

Research

Emerging Market Fixed Income

FTSE
Russell

Development and characteristics of the asset class

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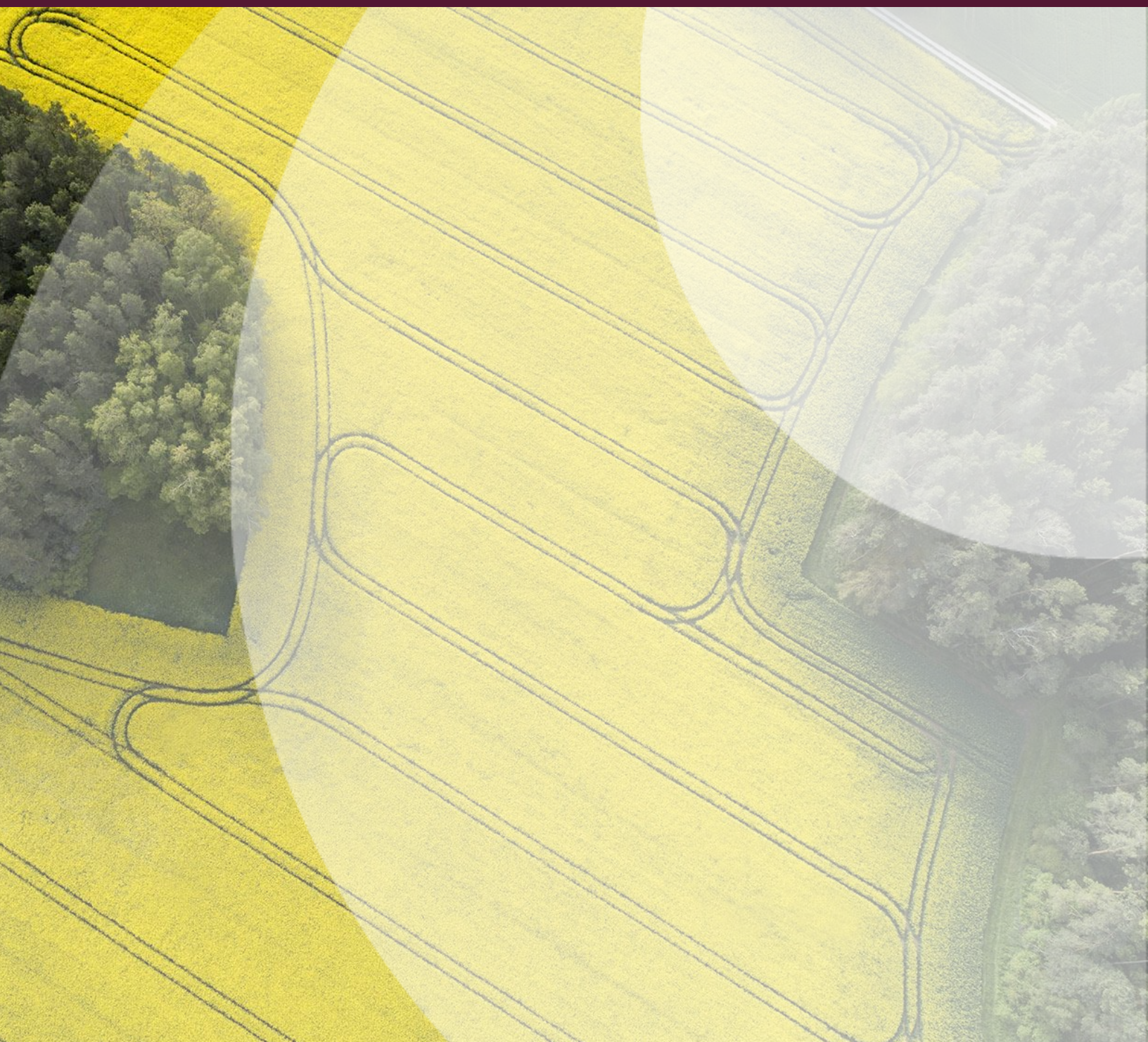


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Executive summary

Emerging Market (EM) fixed income has developed into a substantial and investible asset class, combining local currency and hard currency categories. It is a very different asset class to the one that suffered major dislocation and contagion after the Asian and Russian shocks in 1997/98. Contagion within the asset class has been more limited in recent years, both in local and hard currency classes. Empirical evidence does not support the view EM fixed income is a purely risk-on asset class, and the variable correlations of returns with other asset classes offer portfolio diversification benefits. Fears of a dollar trap for EM fixed income from higher US dollar interest rates in 2015-18 proved unfounded when credit spreads tightened.

The coronavirus shock is a major challenge for emerging markets, but this is a major global shock for all markets, with a substantial global policy response unfolding. International Monetary Fund and World Bank support for EM economies is also developing after the coronavirus shock, and G7 central banks have already moved to ease strains on global dollar liquidity. The scale of the crisis for all markets may require some relaxation in IMF conditionality, and a further increase in SDR allocations, since a deeper economic shock is unfolding from the coronavirus and Great Lockdown, than the Great Financial Crisis. But it should be noted that following the GFC in 2008/09 and the initial spread widening, EM fixed income benefited from spillover effects from G7 QE programs, and the subsequent global search for yield, which has intensified as the universe of negative yielding bonds, has expanded.

Introduction to emerging markets

The World Bank defines an emerging market economy as one with a per capita income of less than \$4,035. But the designation often describes economies in transition from developing to developed economies, like the G7, and emerging market can apply to an economy that was formerly highly developed but has regressed to being an emerging market economy (i.e., Argentina).

The term “Emerging Market” was coined by World Bank economist Antoine Van Agtmael in 1981. Most EM fixed income index providers, including FTSE Russell, use IMF and World Bank definitions of emerging markets. They consider a fixed income market to be emerging if it is defined by the IMF to be among emerging and developing economies or defined by the World Bank to be among low-income economies, lower middle-income economies, or upper middle-income economies. The list of EM countries is reviewed every September. For the purpose of the FTSE Emerging Markets Fixed Income Index inclusion, emerging markets are obliged to meet a set of criteria based on liquidity and credit quality, and an assessment of accessibility for foreign investors as outlined below.

Table 1: Inclusion criteria for the FTSE EM Government Bond Index (in local currency)

Index	FTSE EM Government Bond Index (local currency)
Credit rating	C by S&P, Ca by Moody's
Market accessibility level	Minimum level of 1
Market inclusion criteria	Entry: at least \$10bn Exit: when outstanding amount falls below \$5bn for three consecutive months
Issue size criteria	A local currency minimum issue size is applied on a per-country basis
Maturity	At least one year

Source: FTSE Russell

Evolution of EM debt as an asset class

The first major securitization of EM bonds

Emerging market countries financed economic development by syndicated bank loans from the international banking system (largely in US dollars), until the late 1980s, led by the US banks. This meant the market for EM sovereign debt was very small and illiquid both in dollars and local currencies. Economic shocks were transmitted through the international financial system by global banks, including the recycling of petro-dollars, following the oil shocks of 1973 and 1978/79.

