T.RowePrice®
INVEST WITH CONFIDENCE

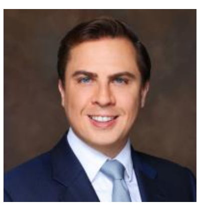
PRICE
POINT
May 2018

Timely intelligence and analysis for our clients.

Multi-Asset Investing

EMERGING MARKET DEBT—AN ASSET ALLOCATION PERSPECTIVE

Yoram Lustig, CFA
Head of Multi-Asset Solutions, EMEA



Nick Samouilhan, Ph.D., CFA, FRM
Solutions Strategist EMEA

KEY POINTS

- Emerging market debt (EMD) can play three main roles in multi-asset portfolios: income, growth, and diversification against the risks of both equities and developed market investment-grade bonds.
- Blending the three subsets of EMD expands the investment opportunity set and offers opportunities to generate excess return (alpha) through security selection and dynamic asset allocation across EM debt sectors.
- As we outline in this paper, we believe there is a case for having both strategic and tactical allocations to EMD.

INTRODUCTION

Emerging market debt (EMD) has come to play an increasing role in multi-asset portfolios, not least because it offers the opportunity for higher income in a low-yield world. But the thing to remember is that EMD is not a single homogeneous asset class. It spans several types, each with its own set of risks and return opportunities. Investors can use EMD to fulfill a wide array of roles in portfolios, including a source of income, a risk-dampening diversifier, and a return-seeking growth asset.

Commonly, EMD is split into three subsets, or sectors:

1. Hard currency sovereign debt, issued by governments of emerging market (EM) countries but denominated in currencies of developed market (DM) countries, most commonly the U.S. dollar
2. Hard currency corporate debt, issued by companies operating in EM countries and predominantly dollar denominated
3. Local currency sovereign debt, government related, issued in the currency of the issuing country

It is useful to look at the sources of return and risk of each EMD subset to understand its characteristics and the potential roles it can play in portfolios. Figure 1 maps the three sectors according to the three broad sources of return and risk of fixed income assets:

1. Interest rate risk or duration risk: sensitivity to changes in interest rates
2. Credit risk or default risk: inability of issuer to repay its debt obligation
3. Currency risk: sensitivity to fluctuations in value of currency of denomination relative to the investor's base currency

Figure 1: **Sources of Return and Risk of EMD Subsets**

	Interest Rate Risk	Credit Risk	Currency Risk
EMD hard currency	U.S. yield curve	Sovereign investment grade and high yield	U.S. dollar
EMD corporates	U.S. yield curve	Corporate investment grade and high yield	U.S. dollar
EMD local currency	EM yield curve	Sovereign investment grade and high yield	EM currencies

Source: T. Rowe Price.

THE ROLE OF EMD IN MULTI-ASSET PORTFOLIOS

For asset allocators looking to identify the appropriate role of any asset class in a portfolio, one starting point is to define the opportunity as either a risk asset or a conservative asset. The typical role of risk assets (return-seeking or growth assets), including equities and high yield bonds, is to generate inflation-beating growth and potentially high levels of income. The typical roles of conservative assets, such as DM government bonds and cash, are to generate steady income, diversify against portfolio volatility caused by risk assets, hedge liabilities, and potentially generate positive returns when risk assets fall.

While EMD is a fixed income investment, it is actually a risk asset. As Figure 2 demonstrates, the volatilities of the different subsets of EMD are closer to equities than global investment-grade (IG) bonds; EMD has historically experienced drawdowns of 20% or more; and its total return has been higher than that of IG bonds. However, because of its fixed income cash flow characteristics, EMD can also fulfill the role of a diversifier in multi-asset portfolios.

Figure 2: **Return and Risk Characteristics**

January 2003 to December 2017

	Performance % Per Annum	Volatility % Per Annum	Maximum Drawdown %	Performance/ Volatility	Performance/ Drawdown
EMD hard currency	8.8	8.1	-21.8	1.09	0.40
EMD corporates	7.2	8.0	-26.4	0.90	0.27
EMD local currency USD	7.3	11.6	-27.1	0.64	0.27
EMD local currency GBP	8.6	11.1	-23.7	0.78	0.36
Global DM equity	9.5	14.4	-53.6	0.66	0.18
Global EM equity	12.6	21.4	-61.4	0.59	0.21
Global IG bonds	4.2	2.7	-2.8	1.56	1.50

Past performance is not a reliable indicator of future results.

