



The case of the missing asset class

Why emerging market bonds needs its own allocation March 2020

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About the Authors



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Mr Fine joined VanEck in 2009 from Morgan Stanley and brings over 30 years' experience in emerging markets. He makes final decisions on investments, manages VanEck's unconstrained emerging markets bonds team, and is involved in all aspects of the portfolio. During the 14 years Mr Fine worked at Morgan Stanley, he founded Morgan Stanley's Emerging Markets Proprietary Trading Group – which he ran from 2004 to 2008. While at the Harvard Institute for International Development, he designed and built Russia's first securities clearing system and advised the Russian government on financial telecommunication issues. Mr Fine holds an MPA from Harvard University and a BA from Duke University.



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Introduction

When investors are asked how they get access to Emerging Market (EM) bonds, a common answer is that they allocate to a global fixed income/bond fund that invests in this sector. The problem with this approach is that global bond funds do not provide optimal exposure to EM bonds because they have constraints that limit allocations or exclude certain EM bonds sectors. Additionally, EM bonds' risk and return characteristics often dominate other bond categories.

To maximise the opportunities within the EM bonds asset class, VanEck takes an index-agnostic approach to EM hard-currency, local-currency and corporate bonds. This paper provides a rationale for why investors should consider allocating to EM bonds as a standalone asset class beyond global bonds.

Key points

- Global bond funds do not provide optimal EM bonds exposure.
- Currency considerations should not overshadow allocations to EM bonds.
- EM bonds delivers higher return and lower risk.
- Global comparisons show EM economies are as liquid and structurally sound as developed markets (DM).

This paper provides a rationale for why investors should consider allocating to EM bonds as a standalone asset class beyond global bonds.

Global bond funds do not provide optimal EM bonds exposure

A commonly-used framework for asset allocation decisions is the efficient frontier, which shows the optimal portfolio that offers the highest expected return for a given level of risk. By analysing historical returns for the period of 2004 to 2019, it is possible to determine if you could have reduced volatility without sacrificing return, or boosted return without increasing volatility by adjusting the mix of asset classes.

In the following charts, we input the historical returns and volatility of key asset classes. The efficient frontier line represents the optimal combination of these asset classes such that no other combination can increase return without a rise in volatility, nor reduce volatility without a decrease in return.

To make this exercise as "pure" as possible, we intentionally chose not to impose any constraints on the individual asset class weights. For example, a maximum allocation of 5% or 10% to smaller asset classes is a common rule-of-thumb that many institutions use. We also tried to make our global fixed income universe as representative of the primary investment opportunities as possible (US Treasuries, Euro Aggregate, Global Government, US High Yield, etc). But our selection is, of course, not exhaustive or the only possible ones.

9.0 **EMBIG** 8.0 - - - - US High Yield 70 ★ — GBI-EM СЕМВІ Average annual return % 6.0 5.0 Euro Aggregate Global Aggregate -Global Corporates **US** Aggregate 4.0 Global Government Related -Global Treasury Global Securitized 3.0 **US** Treasury 2.0 1.0

7.5

10.0

Volatility %

12.5

17.5

15.0

Figure 1: Efficient frontier - global fixed income portfolio (2004 to 2019)

Source: VanEck Research; Bloomberg LP. Data as of June 2019.

2.5

5.0

0.0

0.0

Figure 2: USD-based global fixed income portfolio's efficient frontier and implied weights

2004 to 2019 (monthly)												
← Low Risk High Risk →										n Risk \longrightarrow		
Portfolio st dev	2.76	2.84	3.31	4.22	4.30	4.68	5.14	6.58	8.61	9.64	11.36	14.55
GBI-EM	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
EMBIG	12%	15%	29%	48%	50%	56%	62%	79%	100%	77%	47%	0%
Global Aggregate	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Global Treasury	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Global Government Related	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Global Corporates	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Global Securitized	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
US Aggregate	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
US High Yeild	10%	9%	4%	0%	0%	0%	0%	0%	0%	23%	53%	100%
Euro Aggregate	29%	28%	23%	10%	9%	3%	0%	0%	0%	0%	0%	0%
US Treasury	49%	48%	44%	41%	41%	41%	38%	21%	0%	0%	0%	0%
CEMBI	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
EM FI (GBI-EM, EMBIG, CEMBI)	12%	15%	29%	48%	50%	56%	62%	79%	100%	77%	47%	0%
EM HCD (EMBIG, CEMBI)	12%	15%	29%	48%	50%	56%	62%	79%	100%	77%	47%	0%

Source: VanEck Research; Bloomberg LP. Data as of June 2019.

