

In focus

The case for a core allocation to emerging market debt

June 2019

A commonly held, but misplaced, belief that emerging market debt (EMD) is an obscure, risky, outpost of the fixed income universe has resulted in it being under-represented in many portfolios. Within each category (hard or local currency EMD), however, it has qualities that are similar to, or even better than, other core fixed income allocations. Our analysis demonstrates that a strategic allocation to EMD should improve risk-adjusted return potential for portfolios of all degrees of sophistication.

Emerging markets have grown in prominence and now represent around 40% of global GDP,¹ twice their level at the turn of the millennium. In addition, emerging market debt now represents 18% of the global bond market.² Despite that, many investors hold far less and portfolios with no money allocated to EMD at all remain widespread.

One reason is that the common perception of emerging market debt is that it consists of a basket of hard-to-analyse credit risks, appropriate for holding only as a tactical allocation. However, an analysis of the full opportunity set reveals something very different – a mix of bonds correlated to various macroeconomic risks, traditional fixed income drivers, and yes, idiosyncratic credit risk that has a varied set of market drivers. These building blocks, within a broad and diverse emerging markets portfolio, will share the characteristics – but not materially increase the risk – of the rest of a typical investor's fixed income portfolio: a mix of interest rate risk, credit risk and currency risk where parts of the portfolio respond to different drivers differently than other parts.

Our analysis suggests that many portfolios would benefit from the inclusion of EMD. Investors who fail to allocate to this area are missing out on an opportunity to improve absolute and risk-adjusted returns.

A diverse universe

EMD covers a diverse range of exposures, countries and sectors, with very different fundamental drivers. Figure 1 on the next page summarises some of the key characteristics.



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At a basic level, the underlying drivers of returns vary across the main EMD components. Hard and corporate EMD relate to the US dollar borrowings of EM sovereigns, quasi-sovereigns and companies. Yields are a combination of US Treasury yields and a credit spread. As a result, returns are directly influenced by movements in US interest rates and whether those moves are growth or inflation-fuelled, along with changing perceptions about the creditworthiness of EM borrowers. Rising US rates have typically been associated with falling returns and vice versa. As these borrowings are in a different currency to that of the borrower, currency movements can impact the cost of servicing these debts.

In contrast, local EMD relates to the local currency borrowings of EM countries, so borrowers are not exposed to currency risk in the same way of hard and corporate EMD borrowers. Instead, investors in local EMD take on EM currency risk. As an investment, this makes local EMD much more volatile than hard or corporate EMD. In addition, while some expect EM currencies to appreciate in value over the very long run, the opposite can be true over discrete periods and the impact can be considerable.

EMD definitions

Hard Emerging Market Debt:

US dollar-denominated sovereign and quasi-sovereign emerging market debt

Local Emerging Market Debt:

Local currency sovereign emerging market debt

Corporate Emerging Market Debt:

US dollar denominated corporate emerging market debt

The most widely adopted EMD benchmarks are the "diversified" indices, run by JP Morgan. These limit the weights of those countries with larger debt stocks by only including a specified portion of their debt. All analysis in this paper is based on these indices.

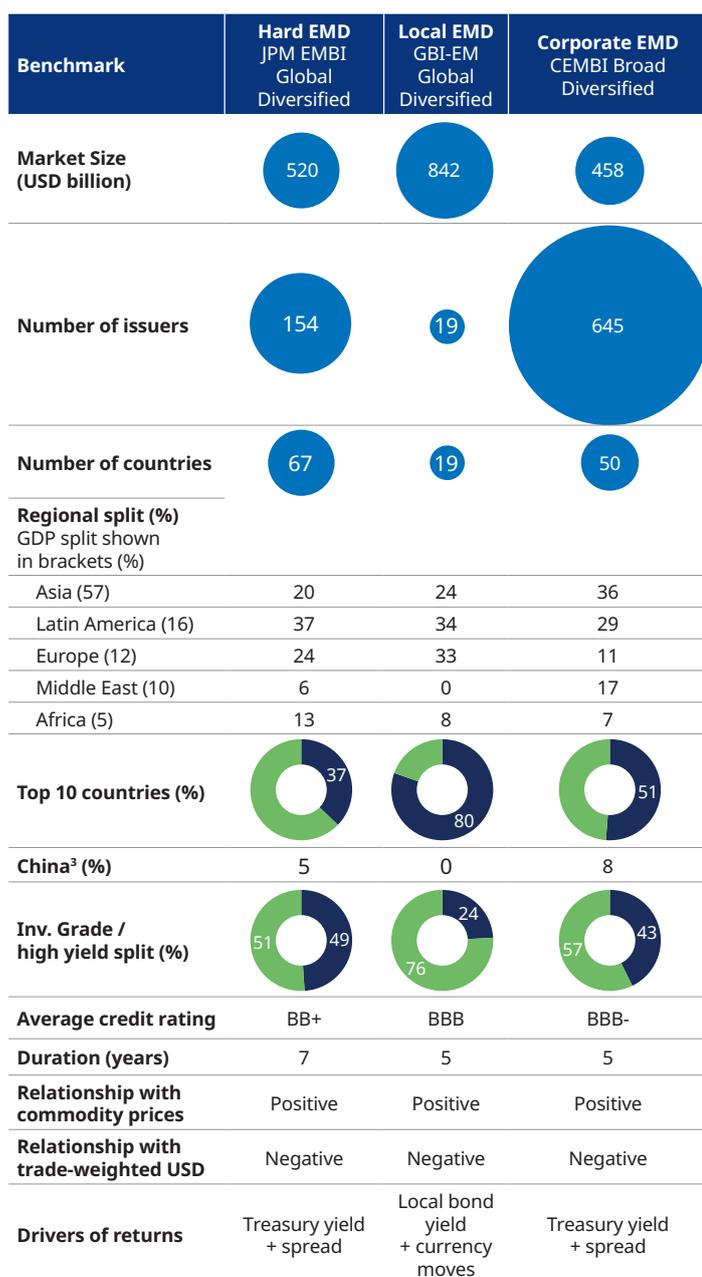
¹ IMF World Economic Outlook, April 2019

