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EMERGING MARKETS COMMENTARY

More Than a Passing Fad: Emerging Markets Bond Funds Deserve Strategic Consideration for Many Portfolios

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Allocations to emerging markets bond funds make sense from a strategic perspective, but the opportunity set offered by this evolving market is not static.

Investors have a growing variety of options through which to gain exposure to emerging markets debt. Fund offerings are typically divided between those that invest in debt denominated in local currency and those that invest in "external" debt denominated in currencies like the U.S. dollar and euro. Funds are also normally focused on either sovereign or corporate debt, though there are an increasing number that have the flexibility to invest in both. The number of investment options varies considerably across strategies, and has struggled to keep pace with the growth of the emerging markets debt universe. For example, a range of vehicles offers access to local currency sovereign debt; in contrast, options for local currency corporate debt are extremely limited. This situation is changing, however, as strong investor appetite spurs both more issuance and the proliferation of funds that can absorb it.

This commentary describes the options and rationale for making an investment in emerging markets debt funds, and examines the prospects for future returns given the strong recent performance. This task is not easy, as it is complicated by the rapid evolution of the emerging markets debt universe and the diversity of credit fundamentals and liquidity across jurisdictions. Put another way, it is tough to generalize about "emerging markets debt" when the term refers to dozens of individual sovereign and corporate bond markets that, in many instances, have little in common. Generally speaking, given the degree to which emerging markets interest rates and credit spreads have compressed in recent years, it is likely that the double-digit annual returns of the past will be harder to achieve. However, this asset class may outperform some developed markets equivalents, and will prove a useful tool for those seeking to diversify their exposure to emerging markets or fixed income.

Investment Universe

The emerging markets fixed income universe, including external and local currency debt, is vast. Estimates of outstanding sovereign debt issuance alone are near $6 trillion, while outstanding corporate debt is closer to $2 trillion. However, the total investable universe for offshore investors across both categories may be closer to just $2 trillion (Exhibit 1). This is due to both capital controls in countries like China and India, and liquidity considerations, which reduce the stock of debt available to foreign investors. This universe is growing rapidly—in 2010, there was nearly $300 billion of eurobond issuance in both local and external formats. Trends in recent issuance have shifted the profile of outstanding investable debt; for example, the volume of outstanding local currency emerging markets sovereign debt has gone from being roughly equal to that of external debt in 1999 to over 400% of this amount in 2010. In addition to emerging markets debt, investors seeking exposure to emerging markets currencies and interest rates may also wish to look at emerging markets currency funds, which we will touch

on briefly in this commentary for comparative purposes.[1]

Investment Options

Sovereign Debt—Local Currency

Sovereign debt issued in local currency is the largest component of the emerging markets debt market. One proxy for the size of the *investable* universe is the $800 billion J.P. Morgan Government Bond Index Emerging Markets Global Diversified (Exhibit 2). The actual emerging markets local currency sovereign bond universe is far larger; the People's Republic of China alone has issued nearly $2.5 trillion (in US$ terms) in outstanding debt. However, capital controls and liquidity considerations in practice mean that the investable universe is far smaller than might be assumed. For example, less than 10% of a typical Asian sovereign's local currency debt is held by foreign investors; many of these are other central banks. To use a specific example, the Asian Development Bank reports that just 9% of the Republic of Korea's KRW 565 trillion (US$498 billion) of sovereign debt is held outside the country, with China and Luxembourg alone controlling 20% of this amount.

These capital controls and liquidity considerations, as well as index construction methodologies, cause many emerging markets bond indices (and funds that track them) to be far more concentrated than outstanding issuance would suggest. Just eight countries contribute 80% of the market capitalization of the J.P. Morgan Government Bond Index Emerging Markets Global Diversified. This has implications for performance and the exposure offered; country weightings may thus bear little relation to stocks of outstanding debt or a country's economic importance. For example, Malaysia's weighting in the main index is equal to that of Mexico, despite having half as much debt outstanding and an economy approximately one-quarter as large. Given these circumstances, some investors may prefer an active manager that can construct a more diversified (or targeted) portfolio, while others will favor the cost efficiency offered by more concentrated funds. The good news is that there is a wide variety of fund offerings from which to choose, including exchange-traded funds, mutual funds, private vehicles, and hedge funds.

One consideration for both local currency sovereign and corporate debt is that transaction fees are typically higher than those for external debt, which can erode investor returns. These fees may not be captured by index returns, but unfortunately will most certainly be reflected in fund performance.

Corporate Debt—Local Currency

Given liquidity considerations, capital controls, and other issues (such as classifying debt from quasi-governmental entities), there is a certain amount of disagreement about the size of the local currency corporate bond market. One figure from J.P. Morgan puts the number at $1.3 trillion for the whole universe, while other sources suggest that the Asian local currency corporate market alone is $1.6 trillion. In either event, the *investable* amount for offshore investors is just a fraction of this, and there are no widely used indices that track its performance. It is generally thought that the vast majority (between 75% and 80%) of this issuance is from Asian borrowers in countries like China, Korea, and Taiwan, where local capital markets are relatively deep (though not necessarily accessible to foreign investors). One factor that historically limited the market's development was the tendency of emerging markets corporates to turn to local banks or even governments for funding requirements. From an investor perspective, offshore demand in turn was limited by a desire to separate

[1] For more information on these funds, please see our May 2010 Market Commentary *Emerging Markets Currency Funds: Time to Hitch a Ride on the Local?*

credit and currency risk, which resulted in a preference for emerging markets corporate exposure in external debt format. Recent attempts to deepen international appetite for local currency emerging markets corporate debt via issuance in eurobond format have met with mixed success, as broker-dealers have struggled with practical constraints like whether these bonds should be traded on local currency desks (that are used to trading sovereign bonds) or corporate bond desks (that have no currency expertise), causing the liquidity (and thus bond prices) of new deals to languish. However, it is expected that this market will eventually gain traction.

Given these historical dynamics, opportunities for foreign investors have been limited—we know of only a handful of hedge funds and long-only managers that offer dedicated local currency corporate bond funds. This is changing, however, given increasing investor interest and local governments and corporations that are eager to develop local capital markets. Manager offerings are increasing, with some funds that had already invested in emerging markets credit in external debt format now looking to expand mandates to cover local currency debt, leveraging currency analysis capabilities used in separate offerings. We also know of several managers that offer "core plus" local currency emerging markets funds that include sovereign and corporate debt.

Sovereign Debt—External

At just over $600 billion, the emerging markets sovereign external debt universe is smaller than the local currency equivalent in outstanding issuance. However, it has historically been the most popular emerging markets debt asset class with foreign investors (Exhibit 3). In theory, this asset class allows investors to separate their views on the credit quality of sovereigns from volatility in returns relating to movements in foreign exchange and local interest rates. However, to the extent that the *issuers* have not hedged the currency exchange rate risk associated with their issuance, and thus encounter difficulty in servicing such debt due to exchange rate movements, *investor* returns ultimately may be less insulated than originally intended. With over $214 billion in benchmarked assets, the most commonly used index is the J.P. Morgan Emerging Markets Bond Index Global Diversified. One reason is diversification—it includes over 40 different sovereigns, compared with 15 in the local currency equivalent. External debt indices are thus less concentrated than local currency equivalents—the largest country weighting in the J.P. Morgan Emerging Markets Bond Index Global Diversified tops out at 7.4% (Brazil), and the top ten countries contribute less than 60% of market capitalization. While diversification presents some benefits, it also carries some drawbacks, one of which is lower credit quality. The J.P. Morgan Emerging Markets Bond Index Global Diversified carries a Baa3 rating from Moody's, while the local currency equivalent carries a rating that is two notches higher. The default by index member Ivory Coast earlier this year on its debt is a reminder that not all emerging markets are benefitting from a secular upswing.

Like local currency sovereign debt, there are a large number of investment options in this market. While we see no reason for this to change in the years ahead, there are reasons to think that the importance of external debt markets will eventually be overshadowed by that of local currency markets. As investor demand evolves, many sovereigns will prefer to issue in local currency debt to boost local capital market development, as well as insulate their debt servicing requirements from exchange rate volatility. In other instances, emerging markets sovereigns will have limited funding needs as economies grow and governments run surpluses. These dynamics might support the argument to employ a manager with an open mandate that, in addition to making relative value calls across asset classes, will also be able to shift investment focus as the market (and thus opportunity) evolves.

Corporate Debt—External

At $645 billion, the market for corporate external debt exceeds that for sovereign external debt. External and local currency corporate debt have different geographic profiles. While approximately 75% of outstanding local currency corporate debt is issued by Asian corporates, the equivalent figure for external debt is just 33%. The index most frequently used to track performance is the $134 billion J.P. Morgan Corporate Emerging Markets Bond Index Broad Diversified, which is used to benchmark around $12 billion in assets. This index includes debt from corporations in 35 different countries and has different geographic weightings than sovereign indices. For example, the 40% and 20% weightings, respectively, for Asia and the Middle East/Africa in the J.P. Morgan Corporate Emerging Markets Bond Index Broad Diversified are far higher than those in the sovereign external debt index. There are several reasons for this, including the capital controls mentioned earlier as well as the fact that cash-rich Middle Eastern sovereigns are less active in international bond markets. This difference may appeal to investors looking for specific geographic exposures. The sector exposure offered by emerging markets corporate external debt also differs from that offered by emerging markets equities. For example, the weights in the external corporate debt index for financials and industrials are 33% and 21%, respectively—the comparable weights in the MSCI Emerging Markets Index are 25% and 7%, respectively.

The emerging markets corporate external debt market has historically prospered due to the liquidity on offer to borrowers from countries with less developed local capital markets and foreign investor preferences to separate credit and currency risk (as in the case for sovereign debt). From a hedging perspective, however, corporate borrowers such as materials and energy firms are inclined to issue in external debt format due to revenues in currencies such as the U.S. dollar that provide a natural cash flow hedge for their debt servicing requirements.

Emerging Markets Currency Funds

As an alternative to various emerging markets bond fund options, investors may also wish to consider emerging markets cash funds, which invest in emerging markets currencies via derivatives such as currency forwards or short-term local debt (like Treasury bills) denominated in these currencies. As such, the returns of emerging markets cash funds are less sensitive to changes in interest rates, credit spreads, and liquidity premiums. Emerging markets cash funds can mimic the returns of emerging markets bond funds when currencies are the main driver of returns, and their returns should be little affected by changes in long-term yields or credit fundamentals. To the extent that local interest rate curves are steep, these funds may also not generate the same amount of carry as bond funds that invest in longer-duration debt. One motivation for investors in currency funds is to hedge against the devaluation of developed markets currencies.

The geographic exposure of emerging markets cash funds can vary. The main J.P. Morgan Emerging Local Markets Index Plus has a larger number of constituents than local currency sovereign bond indices, though far fewer than external debt emerging markets bond funds. One significant difference between the J.P. Morgan Emerging Local Markets Index Plus and emerging markets bond indices is that it contains currencies from developed economies (such as Singapore and Hong Kong), which may mean it is less suitable for investors wishing to obtain exposure solely to emerging markets. J.P. Morgan estimates that around $20 billion in assets is currently benchmarked against the J.P. Morgan Emerging Local Markets Index Plus, though there are a number of emerging markets currency funds that either do not use the J.P. Morgan Emerging Local Markets Index Plus as a benchmark or considerably deviate from

its holdings. Some, for example, include Chinese *renminbi* and Indian *rupee* exposures that are significantly above their 2% weights in the index. It would be difficult to build such positions in sovereign bonds.

Emerging Markets Debt Opportunity in Context

To compare the emerging markets debt investment opportunity to that offered by other fixed income markets, total investable issuance is well below that of the $10 trillion U.S. government bond market or even the approximately $5 trillion U.S. investment-grade credit market. However, subcategories such as local currency sovereign debt are comparable to markets such as U.S. high yield (which has around a $950 billion market cap).

Sources of Returns

Emerging markets bond funds can generate returns from several sources, which include interest (carry) earned from underlying holdings as well as currency appreciation for unhedged foreign investors in local currency bond funds. Changes in interest rates and credit spreads (the difference in the yield between a bond and its underlying benchmark) can also be important, though the dynamics are different for external debt and local currency funds.

External debt emerging markets bond prices are impacted by changes in the yield of the developed markets bond (such as a U.S. Treasury) to which they are benchmarked, as well as changes in credit spreads. If emerging markets credit spreads are falling, for example, external debt investors may still incur losses if yields on the underlying developed markets benchmark rise by a greater amount.

Local currency emerging markets bond valuations, in contrast, are more insulated from changes in developed markets interest rates. Emerging markets sovereign yields are more influenced by changes in local macroeconomic variables such as interest rates and growth. While theoretically this makes local currency emerging markets bonds more of a pure play on local emerging markets fundamentals than external debt, in practice global trends can impact interest rates in both emerging markets and developed markets. For example, price increases in commodities can impact inflation expectations across both markets.

Historical Performance

Emerging markets fixed income investments have turned in a strong performance over the past 17 years (since inception) on both an absolute and volatility-adjusted basis (Exhibit 4).