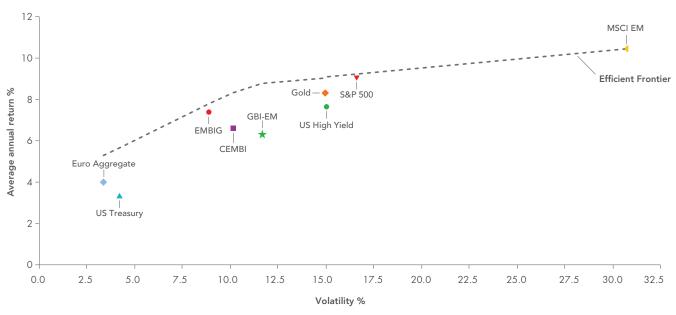
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The main takeaway is that EM bonds appear to be seriously under-represented in global bond portfolios. For a moderate risk global fixed income portfolio of, say, 5% to 9% volatility level shown on the x-axis in Figure 1 – an efficient frontier analysis (presented in Figure 2) suggests that the majority of a fixed income portfolio should be invested in EM hard currency bonds (represented by EMBIG).

Furthermore, an efficient frontier analysis argues for a sizable EM bonds allocation of up to 31%, even for a low volatility portfolio of 3%. The Barclays Global Aggregate, by contrast, has only 5.91% allocated to EM bonds. Interestingly, the analysis suggests a much lower allocation to US High Yield, which is considered an EM "substitute" asset, for portfolios, with the exception of very high volatility portfolios. A look at Figure 1 shows that US High Yield generated double the volatility of the EMBIG with almost no increase in expected return.

No reason for global asset portfolios to ignore EM bonds

Figure 3: Efficient frontier - global asset portfolios (2004 to 2019)



Source: VanEck Research; Bloomberg LP. Data as of June 2019.

Figure 4: USD-based global asset portfolios' efficient frontier and implied weights

2004 to 2019 (monthly)											
\leftarrow Low Risk High Risk $ ightarrow$											
Portfolio Volatility		3.38	4.25	8.91	10.16	11.67	14.96	15.07	16.60	24.78	30.74
Exposure Type	Representative Index										
Euro Aggregate	Barclays Euro Aggregate Bond Index	34%	35%	17%	4%	0%	0%	0%	0%	0%	0%
US HY	Barclays U.S. Corporate High Yield Bond Index	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
EMBIG	J.P. Morgan EMBI Global	0%	0%	4%	11%	0%	0%	0%	0%	0%	0%
US Treasury	Barclays U.S. Treasury Index	35%	26%	0%	0%	0%	0%	0%	0%	0%	0%
CEMBI	J.P. Morgan CEMBI	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Gold	Dow Jones Commodity Index Gold	11%	17%	40%	43%	37%	28%	28%	24%	2%	0%
MSCI EM	MSCI Emerging Markets Index	0%	0%	0%	0%	0%	17%	18%	26%	66%	100%
S&P 500	S&P 500	20%	23%	38%	42%	62%	54%	54%	51%	32%	0%
S&P GSCI	S&P Goldman Sachs Commodity Index	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GBI-EM	J.P. Morgan GBI-EM	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
EM FI (50:50, CEMBI)	EM Blended Currency (50% GBI-EM/50% EMBI Index), CEMBI	0%	0%	4%	11%	0%	0%	0%	0%	0%	0%

Source: VanEck Research; Bloomberg LP. Data as of June 2019.