² Bank of America Merrill Lynch, December 2017

Local EMD yields are priced in relation to local, rather than US, interest rates, with local inflation and the exchange rate being key influences. However, this does not mean that returns are immune to changes in US rates. In the same way that hard and corporate EMD returns have tended to decline when US rates have risen, the same has been true of local EMD, albeit to a slightly lesser extent, on average.

Emerging asset markets are continually evolving in terms of their exposures, breadth and depth. Looking into their components at present, as set out in Figure 1, hard EMD and corporate EMD are both well diversified by country and also by region. They each offer something different to the other too – hard EMD has more exposure to Latin America whereas corporate EMD has a relatively

Figure 1: Key features of most common emerging market benchmarks



Data as of 31 December 2018. Sources: IMF World Economic Outlook, JP Morgan, Schroders.

large exposure to the Middle East and also to India (5%). On a sectoral basis, the most significant exposure within corporate EMD is to financials (31%), followed by commodities (21%).

In contrast, while local EMD may appear well diversified on a regional basis, with roughly a third in Latin America and Europe and a quarter in Asia, this is a highly concentrated index. Many countries are excluded from the most widely used local EMD benchmark due to issues around accessibility. These restrictions result in both India and China being excluded entirely. As a result, only 19 countries feature and the largest 10 make up almost 80% of the index. Country and currency-specific risk is significant.

The broader local EMD universe, which includes these additional countries, is much larger. In addition, just because a market is excluded from a benchmark does not mean that it is inaccessible. A narrow focus on benchmarks can be unhealthy when considered alongside the full opportunity set. For example, access to the local Chinese bond market has improved considerably over recent years. As a result, Bloomberg started adding local Chinese sovereign and policy bank (quasi-sovereign) bonds to its flagship Global Aggregate benchmark index from April this year. JP Morgan has not followed suit, yet, but we believe there is a strong likelihood it will. However, the opportunity is alive today for investors who wish to invest in the market.

In terms of credit risk, with an average credit rating of BBB and 76% of the market rated investment grade, local EMD is the safest of the EMD sectors. Corporate EMD comes next while the hard EMD market has the weakest credit profile. Investors are used to thinking of corporate debt as being riskier than sovereign debt but the opposite is true for hard and corporate EMD indices, due to their differing country mixes. Hard EMD also has the longest duration so is most sensitive to changes in US interest rates.

As these markets have evolved over time their characteristics have also changed. Having been a laggard in terms of liquidity in the 1990s, the local EMD market is now the most liquid of the three.

While there are clear differences between the different EMD asset classes, they also share common relationships with key global macroeconomic variables, such as the US dollar and commodity prices. To varying degrees, all have tended to perform better when the trade-weighted dollar has been weakening or commodity prices rising. Where the dollar is concerned, local EMD is unsurprisingly the most sensitive whereas hard and corporate EMD tend to be slightly less affected. Hard EMD is also the least sensitive to movements in commodity prices.

At a regional level, further differences emerge. For example, local emerging European and Latin American bonds have historically been the most sensitive local bond markets to commodity prices whereas Asian bonds have been less impacted. In terms of the trade-weighted dollar, European local debt has consistently been much more sensitive to developments than other major sectors.

Clearly, EMD assets as a whole are diverse in their geographic exposures, fundamental drivers and sensitivity to macroeconomic factors. Portfolios diversified across EMD can limit directional exposure to these influences whereas investors with strong views would benefit from constructing their portfolios accordingly.

