Emerging markets-domiciled corporations issue more than four times the amount of U.S. dollar-denominated fixed income securities

on a gross basis than do emerging markets (EM) sovereign issuers (Figure 1, page 2). DoubleLine expects that gap to widen into the next decade. On an index basis, EM corporates exhibit higher yields per credit rating category and higher yields relative to duration compared to EM sovereigns. EM corporates also have delivered better historical risk-adjusted returns as measured by their Sharpe ratio. Yet investor perceptions of the EM sector remain hostage to the past. By convention, most EM fixed income portfolios remain indexed to sovereign issue-based benchmarks.

This disconnect from reality stems from a couple of factors. The first is the legacy of EM’s initial emergence as an asset class of sovereign dollar-denominated issues (Brady Bonds) over 20 years ago. The second factor stems from sovereign index performance relative to corporate index performance: each has generated similar historical returns although volatility and risk-adjusted returns favor dollar-denominated corporates. However, EM corporate and sovereign indices are extraordinarily heterogeneous. Thus taking a passive investment approach to EM debt, sovereign or corporate, is fraught with risk. For example, the JP Morgan Corporate Emerging Markets Bond Index-Broad Diversified (CEMBI-BD) contains issues by companies domiciled in countries as wealthy as Qatar and Singapore and issues by companies in countries as poor as Guatemala and Bangladesh. The sovereign indices likewise comprise widely varying sovereign credits.

Investment Thesis

Through bottom-up corporate credit selection and top-down election/exclusion of countries, DoubleLine believes active managers can construct portfolios primarily invested in U.S. dollar-denominated EM corporate credits that will likely outperform EM sovereign portfolios, multi-sector EM debt portfolios and sovereign indices.

Dollar-denominated sovereigns still have a secondary role to play in a corporate-centric EM portfolio. In addition, opportunistic plays periodically arise in local currency-denominated EM debt. Nevertheless, the story of EM debt as a secular trend of improving creditworthiness, which began and persists in the sovereign sector, will

1. The Sharpe ratio was developed by Nobel laureate William F. Sharpe to measure risk-adjusted performance. The Sharpe ratio is calculated by subtracting the risk-free rate of return, such as that of the 3-month U.S. Treasury bill, from the rate of return for a portfolio and dividing the result by the annualized arithmetic standard deviation of the portfolio returns. For returns on the annualized arithmetic Sharpe ratio comparisons, see Figure 3, page 3.
3. Brady Bonds were dollar-denominated bonds issued mostly by Latin American countries in the late 1980s. The bonds were a restructuring of EM sovereign debt proposed by U.S. Treasury Secretary Nicholas Brady.
4. Of 228 countries ranked by 2013 Gross Domestic Product per capita, Qatar ranked No. 1 with GDP of $102,100 per capital; Singapore No. 7, $62,400; Guatemala No. 157, $5,300; Bangladesh No. 194, $2,100. By comparison, the United States ranked No. 14 with GDP per capita of $52,800; European Union No. 41, $34,500. U.S. Central Intelligence Agency, The World Factbook.
primarily unfold in the dollar-denominated corporate sector over the next decade. The active manager can target the most attractive credits in the corporate index melting pot to outperform the most widely referenced sovereign and corporate EM fixed income benchmarks.

**EM Investing Can Take Many Forms**

The EM fixed income asset class originated in the form of sovereign debt. Over the past two decades, the asset class broadened into dollar-denominated corporate bonds, local currency sovereign bonds and currency forwards. Accompanying these diverse investment options has been the construction of benchmarks to measure each of these markets or “betas.” Investors targeting a discrete EM debt beta can measure their managers’ performance against the benchmark most closely related to the chosen beta. Nevertheless, many global fixed income investors remain uncomfortable with the idea of committing to any one discrete beta. In general, pension funds, sovereign reserve managers and insurance companies remain underweight EM debt in their fixed income allocations. We expect allocations to EM debt by these institutions to move closer to market weights in the years ahead. Thus the intertwined issues of picking the “right” beta and corresponding benchmark have important implications for billions of investment dollars. To address investor uneasiness about committing to specific EM debt betas, funds have begun to surface using blended benchmarks or even LIBOR as their benchmark. These funds invest across the full spectrum of EM debt.

