected in higher yields on USD emerging market debt since the additional yield investors expect for accepting emerging market risk will be added to the (now higher) base US Treasury rate.

The impact of the investor's own country inflation would only be felt through a change in the exchange rate between the US dollar and the currency of the investor country. In this case, investor country inflation might even be beneficial to the degree that it weakens the investor's home currency against the dollar, boosting the value of the foreign currency income.

The transmission mechanisms from inflation to sovereign USD emerging market debt yields apply equally to corporate USD emerging market debt. To the degree that higher inflation signals higher risk, corporate debt spreads will reflect this, and probably more strongly since these spreads tend to be more volatile and sensitive than sovereign spreads. The sensitivity to inflation is slightly different between the two indices (EMBI and CEMBI), but this has to do with variations in composition and index duration. But as with USD sovereign debt, an increase in inflation does not necessarily equate to an increase in spreads over the Treasury benchmark.

Emerging market debt issuers have to offer a premium over US Treasury yields, so if US yields go up, so must the yields they offer.

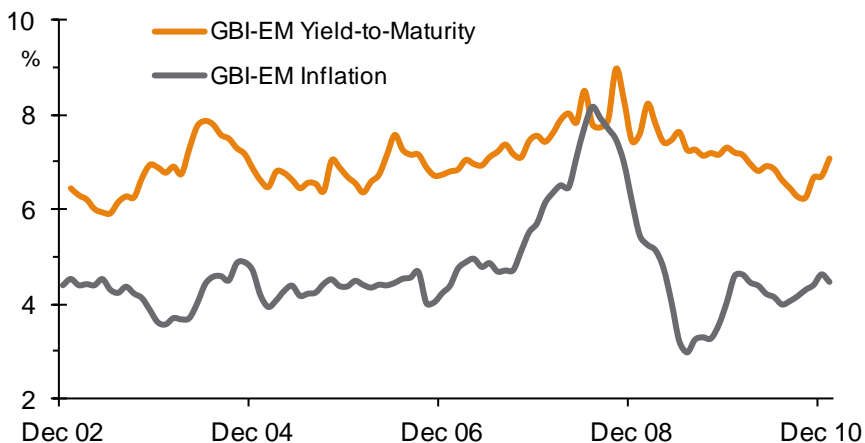
Exhibit 3 – US inflation rates and EMBI benchmark yields



Local currency debt

The relationship between inflation and the yield-to-maturity (and hence total return) for local currency emerging market sovereign debt is more straightforward. An increase in issuing country inflation (or policy rates) translates fairly directly into increases in the yield on the debt. In **Exhibit 4** below, the wild swings in the price of oil in 2008 skew the relationship somewhat as the year-on-year changes did not feed directly in nominal bond yields.

Exhibit 4 – Local market inflation and bond yields



Latest data January 2011. Source: J.P. Morgan.

Local currency debt is the most exposed to changes in issuing country inflation.

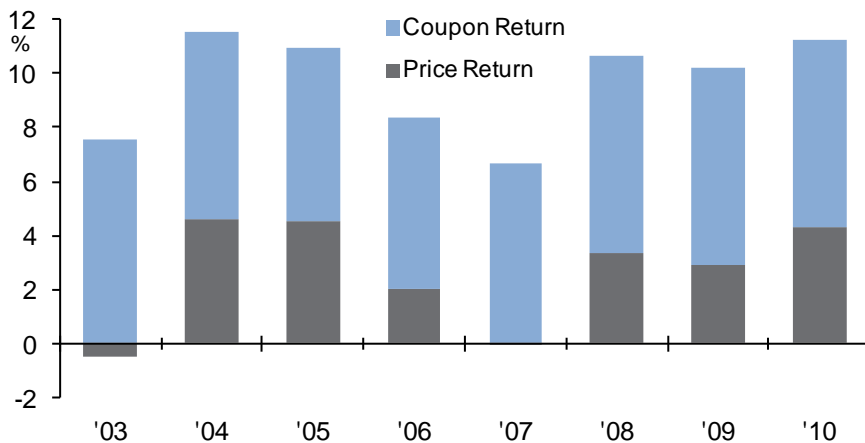
While the implications for an investor of rising yields are clear (and negative), there are two considerations to be kept in mind. A major advantage of local currency debt is that it offers not only substantial portfolio diversification, but also generous yields for an asset class rated Baa2/BBB+, on average 45 basis points more than equivalently rated (and longer duration) US corporate debt. This yield helps cushion investors against losses from price declines. Over the last eight years, despite periods of rising yields, there have only been two years where the price return on the index was negative, and even then the income from the coupon more than offset the loss (see **Exhibit 5** on following page).

As with USD debt, an investor has to consider the impact on the exchange rate of local market inflation.

The second point is that while an increase in local currency inflation has no impact on a foreign investor's real yield, it may affect their return via the currency. Particularly high inflation may lead to a fall in the value of the local currency, and since bond payments are in local currency and not in US dollars, this directly reduces the amount of income received. Inflation rate differentials are one factor that determines exchange rates, but relative GDP growth and interest rates also play a role. Since rising inflation is often the result of strong GDP growth and may

A key advantage of local currency debt is that generous coupons help offset occasional declines in prices.