³ China was an estimated 40% of emerging and developing world GDP in 2018; source: IMF World Economic Outlook

Is EMD credit exposure riskier than US credit risk?

A common reservation regarding hard and corporate EMD is that lending to EM borrowers is riskier than the developed market (DM) corporations investors are more accustomed to (a comparison is made with DM corporations rather than DM sovereigns because default risk is not a major issue for DM sovereign debt - as it is normally denominated in the domestic currency, money can simply be printed to repay it). However, this fear is not borne out in the data. Figure 2 shows that default rates for the high yield components of both hard and corporate EMD (the parts that are more susceptible to default risk) have been lower than for US high yield debt (HYD). As with DM sovereigns, default risk is less of an issue for local EMD as countries can simply print money to repay it, although this does have inflationary consequences.

Figure 2: EM borrowers have had lower default rates than US corporations

Average default rate 2001 – 18	
US HYD	3.5%
High yield hard EMD	2.4%
High yield corporate EMD	3.1%

Past performance is not a guide to future performance and may not be repeated. Source: JP Morgan.

In addition, if the worst happens and a default does occur, anticipated recovery rates have been very similar in EMD and US HYD. Over the long run, both have averaged close to 40%. Whether considered in terms of default rates or recovery rates, there is no evidence that EMD is riskier than US credit exposure.

The income advantage

However, there is an historical yield and spread advantage for EMD, despite the lack of evidence for worse outcomes (Figure 3). This is the most compelling argument to hold EMD as a core allocation. This yield and spread advantage has also persisted for all of the major credit rating components of each market. The only exception is BB-rated hard EMD, which has averaged a similar yield to BB-rated US bonds.

A recent study published by the National Bureau of Economic Research⁴ took an even longer term perspective, analysing 220,000 monthly prices of foreign-currency government bonds traded in London and New York between 1815 and 2016. Their two-century analysis covered 91 countries and spanned multiple default episodes, wars and global crises. They found that real returns exceeded those on US or UK government bonds by 4% a year, comparable to equities and ahead of corporate bonds.

4 Sovereign bonds since Waterloo, Josefin Meyer, Carmen M. Reinhart and Christoph Trebesch, National Bureau of Economic Research Working Paper 25543

Figure 3: EMD has offered a spread and yield advantage over US corporate and high yield debt

	Spread advantage for EMD (basis points)				Yield advantage for EMD (basis points)			
	Current	Five-year median	Post-crisis median (2010)	Median since 2001	Current	Five-year median	Post-crisis median (2010)	Median since 2001
IG hard EMD	+67	+69	+61	+50	+78	+116	+89	+89
IG corporate EMD	+68	+77	+77	+73	+67	+92	+98	+98
HY hard EMD	+103	+80	+33	+3	+107	+118	+38	+38
HY corp EMD	+17	+61	+76	+85	+13	+64	+83	+83

Past performance is not a guide to future performance and may not be repeated.

Data to 31 December 2018. US corporate IG index used in comparison is ICE BofA Merrill Lynch USD Corporate Index, US HY index used in comparison is ICE BofA Merrill Lynch US High Yield Master II Index

Volatility not meaningfully higher

Assuming a worst case default scenario does not occur, an obvious question is whether investors have to endure much more volatility over time in EMD than others? The answer is a qualified “no”. Figure 4 shows the volatility of the major credit rating components of the IG and HY components of EMD, compared with US corporate bonds. Given the different durations of the US and EMD markets, we have normalised them to make a like-for-like comparison.

Figure 4: Volatility comparison

	Last 5 years			Post-crisis (2010)		
	US	Hard EMD	Corporate EMD	US	Hard EMD	Corporate EMD
Volatility						
BBB	4.0%	5.7%	3.6%	4.3%	6.5%	4.5%
BB	5.2%	5.0%	5.1%	5.7%	6.3%	7.8%
B	4.3%	7.2%	7.7%	5.0%	8.4%	8.7%
Duration						
BBB	7.2	8.2	5.5	7.0	7.9	5.7
BB	5.3	6.1	4.0	5.3	6.6	4.0
B	4.8	5.5	4.0	4.8	5.5	3.9
Volatility/duration						
BBB	0.5%	0.7%	0.7%	0.6%	0.8%	0.8%
BB	1.0%	0.8%	1.3%	1.1%	0.9%	2.0%
B	0.9%	1.3%	1.9%	1.1%	1.5%	2.2%

Past performance is not a guide to future performance and may not be repeated.

Data as of 31 December 2018. Sources: ICE BofA Merrill Lynch, JP Morgan, Schroders

Once you adjust for credit rating and duration, the IG components of hard and corporate EMD (which make up more than 50% of each market) have not been noticeably more volatile than US credit in the post crisis world. Longer term data (not shown) is less reliable given the significant changes to the market over time, but the same has also been true of hard EMD over the longer run⁵. In other words, investors have been able to earn a spread and yield pickup, without exposing themselves to markedly higher volatility.