**Figure 1:** U.S. Dollar-denominated Gross EM Debt Issuance ($Bil) 1/1/2000 - 7/14/2014

Source: J.P. Morgan

**Figure 2:** Emerging Markets Debt Outstanding $10.6 Trillion as of 12/31/2013

Source: Bank of America

5. LIBOR = London Interbank Offering Rate
Although strong arguments can be mustered in favor of largely unconstrained strategies, many investors are uncomfortable entrusting a manager with such broad latitude. This is especially true of EM debt, which encompasses issuers in more than 70 countries and myriad currencies, many of the latter being volatile and illiquid. Investors may not know the extent of significant changes in unconstrained portfolios, including large swings in allocations among EM subsectors, until quarterly holdings reports are made available.

The DoubleLine View: EM Corporates Offer Better Value, but Security Selection is Key

This brings us back to the key question: which EM debt subsector will provide the best risk-adjusted returns in the years ahead? Is the answer dollar-denominated sovereign, dollar-denominated corporate or EM local currency bonds, or some mix of subsectors?

We believe that dollar-denominated corporates will provide investors with the best risk-adjusted returns in the EM debt universe. After a long and sustained period of positive momentum, it’s no surprise that the pace of improving sovereign fundamentals has slowed in some EM countries.

The improvement in the credit worthiness of EM corporates is less than a decade old and, in DoubleLine’s view, likely to continue for years to come.

During the past five years, the nominal annualized returns of the widely used JP Morgan EM debt indices for dollar-denominated sovereigns and corporates – the JP Morgan Emerging Markets Bond Index-Global Diversified (EMBI-GD) and the JP Morgan Corporate Emerging Markets Bond Index-Broad Diversified (CEMBI-BD) – have been almost identical (Figure 3). However, the CEMBI-BD has been less volatile and thus EM corporates historically have delivered better-risk adjusted returns as measured by Sharpe ratio (Figure 3).

The least attractive risk-adjusted returns have come from EM local currency bonds. On an index basis over the past five years, this subsector has failed to compensate investors for the considerable volatility of EM currencies. Over that time period, the Sharpe ratio for the JP Morgan Index for EM local currency bonds was less than half of those of the corresponding dollar-denominated corporate and sovereign indices. DoubleLine’s view is also that the U.S. dollar will remain relatively stable, especially against the euro and yen, two currencies to which many EM currencies

Figure 3:

Emerging Markets Debt Indices
Five-Year Returns as of 6/30/2014

<table>
<thead>
<tr>
<th></th>
<th>$ Sov</th>
<th>$ Corp</th>
<th>$ Local Sov</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annualized Return</td>
<td>11.3%</td>
<td>11.2%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Annualized Volatility</td>
<td>7.2%</td>
<td>6.1%</td>
<td>11.9%</td>
</tr>
<tr>
<td>Sharpe Ratio</td>
<td>1.52</td>
<td>1.76</td>
<td>0.74</td>
</tr>
</tbody>
</table>

Source: JP Morgan. The index used for U.S. dollar-sovereign bonds is the Emerging Market Bond Index Global Diversified or EMBI-GD, for dollar-denominated corporate the Corporate Emerging Bond Index Broad Diversified or CEMBI-BD and for local currency sovereign bonds, the Global Bond Index – Emerging Markets Bond Index Global Diversified.
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are closely linked. Moreover, investing in local EM markets could involve significant amounts of counterparty risk for which investors receive no compensation. This is especially true for managers who use interest rate swaps and foreign exchange contracts to separate their investment view into discrete decisions on rates versus currencies. As with credit default swaps, currency forwards are contracted over-the-counter and thus lack the protection of centralized exchanges. The use of these derivatives also introduces leverage that we believe is unnecessary to achieving attractive risk-adjusted returns in EM debt.

The Composition of EM Indices May Surprise You – and Not in a Good Way

We have discussed the relative performance of the leading JP Morgan dollar-denominated sovereign and corporate bond indices, the Emerging Markets Bond Index Global Diversified (EMBI-GD) and the Corporate Emerging Market Bond Index Broad Diversified (CEMBI-BD), respectively. These indices have the following important characteristics:

JP Morgan Emerging Markets Bond Index Global Diversified (EMBI-GD)

1. **Duration**: The duration of the EMBI-GD is 6.94 years. The duration of the investment grade portion of the EMBI-GD, which comprises two thirds of the index, is even longer at 7.68 years. This presents considerable interest rate risk during a time when global rates are near historical lows.