Local currency debt returns have been helped by foreign exchange appreciation, the generous carry on offer from high local interest rates, and interest rates that have fallen sharply over the past decade. The decline in interest rates across most emerging markets (Exhibit 5) can be attributed both to falling inflationary pressures (Exhibit 6) and to greater political and economic stability that reduced the rates that emerging markets countries needed to pay to attract outside capital.

External debt has also generated attractive returns over much of the past two decades. Interest rates in the developed world have steadily declined, enhancing returns from carry with those from capital appreciation. Meanwhile, improving credit quality has led to a mostly continuous tightening of credit spreads for sovereign and corporate bonds (Exhibit 7), though occasional crises have seen spreads blow out. Exhibit 8 illustrates how credit spreads have tracked improving credit fundamentals; the largest external sovereign debt index is now Baa3 by Moody's as opposed to Ba3 a decade ago, while the main external corporate

index now also carries a Baa2 investment-grade rating.[2] Sovereign ratings have been boosted by rising foreign exchange reserves and GDP per capita, as well as falling inflation and external debt.

Two exhibits help assess the degree to which these various drivers contributed to returns. Exhibit 9 compares the historical returns for the local currency sovereign bond and the emerging markets currency index over the past several years, breaking out the returns attributable to foreign exchange appreciation and interest rate exposure (carry plus capital gains/losses from changes in interest rates). Both currency appreciation and interest rates have been significant contributors to emerging markets sovereign bond returns. It is notable that returns from interest rates have been fairly consistent over the years, while returns from currency appreciation have been more volatile. Exhibit 10 compares the returns for sovereign and corporate external debt indices maintained by J.P. Morgan. The returns for both of these indices declined steadily from 2003 to 2007, plunged in 2008 given the credit crisis, and then rebounded sharply in 2009. Two points are worth highlighting. First, for both of these indices, the returns generated by a decline in the yield of the underlying benchmark (U.S. Treasuries) were higher than those generated by the "spread return" (additional carry earned by investing in the asset class plus capital gains/losses from changes in credit spreads) during the 2006–08 period. The decline of yields and credit spreads during this timeframe reduced the ability of "spread returns" to drive total returns. Second, as yields on the indices have declined over time, the ability of carry to compensate for declining returns from credit spreads has greatly diminished. For example, the "spread return" for external corporate debt dropped for five straight years (from 2003 to 2008) before staging a massive rally in 2009, steadily lowering the total return of the index.

[2] The rating history for the J.P. Morgan Corporate Emerging Markets Bond Index Broad Diversified only dates back to early 2009.

On a volatility-adjusted basis, performance has also been impressive. During the (relatively short) history of emerging markets bond indices, their returns have been higher than those of most other asset classes, with lower volatility. This outperformance is especially noticeable during times of crisis. During 2000–02, a time that included the dot-com crash in the developed world and the International Monetary Fund (IMF) bailouts of Turkey and Argentina in the emerging world, external sovereign emerging markets debt returned 31.2% cumulatively, while emerging markets equities returned -36.3% (Exhibit 11). More recently, during the credit crisis–inspired global sell-off in risk assets during 2008, the returns from external and local currency sovereign emerging markets debt were -10.9% and -5.2%, respectively, while emerging markets equities returned -53.2%. Despite this resilience, particularly in the local currency debt, the appropriateness of emerging markets debt as a deflation hedge is questionable given its relatively short performance history, limited currency convertibility, and relatively illiquid character. In contrast, the Barclays Capital U.S. Treasury Bond Index returned 35.5% from 2000 to 2002, and an impressive 13.7% during the crisis in 2008. Of course, despite its strong historical record, the ability of U.S. Treasuries to serve as a deflation hedge looking forward can also reasonably be called into question.

Outlook for Future Returns

To assess the outlook for investing in emerging markets bond funds, we discuss developments across the various drivers of returns.

Currencies

Many metrics suggest that emerging markets currencies are currently undervalued in comparison with their developed markets peers (Exhibit 12). To the extent that these currencies can appreciate

in the years ahead, this will enhance returns for local currency funds. There are various reasons this might occur. Emerging markets countries, assisted by increasing investment, improving productivity, and changes in economic policies, are likely to continue to grow more quickly than their developed markets peers. This growth, and the higher local interest rates on offer (Exhibit 13), will attract foreign capital and create upward pressure on many emerging markets currencies. Insulating emerging markets from any potential external shocks will be the strong foundation of low debt levels, high foreign currency reserves, and current account surpluses (Exhibit 14).

While these arguments have a strong foundation, several caveats are worth mentioning. The first is that not all emerging markets currencies are undervalued to the same extent versus those of developed markets. In fact, some currencies may actually depreciate in the years ahead, especially if growth disappoints. The second is that predicting the timing of when currencies might appreciate is much harder than estimating their values, particularly in countries where currency controls exist and are used as a public policy tool. For example, though many models show the Chinese *renminbi* to be heavily undervalued against the U.S. dollar, predicting when the government will allow this to change is extremely difficult. These differentials may present an opportunity for active managers to add (or detract) value compared with an indexed portfolio.

Interest Rates

High interest rates offer opportunity for local currency emerging markets bond investors, but also a key risk. If faster growth and loose monetary policies create unanticipated inflation, and interest rates rise in response, losses may be triggered for bondholders. This risk is acute now given that inflationary pressures are building in many emerging markets, and local emerging markets interest rates are much lower than a decade ago. Historically, fund managers have demonstrated the ability to generate positive returns during times of rising rates. However, their task was arguably easier given the high absolute level of interest rates in emerging markets—interest income was a useful cushion against losses resulting from rising interest rates. Whether fund managers, whose task is further complicated by having to anticipate both onshore and offshore pressures (e.g., investment flows), will be so nimble this time around remains to be seen. The recent sell-off in long-term emerging markets interest rates, due in part to QE2 and the deal on tax cuts in the United States, triggered steep losses for some emerging markets bond funds in the fourth quarter and highlights the difficult task that fund managers face in anticipating risks across international markets. The good news for investors is that several of the emerging markets where inflationary pressures are strongest, including India and China, use capital controls that make their debt difficult to access; these types of capital controls, in fact, are part of the reason why inflationary pressures can build in the first place.

For external debt funds, investing in bonds benchmarked to developed markets sovereigns like U.S. Treasuries, it seems less likely that capital appreciation from falling rates can continue to help boost returns. This is because interest rates seem less likely to meaningfully decline from current levels, particularly given cyclical factors that suggest that rates should normalize from historical lows reached in 2010, as well as the potential for rising inflationary pressures and the expiration of quantitative easing measures in various countries.

Credit Spreads

Aside from interest rate and currency effects, economic growth in emerging markets has other implications for investors, as it could lead to further improvements in issuer credit quality that will have different implications for external and local currency assets.

For external debt funds, improved credit quality could result in lower sovereign and corporate credit spreads versus developed markets benchmark bonds. Even without improvement in credit fundamentals, the perception that credit quality is improving due to ratings drifting higher may also lead to tighter spreads. Ratings of emerging markets borrowers may have been biased downward for years compared with those of similar quality developed markets issuers. This is clearly supported by developments with European sovereigns, where rating agencies have for years overlooked structural imbalances and overestimated credit quality. Rating agencies have scrambled to address this situation, upgrading numerous emerging markets borrowers in recent years (and downgrading numerous developed markets credits): in 2010, the ratio of emerging markets sovereign credit upgrades to downgrades was nearly 7:1 (Exhibit 15). On the corporate front, Bank of America Merrill Lynch estimates that emerging markets issuers are typically rated one to two notches below similar quality developed markets corporate borrowers looking at comparable levels of leverage. To the extent that the credit quality of emerging markets issuers continues to improve, or that simply the perception of this quality rises, this may contribute to lower risk premiums and thus gains for emerging markets bond investors.

Even if further improvement in ratings or underlying fundamentals occurs, it is worth asking whether this is already reflected in current spreads. Relative value measures indicate that investors are looking beyond rating agency metrics (Exhibit 16). Mexico has funding costs below those of U.S. states like New York, despite having a Moody's rating that is four notches lower (Baa1 versus Aa3). In fact, there may be signs that spread tightening has gotten ahead of itself. Brazil and Turkey, despite requiring IMF bailouts as recently as 1998 and 2000, respectively, have credit default swap spreads below those of U.S. states like New York and European sovereigns like Italy.

For local currency assets, the improved credit quality of sovereigns will not necessarily be reflected in lower interest rates on benchmark bonds, as these can be driven more by expectations of inflation and growth. However, corporations that have received ratings upgrades based on improvements in credit quality should see their credit spreads fall versus their respective sovereign benchmarks, generating gains for investors.

Technical Factors

As the investor base develops for emerging markets bond funds, a final factor that could generate returns is falling premiums as bond markets become less volatile. Investor interest in emerging markets bonds is surging, particularly from local institutional investors such as insurance companies and pension funds, whose assets under management have soared given government programs to encourage saving. The assets managed by emerging markets pension funds have more than tripled over the past decade, from $400 billion to over $1.4 trillion, and as much as 70% of these funds is now invested in emerging markets sovereign debt, according to J.P. Morgan. Given that domestic investors now own the great majority of outstanding sovereign local currency debt in many countries, these markets should become more stable during any potential bouts of future volatility. This was in fact what happened with Asian sovereign bonds during the 2008–09 credit crisis, as local currency debt values were much less volatile than external debt equivalents. Increasing foreign ownership of these assets could eventually start to erode some of the stability provided by this domestic bid. However, there would be some offsetting benefit from the increased liquidity, which is currently a drawback of some local buy and hold markets. Investors and the managers they select need to carefully weigh how limited trading of some emerging markets bonds should be reflected in their pricing.

Foreign investor demand is also on the rise, spurred by the low yields on offer from developed markets bonds and concerns about deteriorating sovereign credit quality. Globally, over $60 billion flowed into emerging markets fixed income assets through mutual funds and other vehicles during the first nine months of 2010, a 34% increase from the full-year 2009 figure. In the United States last year, funds dedicated to emerging markets debt saw their assets more than double, according to BofA Merrill Lynch. Starved of yield on domestic government bond holdings, Japanese investment trusts have also gotten in on the act and accumulated over $30 billion of emerging markets currency and bond funds. The growing breadth of the investor base should stabilize prices if another bout of volatility ensues in the future, lowering risk premiums for emerging markets bonds.

Other Considerations for Investors

Investors should take several factors into consideration before allocating to emerging markets bond funds. One is their strong recent performance. Given the relatively youthful nature of many of the indices and funds that invest in the product, and that most have enjoyed what has been a nearly continuous bull market in the product, it is unclear how investors will respond when markets suffer the inevitable hiccup. The external sovereign debt index, for example, has only posted one negative calendar-year return in the last decade (2008). This may be a particular risk for local currency corporate bond funds, as many have been established only recently and managers have limited track records trying to manage both credit analysis and currency forecasting. For external debt funds, these risks may be lower, as many managers have experienced past crises and as credit spreads (for both sovereign and corporate bonds) are somewhat elevated relative to historical averages.

A related risk is the possibility that elevated levels of investor interest in emerging markets bond funds have made portfolio managers more complacent and reduced their incentives to weed out lower-quality credits and structures. While issuer fundamentals have been broadly improving, there is the chance that some weaker credits have slipped through the screening process. An economic downturn in emerging markets, while not our base case, would likely flush out some of the issuers that have been beneficiaries of momentum as opposed to strong fundamentals, and see their bond prices adjust accordingly.

As with many other types of emerging markets assets, emerging markets fixed income assets would be at risk if another global flight to quality resumed. Identifying a catalyst for such an event is not difficult—an escalation of worries over sovereign debts in Europe, inflation in China, and further instability in the Middle East would be prime examples. In this scenario, the high credit quality of many emerging markets bonds may not prevent their prices from plummeting. The growth of the domestic investor base for local currency debt, especially from local sovereigns, mitigates this risk; as a result, it is likely that external debt assets would underperform in this scenario.

There is a different, and perhaps likely, scenario that might cause local currency debt to underperform. This is the risk that, even if emerging markets countries experience strong growth, local governments will intervene to prevent currency appreciation in order to maintain export competitiveness. One way is via purchases of foreign currencies—the Chilean government has recently announced that it may spend up to $12 billion in 2011 weakening the peso. Another is via taxes—the Brazilian government has attempted to discourage foreign investment in local bonds by hiking withholding taxes on interest income. Emerging markets central banks have numerous tools to intervene in financial markets and disrupt what

they deem to be "speculative" investor flows; the odds are that we will see more rather than less of them in 2011.

One final consideration for investors choosing between local and external debt is ability and willingness to pay. To service local currency debt, sovereigns can raise taxes or print currency. Whether they do is, of course, a separate matter. External debt, in contrast, can be problematic for unhedged borrowers if exchange rate movements increase debt servicing costs. This explains, in part, why local currency sovereign debt can carry higher ratings than external debt from the same borrower. From a legal perspective, local currency debt is documented and governed under local laws, while external debt is documented and governed under local law in the market of issuance such as the United States or the United Kingdom. While bankruptcy events are relatively rare, local courts may be less sympathetic to foreign bondholders than their offshore equivalents, especially where the judicial system lacks independence from local politicians.