As you move further down the risk spectrum, the case is less clear cut. BB rated hard EMD has been slightly less volatile than BB rated US credit, once duration is taken into account. However, BB-rated corporate EMD has been more volatile on a duration-adjusted basis.

5 The changes include: IG to HY migrations for some of the largest issuers—Brazil, Russia, South Africa, the migration back to IG of Russia, the upward migration of the entire Asian component, and the recent inclusion of highly rated Middle Eastern Gulf countries and less recent inclusion of a large swathe of single B sub-Saharan African countries. In short, it has been a dynamic asset class which means that very longer term results are less useful for assessing today's mix of countries.

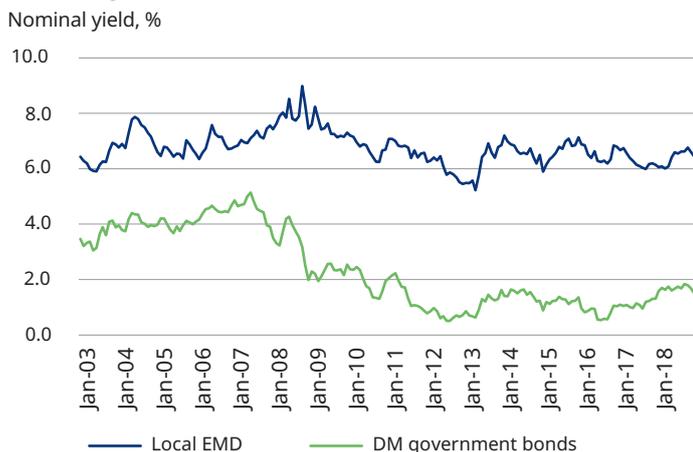
In addition, whether on an absolute or adjusted basis, B-rated hard and corporate EMD has been much more volatile than US credit. However, this is compensated to an extent by a higher credit spreads and returns. In the post financial crisis environment (since 2010), B-rated hard and corporate EMD have outperformed B-rated US bonds by 0.4% and 0.5% a year, respectively.

What about local EMD?

Our analysis so far has focused predominantly on USD-denominated hard and corporate EMD. As a mixture of interest rate and credit risk, these are analogous to traditional core fixed income investments.

Local EMD is different, however. Yields are largely driven by local interest rates and views of local inflation. Both interest rates and inflation tend to be higher in emerging economies and, as a consequence, local EMD has offered a persistent yield pick-up over developed market government bonds (Figure 5). Because money can be printed to repay these debts (which is not the case for hard and corporate EMD), default risk is less of an issue. As a result, it makes less sense to compare local EMD with developed market (DM) credit and a more appropriate comparison can be made with DM government bonds.

Figure 5: Local EMD has offered a substantial yield pick-up over DM government bonds

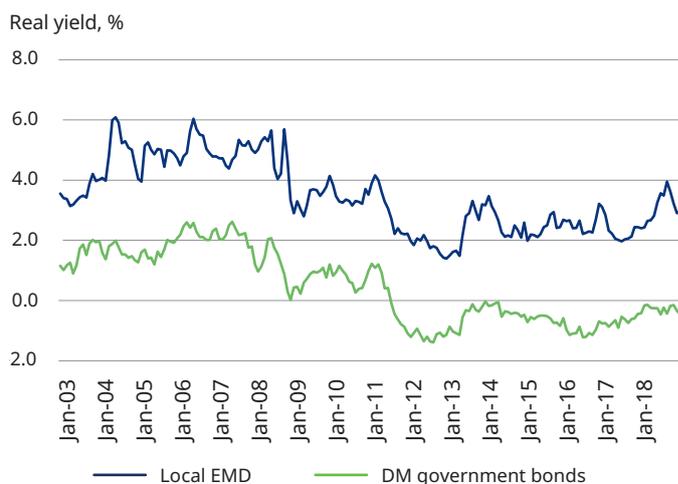


DM yield corresponds to five-year government bond yields of US, UK, Euro zone and Japan, weighted by the size of individual government bond markets. Data to 31 December 2018. Sources: Schroders, Thomson Reuters DataStream, ICE Data Indices, J.P. Morgan, Fathom Consulting.

As of 31 December 2018, this yield pick-up stood at almost 5%. Furthermore, because local interest rates are strongly influenced by domestic factors, local EMD yields have not collapsed in the way they have in developed markets. This pick-up increased when the financial crisis started and has remained large since.

However, given that part of this yield pick-up is driven by expectations for higher inflation in EMs, we need to look at real (inflation-adjusted) yields to make a fair comparison. Even on this basis, Local EMD has had a persistent advantage over DM government bonds (Figure 6). This advantage stood at just over 3% on 31 December 2018.