Sources: T. Rowe Price, Bloomberg, J.P. Morgan EMBI Global Diversified Composite, J.P. Morgan CEMBI Broad Composite, J.P. Morgan GBI-EM Diversified USD Unhedged, MSCI World, MSCI Emerging Markets, and Bloomberg Barclays Global Aggregate Hedged USD.

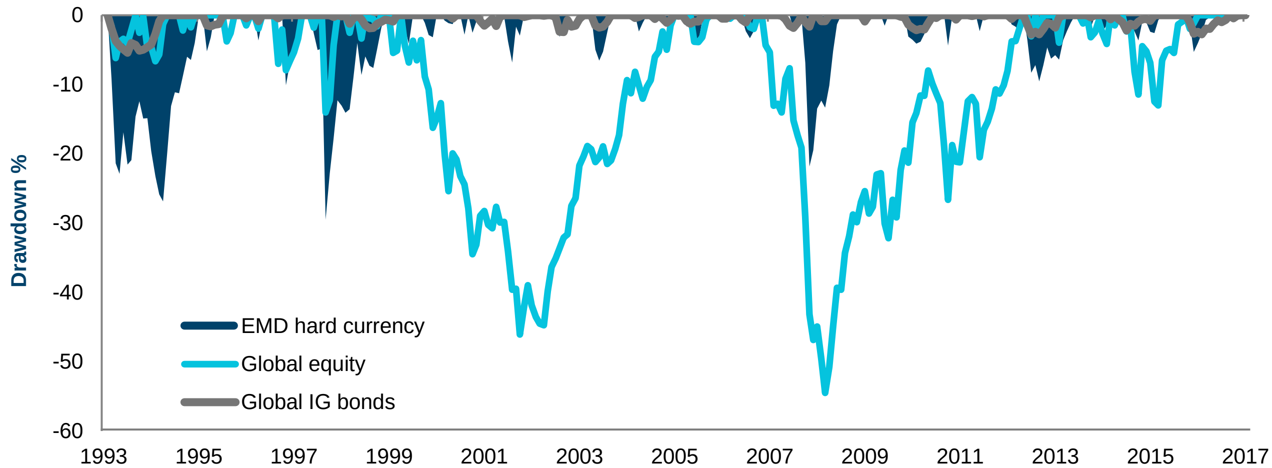
AN EVOLVING ASSET CLASS

One thing worth noting about the historical drawdown numbers is that EMD risk profiles have changed over time. For example, while in the early 1990s the representative EMD hard currency index, the J.P. Morgan EMBI Global Diversified Composite, was light on IG issuers—today about 50% of the index is investment grade and 50% high yield. This change in the mix impacts not only the credit risk, but also the interest rate risk and volatility of the asset class. Bonds with low credit ratings tend to be more volatile but less sensitive to changes in interest rates than high-rated bonds. The changes in the credit quality of the index over the years means that it has become less volatile and it has less severe drawdowns, but its correlation with DM investment-grade sovereign bonds has increased.

Figure 3 shows the drawdowns of EMD hard currency, global equities, and global IG bonds. EMD suffered more severe drawdowns than those of global equities in the 1990s, but equities' drawdowns dwarfed those of EMD in the 2000s. However, as expected, both EMD hard currency and global equities had more severe drawdowns than developed market IG bonds.

Figure 3: **Drawdowns of EMD Hard Currency, Equities, and Investment-Grade Bonds**

January 1994 to December 2017. Monthly returns measured in U.S.$.



Past performance is not a reliable indicator of future results.

Sources: T. Rowe Price, Bloomberg, J.P. Morgan EMBI Global Diversified Composite, MSCI AC World, and Bloomberg Barclays Global Aggregate Hedged USD.

