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Emerging-market debt offers a range of strategies to suit different investment objectives

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A Spectrum of Possibilities: The Emerging-Market Debt Tool Kit

Everyone wants a piece of the action, but the question is how to get it. The challenge—and the opportunity—for investors is selecting the best strategy to fit their objectives.

Today, three decades after the phrase "emerging markets" was coined, the comparative strength of developing economies is one of the dominant themes in global investing. Emerging-market (EM) countries account for about 85% of the world's population and roughly half its gross domestic product (GDP). Thanks to a virtuous cycle of conservative fiscal policies, credible monetary policies, falling inflation and faster growth, EM sovereign credit metrics are now stronger than those of most developed economies. The International Monetary Fund (IMF) expects emerging countries' gross-debt-to-GDP ratio to fall below 30% by 2017, compared with 130% in the developed world.[1]

But exploiting these trends is not as straightforward as it may seem. This is especially true in emerging-market debt (EMD), which spans several sectors, each with its own set of risks and return opportunities. The EMD tool kit can be used in a wide array of strategies to help achieve a range of goals, from conservative portfolio diversification to high-octane return seeking. The challenge, as well as the opportunity, is to select the right strategy for each investor's needs.

Different Sources of Risk and Return

A common approach to analyzing EMD is to think of it as comprising three major sectors: hard-currency sovereign debt, hard-currency corporate debt and local-currency sovereign debt. But we believe it's far more useful to look at the sources of risk and return in each sector, because these tell us more about the role that each sector might be able to play in a portfolio. All fixed-income instruments have three broad sources of risk and return: interest-rate exposure, credit exposure and currency exposure. The overview in *Display 1, next page,* shows the sources of those exposures for the three EMD sectors.

Hard-Currency Sovereigns

Hard-currency sovereign debt[2] is denominated in developed-market (DM) currencies—most commonly US dollars. (For the purposes of this paper we'll assume investors are US dollar–based.) While investors' source of credit exposure is EM government credit, their interest-rate exposure comes from US interest-rate movements and investors are not directly exposed to EM currency fluctuations.

Credit quality in emerging countries has been steadily improving, and this trend has changed the risk/return profile of sovereign dollar debt. In the early 1990s, there were no investment-grade bonds in the J.P. Morgan EM benchmark indices. Today, about 65% of the Emerging Market Bond Index Global (EMBIG) is investment grade. Given that the EMBIG contains high-yield as well as investment-grade names, credit quality can have a significant impact on volatility and interest-rate risk. Lower-rated bonds tend to be more volatile, but are less sensitive to changes in interest rates than higher-rated bonds are. As a result, over the

[1]*The term "emerging markets" was coined in 1981 by Antoine van Agtmael, an investment officer at the International Finance Corporation. Population and GDP data were taken from the International Monetary Fund (IMF)* World Economic Outlook, *October 2012.*
[2]*For example, bonds included in the J.P. Morgan Emerging Market Bond Index Global (EMBIG).*

Display 1: Sources of Risk and Return for Emerging-Market Debt

	Interest Rates	Credit	Currency
Hard-Currency Sovereigns	US	Sovereign Investment Grade/ High Yield	US Dollar
Hard-Currency Corporates	US	Corporate Investment Grade/ High Yield	US Dollar
Local-Currency Sovereigns	Emerging	Sovereign Investment Grade/ High Yield	Emerging Currency

years, the investment-grade bonds in the EMBIG have developed a closer correlation with US Treasuries. As we'll discuss later, investors need to take this relationship into account when deciding how to employ investment-grade sovereigns in their portfolios.

We think that, on average, emerging governments' credit quality should continue to strengthen in coming years, based on the virtuous cycle discussed earlier. But averages hide important truths: lower-rated sovereigns are still quite a large component of the market, and investing in them can present challenges. These may include unstable political regimes, poor track records on macroeconomic policies, lack of data transparency and even openly unfriendly attitudes toward creditors. And, while the sector includes many issuers, it is also quite concentrated, with relatively few countries accounting for a large share of market capitalization. As a result, while EM sovereign debt has historically generated attractive absolute and relative returns, we recommend that, if investors are looking at this sector as a yield or return booster, they should also take into account the potential for volatility and idiosyncratic (issuer-specific) risk.

Hard-Currency Corporates

Investors in hard-currency corporate debt[3] are buying bonds issued by companies rather than by governments, so their primary source of EM risk and return is corporate credit exposure.