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Our analysis also suggests that there are compelling reasons for having meaningful exposure to EM bonds in global asset portfolios (i.e. we do the same analysis, but for a broader set of asset prices, including equities). For a moderate risk portfolio of, say around the 8% to 10% volatility level on the x-axis in Figure 3, an efficient frontier analysis (shown in Figure 4), would suggest an allocation of 4% to 11% to EM hard currency bonds. Note also that the efficient frontier argues for low allocations to US high yield, which is normally the "substitute" asset class that global fixed income use, instead of allocations to EM bonds.

Currency considerations shouldn't overshadow allocations to EM bonds

Upon presenting this analysis, a commonly-asked question is, "What if I am a Euro (EUR) or Australian dollar (AUD)-based investor? Does this change anything?" The answer, in our view, is no. When looking at returns in EUR (Figures 5 and 6) or AUD (Figures 7 and 8), the conclusion remains the same – a higher allocation to EM bonds than most portfolios currently have. We can't emphasise this conclusion enough, because we have seen a number of institutions frozen by these hedging considerations to the point that it is "analysis paralysis". These institutions understand the case for EM bonds, but don't do anything about it because of the hedging discussion. Another response is to try to access EM bonds via a global bond fund, where we argued earlier that EM bonds allocations aren't high enough. However, as important as AUD or EUR considerations are, the conclusion that portfolios should be more allocated to EM bonds shouldn't be overshadowed.

EMBIG 8 US High Yield 7 Average annual return % **Efficient Frontier** GBI-FN СЕМВІ 5 Euro Aggregate Global Corporates **US** Aggregate 4 Global Securitized US Treasury - Global Treasury Global Aggregate 3 2 8 10 12 14 6 16 Volatility %

Figure 5: EUR-based efficient frontier - global fixed income portfolio (2004 to 2019)

Source: VanEck Research; Bloomberg LP. Data as of June 2019. All indices are in local currency terms.

Figure 6: EUR-based investor portfolio's efficient frontier and implied weights

2004 to 2019 (monthly)													
← Low Risk								F	High Risk $ ightarrow$				
Portfolio Volatility		5.99	6.20	6.77	6.93	7.21	8.65	9.55	9.92	9.95	11.08	12.04	15.33
Exposure Type EMBIG	Representative Index J.P. Morgan EMBI Global	0%	0%	10%	15%	23%	60%	80%	85%	85%	100%	63%	0%
Global Aggregate	Barclays Global Aggregate Index	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Global Treasury	Barclays Global Treasury Index	15%	43%	67%	64%	58%	34%	20%	15%	15%	0%	0%	0%
Global Government Related	Barclays Global Aggregate Government-Related Index	64%	39%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Global Corporates	Barclays Global Aggregate Corporate Index	16%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Global Securitized	Barclays Global Aggregate Securitized Index	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
US Aggregate	Barclays U.S. Aggregate Securitized Index	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
US High Yield	Barclays U.S. Corporate High Yield Bond Index	5%	17%	23%	22%	19%	7%	0%	0%	0%	0%	37%	100%
Euro Aggregate	Barclays Euro Aggregate Bond Index	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
US Treasury	Barclays U.S. Treasury Index	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CEMBI	J.P. Morgan CEMBI	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GBI-EM	J.P. Morgan GBI-EM	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
EM FI (GBI-EM, EMBIG, CEMBI)	GBI-EM, EMBIG, CEMBI	0%	0%	10%	15%	23%	60%	80%	85%	85%	100%	63%	0%

Source: VanEck Research; Bloomberg LP. Data as of June 2019.

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9 EMBIG 8 US High Yield **Efficient Frontier** CEMBI Average annual return % ★— GBI-FM 5 Global Securitized Euro Aggregate US Aggregate Global Government Related **US Treasury** 4 – Global Treasury Global Corporates 3 Global Aggregate

10

Volatility %

12

14

Figure 7: AUD-based efficient frontier - global fixed income portfolio (2004 to 2018)

Source: VanEck Research; Bloomberg LP. Data as of June 2019. All indices are in local currency terms.