Role in a Portfolio

Diversification is one of the key benefits of adding emerging markets bond funds to a portfolio, given that emerging markets bond returns have low correlations with those of other assets (Exhibit 17). Historically, external corporate debt has been less correlated with asset classes such as global equities than sovereign debt in either external or local format, though correlations have risen in recent years given the credit crisis. However, even in recent years, both external sovereign and corporate debt correlations with equities have remained below those of asset classes such as U.S. high yield. Local currency sovereign debt funds can also help add diversification within a specific portfolio bucket like fixed income as their returns are not driven by movements in US$ interest rates. For example, the correlation between the main local currency sovereign bond index and the Barclays Capital U.S. Aggregate Bond Index has been less than 0.5 since 2003. A separate benefit of emerging markets debt is to help lower overall portfolio beta, as returns are typically less volatile than those of equities.

From a strategic perspective, emerging markets bond funds also provide an alternative channel through which investors can attempt to capitalize on strong emerging markets economic growth. Total returns for emerging markets cash and external sovereign debt indices since their inception have exceeded those of emerging markets equities (Exhibit 18), despite strong economic growth and recent equity outperformance. Equities can be an inefficient tool to try and play macro themes such as strong GDP growth for several reasons. The link between stock price performance and GDP growth has historically been weak; one reason may be that expectations of growth and thus increased profits can be priced in to equities well before they actually occur, limiting the returns for equity investors. Another is that in some countries, state-owned and family-controlled companies, which are inaccessible to offshore investors, earn a significant share of profits. Dilution is also a concern, if existing companies decide to issue new equity to finance expansion. Finally, some countries with underdeveloped equity markets may not offer diversified exposures through which an investor can gain exposure to broad-based economic growth. This is not to say that emerging markets debt should be viewed as a substitute for holding emerging markets equities, but rather that it provides a complementary risk exposure. In some instances, equity exposure may be easier to obtain for some countries given capital controls in fixed income markets.

Positioning these funds within a diversified portfolio should reflect potential benefits yet also recognize the potential volatility of their returns.

Given the risk that these funds could sell off given another flight to quality (and see correlations rise with other risk assets), emerging markets fixed income funds are not suitable for inclusion in safe harbor parts of portfolios such as deflation hedges. Their underperformance versus assets like U.S. Treasuries during the credit crisis reinforces this assertion. However, they could be included as a general diversifier intended to lower portfolio equity beta. Local currency bond funds could also help diversify fixed income holdings, particularly for those worried about the impact of currency devaluation in developed markets. On the other hand, whether local currency funds will also serve as a hedge against the potential for higher rates in developed markets (and lower bond prices) is far from certain. Commodity inflation may have global inflationary implications, though dynamics such as reduced quantitative easing are likely more negative for developed markets interest rates. Emerging markets themselves may witness higher interest rates in the years ahead, but as an offshore investor in local debt, some of the potential negative mark-to-market from such rising rates may be offset by currency appreciation.

Conclusion: Choosing Among the Alternatives

Over the past decade, emerging markets bond funds have been one of the best-performing asset classes globally. While we are naturally cautious about adding exposure to asset classes that have demonstrated such strong recent performance, there are still some good arguments to be made why they may continue to generate attractive returns in the years ahead. These arguments are both intrinsic—such as that economic growth should spur improvement in local capital markets and credit quality—and extrinsic—such as that slow growth in developed markets will limit the carry offered by their bonds and may lead to currencies depreciating against emerging markets peers.

Having made a decision to allocate funds, the tougher decision for an investor may be choosing among various emerging markets fixed income alternatives, given the number of variables involved and how the rest of a portfolio is positioned. The solution for some may be to spread their bets and thus position portfolios for the different ways in which changes in rates, currencies, credit quality, and other variables will filter through to asset prices. This can be accomplished through multiple allocations across emerging markets debt and cash products, as well as allocations to managers with more flexible mandates.

Emerging markets cash funds, for example, may benefit from low interest rates and concerns about currency debasement in overleveraged developed markets economies. They also will insulate investors in the near term from the impact of rate volatility on bond prices, though eventually interest rate changes may filter through and impact currency valuations. They could benefit more than bond funds if emerging markets governments impose high taxes on interest income in an attempt to discourage offshore investors. However, exchange rates can be volatile, and many emerging markets countries may attempt to weaken currencies through intervening in the markets.

Emerging markets local currency bond funds will also benefit from emerging markets foreign exchange appreciation, but have greater upside potential to the extent that interest rate curves are upwardly sloping and managers can generate more interest income while correctly anticipating inflationary pressures. Emerging markets local currency bond funds that include corporate bonds also stand to benefit from any compression in corporate credit spreads. The expansion of the domestic investor base may reap rewards as liquidity premiums drop and emerging markets

sovereign and corporate issuers increasingly choose to issue in local currency. Drawbacks include rising emerging markets inflation pressures and the risk of government intervention via mechanisms such as withholding taxes and currency manipulation, which could limit gains for offshore investors.

For investors that want to focus on improving credit quality and minimizing exposure to foreign exchange and local interest rate market gyrations, the preferred option may be emerging markets external debt bond funds. Spreads on these bonds have tightened significantly, but to a certain degree this has mirrored improvements in credit quality. There are downside risks with these bonds, however, and returns may be highly correlated with other positions already held by investors such as higher beta developed markets credit like high yield. From a different angle, many of the developed world sovereign bonds to which these bonds are benchmarked are overvalued; thus, even if emerging markets borrower credit quality improves, a sell-off in developed markets interest rates would erode spread gains for external debt bondholders.

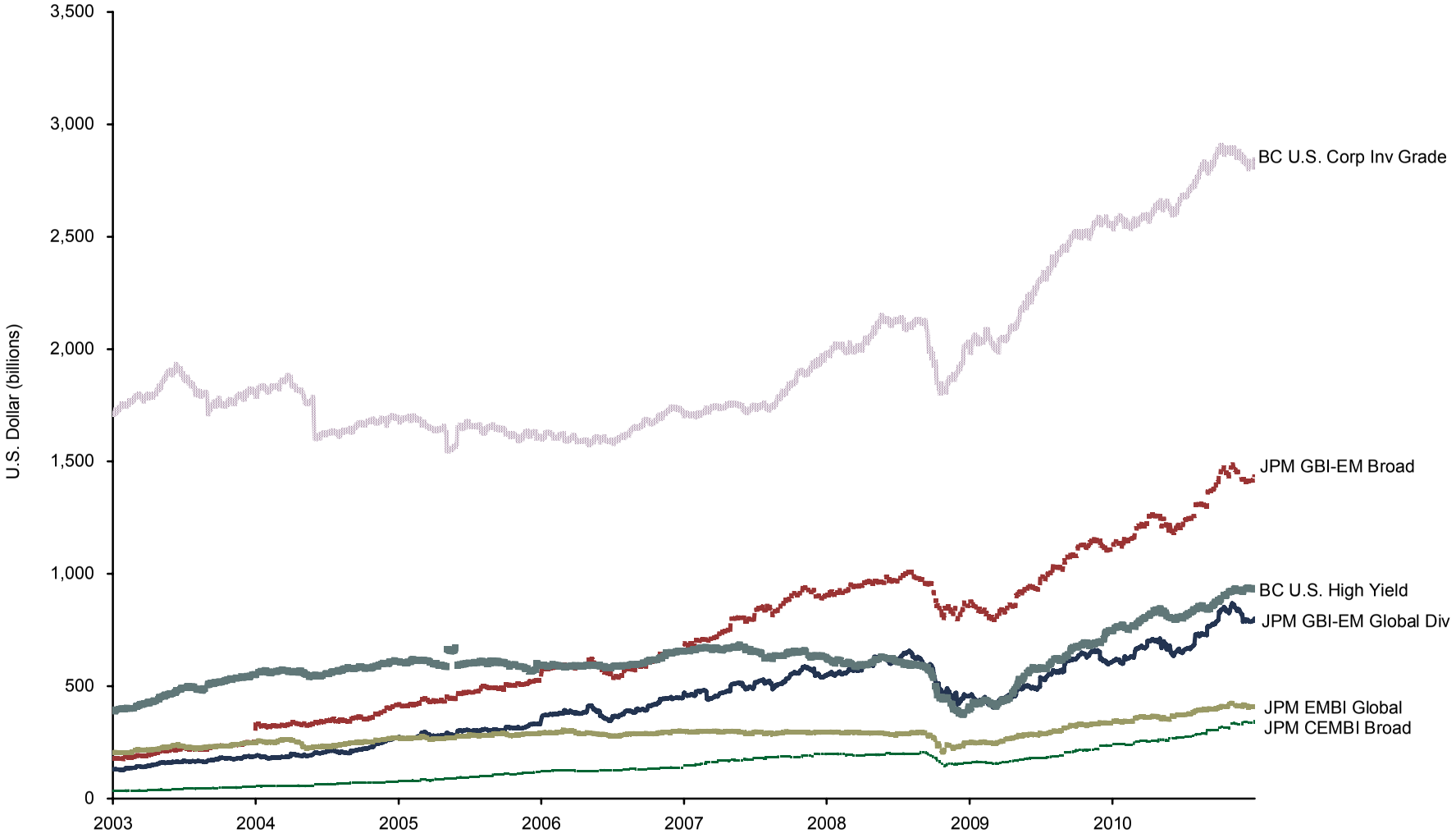
A final option is hiring a manager with a flexible mandate, which might be ideal given that the opportunity set in emerging markets fixed income is still evolving. There are several reasons why this may intuitively be the preferred approach. One reason is that for a given issuer, relative values may be more attractive in one format than another. Mexican government bonds may be expensive in external debt format (for example, given strong demand), but local yields may be overly generous given, for example, subdued inflationary pressure. Another reason is that capital controls will limit the ability of funds within some strategies to gain access to the desired geographic exposures. For example, neither external nor local currency sovereign debt funds typically have any exposure to China and India, though currency funds can provide this via non-deliverable forwards. Finally, given the rapidly evolving nature of the asset class, the benefit of an open mandate may be that managers are able to shift focus and move to where the best opportunities are, assuming, of course, that they have the analytical ability. To illustrate this concept, imagine that local currency corporate bond markets start to attract high-quality issuers that are willing to pay a premium to be early entrants and help broaden their investor bases. A flexible mandate would allow a manager to buy such debt and avoid being limited to the issuer's more expensive external debt bonds. From an implementation perspective, it would also prevent an investor from allocating funds to one of the strategies that later saw a diminishing opportunity set, thus creating a need to later obtain separate approvals from an investment committee to shift focus.

Investors that choose this final option are likely to run into several implementation issues that should be given some thought. One such issue is that, by definition, benchmarking a fund with an open mandate is more difficult than one that adheres, even somewhat loosely, to an index. For example, for funds that have the ability to allocate across local and external debt, as well as currencies, weighting these strategies in a custom benchmark is difficult. In addition, given that there is currently no benchmark for local currency corporate debt, investors need to determine what they believe an appropriate proxy for this strategy is. Finally, many of the managers that offer open mandate strategies have relatively short track records, for reasons stated earlier (e.g., some have only begun to start leveraging credit analysis skills into local currency markets). Investors will need to conduct careful due diligence to ensure they are comfortable that a manager's previous success in one format is portable to a format with a more open mandate. ■

Exhibit 1

Total Market Capitalization of Various Bond Indices

January 2, 2003 – December 31, 2010 • U.S. Dollar



Sources: Barclays Capital, J.P. Morgan Securities, Inc., and Thomson Datastream.
Note: Data are daily.

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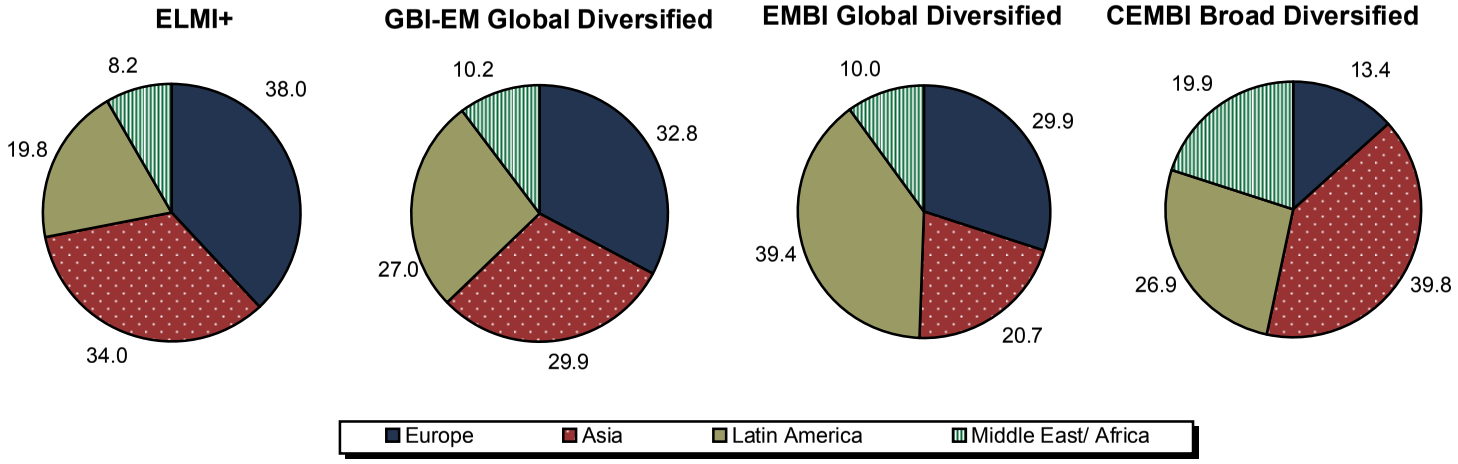
Exhibit 2

J.P. Morgan Emerging Markets Bond Index Characteristics

As of December 31, 2010



Asset Type	EM Currency	Sovereign Debt	Sovereign Debt	Corporate Debt
Inception:	Dec 31, 1993	Dec 31, 2002	Dec 31, 2002	Dec 31, 2001
Debt Denomination	NA	Local	U.S. Dollar	U.S. Dollar
Average Life (Years)	55.7 (Days)	6.6	11.4	8.4
Yield	1.7	6.7	6.0	5.9
S&P/Moody's Rating	NA	BBB+/Baa2	BBB-/Baa3	BBB-/Baa2
Market Cap (US$ billions)	NA	802	251	134
No. of Countries Represented	23	15	41	35

Source: J.P. Morgan Securities, Inc.

