PUBLIC FIXED INCOME

Emerging Markets 2021

Key Themes for EMBI Investors in a Post Pandemic World

March 26, 2021

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MetLife Investment Management

Introduction

The year of 2020 was unprecedented in countless ways, from the continuing health crisis and the commensurate growth shocks to an equally shocking amount of global policy support in the form of monetary and fiscal stimulus. The growth and policy hangover from 2020 will be felt for years to come with its lingering effects creating unique challenges in what will, hopefully, soon become a post pandemic world.

Since the inception of the EMBI in 1994, EM investors have experienced numerous market-moving events, some positive and others negative, caused by both global and country-specific developments. Some of the most memorable highlights include the late 90s currency crises, the .com bubble and 9/11 attacks in 2000-1, the multi-decade rise of China and the commodity boom, the Great Financial Crisis of 2008/9, the European debt crisis of 2010-12, the taper tantrum and commodity bust of 2013-16, the rise of populism and trade wars in 2016-19 and most recently a global pandemic. Along the way, some EM countries have defaulted and restructured, while many others fortified their monetary and fiscal credibility to enable counter-cyclical stimulus when they needed it the most.

Despite these volatile events, the sovereign bond universe has grown in size and scale and we believe continues to reward investors as evidenced through the EMBI's comparably attractive returns against major fixed income indices since 2003 (see figure 1).

Our collective experience as a team gained throughout the years, over a wide range of market cycles, is the basis for seeing the current environment as challenging yet ripe with opportunities. In the wake of the pandemic, we acknowledge the challenges many EM sovereigns will face, which will undoubtedly create stress points for policy makers, global multilateral institutions and investors. This emerging market debt discussion will consider these challenges and feature input from our global team, each of whom will share their perspective on themes that we believe will be most relevant to EMBI investors in a post pandemic world:

- **EMBI Index Changes:** Greater resources are required to efficiently navigate the significant changes in the EMBI over the last decade including more issuers, higher dispersion of credit quality and greater yield sensitivity.
- **Official financing in a Post Pandemic World:** Official creditors have always been and will continue to be key supporters of developing countries. During the pandemic, massive support was provided with little conditionality. Going forward we expect conditionality to increase.
- **China's prominent role for Emerging countries:** China's significance within the global economy and its growing commercial and financial linkages to many emerging economies will have a direct impact on growth and debt dynamics for years to come.
- **After Covid, ESG considerations matter more than ever:** In a world with higher debt burdens and lower financial flexibility, it has become even more critical to differentiate based on ESG factors.
- **Opportunities in EUR-denominated EM issuance:** EUR-denominated bonds represent a rising share of EM hard-currency sovereign debt, and investors with flexibility can periodically find good value, currency hedged or unhedged.
- **Sovereign Ratings Outlook:** With many sovereigns on negative outlook due to rising debt levels we expect the agencies to be more patient as the recovery is taking hold and official institutions remain willing to provide liquidity support.
- **The Future of Sovereign Restructuring:** Higher debt is a legacy of the pandemic and will likely beget more complicated sovereign defaults and restructurings over the coming decade. We apply recent lessons learned from Argentina and Ecuador.
- **Trading themes in Emerging Market Debt, a Trader's perspective:** Trading volumes have steadily increased, but perhaps not as fast as the market has grown; however, there are pockets of better improved liquidity. We highlight the most recent trends impacting our market, such as electronic trading, ETFs, crossover investors, longer-dated tenors and sustainable bonds.