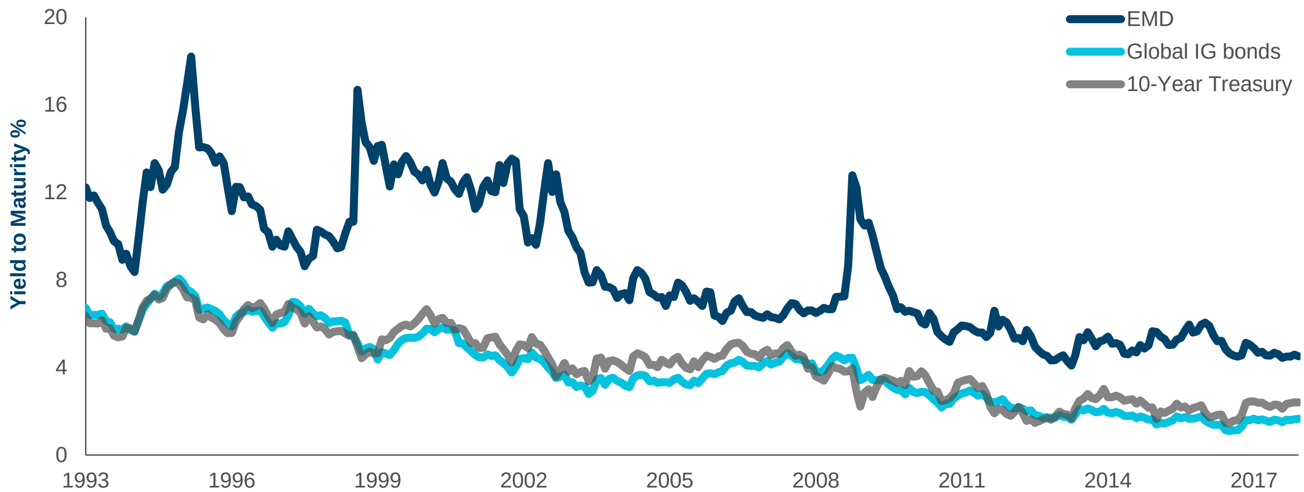
INCOME FROM EMD

Figure 4 compares the yields of EM hard currency governments and corporates with those of 10-year U.S. Treasuries and global IG bonds. EMD has been a source of high levels of income, particularly since the 2008 global financial crisis, after which yields of DM bonds fell due to quantitative easing (QE) and super-accommodative monetary policies. Yields of EMD have come down, but not as much as those of DM issuers.

REAL GROWTH

As shown earlier in Figure 2, EMD can deliver attractive total returns. Total return is composed of two components: income and capital gains. In EMD, income can account for a high proportion of total return. However, as rates in some EM countries are high relative to those in DM countries, the scope for future capital gains is still there. In addition, given today's rich valuations for almost all the major asset classes and a generally low-yield environment, the importance of income in total returns might increase, meaning EMD may have an advantage over asset classes, which rely more on capital gains.

Figure 4: **Bond Index Yields**
January 1993 to December 2017



Past performance is not a reliable indicator of future results.
Sources: T. Rowe Price, Bloomberg, Bloomberg Barclays Emerging Markets Hard Currency, 10-Year U.S. Treasury Note, and Bloomberg Barclays Global Aggregate Hedged USD.

DIVERSIFICATION

EMD can play a unique role in multi-asset portfolios by diversifying not only equity risk, but also the risk of conservative assets, such as DM government bonds. If rates rise, traditional conservative assets might experience losses. In this scenario, diversifying interest rate risk becomes important. Figure 5 shows the correlations between the subsets of EMD and global equities and IG bonds since 2003. Not only is the correlation between EMD and equities imperfect, but the correlation of EMD with IG bonds is low, also offering diversification benefits. EMD is more correlated with equities than it is with IG bonds, which may be advantageous in a rising rate environment.

Figure 5: **Correlation Matrix**
January 2003 to December 2017

Correlation	EMD Hard Currency	EMD Corp.	EMD Local Currency USD	EMD Local Currency GBP	Global DM Equity	Global EM Equity	Global IG Bonds
EMD Hard Currency	1.00						
EMD Corporates	0.92	1.00					
EMD Local Currency USD	0.77	0.69	1.00				
EMD Local Currency GBP	0.57	0.43	0.67	1.00			
Global DM Equity	0.61	0.62	0.69	0.31	1.00		
Global EM Equity	0.67	0.65	0.77	0.44	0.86	1.00	
Global IG Bonds	0.54	0.46	0.32	0.41	-0.01	0.06	1.00

Past performance is not a reliable indicator of future results.
Sources: T. Rowe Price, Bloomberg, J.P. Morgan EMBI Global Diversified Composite, J.P. Morgan CEMBI Broad Composite, J.P. Morgan GBI-EM Diversified USD Unhedged, MSCI World, MSCI Emerging Markets, and Bloomberg Barclays Global Aggregate Hedged USD.