However, Brady bonds – named after the US Treasury Secretary Nicholas Brady at the time – replaced the outstanding commercial bank loans to EM sovereigns, in March 1989, allowing creditor banks to shift loans off their balance sheets into more liquid, securitized bonds. The principal on the bonds was collateralized by the issuance of 30-year US Treasuries, which were purchased by EM countries using foreign exchange reserves, and IMF and World Bank loans. Emerging market countries involved in the initial round of Brady bonds were predominantly Latin American, European and African.¹ A number of the original countries involved have now retired their Brady bonds.

Asian and Russian financial shocks and the introduction of inflation targeting

Alongside the securitization of EM loans, a number of EM economies adopted inflation targets and nominal exchange-rate pegs, mainly to the US dollar, in the 1990s. These pegs caused these economies to become dollarized, proved unsustainable, and subsequently led to deep financial crises, most notably the Asian and Russian shocks of 1997/98. Since the 1997/98 financial crises, more EM economies have adopted explicit inflation targeting as an alternative nominal anchor.²

¹The countries participating in the March 1989 Brady bond round were Argentina, Brazil, Bulgaria, Costa Rica, Dominican Republic, Ecuador, Mexico, Morocco, Nigeria, Philippines, Poland, Uruguay, and Venezuela.

²See F. Mishkin, Inflation Targeting in Emerging Market Countries, NBER Working paper 7618, March 2000).

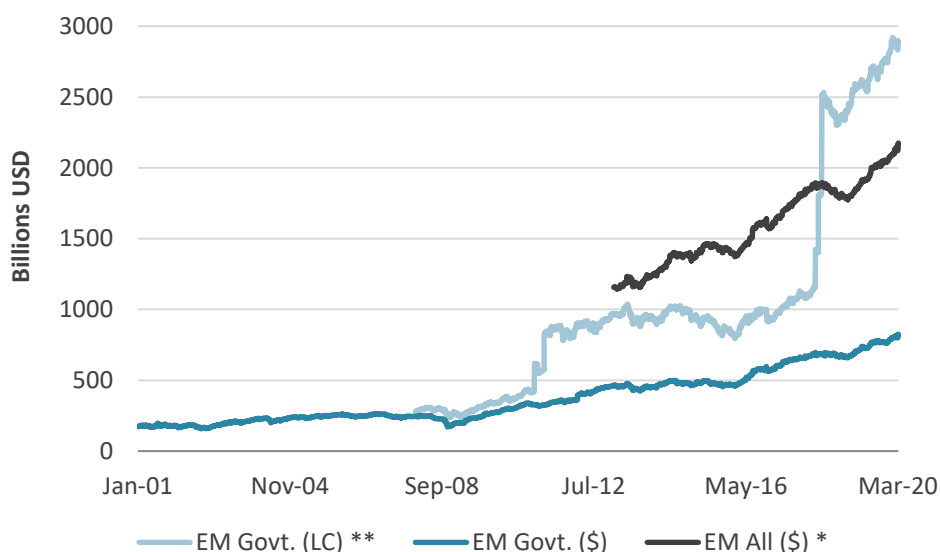
Greater foreign exchange rate flexibility

Alongside inflation targets, exchange rates were allowed to float more freely, but evidence of currency intervention may be found in the accumulation of currency reserves in emerging market economies (EMEs) since the currency crises of the 1990s. Indeed, sterilized currency interventions have been used as a macro-prudential instrument to counteract the de-stabilizing feedback loop between exchange rate appreciation and capital inflows, which can fuel domestic credit creation.³

The rapid growth in EM fixed income markets

More prudent macro-economic policies allowed EM countries to issue longer-term debt in local currencies from the early 2000s onwards – a market that barely existed at the time of the 1997/98 Asian and Russian shocks. Relaxation of capital controls, encouraged by the G7 and G20 as part of the broader globalization of markets and economies, allowed non-residents to increase foreign ownership of this debt, increasing the connectivity of this debt with G7 yields (particularly US Treasuries). Issuance by both EM sovereigns in local currencies (LC) and EM corporates (mainly in US dollars) increased sharply, and particularly after the GFC in 2008. Chart 1 shows the growth in market value of EM fixed income, as issuance has surged in recent years, although please note the introduction of China into the EM local currency index approximately doubled the size of the market in 2018.

Chart 1: Growth in the market value of EM fixed income



Source: *EM dollar index includes corporates and government bonds; data from January 2, 2013.

**EM local currency index is government data. Series start date is January 2, 2008. China joined FTSE EM Bond indexes in January 2018.

³See A. Carstens, Exchange Rates and Monetary Policy Frameworks in Emerging Market Economies, LSE lecture, May 2019).

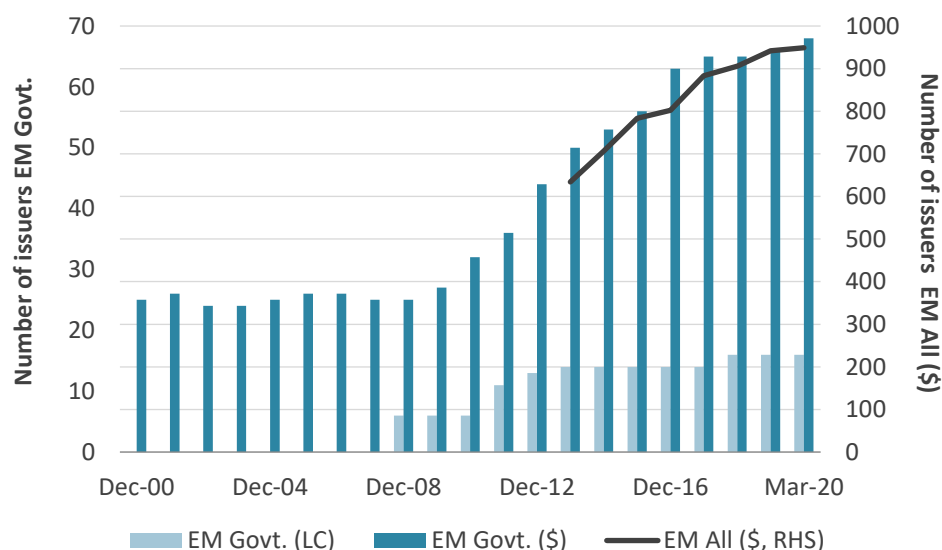
Characteristics of emerging market debt

EM issuers in local currencies

Emerging market issuance in local currencies exposes investors to EM currency risk. This market is dominated by sovereign issuers, but default risks are low, since the sovereign issuer has monetary sovereignty in the same way that developed market borrowers do. Therefore, an issuer could print local currency to repay the debt, in the same way that the US or UK monetary authorities can. The foreign exchange risk introduces more volatility into the performance of this debt, but also adds more portfolio diversification possibilities. Successful EM economies have also generally experienced appreciating exchange rates. Since the debt is issued in local currency, local interest rates and inflation are key factors in driving returns, but the performance of US Treasuries and G7 interest rates has also become an important factor as the correlation of index returns shows (see Table 4).

The EM (local currency) government debt index is a much more concentrated index than the EM dollar debt index, as Chart 2 shows, with a very small number of constituents (only 16 sovereigns*), although the regional weights between Asia, Europe and Latin America are fairly even. China's arrival in some EM (local currency) debt indexes has also been a transformational event and caused some investors to focus more on indexes with country capped weightings, like the FTSE EM Government Capped (local currency) Index, which has a maximum country weight of 10%. The growth of issuers is displayed in Chart 2, with much larger growth in the number of hard currency (US dollar) issuers than local currency issuers.