951m

Exhibit 3

Total Assets Under Management Benchmarked Against Emerging Markets Indices

U.S. Dollar (millions)

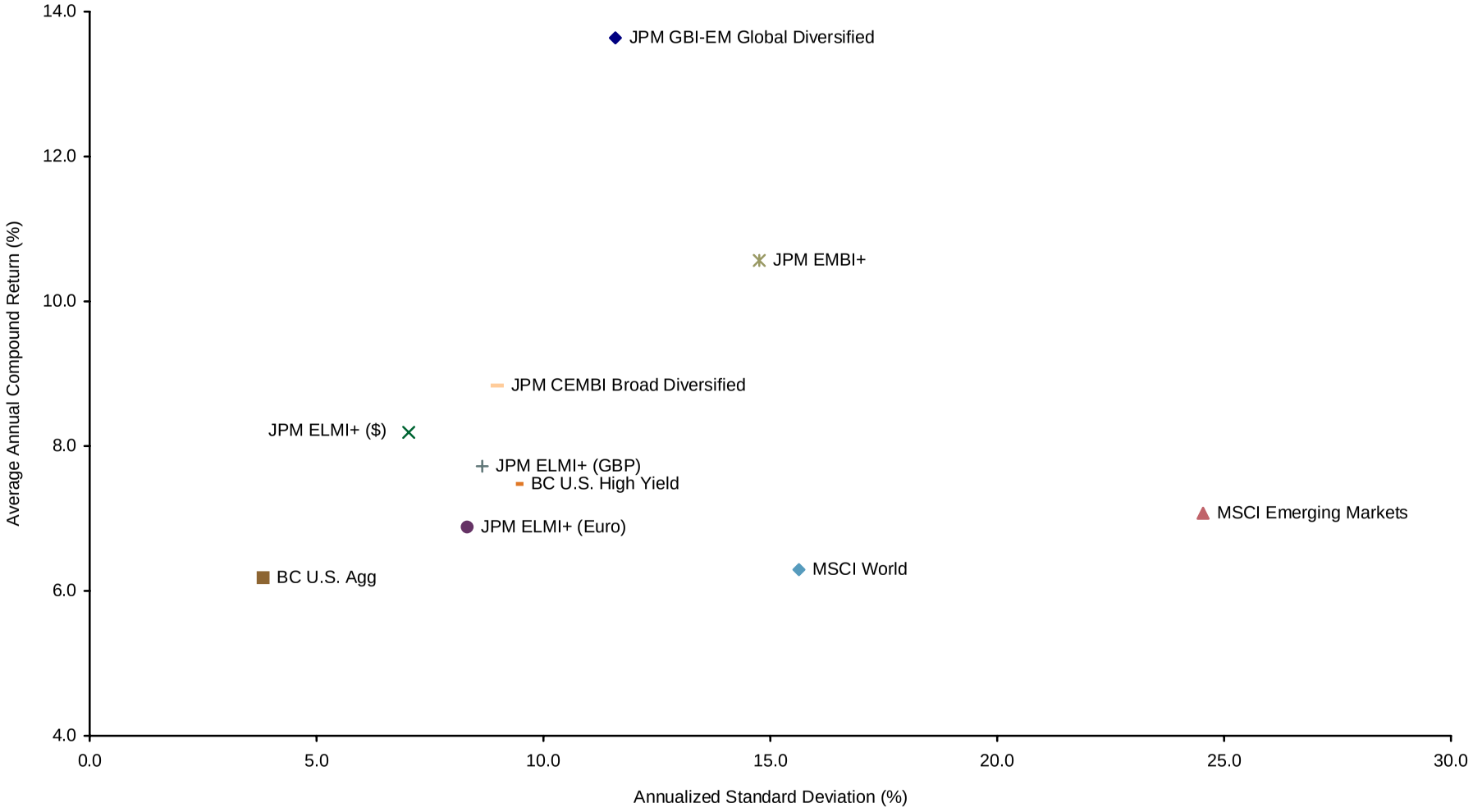
EM Indices		July 2009	January 2010	September 2010
Sovereign Local Currency Debt				
GBI-EM Global Div		35,767	42,310	56,873
GBI-EM Div		8,193	9,418	9,893
GBI-EM Broad Div		5,070	6,063	3,760
GBI-EM		5,771	4,118	6,920
GBI-EM Global		150	150	1,350
GBI-EM Broad		105	260	380
	Total	55,056	62,319	79,176
Sovereign External Debt				
EMBI Global Diversified		115,911	149,409	214,490
EMBI Global		57,908	62,374	75,217
EMBI+		15,850	19,550	15,700
	Total	189,669	231,333	305,407
Corporate External Debt				
CEMBI Broad Diversified		5,687	6,187	11,877
CEMBI Diversified		1,000	1,000	2,062
CEMBI Broad		---	---	---
CEMBI		---	---	---
	Total	6,687	7,187	13,939
Local Currency Money Market				
ELMI+		10,150	13,593	20,060
Total AUM Managed Against EM Indices		**261,562**	**314,432**	**418,582**

Source: J.P. Morgan Securities, Inc.

Exhibit 4

Annualized Return and Risk

January 1, 1994 – December 31, 2010 • U.S. Dollar

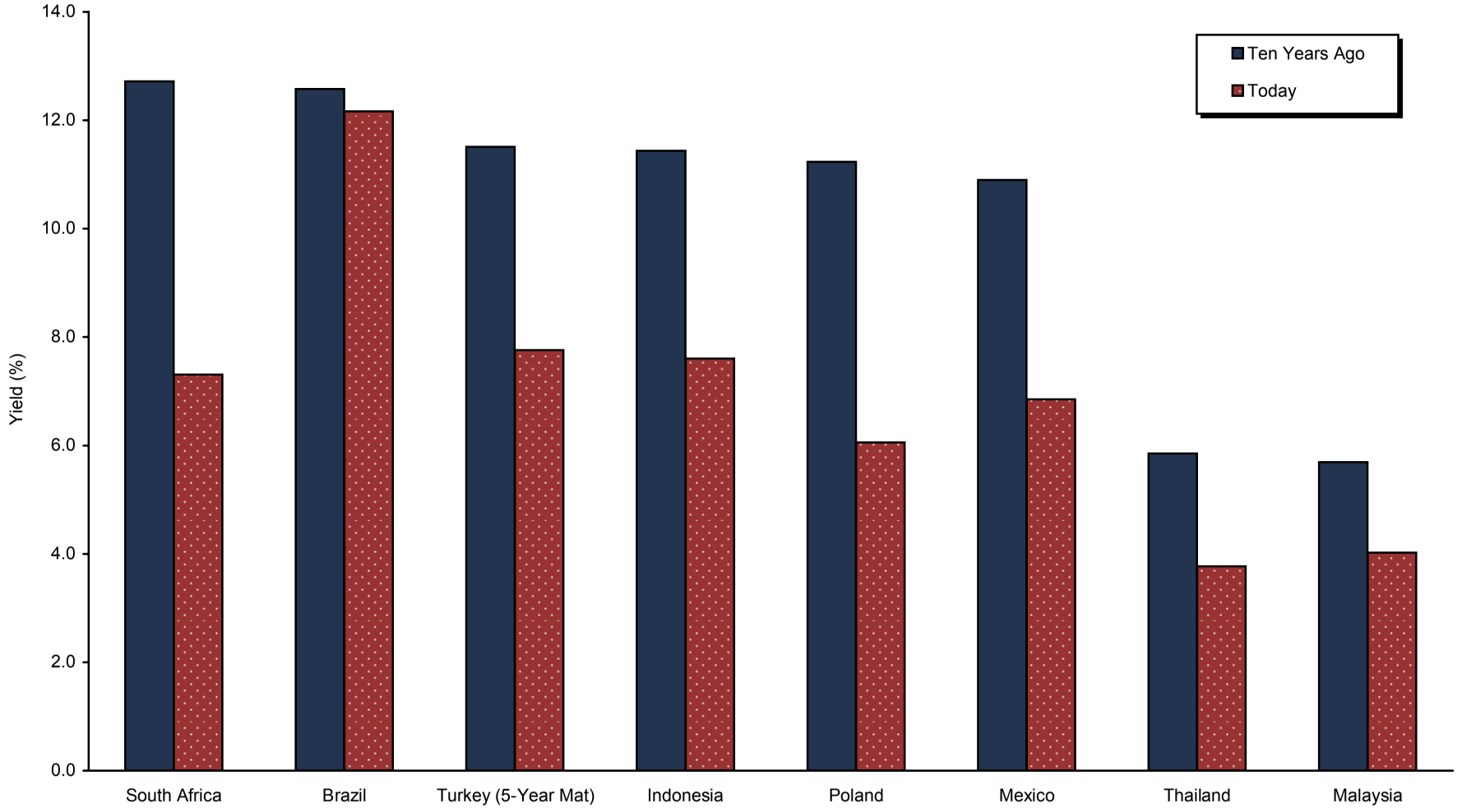


Sources: Barclays Capital, J.P. Morgan Securities, Inc., MSCI Inc., and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.
Notes: Total returns for the MSCI World Index are net of dividend taxes. Total returns for the MSCI Emerging Markets Index are gross of dividend taxes. JPM CEMBI Broad Diversifed returns begin December 2001. JPM GBI-EM Global Diversified returns begin January 2003.

Exhibit 5

Ten-Year Local Currency Denominated Sovereign Bond Yields: Today and Ten Years Ago

December 31, 2000 Versus December 31, 2010



Sources: Bloomberg L.P. and Global Financial Data, Inc.

Notes: Yield data for Turkey are represented by a five-year maturity index from Global Financial Data, Inc. For Indonesia, the beginning period yield is from July 31, 2003, when data begin; for Mexico, the beginning period yield is from July 31, 2001.

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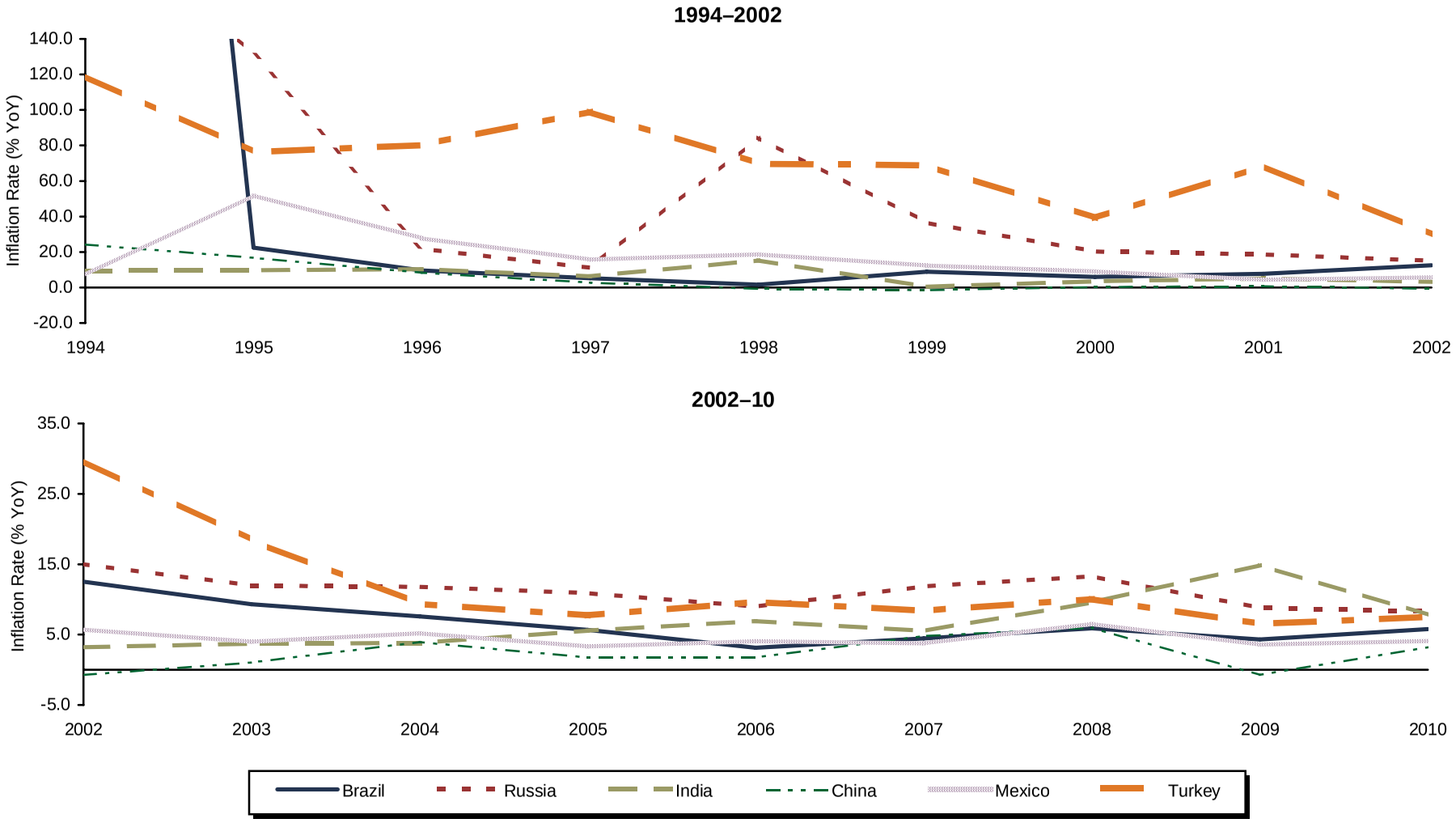
Exhibit 6