8

Figure 8: AUD-based investor portfolio's efficient frontier and implied weights

2

0+

2004 to 2019 (monthly)													
\leftarrow Low Risk High Risk \rightarrow									$_{k} \rightarrow$				
Portfolio Volatility		6.12	6.32	6.66	6.70	8.98	9.26	9.66	10.12	10.75	11.18	12.51	13.63
Exposure Type	Representative Index												
EMBIG	J.P. Morgan EMBI Global	53%	47%	39%	38%	0%	0%	0%	0%	0%	0%	0%	0%
Global Aggregate	Barclays Global Aggregate Index	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Global Treasury	Barclays Global Treasury Index	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Global Government Related	Barclays Global Aggregate Government-Related Index	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Global Corporates	Barclays Global Aggregate Corporate Index	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Global Securitized	Barclays Global Aggregate Securitized Index	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
US Aggregate	Barclays U.S. Aggregate Securitized Index	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
US High Yield	Barclays U.S. Corporate High Yield Bond Index	47%	53%	61%	62%	100%	100%	100%	100%	100%	100%	100%	100%
Euro Aggregate	Barclays Euro Aggregate Bond Index	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
US Treasury	Barclays U.S. Treasury Index	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
CEMBI	J.P. Morgan CEMBI	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GBI-EM	J.P. Morgan GBI-EM	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
EM FI (GBI-EM, EMBIG, CEMBI)	GBI-EM, EMBIG, CEMBI	53%	47%	39%	38%	0%	0%	0%	0%	0%	0%	0%	0%

Source: VanEck Research; Bloomberg LP. Data as of June 2019.

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In the AUD-based portfolio (Figure 7), the efficient frontier is flat compared to the USD or EUR-based portfolios because assets with very low volatility have much higher returns than higher-volatility assets. So investors are not improving their returns by switching into them.

EM bonds deliver higher return and lower risk

Moving beyond the backward-looking efficient frontier framework, and to a more forward-looking, fundamentally-based approach, we see another argument in favour of EM bonds. Based on fundamentals, EM bonds delivers a higher return and lower risk than DM bonds. In Figures 9 and 10, we have on the x-axis our normalised proprietary fundamental score for countries, which reflects a range of solvency measures (e.g. government debt-to-GDP), liquidity measures (e.g. current account deficits), and structural measures (e.g. banking system common equity to assets). On the left of the x-axes are countries with "strong" scores relative to other countries (e.g. low debt-to-GDP) and on the right are countries with "weak" scores.

On the y-axis is the spread paid by bonds in those countries. We show individual countries and a regression line representing countries that happen to be called "Emerging Markets", and another regression representing countries that happen to be called "Developed Markets". The EM Trend regression line shows consistently higher spreads (for hard currency bonds) and higher real yields (for local currency bonds) than the spread and real yield for same-rated DM bonds. In other words, EM bonds delivers a higher premium to investors for similar fundamentals.

We perform a similar exercise for local-currency bonds and come to the same conclusion – that EM bonds provide much higher premia relative to DM bonds with the same fundamentals. In Figure 10, you'll see the same fundamental score on the x-axis, and on the y-axis, we measure the real yield of the major EM local markets and DM markets. Bonds issued by countries that happen to be emerging markets pay higher real yields across fundamental quality. This is another powerful argument supporting allocations to EM bonds, particularly in an era of central bank experimentation, rising debt, and other risks that now characterise developed markets.