Figure 6: Even on an inflation-adjusted basis, local EMD has come out well on top



Real yields have been calculated as nominal yields deflated by core inflation. EM real yield corresponds to weighted average of real yields of individual countries within JPM GBI-EM Global Diversified index. DM real yield corresponds to five-year government bond yields of US, UK, Euro zone, Japan deflated by core inflation, weighted by the size of individual government bond market. Data to 31 December 2018. Sources: Schroders, Thomson Reuters DataStream, ICE Data Indices, J.P. Morgan, Fathom Consulting.

In addition to exposure to local interest rates, local EMD, however, has another important difference to DM government bonds – exposure to EM currencies. Many investors desire this exposure as they expect EM currencies to gain in value on a structural basis due to their greater potential for growth and productivity improvements. When combined with the structurally higher yields offered by local EMD, this appears a strong basis for performance.

However, despite the consistent and sizeable yield pick-up over US bonds, as well as hard and corporate EMD, local EMD has underperformed them all over recent years. It has returned 7.3% a year in local currency terms over the post financial crisis years (since December 2009), but US dollar investors have earned only 1.6% a year due to adverse currency movements. In contrast, hard EMD has returned 6.0% and corporate EMD 5.6% over the same period.

Why has this happened? Currencies have become the macroeconomic shock absorber for EM countries when faced with sharp withdrawals of liquidity. Such withdrawals are generally caused by a strong rise in the US dollar. The poor local currency returns in the 2013-2015 timeframe in particular coincided with a rise in the dollar caused by the Fed ending its Quantitative Easing program and preparing to normalise interest rates.

The longer term structural story remains sound and any weakness in the dollar could provide relief. However, local EMD investors should expect currency volatility to remain a feature. Over long and short horizons, emerging currencies have added considerably to the volatility of local EMD. Whereas volatility averages around 4% a year before taking account of currencies, this rises to 11-12% for US dollar based investors.

But that volatility needs to be put in perspective. It may surprise some readers to learn that it is no higher than the volatility of the US dollar exchange rate with developed market currencies such as the euro, yen, sterling and Canadian dollar. Although individual EM currencies can be much more volatile than major developed market currencies, the aggregate basket of currencies within the local EMD market is not (Figure 8). This occurs because the various EM currencies have relatively low correlations with each other (Figure 7). This results in a substantial diversification benefit among currencies when investing in local EMD. A simple weighted average of their individual volatilities, based on their index weights as of 31 December 2018, would result in an estimated volatility of

12% over the five years to 31 December 2018. However the true volatility of this basket of currencies was only 8.4%, almost 30% lower, as a result of their relatively low correlations with each other.

Therefore, although local EMD may seem more alien than traditional fixed income investments, a look behind the numbers highlights more similarities than might be expected. It is nothing more than a combination of local interest rate exposure and currency risk. Those local interest rates have offered a persistent uplift over developed market government bonds and currency risk turns out to be no greater than investors are used to dealing with in developed markets.

Appealing prospects?

When we look to the future, our outlook is promising for all areas of EMD. Hard, local and corporate EMD offer some of the highest risk-adjusted return prospects of any major asset class in our 10-year capital market assumptions⁶ (Figure 9 on the next page).

⁶ For more information on these and our other forecasts, please see *10-year return forecasts 2018-28*, Schroders, December 2018. In this analysis, volatility has been set as the annualised volatility of monthly returns since December 31, 2002, inception date for the main local EMD benchmark. Forecasts should not be relied upon, are not guaranteed and are provided only as at the date of issue.

All lie close to the efficient frontier, suggesting that they should feature in most portfolios.

In the case of hard and corporate EMD, these assumptions are based on projected Treasury returns and credit spreads, adjusted for defaults. In the case of local EMD, it is based on local EMD yields, adjusted for projected currency movements. Currency movements are forecast using a GDP per capita-adjusted Purchasing Power Parity model, as well as future inflation differentials⁷. Although emerging currencies have fallen considerably, to levels many consider cheap, this approach conservatively forecasts a 0% contribution from future currency movements.

⁷ Local EMD return = Yield + impact of currency movements. Currency movements modelled with reference to mis-valuation versus adjusted-Purchasing Power Parity (PPP), and future inflation differentials. Adjusted-PPP takes account of expected mis-valuation, conditional on GDP per capita. Hard and corporate EMD are modelled as government return + spread - adjusted for expected losses from defaults. Global equities are MSCI World, US Treasuries and US corporate bonds are ICE BoAML 7-10 year maturity indices. US high yield debt is ICE BofAML high yield master II index.