Figure 1 | Annual Return of Fixed Income Assets Across Both EM and DM

	Global Credit *	U.S. HG	Euro HG	U.S. HY	Euro HY	EMBI Global Div	CEMBI Broad	GBI-EM Global Div (in USD)	U.S. Treasury
TR 2004	7.2	6.0	7.7	11.1	14.0	11.6	10.3	23.0	3.7
TR 2005	1.7	1.4	3.9	2.4	4.6	10.2	6.3	6.3	2.9
TR 2006	5.7	3.7	1.1	11.6	9.7	9.9	6.5	15.2	3.1
TR 2007	5.0	5.8	0.5	2.6	-1.3	6.2	3.9	18.1	9.2
TR 2008	-5.1	0.8	0.1	-26.6	-34.9	-12.0	-16.8	-5.2	14.3
TR 2009	24.1	18.2	16.0	58.2	73.4	29.8	37.5	22.0	-3.8
TR 2010	10.5	9.4	4.8	14.7	14.8	12.2	12.5	15.7	6.1
TR 2011	8.3	8.6	3.1	7.0	1.7	7.3	3.0	-1.8	9.9
TR 2012	10.7	9.6	12.4	15.4	27.8	17.4	15.2	16.8	2.2
TR 2013	1.1	-0.7	1.8	8.2	11.8	-5.3	-1.3	-9.0	-3.4
TR 2014	6.8	8.0	8.3	2.2	6.1	7.4	3.6	-5.7	6.1
TR 2015	-0.7	0.3	-0.4	-5.0	1.4	1.2	1.2	-14.9	0.9
TR 2016	8.2	6.1	4.3	18.9	9.8	10.2	10.8	9.9	1.1
TR 2017	6.6	6.3	1.6	7.6	6.0	10.3	8.0	15.2	2.5
TR 2018	-2.3	-2.3	-0.8	-2.4	-3.9	-4.3	-1.2	-6.2	0.8
TR 2019	14.2	14.2	5.1	14.1	11.0	15.0	13.2	13.5	7.1
TR 2020	9.4	10.2	2.3	5.2	1.9	5.3	7.4	2.7	8.4
Cum Return	177.4	163.9	97.1	240.7	235.0	224.1	193.2	165.5	90.9
Annualized Return	6.1	5.8	4.0	7.4	7.3	7.1	6.5	5.9	3.8
Annualized Volatility	5.6	5.5	3.5	8.9	10.2	8.6	7.9	12.0	4.4
Sharpe Ratio	0.8	0.8	0.7	0.6	0.5	0.6	0.6	0.4	0.5
Market Cap (U.S. $billion)	8,151	7,215	1,045	936	232	736	1,307	1,387	12,830

Source: J.P. Morgan as of January 2021.
*JULI + JPM HY

Todd Howard
Emerging Market Debt
Portfolio Manager
Based in USA

"Away from all the headlines in EM, the EMBI index itself has undergone significant changes, as evidenced by the ongoing appearance of new issuers and a meaningful shift in index composition."

Thomas Smith
Emerging Market Debt
Portfolio Manager
Based in USA

"The impact of these changes challenge investment teams to assess credit quality and relative value across a much broader universe."

EMBI 2021 and Beyond: an Analytical View of the EM Sovereign Index

Away from the headlines on elections, reforms, tariffs and sanctions, there is another story that has been playing out in the Emerging Markets sovereign space over the past decade. The EMBI index itself has undergone significant changes, as evidenced by the ongoing appearance of new issuers and a meaningful shift in index composition. **This piece will summarize the most important changes in the EMBI since 2010, from a portfolio manager's perspective, and will discuss index composition as we see it today, with a focus on size, quality, maturity, and issuer composition.**

EMBI Index size, as measured in notional dollars outstanding, has grown more than threefold since 2010, from $370bn to over $1.2trn today. The number of issuers has also increased significantly, from 63 to 168, with a healthy contribution from both sovereign (+40) and quasi sovereign (+65) index-eligible names. Similarly, the number of outstanding index-eligible bonds has risen from 252 to 861 (see figure 1).

Figure 1 | EMBIG Div. Index Profile, Dec. 2010 - Dec. 2020

	Dec. 2010	Dec. 2015	Dec. 2020
Market Value ($ bn.)	406.8	672.0	1,327.2
Face OS ($ bn.)	369.9	691.2	1,227.5
# Countries	41	65	74
# Issuers	63	134	168
# Sovereigns	38	60	78
# Quasi-Sovereigns	25	74	90
# Bonds	252	506	861
# Sovereigns	184	302	546
# Quasi-Sovereigns	68	204	315

Source JP Morgan

EMBI quality composition has changed little on the surface, with Investment Grade rated securities declining moderately from 56% to 54%, and sub-Investment Grade rising from 44% to 46%. However, the *composition* of quality has changed quite a bit, leading to greater dispersion by credit rating. Indeed, the group of traditionally "Core EM" securities rated BBB/BB has fallen from 70% of the EMBI to 50% over the last decade, with a meaningful increase of both higher and lower quality securities (see figure 2):

- The highest quality buckets (AA/A) have risen by over six percentage points to 20.9% of the EMBI, mostly due to a 2019 shift in index eligibility criteria that brought the inclusion of several large middle eastern (GCC) issuers. These issuers have issued heavily since then.