HOW TO INVEST IN EMERGING MARKETS DEBT—A MULTI-ASSET PERSPECTIVE

For a multi-asset investor, the strategic decision of how much to allocate to EMD in a portfolio depends on several considerations, such as the outcome the portfolio aims to achieve, the investor's risk tolerance and the role EMD needs to play within the portfolio.

For example, a growth-oriented portfolio could allocate about 5% to EMD while an income-seeking portfolio could allocate around 20% to the asset class, especially in the current low-yield environment. When allocating to EMD, investors should take account for the risks as well as the expected benefits.

THE BENEFITS OF ACTIVE MANAGEMENT

EMD is an asset class where an active approach is recommended for several reasons. First, in a more diverse market compared with DM debt, there are significant opportunities for a skilled portfolio manager to generate excess return above benchmark (alpha) through security selection. Second, from a risk-management perspective, investors should seek a skilled portfolio manager with a proven fundamental credit research track record to avoid lending to issuers that might default. Finally, in EMD local currency, skilled active currency management is crucial both to add excess returns and manage risks.

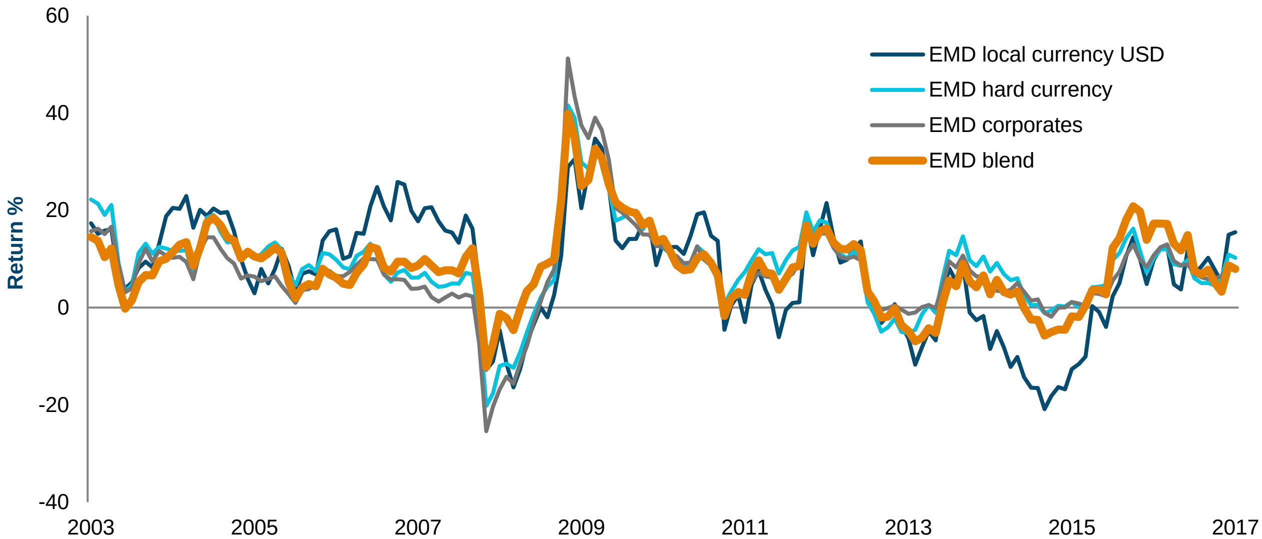
The shortcoming of passive management (e.g., passive index tracking strategies) is not just the loss of the opportunity to earn alpha. From a risk perspective, the biggest negative event for the asset class would be a debt default, and for that investors require a process to identify defaults before they arise. This requires the informed approach offered by active investing and not the naïve approach offered by passive investing.

BLENDING THE SUBSETS OF EMD

Blending the three different flavors of EMD can create a portfolio with a wide investment opportunity set, reduced risk given the imperfect correlations among subsets of EMD, and opportunities to allocate tactically among the sectors based on their attractiveness.

Figure 6: **Rolling 12-Month Index Performance**

January 1993 to December 2017



Past performance is not a reliable indicator of future results.

Sources: T. Rowe Price, Bloomberg, Bloomberg Barclays Emerging Markets Hard Currency, Generic Britain 10-Year Government Bond, and Bloomberg Barclays Global Aggregate Hedged USD. EMD Blend defined as one-third allocation to each index.