Like hard-currency EM sovereign debt, the hard-currency corporate market today is predominantly dollar-denominated. In this sector, levels of credit risk and interest-rate sensitivity vary widely because there is a wide range of issuers, from high-quality, world-class, A-rated companies all the way down to highly indebted companies rated CCC and below. This means that investors need to understand both the credit risk and the interest-rate risk of each corporate bond purchased and judge its likely impact on overall portfolio risk and return.

We believe there's a strong case for having a long-term allocation to EM corporate debt in most portfolios, based on strong fundamentals, relatively attractive valuations and solid growth potential.

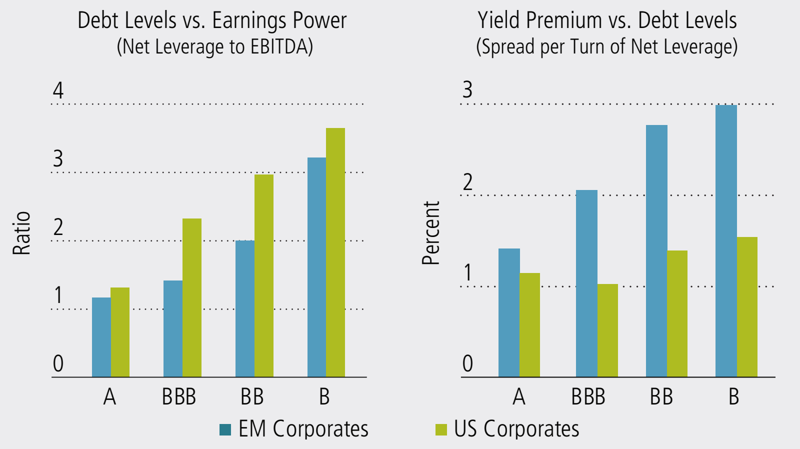
Today, on average, EM corporate issuers are less indebted than their developed-country peers. And these better credit metrics come at more attractive yield premiums, as illustrated in *Display 2*.

We believe the growth outlook also makes a convincing case for EM corporates. Between 2000 and 2011, EM economies grew at an average rate of about 6.3% a year—more than three times as fast as the developed world.[4] We believe that EM growth will continue to outstrip DM growth in coming years. Faster economic growth implies faster credit growth, particularly as EM countries' per-capita GDP begins to increase. According to IMF data, developed economies' average debt-to-GDP ratio is about 212%, compared with just 36% in emerging economies.[5] We expect emerging-market corporations to continue borrowing to fund investments in new capacity, to meet growing consumer demand. Another potential driver of new EM corporate bond issuance is the "disintermediation" effect as capital-constrained banks, less eager to lend, are encouraging their clients to turn to the bond markets for financing.

From a risk perspective, investors should bear in mind that standards of corporate financial disclosure may vary from country to country and that domestic legal structures to protect creditor rights are stronger in some countries than in others, so the overall level of bondholder protection may vary. This means it's crucial for investors to understand the idiosyncratic risks they face, and in-depth research is required at the issuer, sovereign and industry levels. It's also worth noting that EM corporates can suffer sell-offs at times of heightened risk aversion. And, at times of crisis, markets can become illiquid, making it more difficult and expensive to exit a market. But we believe that this risk will diminish over time as the markets continue to expand and deepen.

[3] *For example, bonds included in the J.P. Morgan Corporate Emerging Markets Bond Index (CEMBI) Broad Diversified*
[4] *IMF* World Economic Outlook, *October 2012. Average GDP growth in the developed world was 1.8%.*
[5] *Ratio of public and private debt securities to GDP*

Display 2: Emerging Corporates Have Less Debt, More Attractive Spreads



Historical analysis does not guarantee future results.
As of September 30, 2012. Net leverage refers to the last two-month ratio of debt capital (bank loans, bonds, etc.) to EBITDA (earnings before interest, taxes, depreciation and amortization). Ratings from AAA (best) to D (worst) reflect rating agencies' measure of credit quality of debt securities based on issuer's financial condition.
Source: Bank of America

Local-Currency Sovereigns

Investors in local-currency sovereign debt derive all three types of return—interest-rate, credit and currency—from EM countries.[6] We've seen dramatic changes in the local-currency markets since the 1990s, when the opportunity set was generally limited to short-term instruments. In those days, local-currency debt investing was simply a short-term currency carry play, dominated by "hot" money flows from hedge fund–like investors. Since then, the evolution of more sophisticated banking, savings and pension-fund systems has produced more mature local-currency markets, with full yield curves of bonds across the maturity spectrum. Today, investors can pick and choose between different yield curves and currencies, going overweight in one country for interest-rate exposure and in another for currency exposure.