- The share of BBB rated bonds in the EMBI has fallen nearly nine percentage points to 32.9% on several large downgrades to junk status, most occurring since 2015. These include Brazil (2015), Turkey and South Africa (2017), Oman (2018) and Morocco (2020). There are two countries that fell to junk and later recovered the IG rating over this period: Hungary (2011 and 2016) and Russia (2015 and 2018).
- Issuers rated single-B and below have seen the largest increase, from 13% of the EMBI to over 28%. This is largely due to 16 new country issuers in the single-B space, some large downgrades from BB (Turkey, Bahrain, Costa Rica) and ongoing issuance from existing sovereigns (Egypt, Ghana, Ukraine, etc).

The EMBI's maturity profile has trended toward longer tenors, resulting in a 1.3-year extension in average index duration to 8.26 years. Bonds with duration over 10 years have increased from 19.3% of the EMBI in 2015 (94 securities) to over 32% today (216 securities) (see figure 3). Logically, these longer tenors tend to be concentrated among investment grade issuers. However, sub-IG issuers have been more active out the curve and now make up around 1/3 of all long bonds, equivalent to ~10% of the EMBI. And "long bonds" keep getting longer: over the past year, ten countries have issued a 40-year bond, and another two have issued a 50-year tenor. In fact, bonds with an average life of greater than 30 years now equate to ~4% of the EMBI. While 100-year bonds are not common in our space, there are currently two outstanding (Peru and Mex), and we wouldn't be surprised to see more.

Figure 2 | Credit Profile, Weight %

Credit Quality	2010	2015	2020
IG	56.0%	56.4%	53.7%
BIG	44.0%	43.6%	46.3%
Rated AA	4.3%	4.0%	6.9%
Rated A	10.5%	10.6%	14.0%
Rated BBB	41.2%	41.9%	32.9%
Rated BB	29.5%	16.4%	17.3%
Rated B	13.1%	19.0%	23.7%
Rated C	0.0%	7.5%	4.6%
Not Rated	1.4%	0.7%	0.7%

Source JP Morgan

Figure 3

EMBI Duration	2010	2015	2020
10+	19.75%	19.30%	0.3208
5-10y	50.95%	43.45%	34.14%
3-5y	19.17%	23.85%	17.30%
<3yr	10.12%	13.40%	16.40%

Source JP Morgan

The composition of EMBI issuers has expanded and evolved, resulting in 78 sovereign and 90 quasi-sovereign issuers. The region with the most dramatic increase in representation is Sub-Sahara Africa, with 10 new issuing countries added since 2010 (for a total of 13) and an EMBI market cap of 12.4% (up from 5.2%). Meanwhile, the CEE/CIS[2] region posted the biggest decline from 22.7% to 15.5%, mostly due to a regional bias to issue bonds in euros, which aren't captured in the USD EMBI.

EMBI quasi-sovereign issuers have virtually quadrupled to 90 names, but many of these are smaller, one-time issuers, and therefore the overall weighting of quasis has remained in a range of 19-24% over the years. The outstanding stock of quasis is currently on the lower end of that range, with outsized participation in the index from China (3.4%), Mexico (2.5%), Chile (2%), Indonesia and Kazakhstan (each with 1.5%).

Conclusion: over the past decade the EMBI has grown significantly in total notional dollars outstanding, number of issuers (particularly quasi-sovereigns and below investment grade sovereigns), and number of bonds, while also extending in duration. The trend toward longer duration is a double-edged sword. Longer bonds, with higher spread duration, offer the potential for attractive income and return enhancement, especially given the steepness of some credit curves, but not without the risk of greater price volatility. The impact of these changes challenge investment teams to assess credit quality and relative value across a much broader universe. **We believe that teams with a global footprint, broad research coverage and specialized trading roles will be best equipped to capture the alpha opportunities residing in the EMBI space.**

Nalini Cundapen
Emerging Markets
Sovereign Research Analyst
Frontier Asia
Based in Hong Kong

"For decades, official creditors have actively supported the development of Emerging Market countries and in 2020, they once again played a vital role. We anticipate a renewed push for multilateralism during the Biden administration, and an even greater role for official assistance."