Chart 2: The growth and number of EM issuers

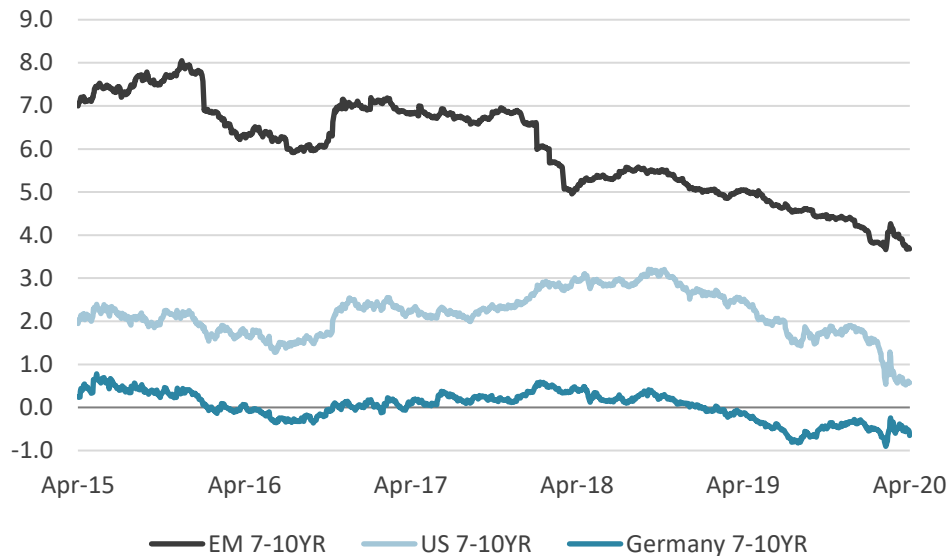


Source: FTSE Russell, April 2020 *Please see Appendix for index constituents.

Local currency EM government bonds also continue to offer a significant yield pick-up versus G7 government bonds, reflecting the higher local yields, as Chart 3 shows. Yield spreads narrowed, despite fears of a “dollar trap”, during the

period of Fed policy tightening from 2015-18. This may reflect the global search for yield as a number of sovereigns have become negative yielding. More generally, longer-term research recently published by the National Bureau of Economic Research also suggests that foreign currency government bonds have offered attractive real returns versus US or UK government bonds, with real returns some 4% a year higher from 1815-2016⁴.

Chart 3: EM (LC), US & German 7-10-year yields, April 2015 to April 2020



Source: FTSE Russell, Data as of April 2020. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

Chart 3 also shows that after the initial increase in EM (local currency) yields, following the coronavirus shock, yields have fallen since. Nonetheless, EM currencies have fallen back, in response to the stronger US dollar.

An important feature of EM currencies for investors is that aggregate volatility of EM currencies versus the US dollar is at about the same level as the volatility of other G7 currencies with the US dollar. This is because EM currencies have low correlations with each other, and therefore the overall volatility of an EM local currency fixed income index is dampened. Notwithstanding the recent strength of the trade-weighted US dollar, and weaker EM currencies, the Balassa-Samuelson effect⁵ – based on replicating productivity gains in developed economies but in lower cost EM economies – suggests EM currencies may tend to rise in value over time versus developed market currencies.

Emerging market issuers in hard dollar debt

Hard EM corporate debt is debt issued by sovereigns, quasi-sovereigns and corporates in US dollars. Yields are higher in EM US dollar debt than in EM local currency debt partly because default risks are much higher, as Table 2 shows. This is because issuers immediately face a currency mismatch on their borrowings, given the debt is in US dollars, and their assets are in local currencies.

⁴ "Sovereign Bonds since Waterloo", Josefin Meyer, Carmen Reinhart and Christoph Trebesch, NBER Working Paper 25543.

⁵ "Real Exchange Rates over the Past Two Centuries: How Important is the Harrod-Balassa-Samuelson Effect?", James R Lothian, Mark P Taylor, The Economic Journal, October 2008.

This is reflected in lower credit quality ratings for EM corporate and sovereign issuers in US dollars, compared to local currency issuers, as Table 2 also shows.

Table 2: Summary characteristics and key drivers of EM bond indexes

Index key:

EMGBI (LC)	Emerging market government bonds, in local currency (16 countries in index)
EMGBI (Capped)	Emerging market government bonds, weights capped at 10% for one sovereign, in local currency
EMUSDGBI	EM US dollar government bonds, in US dollars
EMUSDBBI (Corp. Capped Extended)	EM US dollar corporate bonds, investment grade & high yield, caps single issuer at \$10bn weight, extends to Israeli & Korean corporate debt, in US dollars
EGBI	Eurozone government bonds, in euros
US Treasury Index	US Treasury, ex Fed purchases, bonds < 1yr to maturity, in US dollars
US BIG Credit Index	US investment-grade corporate bonds, in US dollars
US High Yield Index	US high yield index of US & Canadian companies, in US dollars
FTSE USA Index	US equities, in US dollars

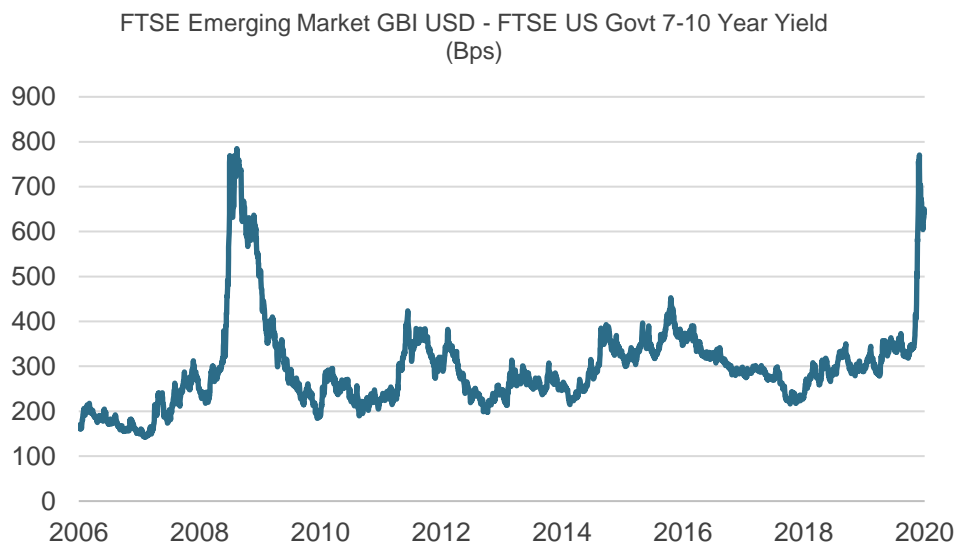
Asset class index	EMGBI (LC)	EMGBI Capped (LC)	EMUSDGBI (USD)	EMUSDBBI Corp. Capped Extended (USD)	EGBI (EUR)	US Treas. (USD)	US BIG Credit IG (USD)
Effective duration (years)	5.90	5.80	7.70	5.20	8.1	6.95	7.60
Average credit rating	A	BBB+	BBB-	BBB+	AA-	AA	A-
Current index yield (%)	3.67	5.37	7.76	4.38	0.24	0.73	3.50
Risk-on / risk-off	Unclear	Unclear	Risk-on	Risk-on	Risk-off	Risk-off	Risk-on
Key drivers of returns	Local yields, local inflation, currency	Local yields, local inflation, currency	US Treas.+ spread	US Treas.+ spread	ECB rates, eurozone inflation	Fed rates, US inflation	US Treas.+ spread
Market size (USD, Bn)	2,686	1,337	799	700	8,107	9,668	6,225

Source: FTSE Russell, data as of April 2020.