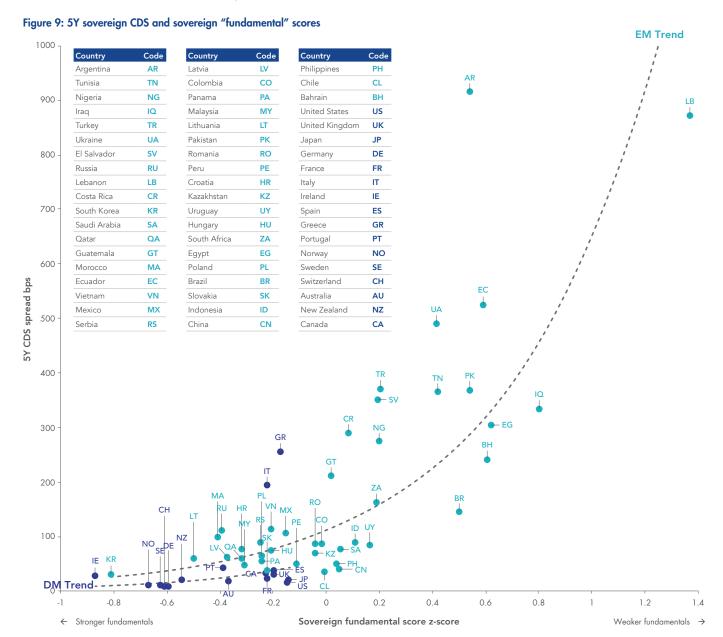
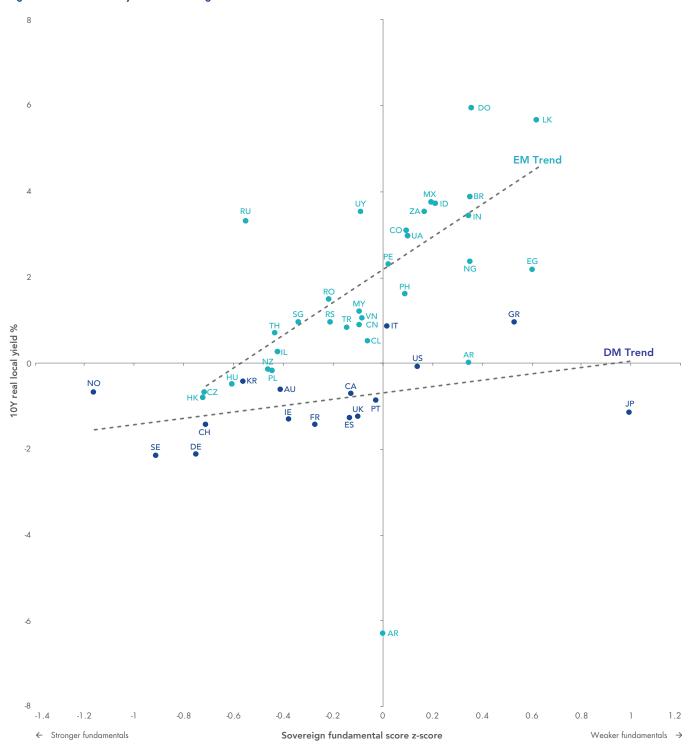


Figure 10: 10Y real local yield and sovereign fundamental score



Country	Code
Argentina	AR
Brazil	BR
Chile	CL
China	CN
Colombia	СО
Czech	CZ
Dominican Republic	DO
Hong Kong	HK

Country	Code
Hungary	HU
India	IN
Indonesia	ID
Israel	IL
Malaysia	MY
Mexico	MX
Nigeria	NG
Peru	PE

Country	Code
Phillipines	PH
Poland	PL
Romania	RO
Russia	RU
Singapore	SG
South Africa	ZA
South Korea	KR
Sri Lanka	LK

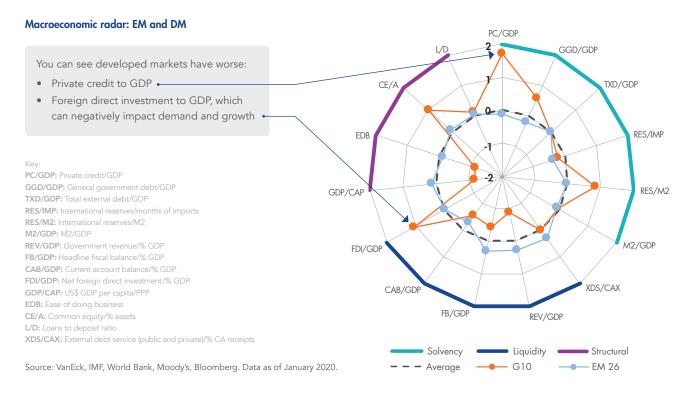
Country	Code
Thailand	TH
Turkey	TR
Uruguay	UY
Vietnam	VN
Serbia	RS
Egypt	EG
Ukraine	UA