Year-over-Year Inflation Growth in Selected Emerging Economies

1994–2010

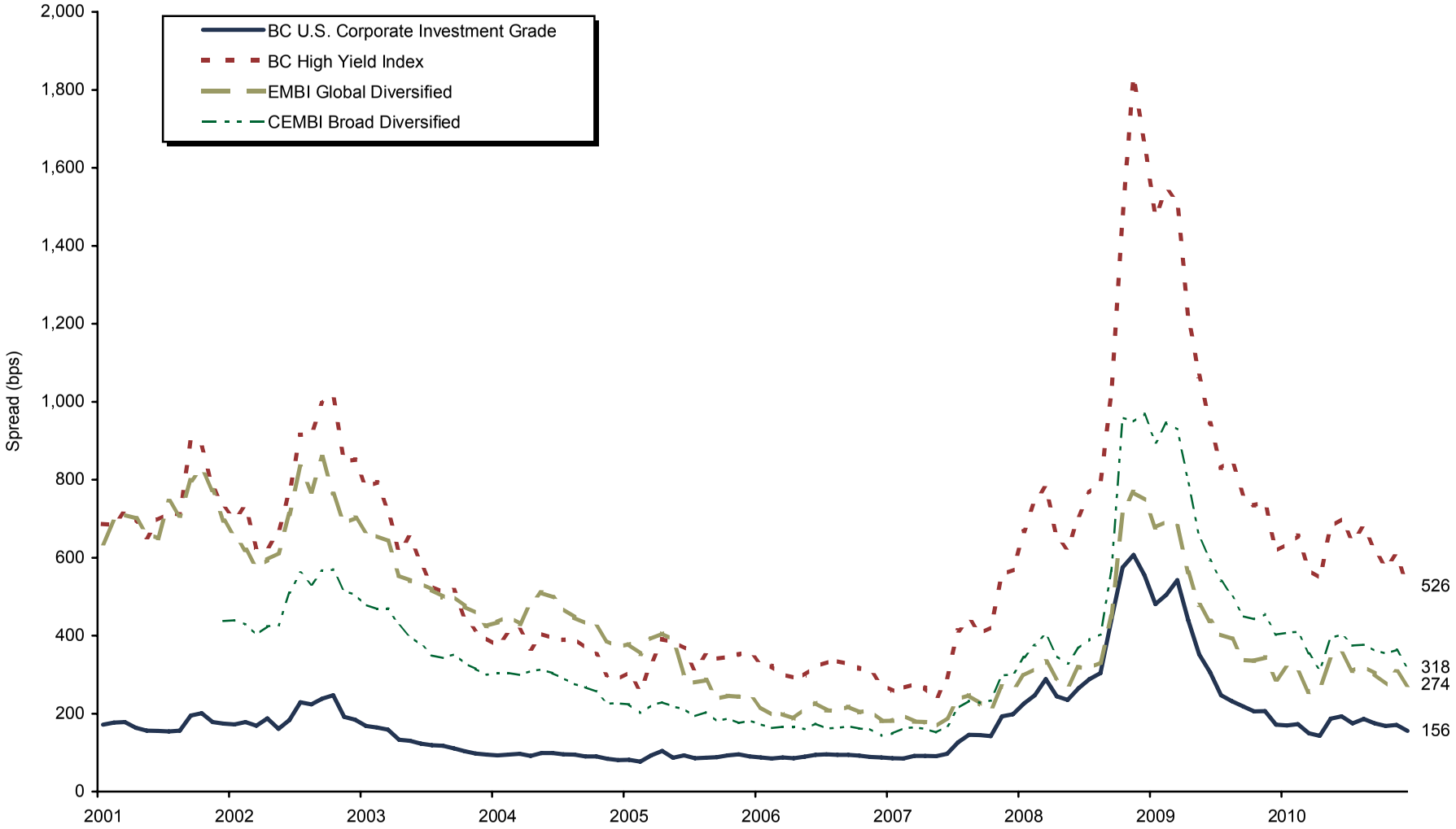


Sources: Economist Intelligence Unit and Thomson Datastream.
Notes: The y-axis of the top chart has been capped at 140% for scaling purposes. Inflation rates in 1994 for Brazil and Russia were 916% and 211%, respectively.

Exhibit 7

Emerging Markets Debt Yield Spreads

January 31, 2001 – December 31, 2010

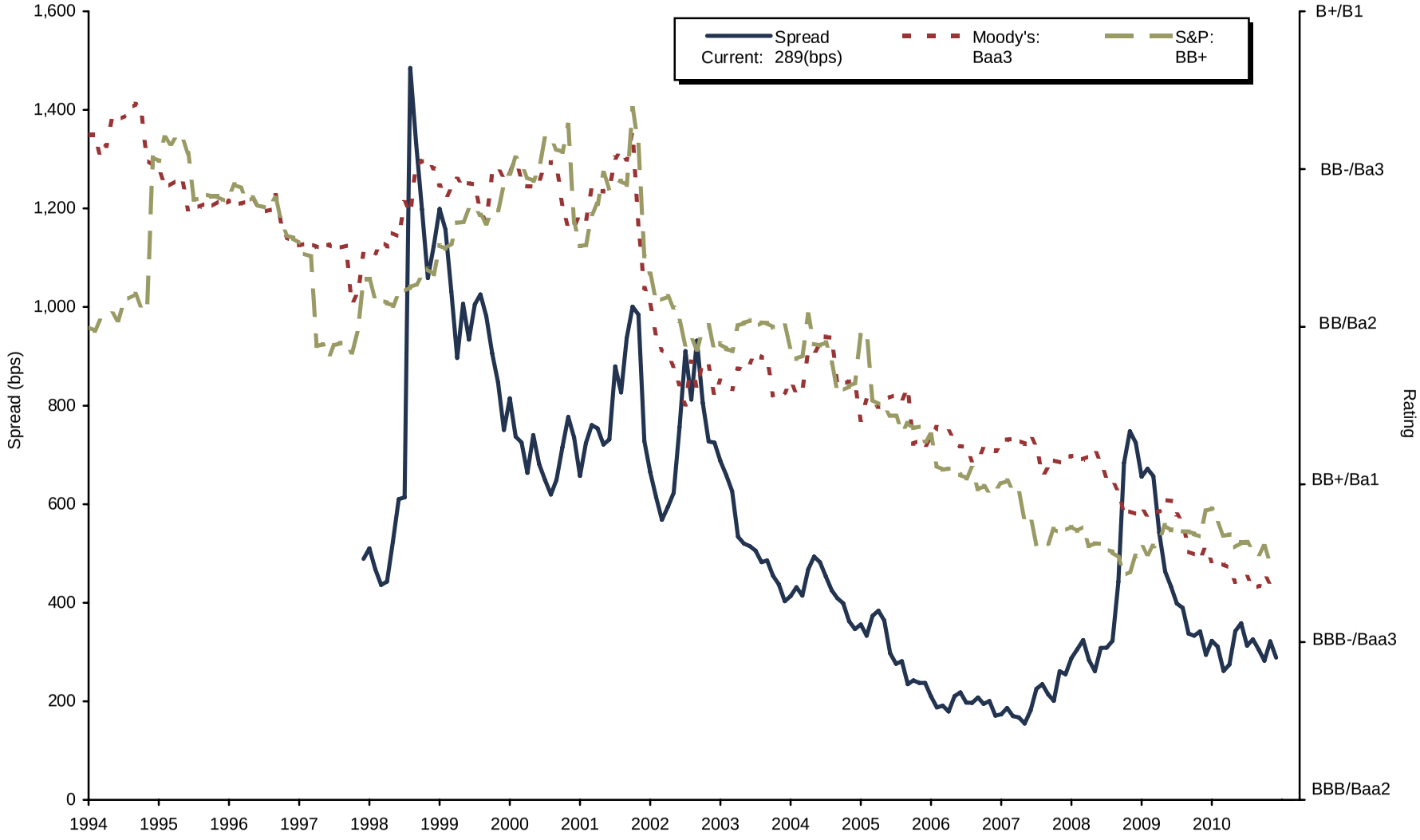


Sources: Barclays Capital, J.P. Morgan Securities, Inc., and Thomson Datastream.
Notes: J.P. Morgan CEMBI Broad Diversified spreads begin December 2001. Spreads are yield-to-worst over the U.S. Treasury curve.
953m

Exhibit 8

J.P. Morgan Emerging Market Bond Index Global (External/US$) Rating

January 31, 1994 – December 31, 2010

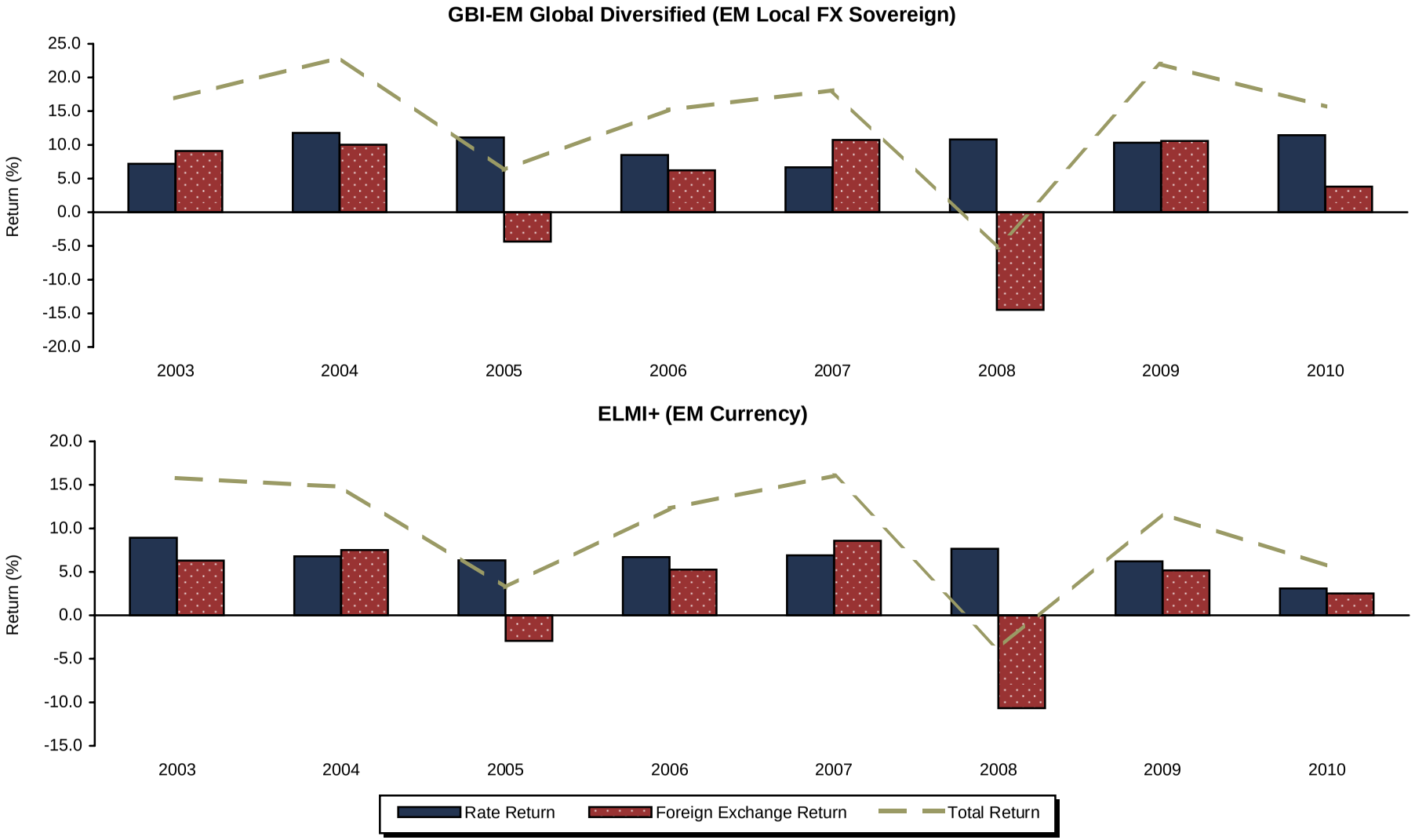


Source: J.P. Morgan Securities, Inc.