Categorizing these EM asset classes as risk-on, or risk-off is not straightforward as a result, but like US corporate bonds, it can be argued that EM (USD) government bond yields will trade with a spread over US Treasuries, which will vary according to default risks. This spread will rise during periods of weak growth/recession, such as the coronavirus shock, as US Treasury yields fall during these periods.

Therefore, credit spreads of both US corporate bonds and EM government dollar debt rose sharply following the shock, as Chart 4 shows, whereas movements in EM local currency government debt spreads were much more subdued.

Chart 4: EM (US dollar) govt. bonds and US corporate bond spreads versus US Treasuries



Source: FTSE Russell/Refinitiv as of April 2020. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

Similarly, the performance and returns of EM (USD) government debt might be expected to be more closely correlated with US Treasuries and dollar interest rates than local currency EM government debt, because EM (USD) government debt is also a form of US dollar debt. But Table 4 below shows the correlation is lower between hard EM debt, issued in US dollars, and US Treasuries, than the correlation between EM local currency government debt returns and US Treasuries. This may reflect the lower credit rating on EM debt issued in dollars, particularly when compared with high quality sovereign debt, like US Treasuries, where the issuer has monetary sovereignty. Given the default risks EM issuers also have from the currency mismatch, it is much more appropriate, therefore, to compare hard and corporate EM debt with US credit, including high yield, since default rates are similar.

Active versus passive investment in EM fixed income

The main arguments cited for an active investment approach to EM debt are that (1) passive investors are forced to remain invested in an EM index including a sovereign near default until the sovereign defaults, and the related argument that; (2) EM debt is less developed, and efficient in incorporating information into current market pricing. But these arguments hinge on the speed with which market prices, index weights and credit ratings are adjusted. Active investors also face the likelihood that market prices of the sovereign facing default will fall well in advance of the default.

Default risks are also less relevant in the local currency EM debt class, where default rates are very low anyway, because the issuer has monetary sovereignty. The

improved risk profile of EM debt, and greater market depth as issuance has grown (see Chart 1) may also have increased the efficiency of the market, and the evidence of delivery of historical alpha in EM debt, gross and net of fees is mixed⁶ even if in theory EM debt offers more raw potential for outperformance by active management.

Performance of EM debt versus other asset classes

These characteristics of EM fixed income are displayed in the performance of the asset classes from 2008 to April 2020, shown in Table 3. Relatively high volatility in EM US dollar debt (EMUSDGBI) reduced risk-adjusted returns. The higher volatility in EM US dollar debt may partly be explained by the notably longer duration of the index, at 7.7 years versus 5.9 years in the EM (local currency) Government Bond Index (EMGBI (LC)) (Table 2 above). In Table 3, both US high-yield debt and US equity indexes show notably higher standard deviation of returns, however, than the EM US dollar debt (EMUSDGB), which is generally a feature of risk-on asset classes.

Performance returns are in the currency of the index, so the investor's exchange rate exposure increases the underlying volatility of the EM local currency index (EMGBI), to a dollar or euro base. (In contrast, the hard EM debt index is denominated in US dollars and is therefore unaffected by movements in the US dollar.)

The currency effect impacted the EMGBI (LC) Index significantly during the taper tantrum, in 2013, when the US dollar strengthened, and both government bond and credit spreads widened.

Table 3: Risk-adjusted returns in EM fixed income versus other asset classes

Asset class index	Annual			Monthly		
	Index Return	Standard Deviation	Risk-Adjusted	Index Return	Standard Deviation	Risk-Adjusted
EMGBI (LC)	7.46	4.57	1.63	0.60	1.32	0.46
EMUSDGBI (USD)	5.53	10.48	0.53	0.45	3.03	0.15
EMUSDBBI Corp Capped (USD)	3.54	5.86	0.60	0.29	1.69	0.17
EGBI (Govt) (LC)	4.51	4.72	0.96	0.37	1.36	0.27
US BIG (Credit) (USD)	5.73	6.68	0.86	0.47	1.93	0.24
US High yield (USD)	6.21	11.07	0.56	0.50	3.20	0.16
US Treas. (USD)	4.03	4.33	0.93	0.33	1.25	0.26
FTSE USA (Equity) (USD)	7.52	17.35	0.43	0.61	5.01	0.12

Source: FTSE Russell estimates January 2008-end to April 13, 2020, apart from EM Corp capped (USD)

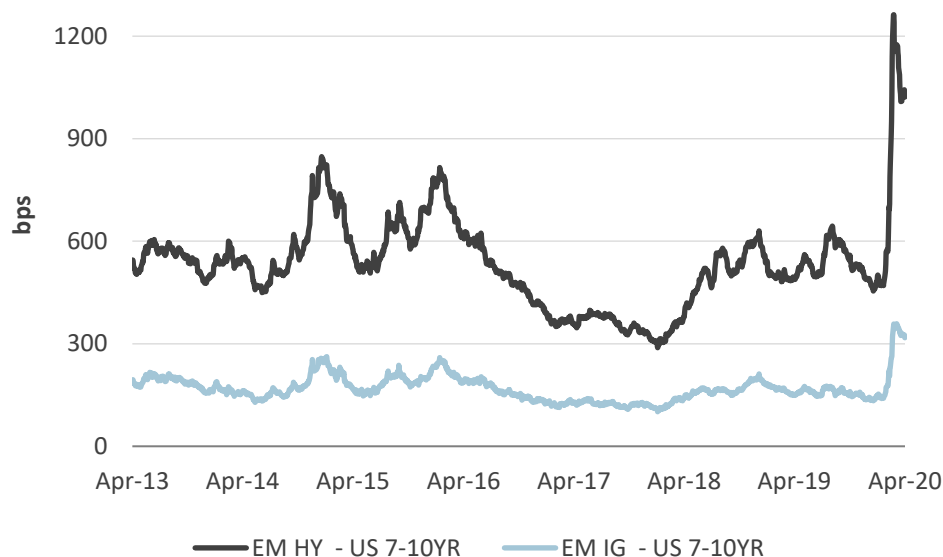
2013 to April 13, 2020. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

However, there was a much bigger effect on EM high-yield credit spreads from the collapse in the oil price, which drove both investment-grade and high-yield spreads out sharply, as Chart 5 shows. This is consistent with the high weight of the energy sector in EM high-yield debt. Similarly, the risk-off phase in Q4 2018, and the coronavirus shock of 2020 – when equity markets weakened sharply –

⁶ "Active versus Passive Management, Guiding Principles", Mercer, August 2016.

caused pronounced high yield spread widening, but investment-grade spreads moved more modestly.