Historically, one of the major selling points for investing in local-currency bonds has been exposure to currencies that have potential to appreciate against the dollar. And, as we'll discuss in the next section, unhedged local-currency bonds have generated attractive returns. But it's important to remember that these securities have also been more volatile than any other major sector of EM fixed income. According to economic theory, countries with rapid economic development and increasing productivity should see a real appreciation in the value of their currencies. But this secular trend can be wrapped in a lot of cyclical volatility. And investors are concerned with nominal appreciation, which may be lower than real appreciation, depending on how much of a role inflation plays in real exchange-rate movements. (This is beyond the scope of this paper, but it's a topic for investors to bear in mind.)

The second source of return in local-currency bonds is local interest-rate exposure. Investors look to local-currency bonds for added yield and potential capital appreciation. While EM bond yields have fallen significantly, they still offer a yield pickup over those of the major developed economies. And, if inflation in emerging economies is on a long-term downward trend, we would expect EM yields to converge further with those of developed markets. From a risk perspective, EM economies tend to have more volatile growth and inflation, which can lead to greater bond-market volatility. Such volatility could limit how fast EM yields converge with DM yields if the markets seek higher yield premiums to compensate for the fluctuations.

Investors should bear in mind that taxation and settlement issues can also have an impact on local-currency bondholders. While the yields quoted may be attractive, the actual yield earned by an investor may be lower, depending on the local tax regime. In addition, settling bond sales and purchases in these countries can present challenges. Some of these issues can be addressed using credit-linked notes and derivatives.

EMD Can Meet a Range of Objectives

Emerging-market debt can be used to pursue a range of investor objectives. In this section, we'll discuss the returns and volatilities of the major sectors of the EMD universe, briefly explore their diversification potential and, finally, show how they can fit other criteria such as yield and interest-rate sensitivity.

The Risk/Return Trade-Off

Depending on investors' risk tolerances and return requirements, some forms of EMD exposure are likely to be a better fit than others. *Display 3, next page,* shows where some of the major EMD sectors have historically fallen on the spectrum of risk and return. To help show how EMD fits into the context of the broader global opportunity set, we also show returns and volatilities for some of the major DM bond indices. Readers familiar

[6] The local-currency sovereign opportunity set includes bonds in the J.P. Morgan Government Bond Index Emerging Market Global Diversified (GBI-EMGD).

with the Capital Asset Pricing Model will notice that the strategies fall quite neatly into a capital-markets line, illustrating the principle that, over time, the more risk investors take, the more they get paid (and the more volatility they experience along the way).

A few broad generalizations can be made from Display 3. First, over the past decade, emerging-market government debt denominated in US dollars has generated better risk-adjusted returns than most of the EM and DM sectors shown in the chart. Second, EM local unhedged debt would have helped boost returns when added to a dollar-denominated portfolio of DM treasuries. But the currency risk that would have helped to generate those returns would have meant significantly more volatility. Finally, EM corporates didn't look especially attractive relative to sovereign debt.

These observations are based on historical data, so some things are likely to change in the future. We wouldn't expect significant shifts in the overall picture of risk and return, but we would expect EM corporates to outperform similarly rated EM government bonds going forward. This should narrow the gap in risk-adjusted returns between these sectors. We think that as the EM corporate-debt market continues to mature, it will become less volatile. This is partly due to the nature of investment flows. In the early days of EM corporate bond investing, many new entrants didn't fully understand the challenges of the market and were quicker to panic at times of turbulence. For many, EM corporate credit was an exposure they were taking outside their benchmark, so they were quicker to close out those positions in times of market stress. Today, investors have a better understanding of the market, and firms are hiring research analysts who are dedicated to EM corporate bonds. And more EM funds are being launched that include corporate bonds in their benchmarks, suggesting that investment flows into corporates are likely to be "stickier" than in the past.

As we've discussed, investors can choose how much risk they're willing to accept, and where they want that risk to come from. We believe that, in the future, more investors will start to split their EMD exposure into high-beta and low-beta strategies. The more conservative low-beta component could combine hedged local EM debt with investment-grade government and sovereign bonds, while the more aggressive high-beta component could take currency risk and combine it with subinvestment grade sectors. There is no single "right" approach to investing in EM debt. Investors should ask several questions to clarify what their goals are and how best to achieve them. One of the key questions is how EM debt can diversify preexisting fixed-income portfolios.