Exhibit 9

J.P. Morgan Index Return Attribution

December 31, 2003 – December 31, 2010

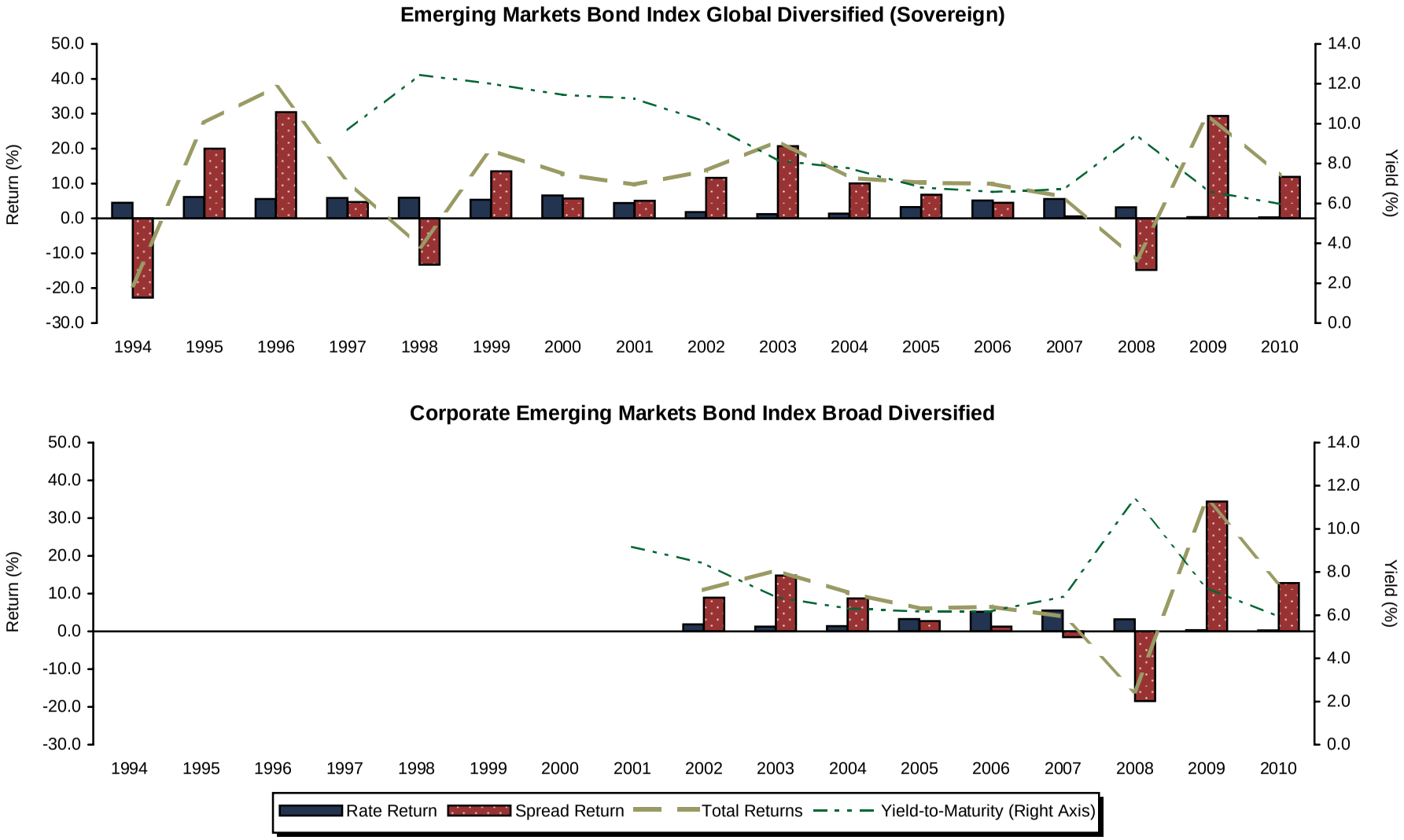


Sources: J.P. Morgan Securities, Inc. and Thomson Datastream.

Exhibit 10

J.P. Morgan Emerging Markets External Debt Sovereign and Corporate Index Return Attribution

December 31, 1994 – December 31, 2010



Sources: J.P. Morgan Securities, Inc. and Thomson Datastream.

Exhibit 11

Annual Performance by Index Type

1994–2010 • U.S. Dollar

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	AACR
EM Sovereign External Debt																		
JPM EMBI Global	-18.3	26.4	35.2	11.9	-11.5	24.2	14.4	1.4	13.1	25.7	11.7	10.7	9.9	6.3	-10.9	28.2	12.0	10.2
EM Sovereign Local Currency Debt																		
JPM GBI-EM Global Diversified	---	---	---	---	---	---	---	---	---	16.9	23.0	6.3	15.2	18.1	-5.2	22.0	15.7	13.6
JPM GBI-EM Global Diversified (Local FX Return)	---	---	---	---	---	---	---	---	---	7.2	11.8	11.1	8.5	6.7	10.8	10.3	11.4	9.7
EM Corporate External Debt																		
JPM CEMBI Broad Diversified	---	---	---	---	---	---	---	---	10.9	16.2	10.3	6.1	6.5	3.9	-15.9	34.9	13.1	8.8
EM Currencies																		
JPM ELMI+	5.9	11.1	10.4	-7.4	18.4	12.5	2.0	3.2	11.4	15.8	14.8	3.2	12.3	16.0	-3.8	11.7	5.7	8.2
JPM ELMI+ (Local FX Return)	18.2	21.5	19.1	16.5	23.3	19.3	11.9	13.9	17.5	8.9	6.8	6.3	6.7	6.9	7.6	6.2	3.1	12.4
EM Equities																		
MSCI EM Index	-7.3	-5.2	6.0	-11.6	-25.3	66.4	-30.6	-2.4	-6.0	56.3	26.0	34.5	32.6	39.8	-53.2	79.0	19.2	7.1
MSCI EM Index (Local FX Return)	27.7	0.8	13.5	4.8	-19.6	77.5	-25.3	7.9	-7.1	46.7	16.4	35.8	28.9	33.5	-45.7	62.8	14.4	11.7
Fixed Income Benchmarks																		
BC U.S. Aggregate	-2.9	18.5	3.6	9.7	8.7	-0.8	11.6	8.4	10.3	4.1	4.3	2.4	4.3	7.0	5.2	5.9	6.6	6.2
BC 1-3 Month Treasury Bill Index	4.1	5.9	5.3	5.3	5.1	4.8	6.1	4.1	1.7	1.0	1.2	3.0	4.8	4.8	1.8	0.2	0.1	3.5
BC U.S. Treasury Bond	-3.4	18.4	2.7	9.6	10.0	-2.6	13.5	6.7	11.8	2.2	3.5	2.8	3.1	9.0	13.7	-3.6	5.9	5.9
Cash Rate	4.2	6.0	5.3	5.3	5.2	4.8	6.2	4.4	1.8	1.1	1.3	3.1	4.8	5.0	2.1	0.2	0.1	3.6

Sources: Barclays Capital, Bloomberg L.P., BofA Merrill Lynch, Federal Reserve, J.P. Morgan Securities, Inc., MSCI Inc., and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Notes: The cash rate represents the BofA Merrill Lynch 91-Day Treasury Bill Index. All returns are in US$ terms unless otherwise specified.

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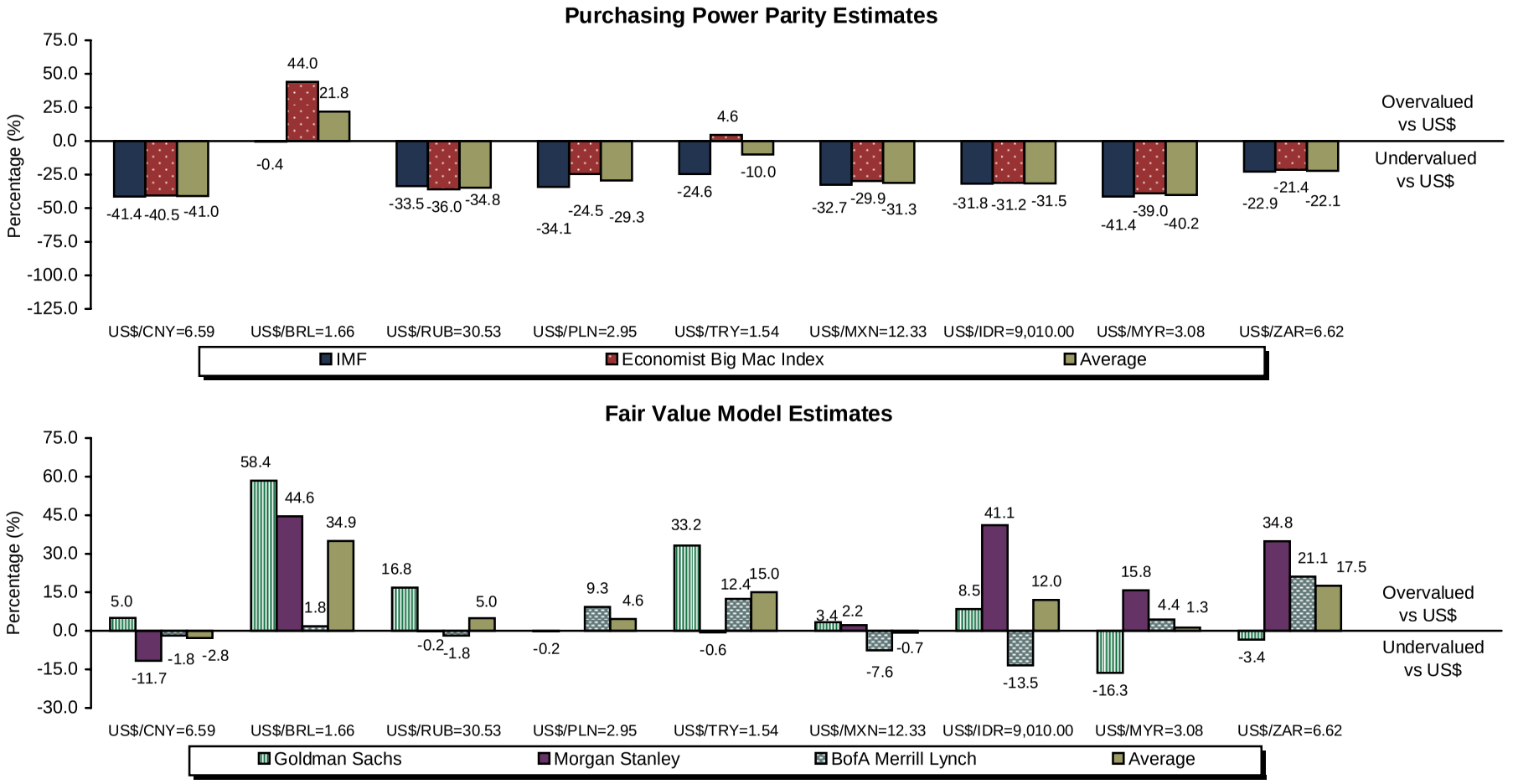
Exhibit 12