Jose del Rosal
Emerging Markets
Sovereign Research Analyst
Central America and Caribbean,
Based in Santiago

"Since the outset of the pandemic, we have observed leniency and flexibility from the IMF toward countries proactively seeking formal fund programs, like Costa Rica and Ecuador."

Official Assistance for Emerging Countries Beyond the Pandemic

For decades, official creditors like the International Monetary Fund (IMF), World Bank, IADB, ADB and EBRD have actively supported the development of Emerging Market countries. The financial support they provide in times of need is a unique advantage for sovereign issuers relative to corporates of similar rating quality.

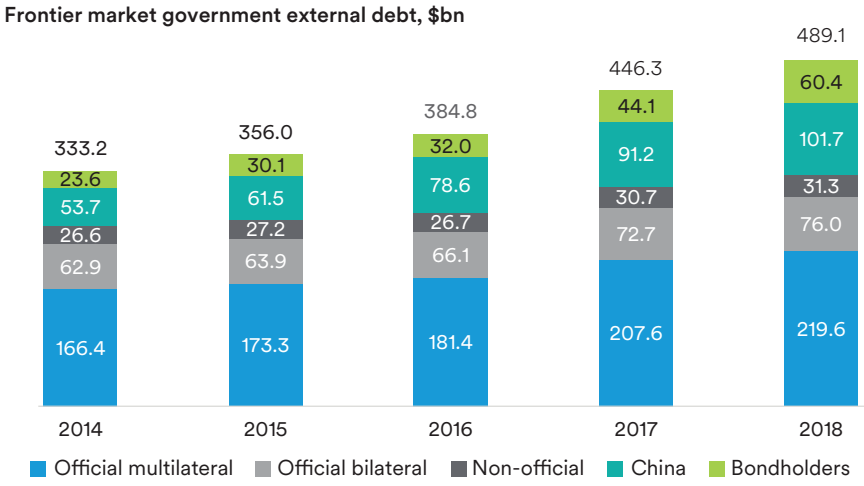
In 2020, Official creditors once again played a vital role for EM countries, providing emergency funding and relief during the COVID outbreak and ensuing economic crisis. The IMF led the effort, acting swiftly with its Rapid Financing Instrument and Rapid Credit Facility on concessional terms. Both facilities offered funding without any ex-post conditionality or programme reviews, provided the IMF deemed the country's debt stock as sustainable. These programs provided a total of $31bn for 74 countries (source IMF). In parallel, the G20 launched its Debt Service Suspension Initiative (DSSI) for over 70 eligible countries, which allowed poorer countries to redirect official funding back into their economies rather than servicing multilateral debt payments. In total this program has saved sovereign borrowers over $5bn dollars in debt service, especially benefiting EMBI sovereigns (source IMF). The DSSI was extended into June 2021, without a PSI prerequisite.

As we move beyond the initial emergency response phase, we expect official creditors to retain a key role with vulnerable countries, providing support as appropriate while encouraging economic adjustment and transparency with a heavy emphasis on debt sustainability. Since the outset of the pandemic, we have observed leniency and flexibility from the IMF toward countries proactively seeking formal fund programs, like Costa Rica and Ecuador. Factors that correlate positively to funding flexibility from official lenders include previous IMF relationship and reform track record, as demonstrated recently in the cases of Egypt and Angola. However, not all countries will benefit from a more relaxed IMF, in our opinion. Countries like Sri Lanka and Zambia, with a high proportion of commercial external debt, opaque bilateral borrowings (e.g. with China or other non-Paris Club countries), and with limited market access may still face a very scrutinizing IMF.

The official sector is calling for a more inclusive debt restructuring framework (PSI), likely in response to the growing share of commercial external debt and emergence of China as a major EM creditor, particularly to frontier markets. The last decade saw an expansion of countries issuing in hard currency bonds, which increased the share of frontier markets in the EMBIGD, now accounting for ~22% of the market cap (source JP Morgan). According to JP Morgan, DSSI-eligible countries had $489bn of government external debt in 2018, up 47% from 2014. Against this backdrop, Chinese debt has doubled while bonded debt has almost tripled over the same period (see figure 1).