Chart 5: EM corporate debt spreads versus US Treasuries, USD



Source: FTSE Russell/Refinitiv as of April 2020. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

Correlation of EM bond index returns with other asset classes

In the correlation of asset class returns, Table 4 shows that the EM government (local currency) bond return has a much higher correlation with the US Treasury returns, than US equity (FTSE USA Index) returns, based on data from 2008 to April 2020 (0.47 versus only 0.08). This suggests it is a more risk-off asset class than EM government debt in US dollars with its higher correlation to US equities. But none of the EM fixed-income indexes have the pronounced risk-on characteristics of US high yield, or US equities (note the negative correlation between the returns on the FTSE USA and the US Treasury indexes. In fact, EM government (local currency) bonds have the lowest correlation of returns with the FTSE USA Index (the most risk-on asset class). It should also be noted that the data set captures the two major macro-economic crises of the last 12 years in the GFC and coronavirus shocks.

Perhaps unsurprisingly, the EM government debt (USD) shows its strongest correlation of returns with US corporate bonds, reflecting the credit risk inherent in the asset/liability currency mismatch for EM governments borrowing in US dollars. In contrast, the returns on the EM local currency government bonds have a much lower correlation of returns with US high-yield bonds particularly, since default risk is very much lower for EM issuers in local currency, which have monetary sovereignty. These variable correlations of asset returns enhance the portfolio diversification benefits of the EM fixed-income asset classes.

Table 4: Correlation of Emerging Market bond index returns with other asset classes

Asset class index	EMGBI (LC)	EMUSDGBI (USD)	EMUSDBBI (Corp Capped) (USD)	EGBI Govt (LC)	US BIG (Credit) (USD)	US High Yield (USD)	US Trsy (USD)	FTSE USA (Equity) (USD)
EMGBI (LC)	1.00							
EMUSDGBI (USD)	0.70	1.00						
EMUSDBBI (USD)	0.64	0.95	1.00					
EGBI (LC)	0.34	0.20	0.45	1.00				
US BIG (Credit) (USD)	0.61	0.75	0.84	0.35	1.00			
US High Yield (USD)	0.33	0.73	0.85	-0.08	0.60	1.00		
US Treasury (USD)	0.47	0.08	0.03	0.46	0.38	-0.34	1.00	
FTSE USA (Equity) (USD)	0.20	0.61	0.58	-0.07	0.36	0.71	-0.37	1.00

Source: FTSE Russell estimates January 2008 - April 13, 2020, EM Corp (USD) data is from 2013-April 13, 2020. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

Misperceptions and facts about the EM fixed-income asset class

Despite these performance and correlation characteristics, the traditional view of emerging market debt has been that it is a demanding asset class to analyze, with complex information requirements and diverse and unpredictable political and credit risks. These concerns may be listed as follows:

1. General systemic concerns

Perception: High profile defaults, like Argentina, and the Asian shock of 1997/98, have lent support to the perception of higher systemic risk in EM debt than developed markets. As a result, portfolio allocations to EM debt have often been avoided, and the asset class subject to violent investor sentiment swings and capital outflows, typically during bouts of risk aversion (such as those following the GFC in 2008/09, and the recent coronavirus shock) or after Argentina's default in 2001/02.

Fact: Cross-border portfolio flows increased sharply after the globalization of financial markets in the 1990s and the removal of capital controls in a number of EM economies. But the yield attraction of EM debt also means it can benefit from increased portfolio inflows, during periods of declining G7 yields, and spillover benefits from G7 central bank QE programs. This occurred from 2009 onwards after the Fed adopted QE. Political shocks have also been frequent in developed markets in recent years, increasing volatility as a result (i.e., UK vote for Brexit in June 2016 & President Trump's election in the US in November 2016).

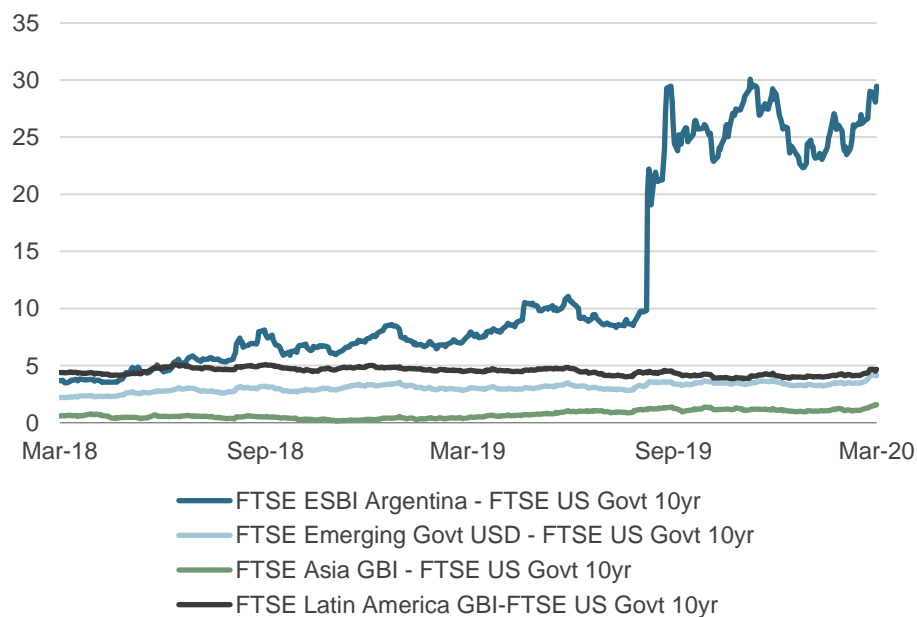
2. Contagion risks

Perception: Another traditional fear related to the EM fixed income class is contagion risk, again borne out of the generalized rout in the asset class during the Russian and Asian shocks in 1997/98. These fears have increased because the dollar value of issuance of EM non-financial corporate debt has grown sharply since 2007 and doubled as a share of EM GDP.

Fact: It should be noted that the share of EM corporate debt denominated in foreign currency has fallen, and is notably smaller than previous financial crises, whereby currency mismatch risks may be overstated. Also, financial deepening, ongoing globalization and very low interest rates have all contributed to increased EM issuance. As noted above, a number of EM countries adopted best practice in central bank inflation targets after the 1997/98 shocks and were able to deliver lower inflation rates as a result, improving policy credibility.

Despite higher EM issuance levels, a recent Federal Reserve note qualified the vulnerability of EM corporate debt as more moderate. Using the metric of the share of risky debt-to-GDP, it found that EMEs (excluding China) have a comparatively low share of risky debt-to-GDP of only 10% versus the 50% share for East Asian economies before the Asian shock in 1997/98. The authors also found earnings and interest-rate shocks to be the most material risks and that EMEs have not suffered significant increases in corporate defaults, despite their currency depreciations from mid-2011 onwards.⁷ Partly as a result, contagion has generally fallen across the EM asset class. As Chart 2 shows, the 2019 collapse in Argentine debt values is an example. The collapse in Argentine debt was not accompanied by weakness in either Latin American EM dollar debt, or EM dollar debt more generally, since yield spreads against US Treasuries did not widen significantly.