Valuation Versus the U.S. Dollar: Emerging Markets Currencies

As of December 31, 2010

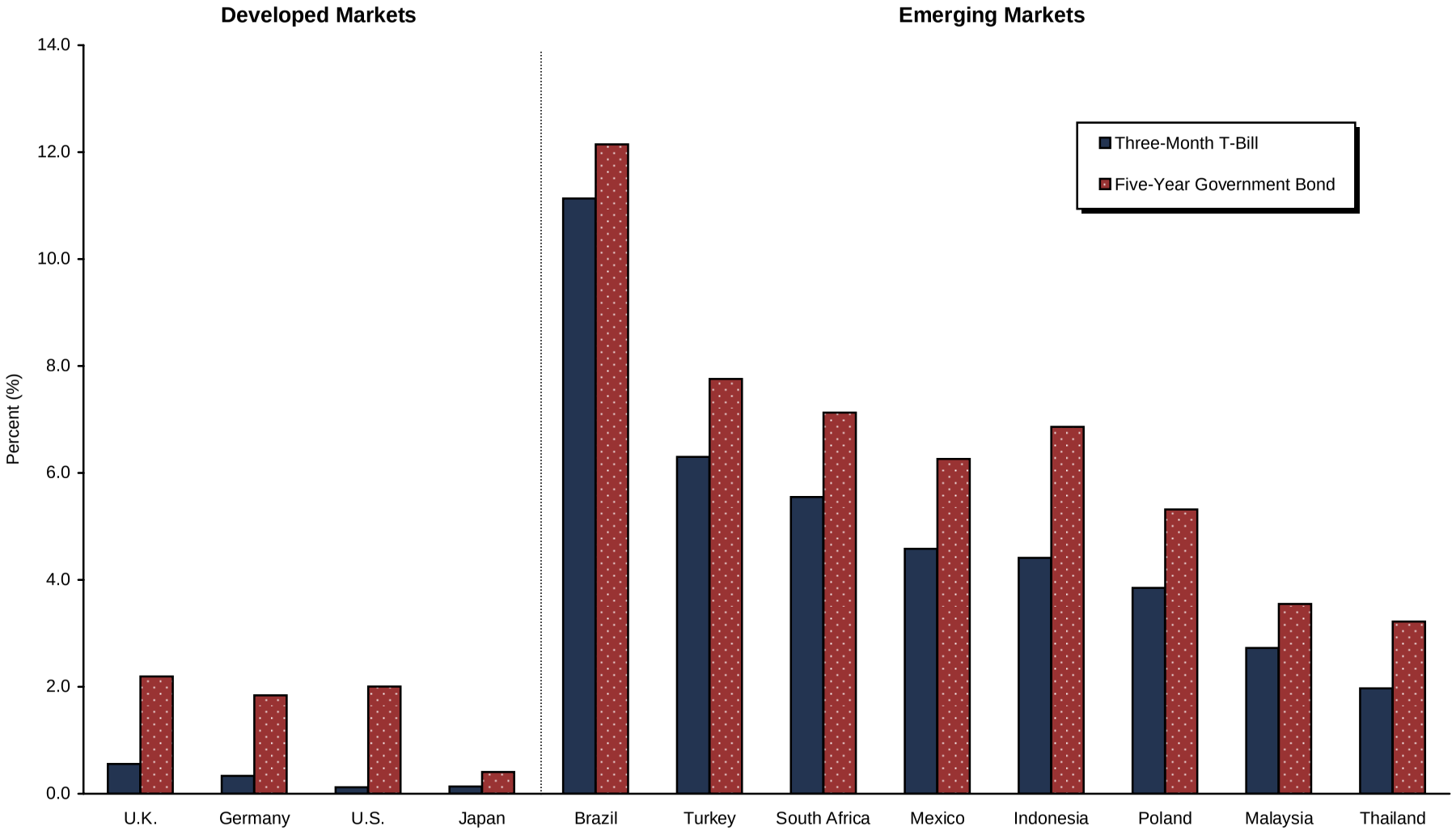


Sources: Bloomberg L.P., BofA Merrill Lynch, The Economist, Goldman, Sachs & Co., International Monetary Fund (IMF), Morgan Stanley, and Thomson Datastream.
Notes: Purchasing power parity (PPP)–implied exchange rates are based on relative price levels between countries, with the assumption that a basket of identical goods should cost the same across countries. IMF PPP estimates are based on consumer prices and are based on 2010 forecasts. Fair value model estimates are derived from econometric models that take into account several variables such as PPP, interest rate differentials, fund flows, etc., to produce an equilibrium exchange rate. These fair value estimates differ from currency forecasts, as it is not always assumed that currencies revert to fair value over the forecast horizon.
3402q (modified)

Exhibit 13

Local Market Interest Rates

December 31, 2010

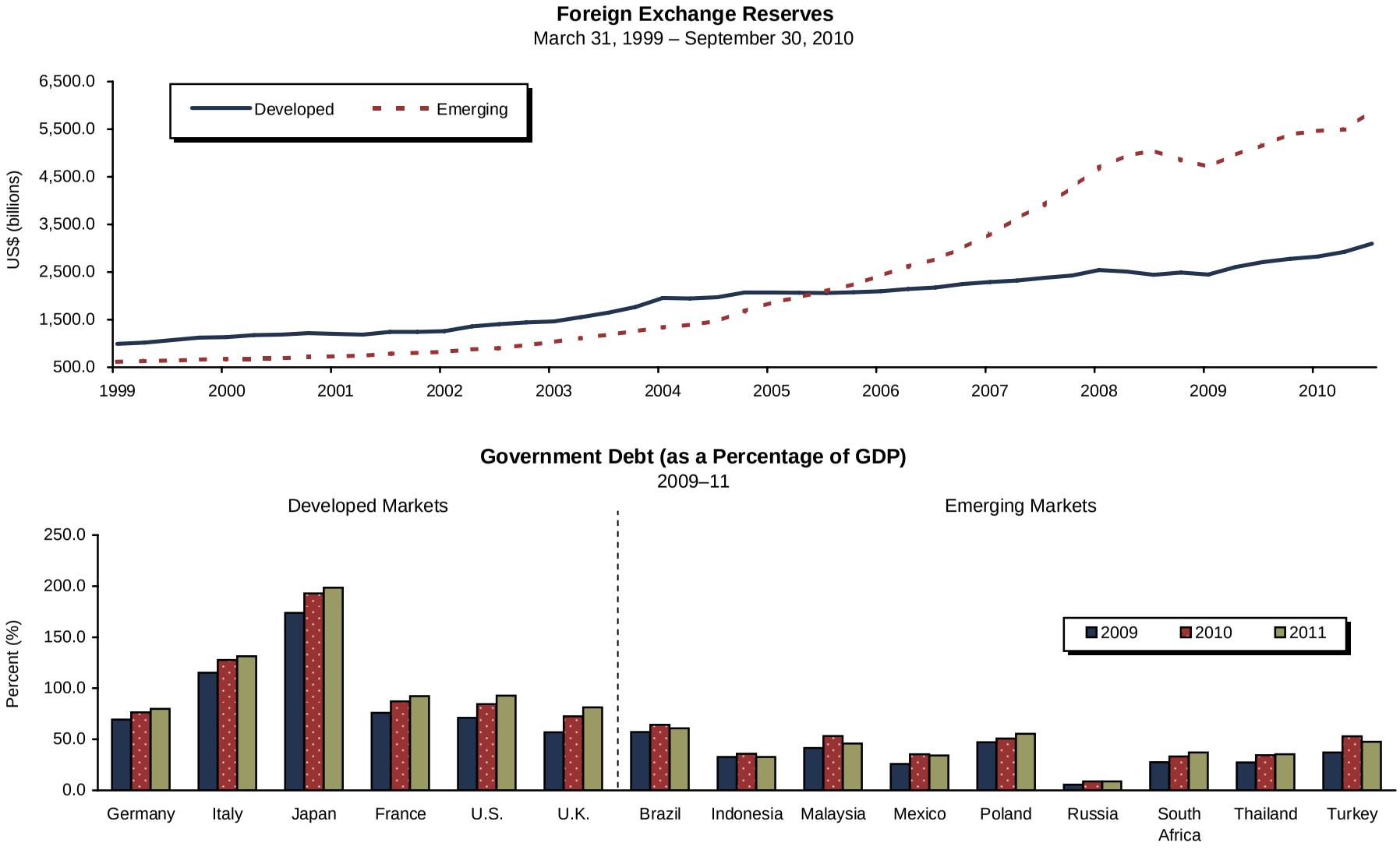


Source: Bloomberg L.P.

Note: Brazil five-year government bond rate is interpolated based on the four- and six-year bond yields.

Exhibit 14

Total Foreign Exchange Reserves and Government Debt as a Percentage of GDP

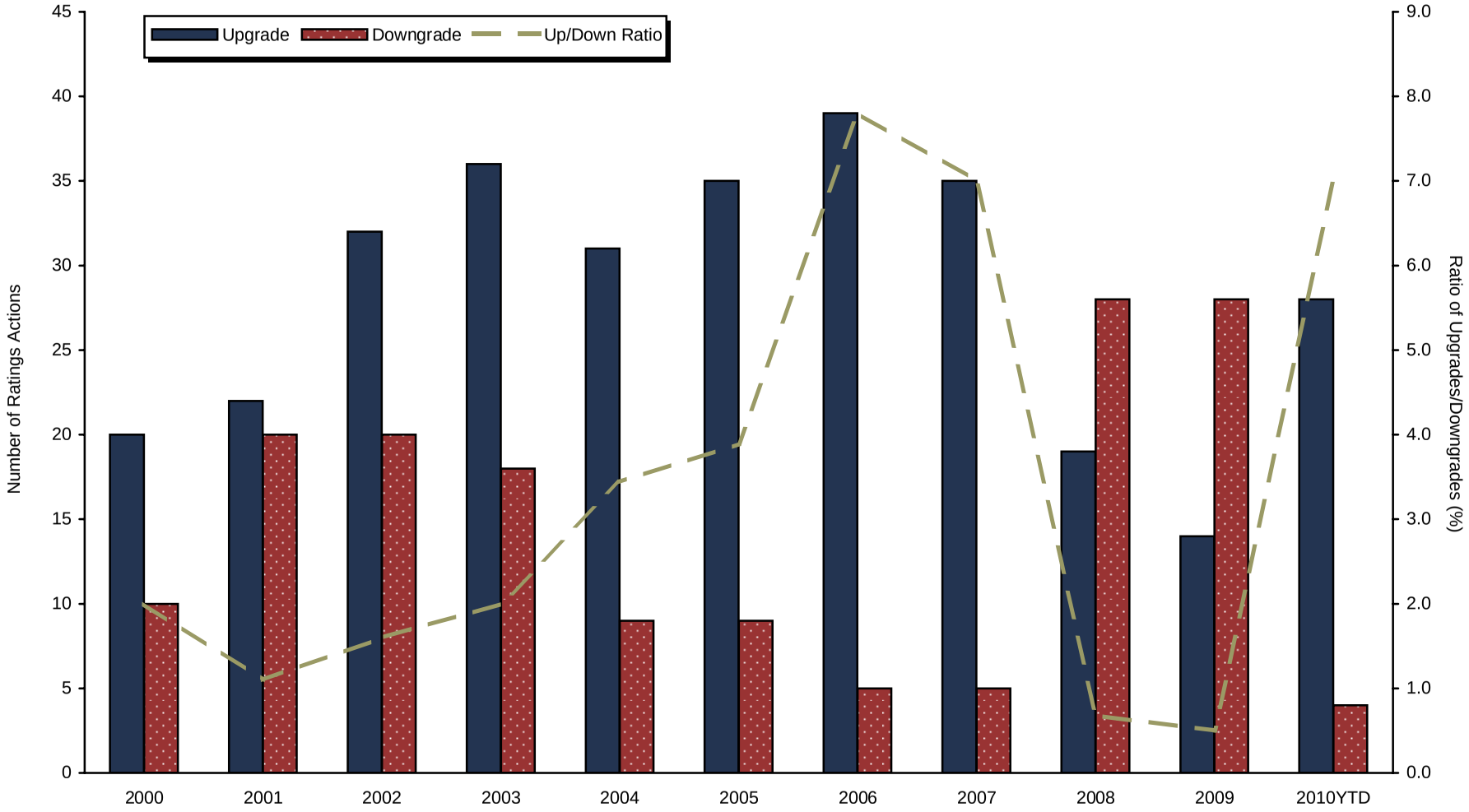


Sources: International Monetary Fund - COFER database, J.P. Morgan Securities, Inc., and Thomson Datastream.
Note: Government debt data for 2010 and 2011 are forecasts.