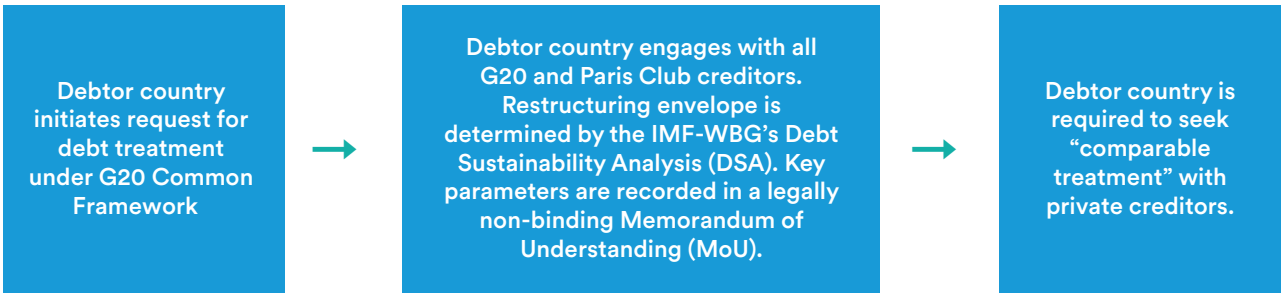
The G20 recently introduced its Common Framework, which lays out the blueprint for a coordinated and comprehensive debt treatment that mandates PSI (see figure 2). The framework, which for now is limited to low-income DSSI countries, requires them to seek "comparable treatment" from private creditors and makes official sector involvement conditional upon PSI. So far among countries with Eurobonds outstanding, only Zambia and Ethiopia have opted into this framework. Going forward, countries with severe liquidity risks, high debt stocks and a high exposure to non-Paris Club creditors, who want to avoid potential hard default, may feel incentivized to follow.

Figure 1 | Bonded and Chinese debt have increased the most across frontier markets



Source: World Bank, J.P. Morgan
Note: DSSI countries.

Figure 2 | The G-20 Common Framework



Source: G-20, J.P. Morgan

We anticipate a renewed push for multilateralism during the Biden administration, and an even greater role for official assistance. This could mean increasing lending capacity of multilaterals, and an increased allocation of IMF SDRs to member countries. If approved, the corresponding unconditional increase in central bank reserve assets could make a significant difference to the external repayment capacity of some emerging markets, particularly in the frontier space, e.g. Argentina, Sri Lanka, Zambia.

David Richter
Emerging Markets
Sovereign Research Analyst
Asia
Based in Tokyo

"China's growing share of global GDP and strengthening trade, investment and financial linkages with EM will remain a key anchor for the asset class going forward."

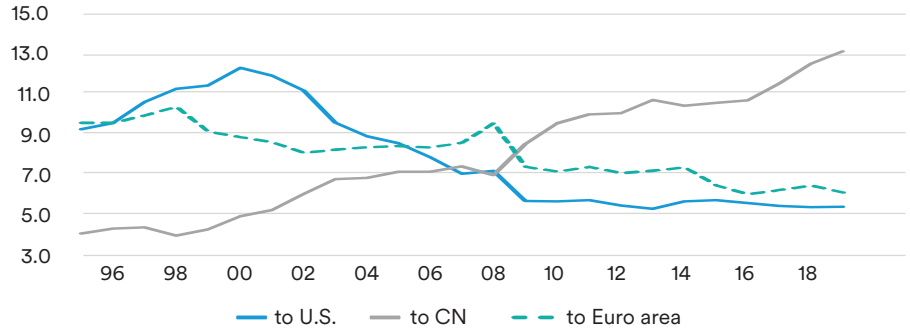
China's Pivotal Role in the Future of EM Sovereigns

For Emerging Market sovereigns, the rise of China is arguably the most impactful event of the past two decades. China's growth story has been formidable, rising from 7.0% to 18.6% of global GDP since 2000 (Source: IMF, Bloomberg). In addition to its successful emergence as an independent source of global demand, China's rising participation in global supply chains has led to stronger trade convergence and economic integration with EM economies as well. EM growth has thus become more highly correlated with that of China than the U.S. and DMs more broadly. Of note is the decline in EM trade with the U.S., reflecting its increasing share of trade with China (see figures 1 and 2).