2. **Yields and Spreads**: Although the EMBI-GD’s yield to maturity of 5.1% may seem attractive relative to U.S. Treasuries, the yield on the investment grade portion of the index is only 4.4%. Moreover, the average spread on the investment grade portion is only 182 basis points (bps). To obtain the higher yields and spreads of the EMBI-GD on an index basis, an investor would have to invest in such high-risk countries as Venezuela, Argentina, Ecuador, Belize, Ivory Coast and Ukraine. With the exception of Venezuela, each of these countries has a history of serial defaults. Moreover, a number of the 61 countries in the EMBI-GD have no history of borrowing in the international bond markets. Investing in them is akin to “rolling the dice” and hoping that the bonds can be sold if the prospect for repayment later appears impaired. Hope is a suboptimal investment strategy.

3. **Lethargic sovereign issuance**: Net issuance for EM dollar-denominated sovereign bonds is expected to total only $8.1 billion in 2014. This compares to over $144 billion projected for net corporate issuance in dollars expected over the same period. The market capitalization of the dollar-denominated EM sovereign universe at less than $700 billion is now roughly half the size of that of the $1.2 trillion market cap of the dollar-denominated EM corporates.

JP Morgan Corporate Emerging Markets Bond Index-Broad Diversified (CEMBI-BD)

1. **Duration**: This CEMBI-BD has a duration of 5.2 years, almost two years shorter than the duration of the EMBI-GD. In other words, broadly speaking, dollar-denominated EM corporates pose less interest rate risk than do their sovereign counterparts.

2. **Yield and Spread**: The CEMBI-BD yield of 5% is close to that of the EMBI-GD despite the former’s lower relative duration and the fact that the CEMBI-BD has average credit ratings of Baa2/BBB/BBB from the three major credit agencies – one notch higher than the EMBI-GD. Moreover, the investment grade

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6. Duration is a measure of the sensitivity of the price (the value of principal) of a fixed-income investment to a change in interest rates. Duration is expressed as a number of years.

7. Except as otherwise noted, all data used in points 1, 2 and 3 to describe the EMBI-GD and CEMBI-BD are from the JP Morgan Emerging Markets Bond Index Monitor dated July 1, 2014 and the JP Morgan Emerging Markets Outlook and Strategy dated June 9, 2014. Net issuance consists of gross issuance less coupon and principal repayments.

8. Basis Point is a unit that is equal to 1/100th of 1.

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Portion of the CEMBI-BD has a spread of 203 bps; 19 bps higher than the spread of the investment grade subsector of the EMBI-GD but low in absolute terms.

3. **Index Composition:** Although the CEMBI-BD includes issuers from 45 countries, which is 16 fewer than the EMBI-GD, the corporate index consists of 1,111 instruments from 515 different issuers. In contrast, the EMBI-GD consists of 437 instruments from 118 issuers in 12 countries. This highlights the importance of security selection as a driver of excess returns and a factor in risk management.

To summarize, the CEMBI-BD corporate index has higher yields and spreads, better credit ratings and lower duration than does the EMBI-GD, its sovereign counterpart.

Despite these distinctions, only $64 billion of investor capital is benchmarked to the CEMBI-BD while more than $300 billion of investor capital is benchmarked to the EMBI-GD despite the fact that active portfolio managers are free to invest much of the latter in corporates. In part, this is likely due to the greater longevity of the EM sovereign indexes compared to their corporate counterparts. So there is a clear disconnect given that the amount of investor capital benchmarked to the EM sovereign indexes is almost five times that of EM corporates even though the latter presents a much larger market universe and, in our view, a more attractive relative-value proposition.

The DoubleLine View: Security Selection in the Right Countries Can Deliver the Best Relative Returns

DoubleLine’s senior EM portfolio managers Luz Padilla, Mark Christensen and Su Fei Koo have worked together for over 19 years, managing EM-dedicated investor capital through many different market cycles as well as the EM debt markets’ transition from sovereign-preponderant debt issuance to corporate-preponderant issuance. The benefits of the later include a now-well established asset class offering strong credit fundamentals with healthy balance sheets, improving ratings and attractive valuations. This experience forms DoubleLine’s view that, in the years to come, the best risk-adjusted returns in EM debt portfolios will come primarily from U.S. dollar-denominated securities issued by corporations in strong EM countries.

For years, investing in EM debt was mostly about investing in certain countries and avoiding others. Investment success largely depended on how a manager was positioned during downturns such as the 1994 Mexican Tequila crisis, the 1997 Asian currency crisis, the 1998 Russian default and the 2001 Argentine default. Given the continuing secular improvement in corporate creditworthiness today, DoubleLine believes that security selection is as important of a driver of performance as is country selection. We think selecting securities issued by entities domiciled in countries with stable to improving fundamentals should always be a baseline criterion for investing in EM debt, be it corporate or sovereign.