EMD offers potential rewards to investors in the form of potentially attractive income, potential for growth, and diversification of risks of both equity markets and DM government bonds, as well as opportunities for alpha generation from skilled active management.

Figure 6 shows the rolling 12-month performance of each of the EMD subsets, as well as a blend investing $^{1}/_{3}$ in each one. The blend demonstrates steadier performance over time. Of course, this is just a static allocation among passive indices, so it does not account for any potential benefits from active security selection or tactical asset allocation, and it does not reflect any transaction costs and charges associated with passive and active management.

CONCLUSIONS

EMD offers potential rewards to investors in the form of potentially attractive income, potential for growth, and diversification of risks of both equity markets and DM government bonds, as well as opportunities for alpha generation from skilled active management. Investors should consider including it in their multi-asset portfolios, especially in the current low-risk environment and richer valuations of many other asset classes.

Important Information

This material is being furnished for general informational purposes only. The material does not constitute or undertake to give advice of any nature, including fiduciary investment advice, and prospective investors are recommended to seek independent legal, financial and tax advice before making any investment decision. T. Rowe Price group of companies including T. Rowe Price Associates, Inc. and/or its affiliates receive revenue from T. Rowe Price investment products and services. **Past performance is not a reliable indicator of future performance.** The value of an investment and any income from it can go down as well as up. Investors may get back less than the amount invested.

The material does not constitute a distribution, an offer, an invitation, a personal or general recommendation or solicitation to sell or buy any securities in any jurisdiction or to conduct any particular investment activity. The material has not been reviewed by any regulatory authority in any jurisdiction.

Information and opinions presented have been obtained or derived from sources believed to be reliable and current; however, we cannot guarantee the sources' accuracy or completeness. There is no guarantee that any forecasts made will come to pass. The views contained herein are as of the date written and are subject to change without notice; these views may differ from those of other T. Rowe Price group companies and/or associates. Under no circumstances should the material, in whole or in part, be copied or redistributed without consent from T. Rowe Price.

The material is not intended for use by persons in jurisdictions which prohibit or restrict the distribution of the material and in certain countries the material is provided upon specific request.

It is not intended for distribution to retail investors in any jurisdiction.

Australia—Issued in Australia by T. Rowe Price International Ltd. (ABN 84 104 852 191), Level 50, Governor Phillip Tower, 1 Farrer Place, Suite 50B, Sydney, NSW 2000, Australia. T. Rowe Price International Ltd. is exempt from the requirement to hold an Australian financial services licence in respect of the financial services it provides in Australia. T. Rowe Price International Ltd. is authorised and regulated by the UK Financial Conduct Authority under UK laws, which differ from Australian laws. For Wholesale Clients only.

Canada—Issued in Canada by T. Rowe Price (Canada), Inc. T. Rowe Price (Canada), Inc.'s investment management services are only available to Accredited Investors as defined under National Instrument 45-106. T. Rowe Price (Canada), Inc. enters into written delegation agreements with affiliates to provide investment management services.

DIFC—Issued in the Dubai International Financial Centre by T. Rowe Price International Ltd. This material is communicated on behalf of T. Rowe Price International Ltd. by its representative office which is regulated by the Dubai Financial Services Authority. For Professional Clients only.

EEA—Issued in the European Economic Area by T. Rowe Price International Ltd, 60 Queen Victoria Street, London EC4N 4TZ which is authorised and regulated by the UK Financial Conduct Authority. For Professional Clients only.

Hong Kong—Issued in Hong Kong by T. Rowe Price Hong Kong Limited, 21/F, Jardine House, 1 Connaught Place, Central, Hong Kong. T. Rowe Price Hong Kong Limited is licensed and regulated by the Securities & Futures Commission. For Professional Investors only.

Singapore—Issued in Singapore by T. Rowe Price Singapore Private Ltd., No. 501 Orchard Rd, #10-02 Wheelock Place, Singapore 238880. T. Rowe Price Singapore Private Ltd. is licensed and regulated by the Monetary Authority of Singapore. For Institutional and Accredited Investors only.

Switzerland—Issued in Switzerland by T. Rowe Price (Switzerland) GmbH, Talstrasse 65, 6th Floor, 8001 Zurich, Switzerland. For Qualified Investors only.

USA—Issued in the USA by T. Rowe Price Associates, Inc., 100 East Pratt Street, Baltimore, MD, 21202, which is regulated by the U.S. Securities and Exchange Commission. For Institutional Investors only.