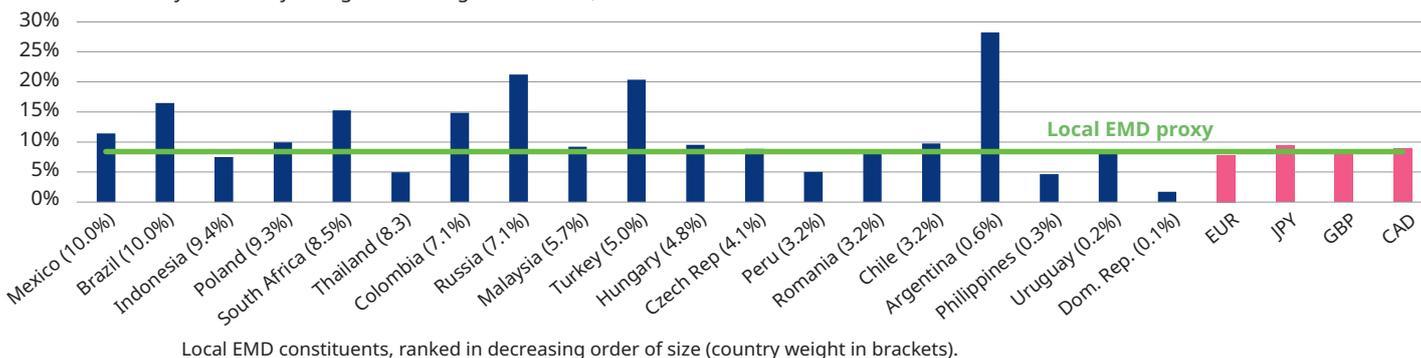
Figure 7: Emerging markets currencies have had low correlations with each other...

Correlation of monthly change in exchange rate vs USD

	Mexico	Brazil	Indonesia	Poland	South Africa	Thailand	Colombia	Russia	Malaysia	Turkey	Hungary	Czech Rep	Peru	Romania	Chile	Argentina	Philippines	Uruguay	Dom. Rep.	
Mexico	1.0	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.3	0.5	0.4	0.5	0.4	0.3	0.2	0.2	0.2	0.1	
Brazil		1.0	0.5	0.4	0.6	0.4	0.6	0.4	0.6	0.5	0.4	0.4	0.4	0.5	0.4	0.3	0.3	0.4	0.0	
Indonesia			1.0	0.4	0.6	0.5	0.5	0.2	0.6	0.4	0.4	0.3	0.3	0.3	0.5	0.0	0.2	0.1	0.0	
Poland				1.0	0.5	0.4	0.5	0.4	0.5	0.2	0.9	0.9	0.5	0.9	0.5	0.1	0.3	0.4	0.0	
South Africa					1.0	0.4	0.5	0.4	0.5	0.5	0.5	0.4	0.5	0.4	0.7	0.3	0.2	0.3	-0.1	
Thailand						1.0	0.5	0.2	0.5	0.1	0.4	0.4	0.3	0.4	0.4	0.0	0.2	0.2	-0.1	
Colombia							1.0	0.6	0.6	0.3	0.5	0.5	0.6	0.5	0.6	0.1	0.2	0.2	0.0	
Russia								1.0	0.5	0.2	0.4	0.3	0.4	0.4	0.5	0.2	0.0	0.1	0.1	
Malaysia									1.0	0.3	0.5	0.5	0.5	0.5	0.4	0.1	0.4	0.2	-0.1	
Turkey										1.0	0.3	0.2	0.2	0.2	0.4	0.5	0.2	0.3	0.0	
Hungary											1.0	0.9	0.5	0.9	0.5	0.2	0.2	0.3	0.2	
Czech Rep												1.0	0.5	0.9	0.4	0.0	0.2	0.3	0.1	
Peru													1.0	0.5	0.4	0.2	0.2	0.2	-0.2	
Romania														1.0	0.4	0.0	0.2	0.3	0.1	
Chile															1.0	0.1	0.1	0.3	0.0	
Argentina																1.0	0.3	0.4	0.0	
Philippines																	1.0	0.3	0.0	
Uruguay																		1.0	-0.2	
Dom. Rep.																				1.0

Figure 8: ...which means their combined currency risk has been less than might be expected