Stronger EM-China connectivity emerged at an opportune time, as global trade more broadly has slowed since the global financial crisis, with the end of the commodity super cycle, de-globalization, population ageing and weaker consumption growth in developed markets. Notwithstanding these headwinds, China's large and growing share of global GDP means that it will likely continue to be a key driver for EM growth going forward.

Figure 1 | EMX exports by destination

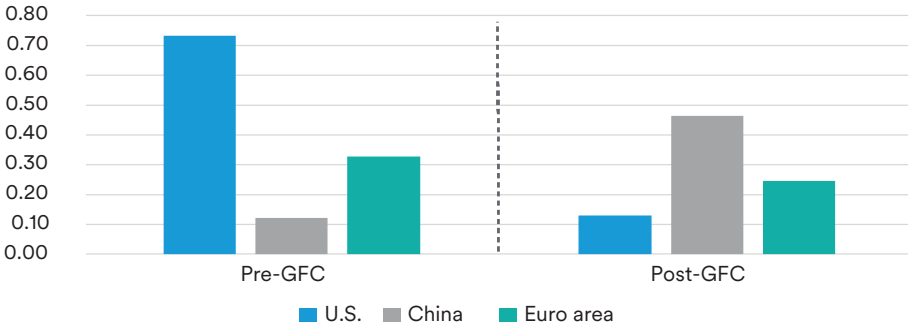
% of total EM exports



Source: J.P. Morgan

Figure 2 | EMX's growth sensitivity to China has increased

%-pt response of EMX GDP to 1%-pt higher US, China and EA GDP



Source: J.P. Morgan

EM countries may also increasingly benefit from growing investment and financial linkages to China in coming years. China's overseas lending to EM has risen dramatically in the past decade, coinciding with the launch of the Belt Road Initiative (BRI) in 2013. Lending has included a combination of official bilateral loans, private commercial loans and mainly policy bank lending related to BRI. The latter has deepened China's economic linkages with EM from primarily a trading partner to an important direct investor, the bulk of which has been financed by Chinese banks. Immense infrastructure needs throughout EM have led many countries to embrace BRI. This has in turn facilitated outward investment by Chinese firms who either build infrastructure or follow it with manufacturing and other investments. Execution difficulty for BRI projects amid the COVID-19 pandemic has been a setback, however, BRI will continue to promote China's integration across EM, particularly in Central Asia, Southeast Asia, Middle East and Africa.

Given the ongoing U.S.-China technology decoupling, China will seek greater geopolitical linkages with non-U.S. aligned EM countries in adopting China tech standards (e.g, 5G) through its investment and lending activities. China's financial linkages with EM are also likely to intensify with further RMB internationalization going forward. These relatively new financial linkages add a complicating factor for EM investors, as China could view itself as senior to sovereign bond investors in the event of a default.

Looking ahead, we believe three key trade trends should sustain China demand for EM exports. One is rising household consumption, which will benefit EMs that export final goods and services, particularly from Asia. The second is China's pledge to reach peak CO2 emission by 2030, making China an even bigger importer of cleaner energy, particularly oil & gas from Russia and the Middle East. The third is China's advancing manufacturing capacity, supporting the more advanced EMs that can export capital and intermediate goods to China. China's import dependence will likely slow in certain segments where China is moving up the value chain and seeking greater self-sufficiency, particularly the tech sector. But this does not mean imports will decline as China's expanding economy will continue to require substantial raw material imports, intermediary goods and final products to support manufacturing and growing household consumption.

Chris Celio
Emerging Markets
Sovereign Research Analyst
Middle East and Africa
Based in London

"A country that enjoys a higher standard of living, lower levels of income and wealth inequality, access to widespread and affordable healthcare and education is less prone to both economic and political volatility."