Chart 6: Little contagion from 2019 collapse in Argentine debt (Yield %)



Source: FTSE Russell/Refinitiv, April 2020. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

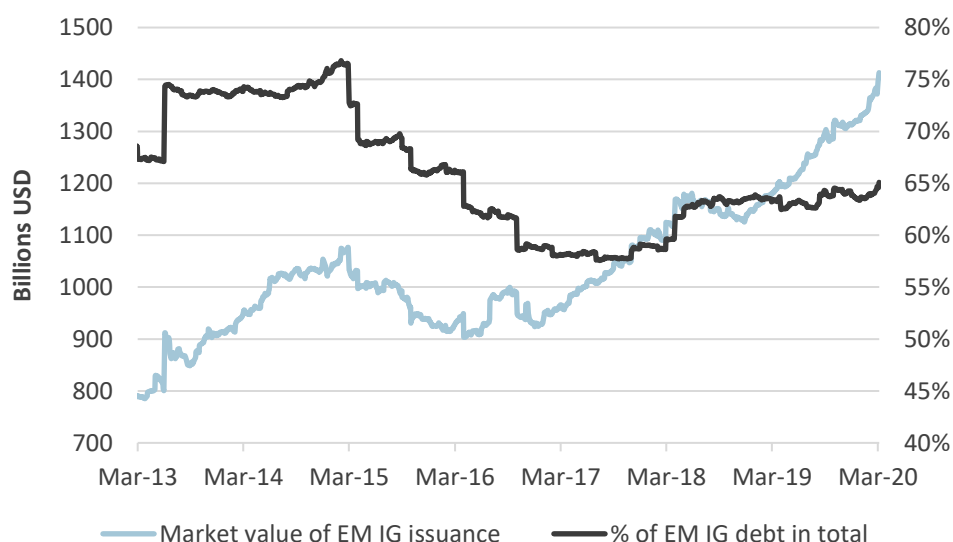
⁷ Emerging Market Nonfinancial Corporate Debt: How Concerned Should We Be, Beltran, Garud and Rosenblum, IFDP Notes, June 2017).

3. Quality of EM debt

Perception: A number of papers in the last 12-18 months have expressed concerns about a deterioration in credit quality, in both corporate bond market issuance globally and emerging markets, most recently from the World Bank*, following the surge in new issuance in recent years.

Fact: Chart 3 shows there was a decline in credit quality, as measured by the share of Investment Grade (IG) credit in the overall market value of EM issuance in US dollars, following the oil shock, and energy price collapse in 2014/15. This caused the share of IG credits to decline from about 75% to 57% in total bonds outstanding. However, since 2017, the share of EM IG credits has been increasing, as total EM issuance growth has recovered.

Chart 7: Share of EM IG issuance in total EM (hard currency) debt outstanding



Source: FTSE Russell, April 2020

4. EM is a pure “risk-on” asset class

Perception: Because a number of EM economies are also net commodity exporters, a related view is that EM debt (including credit default swap) is a pro-cyclical and risk-on asset class, that will suffer severely during global economic slowdowns, periods of weak commodity prices and bouts of risk aversion.

Fact: The evidence from the local currency EM asset class (i.e., EM sovereign debt issued in local currencies) does not support this view, as the correlation of returns shows in Table 2. (In the period from January 2008 to April 2020, the correlation of returns of the FTSE EMGBI (in local currency) is in fact 0.47 to US Treasuries (the purest risk-off asset class) and only 0.20 to US equities (the purest risk-on asset class)).

5. Currency mismatches, debt build-up and US dollar trap

Perception: Since the Asian shock in 1997/98, a related concern is that EM economies generally suffer from currency mismatches, and US dollar shortages, because of the dollar's dominant and disproportionate role in world trade invoicing and finance.⁸ These fears hardened because of the combination of the build-up in debt issuance by EM, from 2004-2014, and the Fed's interest rate and balance sheet tightening cycle from 2015-2018. The IMF has pointed out that "many EM crises have been preceded by rapid leverage growth" and "corporate debt across non-financial firms across major EM increased from \$4 trillion in 2004 to well over \$18 trillion in 2018" (IMF Global outlook, April 2019). This has led to the view that EM borrowers in US dollars are at risk of a wave of enforced defaults, after the coronavirus and related capital outflows.⁹

Fact: Spreads actually fell between EM local currency debt and US Treasuries during the period of tightening in US monetary policy from 2015-18, as Chart 3 showed, despite these fears. Further, in response to the coronavirus shock, a number of G20 central banks have already announced coordinated action to enhance the provision of US dollar liquidity, led by the US Fed (US Federal Reserve, March 15, 2020). Even in hard (dollar) EM debt, the sensitivity of investment performance has generally been lower than that of EM equities to the US dollar.

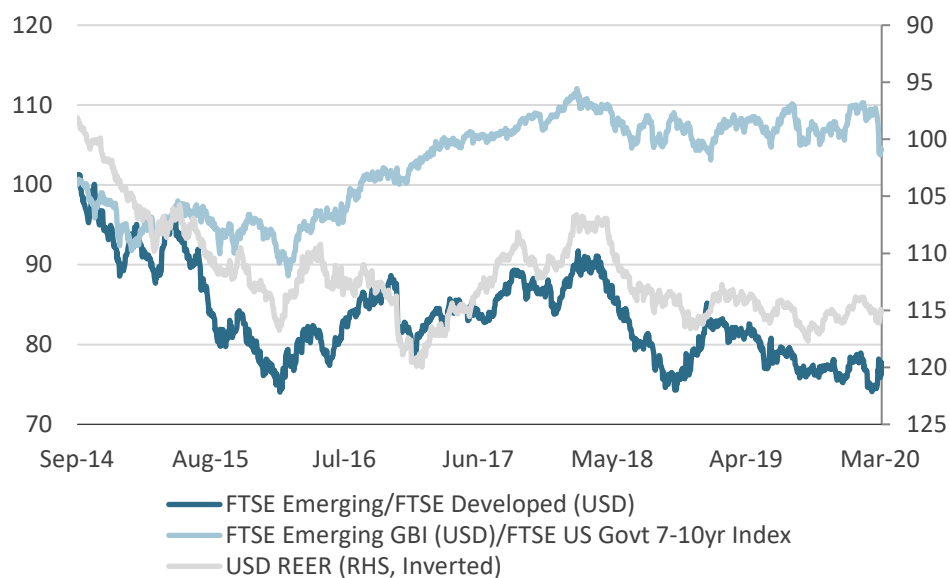
Chart 8 shows the US dollar inverted (trade-weighted index) versus the performance of EM equity markets (relative to developed markets) and the performance of the FTSE EM (USD) Government Debt index relative to the US 7-10-year index performance. Until the coronavirus shock, EM (USD) government debt outperformed EM equities during periods of US dollar strength.

On sovereign defaults, the combination of weaker commodity prices, EM public health systems jeopardized by the coronavirus, and the stronger US dollar, are factors that would suggest higher default risk. But current credit spreads of about 700bp on the FTSE EMUSDGBI index (see Chart 5) imply a default probability of 10-12%, on the debt in the index, assuming a recovery rate of about 40%, and depending on the liquidity premium in credit spreads (e.g., it would be 12% with a zero liquidity premium in spreads). These are extremely high default rates compared to recent history— well above GFC default levels – and EM borrowers have also increased the share of local currency borrowing since the early-2000s. Even after the collapse in oil and commodity prices in 2014/15, default rates were much lower than widely expected. Sovereign defaults are also complex and protracted processes, since sovereigns have more options than corporate borrowers, including the ability to raise taxes, and support from the IMF and World Bank.