Annualised volatility of monthly change in exchange rate vs USD,



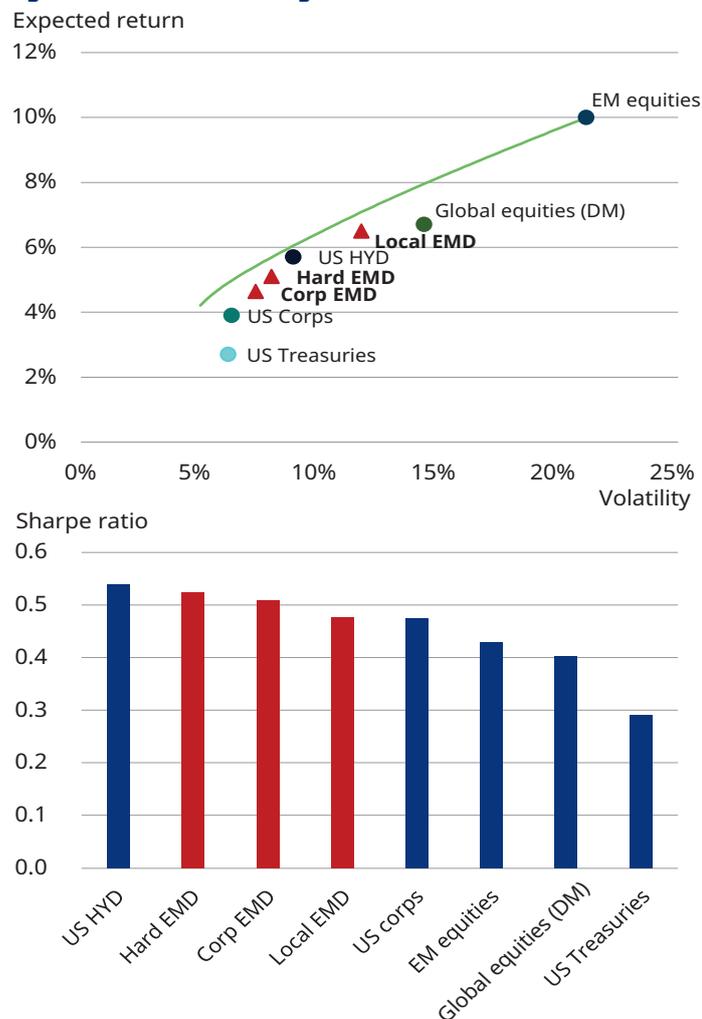
Local EMD constituents, ranked in decreasing order of size (country weight in brackets).

Past performance is not a guide to future performance and may not be repeated.

Local EMD proxy calculated by taking a weighted average of each currency return on a monthly basis, based on the index weights as at 31 December 2018, and calculating the annualised volatility of this portfolio of currencies. Data covers five years to 31 December 2018. Sources for Figures 7 and 8: Thomson Reuters DataStream, JP Morgan, Schroders

Based on market conditions as at 31 December 2018, we forecast that local EMD will have a return prospect of 6.5% a year, outperforming both hard (5.1% a year) and corporate (4.6% a year) EMD over the next decade. It is also forecast to outperform other fixed income asset classes and come close to matching global equities. Local EMD's upturn is driven by a combination of an attractive yield and limited default risk. Hard and corporate EMD are also projected to generate attractive returns, consistent with their risk profile.

Figure 9: The future looks good for EMD



Source: Schroders, as of December 2018. The opinions stated in this document include some forecasted views. Forecasts should not be relied upon, are not guaranteed and are provided only as at the date of issue. Please refer to the back page for important information.

Diversification benefits enhance portfolio efficiency

As well as the potential for attractive risk-adjusted returns, EMD also adds value by virtue of the diversification benefits it offers. Local EMD has a very low correlation with US Treasuries and relatively low correlation with corporate bonds and high yield debt (Figure 10). In contrast, hard and corporate EMD have a slightly higher (but still low) correlation with Treasuries but a lower correlation with equity markets.

Furthermore, there is also great variety in correlations of the subcomponents of EMD. For example, A-rated and corporate hard EMD are less exposed to credit risk and more sensitive to movements in US Treasuries. These differences make EMD a flexible set of assets, whose exposures can be adjusted depending on the prevailing market environment.

This set of correlations means that traditional portfolios can be improved by the addition of EMD. For example, Figure 11 shows the impact of adding an equally-weighted portfolio of hard, local and corporate EMD to a basic 60% equity/40% Treasury portfolio, and to a more diversified portfolio. For simplicity, we have assumed that the EMD allocation is taken prorata from the other asset classes. In other words the relative proportions of the other asset classes remain unchanged.

This analysis shows that a 30% allocation to EMD would result in a 0.1% higher expected return than a 60/40 portfolio (5.19% vs 5.10%) and a 0.4% reduction in volatility (7.97% vs 8.38%). While 30% may be higher than many investors would feel comfortable with, any allocation whatsoever would result in an incremental improvement in expected risk-adjusted returns. For example, a 10% allocation to EMD would result in a broadly unchanged return expectation but a 0.2% reduction in volatility.

Figure 11 also highlights that more diversified portfolios can also benefit from the addition of EMD. Relative to our more diversified portfolio, adding a 30% EMD allocation could lower volatility by almost 0.5% without any discernible impact on expected returns. Even a 10% allocation could lower volatility by 0.2% without affecting expected returns.