ESG Considerations Are More Relevant Than Ever in a Covid-19 World

The Covid-19 pandemic has tested the institutional quality and basic social infrastructure of every country in the world. Twin health and economic crises will likely exacerbate already worrying trends of income and wealth inequality. Citizens from Latin America to Africa will press their governments even harder to address corruption, broaden the social safety net, and improve basic public services like healthcare and education. Countries that are prone to natural disasters made more severe by climate change now have diminished fiscal buffers to deal with future crises. **As a result, we believe properly assessing ESG risks is more crucial than ever to delivering strong risk-adjusted returns in 2021 and beyond.**

It is both intuitive and statistically verifiable that a country that enjoys a higher standard of living, lower levels of income and wealth inequality, access to widespread and affordable healthcare and education is less prone to both economic and political volatility. This can help translate into lower credit risk and more sustainable investment returns. It should come as no surprise that countries like South Africa and Brazil, which have suffered from high levels of corruption and inequality, have also struggled during the pandemic and lagged many EMBI peers (see figures 1 and 2).

Several countries in Latin America face key elections or referendum votes this year, some of which may be pivotal for the performance of their sovereign bonds. Countries from Chile to Ecuador faced rising grass-roots pressure even prior to 2020 to revamp social contracts by addressing a legacy of deep wealth inequality and unequal access to basic social services. Although Chile's referendum will be a major event for the country, we feel it is unlikely to threaten the government's willingness to pay creditors. Whereas questions linger about Ecuador's commitment to bondholders even after having restructured debts as recently as last year. These striking differences can at least in part be explained by Chile's relatively robust institutional quality and higher level of overall per capital wealth compared with Ecuador. These "soft" indicators of social and governance risk can be the difference between chaotic political revolution and a peaceful resolution of economic grievances.

The direction of travel also matters. Although Cote d'Ivoire remains relatively poor and scores at the low end of many governance and human development metrics, the country has made notable progress since a period of political instability in 2010-11. Whereas Turkey has seen a marked erosion in rule of law and independence of key institutions like the central bank since a coup attempt in 2016. Cote d'Ivoire has enjoyed ratings upgrades in recent years, while Turkey has fallen further into below investment grade territory. Cote d'Ivoire's sovereign bonds outperformed Turkey's during the pandemic and have been much less volatile despite being at a similar point in the ratings

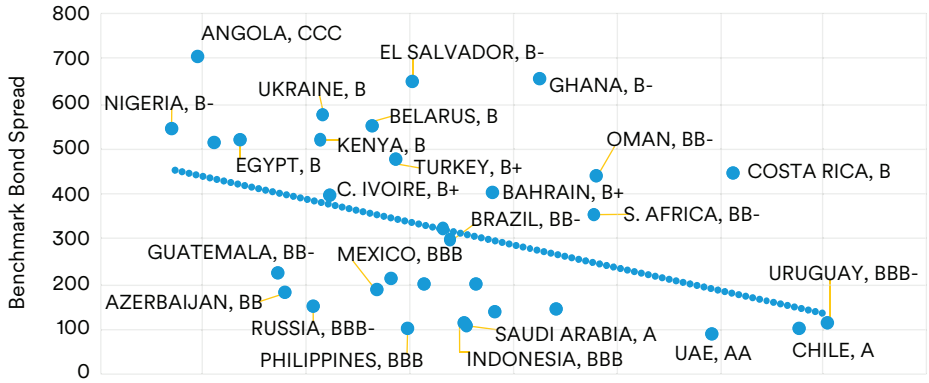
scale. The volatility of Turkish assets has risen recently due to personnel changes at the central bank, highlighting the importance of good governance to investors.

Many countries, especially those in the Caribbean, face rising risk of hurricanes due to climate change that could further damage crucial tourism infrastructure after the sector was decimated by the pandemic. Brazil has received unwanted attention from around the world for failing to contain deforestation in the Amazon. Institutional investors are increasingly advocating for more climate-friendly policies from both governments and companies. The evolution of ESG-focused investing from niche to mainstream could lead to increasing price differentiation between climate laggards and vanguards.

We expect more issuance of sustainability-linked bonds by EM issuers in green, social and other sustainable frameworks tied to the UN Sustainable Development Goals. Many EM sovereigns have increased issuance under these formats in order to meet their own development goals as well as to diversify their investor base and potentially access cheaper financing.