Two Types of Diversification

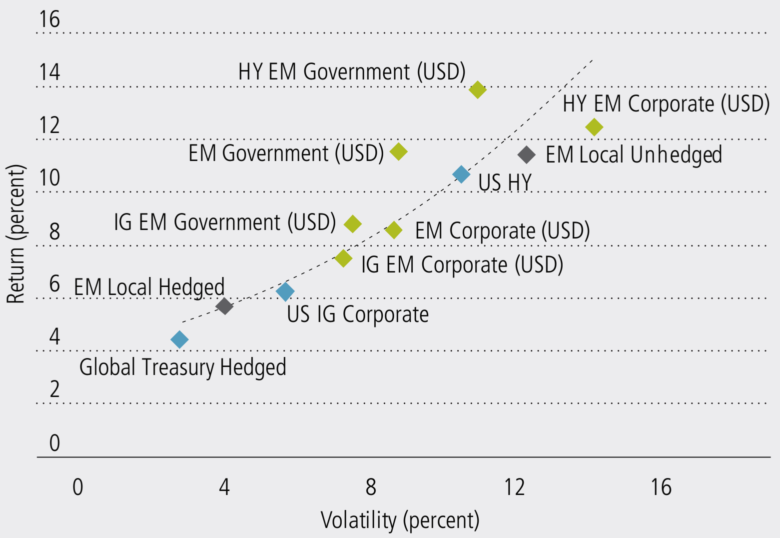
The discussion about the diversification benefits of EM debt can be misleading at times, because in fact there's more than one type of diversification. The first type, portfolio diversification, seeks to mitigate systematic, market-level (beta) risk. The second, issuer diversification, deals with issuer-specific (alpha) risk.

Mitigating Market-Level Risk

Portfolio diversification involves seeking strategies with low correlations to the existing assets in a portfolio. *Display 4* shows the correlations between various EMD strategies and developed-market portfolios. If an investor wants to use emerging markets for diversification,

Display 3: Global Bond Sectors—A Continuum of Risk and Reward

2003–2012



Historical data are for illustrative purposes only.
Past performance is no guarantee of future results.
As of December 31, 2012
J.P. Morgan indices are: EM Local Unhedged—GBI-EM Global; EM Local Hedged—GBI-EM Global hedged to USD; EM Gov't (US$)—EMBIG; IG EM Gov't (US$)—EMBIG Investment Grade; HY EM Gov't (US$)—EMBIG High Yield; EM Corps (US$)—CEMBI Broad Diversified; IG EM Corps (US$)—CEMBI Broad Diversified Investment Grade; HY EM Corps (US$)—CEMBI Broad Diversified High Yield. Barclays Capital indices are: US IG Corps—US IG Corporate; US HY—US High Yield; Global Treasuries Hedged—Global Treasury, hedged.
Source: J.P. Morgan, Barclays Capital and AllianceBernstein

Display 4: Correlations Between Emerging- and Developed-Market Portfolios

10-Year Correlation: 2003–2012

	US Treasuries	US Investment-Grade Corporates	US High-Yield Corporates	Global Aggregate Bonds (USD Hedged)	Global Treasuries (Unhedged)	Global Treasuries (USD Hedged)
EM Sovereigns						
Hard-Currency	0.3	0.8	0.7	0.5	0.5	0.3
Hard-Currency IG	0.5	0.9	0.7	0.7	0.6	0.4
Hard-Currency HY	0.1	0.7	0.8	0.4	0.4	0.1
Local Currency (Unhedged)	0.0	0.5	0.6	0.2	0.5	0.0
Local Currency (USD Hedged)	0.4	0.6	0.4	0.6	0.5	0.5
EM Corporates						
Hard-Currency	0.2	0.8	0.7	0.5	0.4	0.2
Hard-Currency IG	0.4	0.8	0.7	0.6	0.5	0.3
Hard-Currency HY	0.0	0.7	0.8	0.3	0.3	0.0

Historical analysis does not guarantee future results. Investors cannot invest directly in an index.
January 1, 2003 through December 31, 2012
J.P. Morgan indices are: EM Sovereigns: Hard-Currency—EMBIG, EMBIG Investment Grade, EMBIG High Yield; Local Currency—GBI-EM Global (hedged and unhedged).
EM Corporates: CEMBI Broad Diversified, CEMBI Broad Diversified Investment Grade, CEMBI Broad Diversified High Yield.
Barclays Capital indices are: US Treasuries—US Treasury Index; US Investment-Grade Corporates—US Credit Corporate Index; US High-Yield Corporates—US High Yield 2% Issuer Constrained Bond Index; Global Aggregate Bonds—Global Aggregate (hedged); Global Treasuries—Global Treasury (hedged and unhedged).
Sources: Barclays Capital, J.P. Morgan and AllianceBernstein

then the original tilt of the portfolio will help determine which EM sector is appropriate. Is the portfolio primarily based on interest-rate exposure, credit or currency, and to what extent does the investor wish to preserve that tilt?