Exhibit 15

Emerging Markets Sovereign Debt Ratings Actions

January 1, 2000 – November 30, 2010

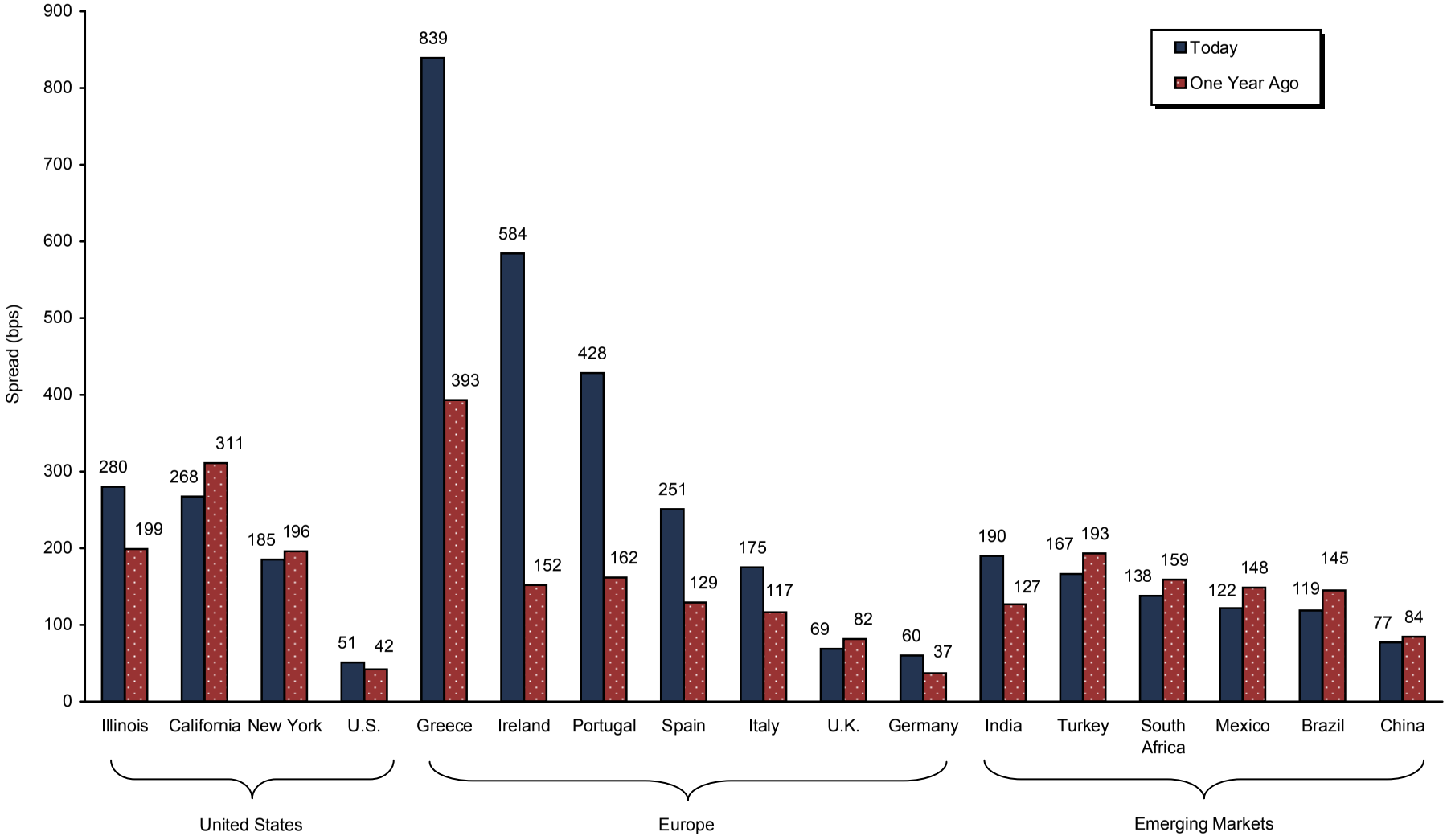


Sources: J.P. Morgan Securities, Inc., Moody's Investors Service, and Standard & Poor's.
Note: The total number of upgrades and downgrades includes both S&P and Moody's actions.

Exhibit 16

Five-Year Credit Default Swap Spreads

January 29, 2010 Versus January 31, 2011



Source: Bloomberg L.P.

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Exhibit 17

Correlation Matrix: Debt Indices Versus Other Asset Classes

January 1, 2003 – December 31, 2010 • U.S. Dollar

	Correlation from 2003 to 2010					Correlation from 2008 to 2010				
	J.P. Morgan EMBI Global Diversified	J.P. Morgan GBI-EM Global Diversified	J.P. Morgan CEMBI Broad Diversified	Barclays Capital High Yield Bond Index	Barclays Capital Corp Investment Grade Bond Index	J.P. Morgan EMBI Global Diversified	J.P. Morgan GBI-EM Global Diversified	J.P. Morgan CEMBI Broad Diversified	Barclays Capital High Yield Bond Index	Barclays Capital Corp Investment Grade Bond Index
MSCI World Index	0.63	0.76	0.61	0.73	0.42	0.71	0.82	0.70	0.79	0.56
MSCI Emerging Markets Index	0.65	0.77	0.60	0.70	0.42	0.76	0.83	0.74	0.83	0.61
MSCI U.S. Index	0.58	0.69	0.56	0.71	0.35	0.66	0.77	0.64	0.76	0.48
Dow Jones-UBS Commodity Total Return Index	0.38	0.46	0.42	0.41	0.28	0.49	0.55	0.54	0.54	0.39
Dow Jones-UBS Commodity Spot Price Index	0.38	0.46	0.41	0.41	0.29	0.50	0.53	0.53	0.54	0.40
Gold Bullion Spot Price	0.36	0.34	0.33	0.11	0.25	0.39	0.27	0.41	0.12	0.34
Barclays Capital U.S. Aggregate Bond Index	0.67	0.44	0.64	0.25	0.84	0.68	0.55	0.63	0.29	0.79
J.P. Morgan Global Government Bond Index	0.46	0.53	0.39	0.14	0.56	0.43	0.56	0.33	0.12	0.50
Barclays Capital High Yield Bond Index	0.76	0.66	0.73	---	0.60	0.81	0.73	0.76	---	0.67
Barclays Capital Corp Investment Grade Bond Index	0.83	0.61	0.84	0.60	---	0.84	0.70	0.84	0.67	---
J.P. Morgan EMBI Global Diversified	---	0.79	0.93			---	0.84	0.95		
J.P. Morgan GBI-EM Global Diversified	0.79	---	0.70			0.84	---	0.77		
J.P. Morgan CEMBI Broad Diversified	0.93	0.70	---			0.95	0.77	---		

Sources: Barclays Capital, Dow Jones & Company, Inc., J.P. Morgan Securities, Inc., MSCI Inc., and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

Exhibit 18

Emerging Markets Debt Cumulative Wealth

December 31, 1993 – December 31, 2010 • U.S. Dollar

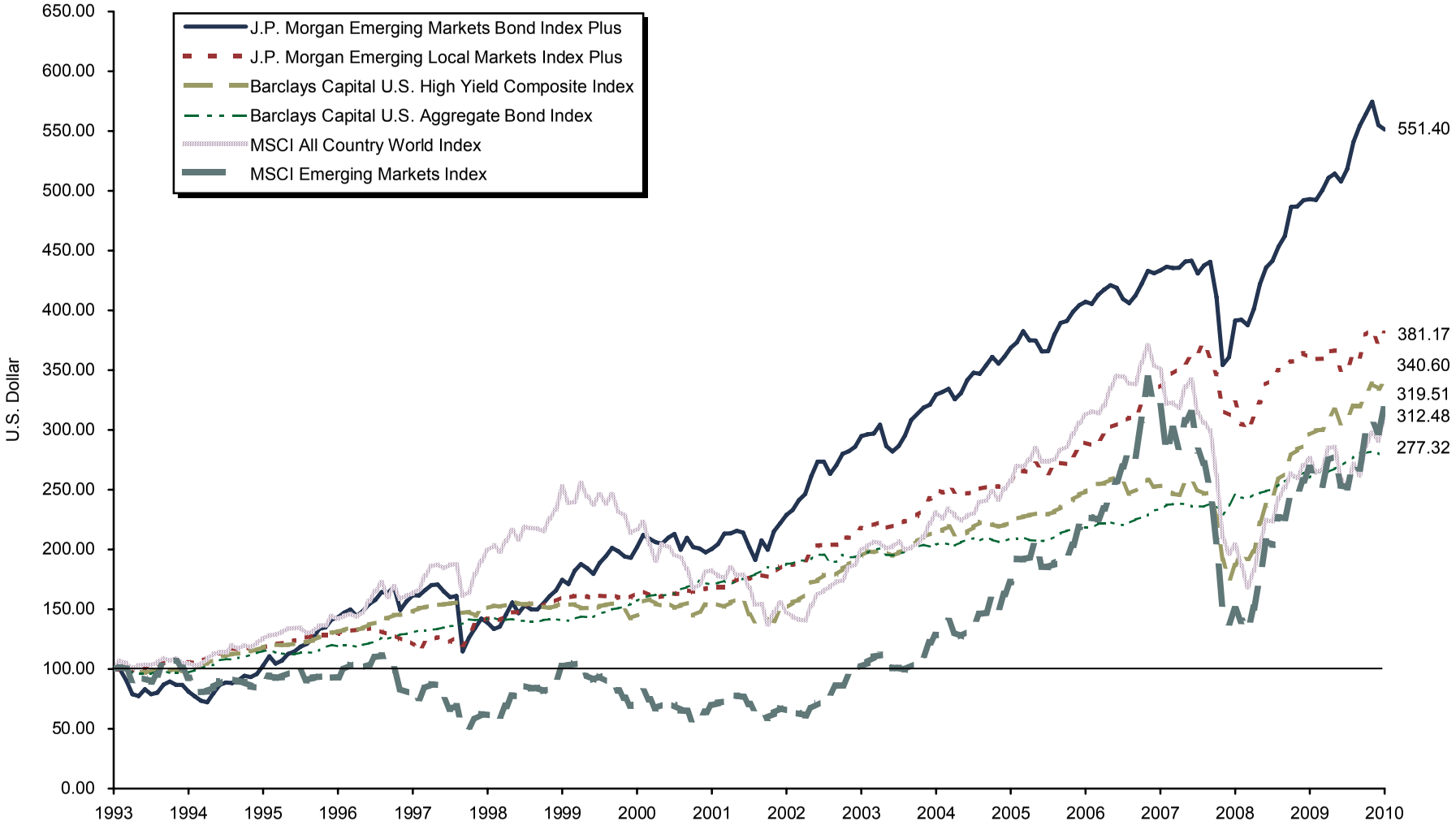
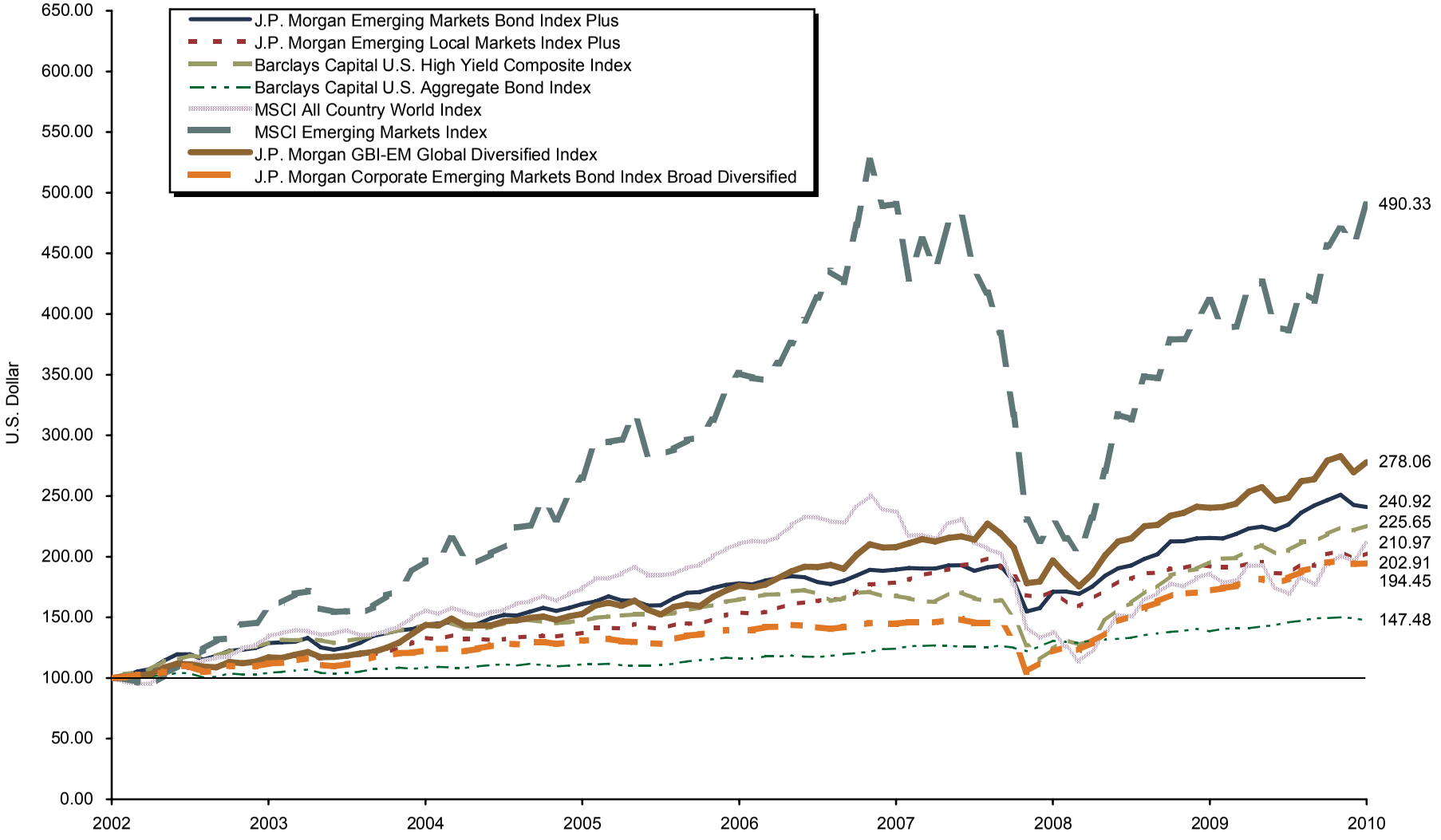


Exhibit 18 (continued)

Emerging Markets Debt Cumulative Wealth

December 31, 2002 – December 31, 2010 • U.S. Dollar



Sources: Barclays Capital, J.P. Morgan Securities, Inc., MSCI Inc., and Thomson Datastream. MSCI data provided "as is" without any express or implied warranties.

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