Exhibit 5 – Components of GBI-EM total return

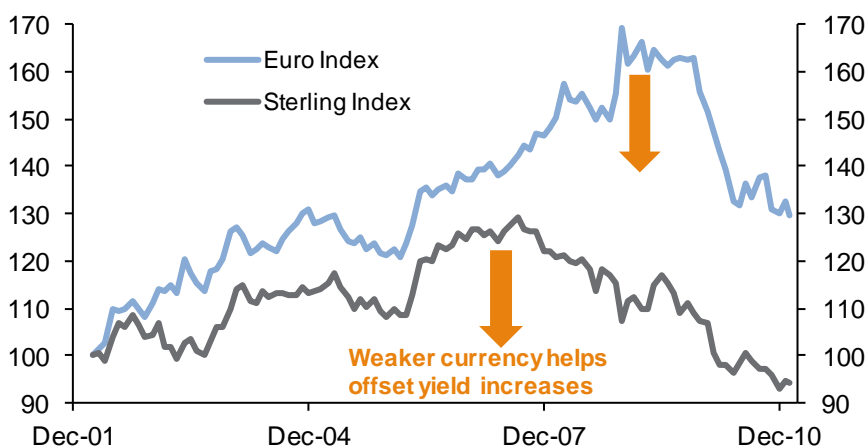


Note: 2007 price return = -0.03. Latest data December 2010. Source: J.P. Morgan.

result in central banks raising base rates, the currency could conceivably strengthen. If the investor's home currency is depreciating against the currency of the countries making up the index, the gain on currency will at least partly offset the loss from the bond price fall. The chart below illustrates how both the euro and sterling appreciated against the currencies making up the GBI-EM index from 2001 until the onset of the credit crisis, but have been weakening since. Over the last several years, higher growth and interest rates in emerging markets have helped their currencies to gain value relative to most developed market currencies.

As long as the investor's currency depreciates against the currencies of the debt issuers, the investor will realize a gain.

Exhibit 6 – Emerging market currency indices



Latest data February 2011. Source: J.P. Morgan.

Conclusion

Fixed income investors must always be conscious of inflation. When they invest in emerging market debt, they have to consider not only inflation in the issuing country, but inflation in the US and in their own country. The impact of inflation on the various types of emerging market debt depends on the cause and source, but in some cases the impact is positive. It is partly because emerging markets have higher inflation that yields are high relative to most developed markets, so inflation can be both a blessing and a curse (or at least a problem). If the risks are judged correctly, this asset class offers the prospect of positive returns and valuable diversification.

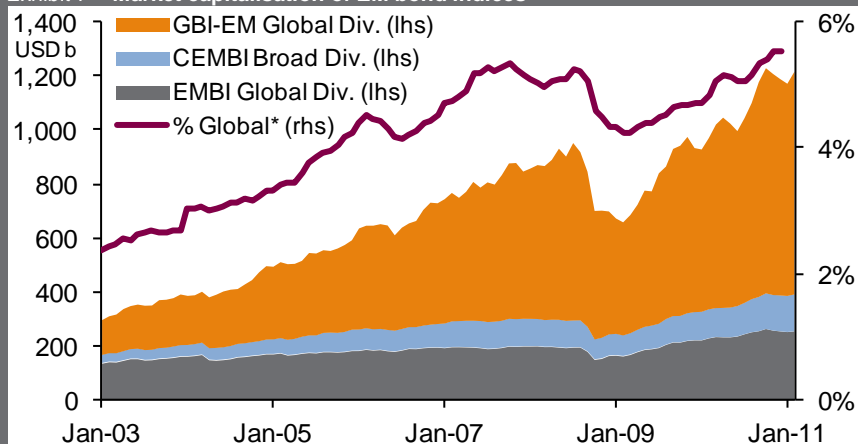
The rescue of Latin American countries in the 1980s soon led to a new, rapidly expanding asset class.

The origins of the asset class

Emerging market debt has developed as an asset class over the last two decades. It is worth USD 1.2 trillion today, with local currency sovereign debt making up an ever increasing portion. Credit ratings are improving, leading to tightening spreads, and new issuers are enhancing the diversification potential.

Emerging debt really had its debut on the international capital markets with the launch of the Brady Plan. This program was created to help less developed countries recover from the debt crisis of 1982-88. At that time, rising interest rates, falling commodity prices, a lack of domestic savings, and limited access to international capital markets put great pressure on many Latin American countries. Numerous loans defaulted, leading to the need for a broad debt restructuring. The Brady Plan introduced highly tradable, liquid, US-denominated, asset backed bonds, providing substantial debt relief for emerging market economies. In total USD 170 billion was issued, with Latin America accounting for USD 148 billion. Over time, countries paid off these bonds such that by 1993, half of the debt had been retired, and today almost all the original Brady debt has been repaid.

Exhibit 7 – Market capitalisation of EM bond indices



Note: Div. = Diversified. Morgan.* Emerging market bond index market cap. as percent of the Barclays Global Multivest Index. Latest data February 2011. Source: World Bank, Barclays, J.P. Morgan.

Dan Morris, *vice president*, is a strategist responsible for delivering market analysis and insight to clients in Europe. Prior to joining J.P. Morgan Asset Management, Dan was the Senior Equity Strategist at Lombard Street Research and before that part of the Institutional Investor-ranked portfolio strategy team at Banc of America Securities in New York. Dan began his career covering Latin American equity markets at BT Alex. Brown and Dresdner Kleinwort Benson. He holds an MBA from the Wharton School and a Masters in International Relations from Johns Hopkins' School of Advanced International Studies. His undergraduate degree is in Mathematics from Pomona College and he is a CFA charterholder.

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