Although these differences are incremental rather than dramatic, the bigger question is whether the bias which many portfolios have against EMD can be justified. To that question, we believe the answer is a clear "no".

EMD can add value to portfolios of all levels of sophistication, from the simplest to the more diversified. The fact that many investors continue to shun this area means risk-adjusted returns are being left on the table. One of our inescapable truths for the decade ahead is that expected returns are set to be lower across the board. In this environment, investors should take advantage of the opportunity provided by EMD.

Implementation considerations

There are many different routes to obtaining access to EMD, from passive, to those that are actively managed relative to a benchmark, to those which are more unconstrained. The merits of different active approaches is a subject we intend to return to in future work. However, EMD is one of those asset classes where a passive approach looks a particularly poor choice:

- When sovereign credit risk is increasing, it does not always come as a surprise – Venezuela is the unfortunate poster child for this. Its problems were telegraphed well in advance. While a passive investment would be forced to remain invested up until the point of default, an actively managed strategy could have taken evasive action much earlier.
- The backward looking nature of credit ratings means that they can give a misleading impression of country risk.
- There is a large universe of assets outside the main EMD benchmarks that passive investors are missing out on, but which are open for investment. As previously explained, China and India's absence is especially glaring. The local Chinese bond market is the third largest in the world and is forecast to become the second largest by the end of 2019⁸.
- This is not a homogenous asset class. Considerable dispersion in returns between countries and the different forms of EMD drives opportunities for active investors to add value.

⁸ Weightlifting China, Schroders, February 2019

Figure 10: EMD can diversify traditional asset classes

	Hard EMD	Local EMD	Corp EMD	Global equities	EM equities	US Corps	US HYD	US Treasuries
Hard EMD	1.0	0.8	0.9	0.6	0.7	0.8	0.7	0.3
Local EMD		1.0	0.7	0.7	0.8	0.6	0.6	0.1
Corp EMD			1.0	0.6	0.6	0.8	0.8	0.2
Global equities				1.0	0.9	0.4	0.7	-0.2
EM equities					1.0	0.4	0.7	-0.2
US Corps						1.0	0.6	0.6
US HYD							1.0	-0.2
US Treasuries								1.0

Correlations based on past performance which is not a guide to future performance and may not be repeated.

Data 31 December 2002 – 31 December 2018. Sources: ICE Bank of America Merrill Lynch, JP Morgan, MSCI, Schroders

- Passive approaches also tend to be constrained in one particular area e.g. hard EMD or local EMD. While this can make it easier for asset allocators to gain tactical exposure to market beta, it is an unnecessarily restrictive approach for a strategic allocation. For example, an integrated approach can take advantage of pricing discrepancies between bonds in the different components. This cannot be achieved by treating them as separate blocks which must be traded en masse
- While passive strategies are very good at tracking their benchmarks in asset classes such as US equities, the same cannot be said in EMD⁹. The largest EMD ETF, the iShares J.P. Morgan USD Emerging Markets Bond ETF has cumulatively fallen short of its benchmark by over 15% in the 10 years to 31 December 2018 (its expense ratio is 0.39% a year so underperformance greatly exceeds this).

9 Emerging market debt and the mirage of passive ETFs, Schroders, April 2017

Figure 11: Portfolios of all degrees of sophistication can be enhanced by the addition of EMD

	60/40	High (30%) EMD alt	Moderate (10%) EMD alt	Diversified portfolio	High (30%) EMD alt	Moderate (10%) EMD alt
Hard EMD	0.0	10.0	3.3	0.0	10.0	3.3
Local EMD	0.0	10.0	3.3	0.0	10.0	3.3
Corp EMD	0.0	10.0	3.3	0.0	10.0	3.3
Global equities (DM)	60.0	42.0	54.0	40.0	28.0	36.0
EM equities	0.0	0.0	0.0	10.0	7.0	9.0
US Corps	0.0	0.0	0.0	20.0	14.0	18.0
US HYD	0.0	0.0	0.0	10.0	7.0	9.0
US Treasuries	40.0	28.0	36.0	20.0	14.0	18.0
Forecast return	5.10	5.19	5.13	5.57	5.52	5.55
Volatility	8.38	7.97	8.20	8.88	8.44	8.71
Sharpe ratio	0.61	0.65	0.62	0.63	0.65	0.64

"EMD alt" portfolios show the impact of adding a 10% or 30% EMD allocation to a basic 60/40 and more diversified portfolio. EMD portfolio assumed to be equally split between hard, corporate and local EMD. Existing allocations adjusted on a prorata basis. Forecasts should not be relied upon, are not guaranteed and are provided only as at the date of issue. This is not an investment recommendation and is being shown for illustrative purposes only. Relevant risk and return objectives will influence the appropriate course of action for any individual investor. Please refer to the back page for important information. Source: Schroders.

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