Portfolio Diversification and Risk Management

The DoubleLine team’s EM investment process is derived from a bottom-up security selection process, targeting credits the team believes offer the highest expected risk-adjusted returns. The team utilizes sovereign macro overlays and position limits to design a well diversified investment strategy; global and multi-sector diversification (by country, economic sector or position type) is used to lower the correlation of returns within the Emerging Markets Fixed Income strategy. The team typically invests no more than 15% of portfolio capital in any one country. Moreover, our portfolios typically hold less than 25% of investor capital in any one economic sector. Maximum exposure to a single corporate issuer is limited to no more than 5% of investor capital and is typically less than 3%.

DoubleLine’s EM investment strategies are actively managed to regulate four inherent types of risk: interest rate, credit, exchange rate and geopolitical.

10. Source: JP Morgan as of May 2014.
We avoid various sovereign and corporate issuers if our view is that a country is not committed to economic and structural reforms, or is decreasing its linkages to the global economy.

Currently, our EM strategies hold no debt of any issuer located in Venezuela, Ukraine, Argentina or Ecuador. Investing in these countries often produces short-lived excess returns, but our view is these are the investment equivalent to “sugar highs.” The high degree of volatility associated with investing in weak credit countries is inherently disruptive to our goal of delivering high quality risk-adjusted returns in the broad EM space.

Dollar-Denominated Sovereign Bonds and Local Currency Sovereign Bonds

It is our belief that investors should avoid EM strategies that focus primarily on dollar-denominated sovereign bonds or local currency bonds over a full market cycle. Over full market cycles, a well-constructed portfolio of dollar-denominated corporates in our view should outperform the sovereign and local currency issues. That said, it’s important to note that DoubleLine is not averse to investing opportunistically in these subsectors of the EM debt universe. In the aftermath of major market dislocations, sovereigns, either dollar-denominated or local currency, may offer more attractive risk-reward propositions relative to dollar-denominated corporates.

With respect to local currency bonds, it is critical to note that the volatility around foreign exchange rates dwarfs the volatility of duration, the traditional driver of fixed income risk and return. Rare market junctures, such as significant pricing dislocations, are required to justify, on an asset-weighted and risk-adjusted basis, the introduction of EM local currency bonds into a client portfolio.

Why DoubleLine EM Portfolios use the EMBI GD as their Benchmark

Although we believe that U.S. dollar-denominated EM corporates generally provide the best risk-adjusted returns in the EM debt market, we benchmark our EM debt portfolios to sovereign benchmarks. We do this not only because of our confidence that a well-constructed portfolio of EM corporates can outperform the EM sovereign benchmark but also because this allows us to opportunistically raise sovereign exposure when we believe the subsector offers attractive relative value. Local currency bonds are used sparingly and tactically but have been and are currently being avoided in our EM strategies.

Author Biographies

Luz M. Padilla
Director, Emerging Markets Fixed Income

Ms. Padilla joined DoubleLine in 2009 as the Director of the Emerging Markets Group and is the lead Portfolio Manager. Prior to DoubleLine, she was a Managing Director at TCW. She began working at TCW in 1994, where she had served in a number of roles of increasing responsibility with the group, including Credit Analyst, Director of Research, Co-Portfolio Manager since December 2001, and lead Portfolio Manager since October 2006. She was involved in all aspects of building and managing TCW's Emerging Markets Fixed Income business including credit, securitization, trading and marketing. Ms. Padilla attended University of California at Berkeley as a fellow of the Robert A. Toigo Foundation and graduated with an MBA in 1994. Ms. Padilla received her BA in Economics in 1989 from Stanford University in Palo Alto, California.
Ignacio E. Sosa
Director, Product Solutions Group
Mr. Sosa joined DoubleLine in 2014 where he is responsible for new product development and working with DoubleLine’s sales team, clients and advisors in support of the firm’s existing product offerings. He is also a member of DoubleLine’s Executive Committee. Previously, Mr. Sosa was an Executive Vice President at PIMCO and the product manager for that firm’s emerging market debt business. Prior to joining PIMCO, Mr. Sosa spent more than twenty years managing portfolios of emerging market securities and currencies, primarily at his own asset management firm and Bankers Trust Company in New York and Tokyo. Mr. Sosa received his MBA from Babson College and his BBA from the University of Miami.