⁸See "Dollar Dominance in Trade and Finance", Gita Gopinath, and also "EM entering a dollar trap", Absolute Strategy Research, August 2019).

⁹ See Absolute Strategy Research, "Prepare for an EM default wave", April 22, 2020.

Chart 8: EM (USD) debt, equities and US dollar trade weighted



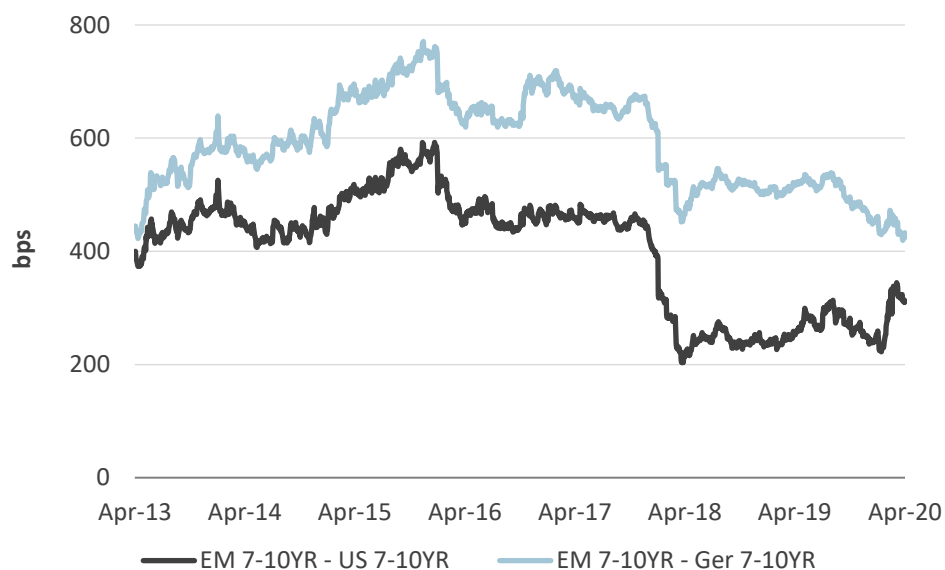
Source: FTSE Russell/Refinitiv April 2020. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

6. Spillover effects from G7 economies and the coronavirus shock

Perception: The coronavirus shock is a massive challenge for all financial markets, and emerging markets have already suffered substantial capital outflows. IMF loan programs work using conditionality on loans (e.g., fiscal austerity conditions, preferred creditor status) leave emerging markets particularly vulnerable, after a colossal demand shock (the largest since the 1930s, according to the IMF April 2020 forecasts). A related concern has been raised as the spillover effect from G7 zero interest-rate policy and QE programs since 2009, including the risk of de-stabilizing capital outflows during periods of monetary tightening in the G7.

Fact: Gross capital inflows to EM fixed income did grow from \$500bn annually (2000-07) to \$1,100bn annually (2010-13), as the G7 central banks reduced interest rates towards zero after the GFC. Similarly, the US Taper Tantrum in 2013 and EM sell-off in 2018 – when fears of Fed tightening drove US Treasury yields sharply higher – did show the closer integration of EM fixed-income markets with the G7 could lead to rapid capital outflows (see Chart 9). However, as already mentioned, spreads fell between EM local currency debt and US Treasuries from 2015-18.

Chart 9: EM (LC) govt. index spreads vs US Treasuries & Bunds since 2013

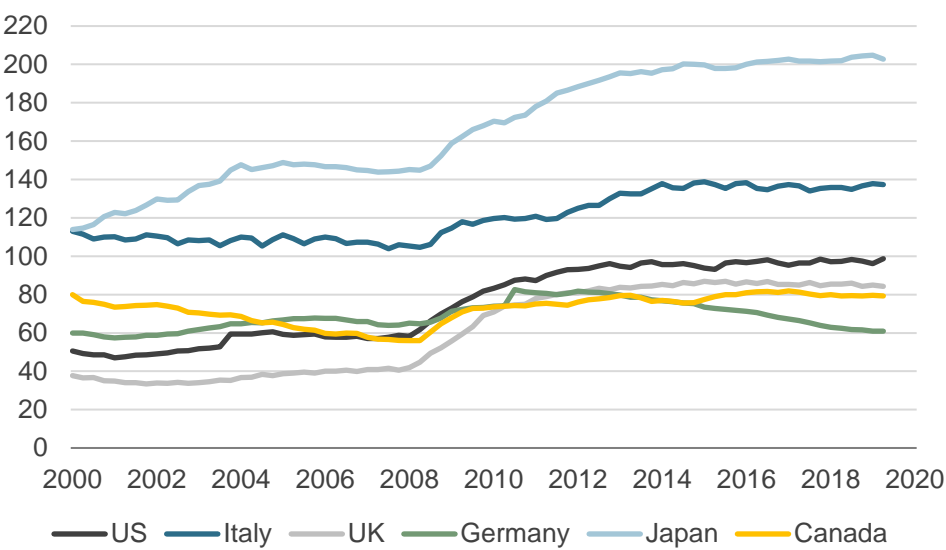


Source: FTSE Russell, data as of April 2020. Past performance is no guarantee of future results. Please see the end for important legal disclosures.

Further, although the coronavirus shock has caused EM spreads versus US Treasuries to widen initially, this is a global shock, and not an EM specific event (like the 1997/98 Asian shock) and has drawn a global policy response. The US Federal Reserve has already broadened its QE asset purchases to include sub-investment grade corporate bonds, and the US has approved a fiscal stimulus of about 9% of GDP. Also, the Global Financial Crisis was followed by a \$500 billion increase in the IMF's Special Drawing Rights allocations, in 2009, and although there is no political agreement yet on a further increase, the G20 has agreed to freeze bilateral government loan repayments for lower income nations until the end of 2020, starting on May 1, 2020. The IMF has also expanded its Rapid Credit Facility, and Rapid Financing Instrument by an initial \$100bn.

Finally, the coronavirus shock comes at a time when a number of G20 economies have large debt burdens, relative to GDP, because of the legacy of low nominal GDP growth since the GFC (notably Italy, but including the US), and the political challenge of reducing these debt burdens. High debt levels also raise the possibility of debt cancellation, and money-financed fiscal stimulus from G7 nations as a policy response to the coronavirus shock (or helicopter money). The fact that globally inflation is low, relative to inflation targets, and the global economy has suffered a substantial negative demand shock (the largest since the 1930s, according to the IMF), makes current economic conditions more suitable for a money-financed fiscal stimulus, to boost demand growth.

Chart 10: Selected government debt/GDP ratios in G7



Source: FTSE Russell / Refinitiv as of April 2020.