Country	Code
US	US
UK	UK
Japan	JP
Germany	DE
France	FR
Italy	IT
Ireland	IE
Spain	ES

Country	Code
Greece	GR
Portugal	PT
Norway	NO
Sweden	SE
Switzerland	СН
Australia	AU
New Zealand	NZ
Canada	CA

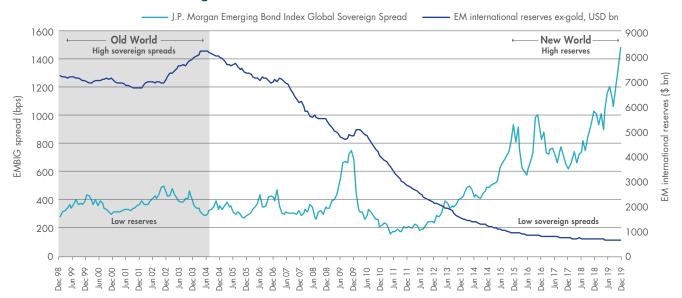
The "new world" of emerging markets bonds

Today, global comparisons show that emerging market economies are as liquid and structurally sound as developed markets. Emerging markets generally have stronger balance sheets. On the radar chart, the red line is the global mean. The circles represent standard deviations above and below the mean. The further you are away from the centre, the worse it is.



Despite their stronger fundamentals, emerging market governments and corporations generally pay more than their developed market counterparts when they issue bonds. This is an opportunity for investors to look beyond the past.

How EM bonds have changed



Source: Bloomberg. Data as of December 2019. EMBIG spread is the difference between EM hard currency sovereign bonds and US treasuries, and is captured by the J.P. Morgan Emerging Bond Index Global Sovereign Spread.

Two decades ago, in the "old world", EM bonds were risky and volatile due to low reserves and the limited ability to absorb losses. This was typified by the 1997 "Asian financial crisis" and the 1998 Russian financial crisis. The Asian financial crisis began in 1997. Thailand's currency devalued as foreign investors withdrew, concerned the country was bankrupt. With no reserves, Thailand's government could do little. The crisis spread throughout the region and those hardest hit were the ones with low domestic reserves. Finally the IMF stepped in to stabilise the Korean, Thai and Indonesian economies. This crisis was closely followed by the similar Russian currency crisis and Argentina's much publicised default in 2001.

These crises set the scene for significant economic reforms through the early part of the new millennium in many emerging markets. Governments were forced, often for the first time, to be fully transparent with foreign investors and global monetary funds. As a result many came out of the GFC structurally stronger than their developed market counterparts. Many emerging market governments were able to better implement counter-cyclical fiscal expansion to reignite growth because of their growing foreign exchange reserves, strong budgets and robust balance of payments.

The "new world" in emerging markets is characterised by higher reserves and lower spreads on bonds. Current accounts and government budgets are largely in check. Policy makers, appealing to an ever growing and better educated middle class encourage savings and pension reforms driving capital investment. Some of the best managed economies are in emerging markets.

It's little wonder more and more investors are embracing EM bonds, especially when they consider the yields being offered.

Conclusion

EM bonds has some unique advantages in a portfolio. Gaining access to this sector via a global bond fund does not realise its full potential. Investors who do that would have under-allocated to the sector, based on the efficient frontier analysis. EM bonds arguably pay a higher premium for the same fundamentals as DM bonds. EM bonds have at least similar, if not superior, liquidity to the US high yield and US investment grade bonds that dominate global bond funds. Finally, there are self-correcting dynamics in two of the three categories of EM bonds.

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