For example, an investor with a portfolio of US Treasuries may want to diversify by adding hard-currency high-yield EM sovereigns given the low correlation of 0.1. Likewise, local-currency unhedged sovereigns may have appeal, since the correlation is even lower. But we'd argue that, while these correlations are attractive, the diversification effect is less about exposure to emerging markets than about exposure to credit and currency: adding subinvestment-grade securities to a portfolio of "low-risk" assets or adding currency exposure to a previously all-US-dollar portfolio. The key is to understand the nature of the diversification opportunity in each EM sector and explore how it is likely to change the emphasis of the portfolio.

Although individual investors' needs will vary, we can make a couple of broad generalizations. For example, for investors in US Treasuries or US dollar–hedged global treasuries, local-currency debt has historically been a good diversifier, partly because it offers exposure to many countries that are not at the same point in their economic cycles as developed countries. Investors might also potentially achieve higher returns and more diversification by adding currency risk, assuming they are willing to tolerate the additional volatility. For investors looking for high-grade assets that help diversify away from US-dollar bond markets, this is likely to be the most attractive EM sector.

One thing to notice about hard-currency investment-grade sovereigns is that they have a higher correlation with US Treasuries than high-yield sovereigns do. The high-grade and high-yield markets have developed different characteristics in recent years, with high-grade sovereigns coming to behave much more like developed-market sovereign debt, while high-yield sovereigns still move more independently. One reason for this is that the performance of high-yield sovereigns tends to be driven by governments' willingness and ability to service their debt. These bonds will be less affected by moves in the US Treasury market. In the investment-grade space, default risk is less of an issue (and so spreads are tighter) and the US Treasury yield curve is a bigger driver of performance.

Mitigating Issuer-Level Risk

Not all EMD opportunities provide much diversification at the portfolio level. For example, adding EM high yield to US high-yield holdings wouldn't result in much portfolio diversification because the two are highly correlated. But this high correlation could be attractive to some people—for example, credit investors who want to preserve the original tilt of their portfolio. For investors like these, the attraction of

Display 5: Comparing Emerging-Market Strategies

	Hard Currency				Local Currency
	Sovereigns	Investment-Grade Sovereigns	High-Yield Sovereigns	Corporates	Sovereigns
Yield (%)	4.5	3.5	6.3	4.7	5.7
Spread (%)	2.7	1.5	4.6	3.2	N/A
Duration (Years)	7.7	8.1	7.0	5.7	4.7
Issuers	95	51	44	391	30
Countries	55	22	33	43	15
Market Size ($ Bil.)	579.2	363.5	215.7	619.9	952.6
J.P. Morgan Index	EMBIG	EMBIG Investment Grade	EMBIG High Yield	CEMBI Broad	GBI-EM Global

Historical analysis does not guarantee future results. Investors cannot invest directly in an index.
As of December 31, 2012
Sources: Bloomberg, J.P. Morgan and AllianceBernstein

adding EMD is issuer diversification, so they might be less concerned about correlations than they are about the number of names in the sector.

When the goal is issuer diversification, investors should compare each emerging-market sector with the developed-market sector that best matches their primary source of risk and return—interest rates, credit or currency—so as to ensure an apples-to-apples comparison.

For example, the best apples-to-apples comparison for a US Treasury portfolio would be local-currency US dollar–hedged sovereigns, because they also represent high-grade sovereign risk, denominated in dollars. This would be the best option if the investor wanted to preserve the original tilt of the portfolio, toward interest-rate risk, rather than toward credit or currency risk.

Display 5 shows that EM corporates are a particularly good source of issuer diversification. Adding them to the opportunity set (for example, if the investor already has an EM sovereign or US investment-grade corporate portfolio) would add almost 400 new names from 43 countries. In some cases, corporates can offer access to countries not represented in the sovereign indices. Countries like Qatar and United Arab Emirates have not yet issued sovereign bonds, but companies domiciled in those countries do have bonds outstanding. EM hard-currency sovereigns also offer good diversification, with 95 issuers, including some, like Angola, Sri Lanka and Côte d'Ivoire, that aren't found in other benchmarks. By contrast, local-currency debt doesn't offer much issuer-level diversification, with only 30 names in the index.