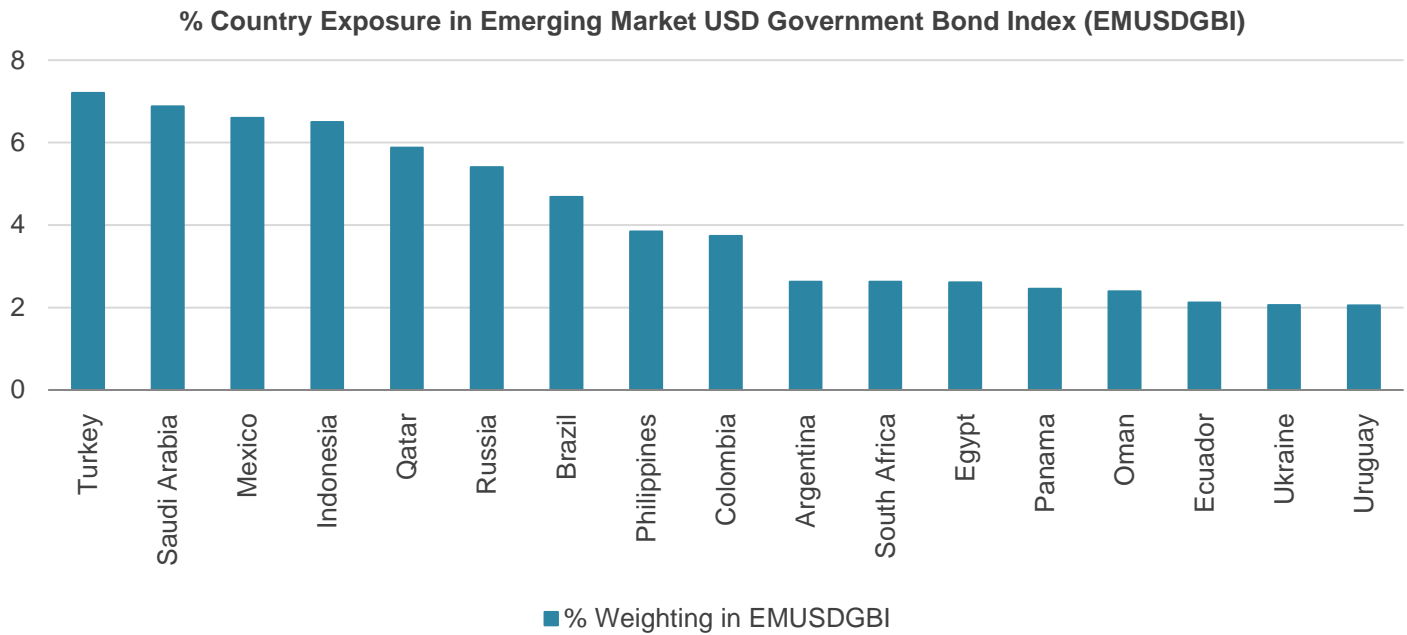
Conclusions

- The diversity of EM fixed income means it is an asset class with variable correlations to other developed market asset classes, despite the perception it has strong risk-on, and pro-cyclical characteristics.
- Empirical evidence suggests more variable correlations, with the EM (local currency) government bond asset class showing stronger correlation to US Treasuries than US equities.
- Such variable correlations increase the attraction of the asset class as a portfolio diversifier.
- In a very low yield world, EM fixed income offers a significant yield pick-up over developed market yields, for similar credit quality.
- EM (local currency) government bonds have much lower default rates than equivalent developed market corporate credits, since sovereign issuers have monetary sovereignty.
- EM (hard currency) fixed income has generally proved less sensitive to movements in the US dollar than in EM equities.
- Despite concerns about “a dollar trap” and a re-run of the 1997/98 EM financial crises, credit spreads in EM bonds fell during the 2015-18 Fed tightening phase versus US Treasuries and Bunds, and there was no re-run of the credit spread widening that occurred during the “Taper Tantrum” in 2013.
- The coronavirus shock is a major challenge for all financial markets, including EM, but this is a global shock, with a substantial global policy response, with IMF and World Bank involvement.
- The cross-correlation of EM currencies dampens the volatility of EM (local currency) fixed income index returns, with G7 currencies.

Appendix

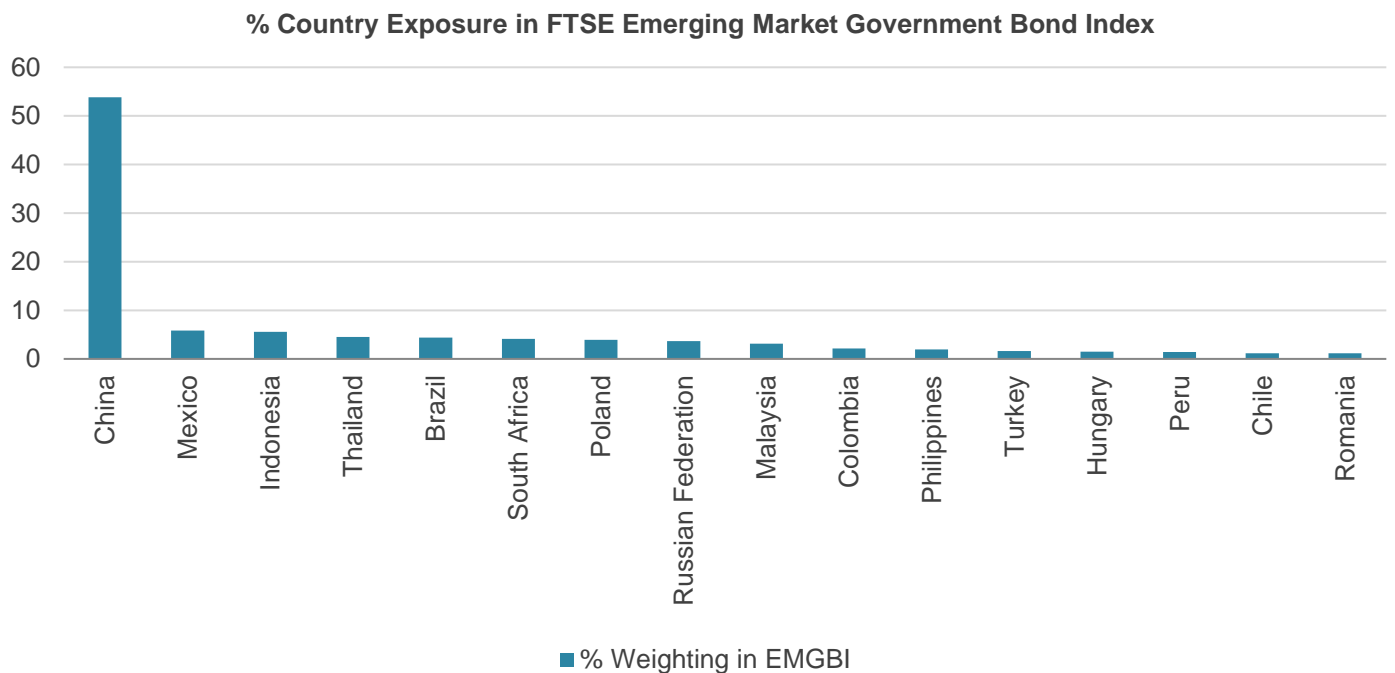
Chart 11: Main constituents of FTSE Russell Emerging Market Fixed income indexes

(A) In Hard Currency



Source: FTSE Russell, data as of April 2020.

(B) In local Currency



Source: FTSE Russell, data as of April 2020.

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