Is Yield a High Priority?

With developed-country bond yields currently close to record lows, yield is a key consideration for many investors. At the end of 2012, hard-currency EM sovereigns were offering a yield premium (spread) of about 2.7% over comparable US Treasuries, while EM corporate bonds offered an average spread of about 3.2%. For investors looking to maximize yield and willing to tolerate volatility, EM high-yield sovereigns, with an average absolute yield of 6.3%, and EM local-currency sovereigns, yielding 5.7%, would have been the most attractive.

How Important Is Duration?

Investors who are wary of taking on too much interest-rate exposure (duration) should note that hard-currency investing can carry more US interest-rate risk than expected, especially at the investment-grade end of the credit spectrum. At the end of 2012, the average duration of the J.P. Morgan EMBIG Investment Grade was more than eight years, compared with about 5.4 for the Barclays Capital US Treasury Index. This characteristic wasn't shared by EM hard-currency corporates: the duration of the CEMBI Broad was less than six years.

The Advantages of Market Size

The size of a bond market can be a source of reassurance to investors, partly as larger markets tend to be more liquid. One area of particularly rapid growth has been the EM corporate market.

Although relatively young, this segment has grown and evolved dramatically, exceeding the US$1 trillion mark in 2012.[7] That's comparable to the US high-yield market and roughly twice the stock of hard-currency EM sovereign debt. Hard-currency corporate issuance has been on a strong upward trend, with the size of the market almost tripling

[7] *This counts all hard-currency corporate issuers, including quasi-sovereigns (the CEMBI Broad, shown in Display 5, includes only issues of $300 million or above and does not include quasi-sovereigns).*

between 2005 and 2012. We think that this growth in issuance reflects a healthy diversification of corporate funding sources away from the traditional bank lending market.

Conclusion

Of the EMD strategies described so far, no single strategy on its own allows investors to exploit all the available sources of return and risk. We recommend thinking about the asset-allocation decision in two parts.

The first step (the beta decision) is to identify the sources of risk and return that best fit the investor's objectives. This is the primary source of market exposure and, for investors who use a benchmark, might be one of the indices discussed above. The second step (the alpha decision) is deciding which additional opportunities the investor wants to pursue. This would mean giving the portfolio manager some latitude to invest selectively in other sectors. For example, an investor with a portfolio of high-grade EM sovereigns might choose to add some corporate exposure and take some selective currency exposure—comparable to a "core-plus" mandate for a developed-market portfolio.

When it comes to adding alpha, we think emerging markets potentially offer good rewards for active management, because they are characterized by more dispersion and complexity than developed markets are. Dispersion of EMD returns can be significant. For example, Côte d'Ivoire returned 94% in US dollar terms in 2012, while Belize fell 20%. This implies that, with the help of in-depth research, active managers can create considerable value by identifying future winners and avoiding the losers.

The challenge for active managers is that emerging markets aren't homogeneous. Each country has its own set of macroeconomic realities, political undercurrents, levels of bondholder protection and standards of corporate governance. It is here that global research capabilities and on-the-ground intelligence can give investors a significant competitive advantage. ■

The Next Generation of Emerging-Market Debt

The benefits of emerging-market debt are not limited to traditional bond portfolios. For EM equity investors, we believe bonds can be a valuable addition, helping to offset the volatility of stocks. Different asset types benefit in different ways from EM growth. Our research indicates that a portfolio which combines emerging stocks, bonds and currencies, managed in an active, unconstrained and integrated strategy, can produce better risk-adjusted returns. We think that such an approach can generate returns that are similar to a stock-only strategy, but with significantly less volatility.

We believe that bolting together separately managed stock, bond and perhaps currency funds has limitations. Unless the managers are coordinating their efforts, the investor may end up with a less-than-optimal result. (For example, the funds might have similar risk-control strategies, and the investor could end up with more risk control than desired in an inefficient part of the market.) This points to the need for an unconstrained, holistic and integrated approach.

One advantage of this approach is that a broad opportunity set, spanning more asset classes, countries, currencies and securities than a stand-alone debt or equity portfolio, offers more flexibility to seek higher risk-adjusted returns. A second advantage is that it provides greater diversification potential to reduce portfolio volatility. Finally, an integrated multi-asset portfolio can potentially exploit a wider range of hedging opportunities to reduce undesired exposures and focus on whatever is most attractive. ■

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