We believe countries with solid governance and human development are better placed to navigate the current challenging environment. Countries less prone to event risk like floods and forest fires are also less likely to suffer political and economic volatility. As a result, we believe a deep understanding of current and evolving ESG risks will remain an important element in delivering superior risk-adjusted returns amid the still uncertain global outlook.

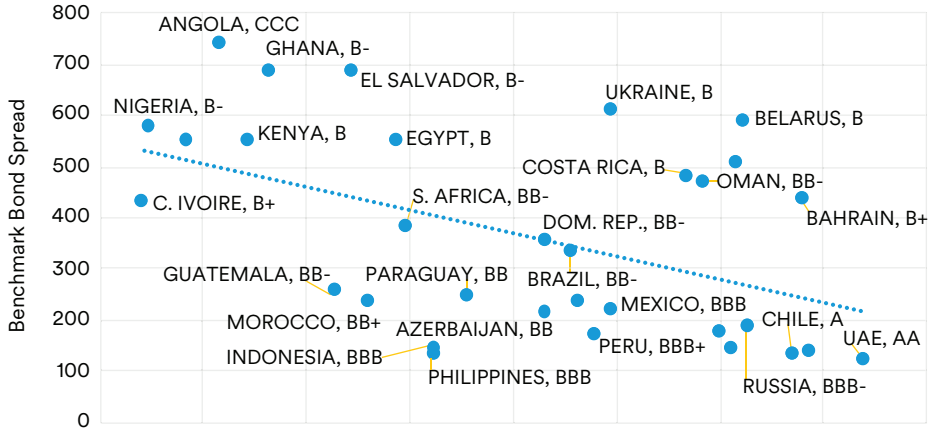
Figure 1 | Better Governance Correlates with Tighter Bond Spreads and Higher Credit Ratings



WB Governance Indicator: Improves from Left to Right
Comprises political stability, government effectiveness, rule of law, control of corruption, regulatory quality, voice & accountability

Source: United Nations, Fitch, Bloomberg, MIM
As of March 9, 2021.

Figure 2 | We Can See a Similar Relationship with Indicators of Social Development



UN Human Development Index: Improves from Left to Right
Comprises life expectancy, years of schooling, GNI per cap PPP

Source: World Bank, Fitch, Bloomberg, MIM
As of March 9, 2021.

Doug Renwick
Emerging Markets
Sovereign Research Analyst
Europe
Based in London

"The redirection of USD supply into EUR raises some challenges for EMBI investors but also presents opportunities".

Euro Issuance: Adding a Dimension to Relative Value

Euro denominated securities represent a gradually rising share of EM hard-currency sovereign debt, accounting for 18% of total outstanding, up from 13% in 2013.[1] In 2020, EUR supply hit a record USD58bn, or 25% of EM hard-currency sovereign issuance[2] While USD will remain dominant in the EMD space, we expect EUR to make further inroads based on a continuation of several broad drivers.

Eurozone real money accounts, which form the bulk of the € EMBI investor base,[3] have been rotating out of domestic and into foreign assets (notably EM)[4] in recent years driven by the low-rate environment and compression in eurozone spreads. This inclination toward Emerging Markets debt, which is likely to persist, reflects growing familiarity and comfort with the asset class.

Investors naturally have a home bias, but also a "close-to-home" bias when it comes to EM. This has supported financing conditions for CEE sovereigns, who are now skewed heavily towards EUR issuance, half of them exclusively so. The region accounts for 49% of the € EMBIG Div. index, versus just 5% of the $ EMBIG Div (Source: JP Morgan) (see figures 1 and 2).

Figure 1 | EMBI Global Diversified

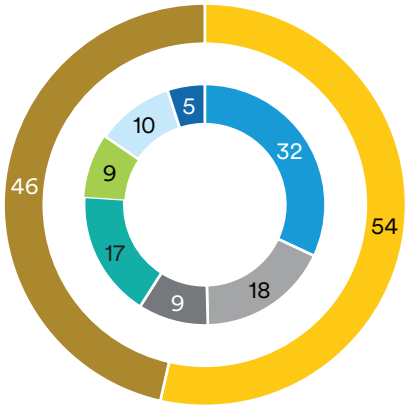
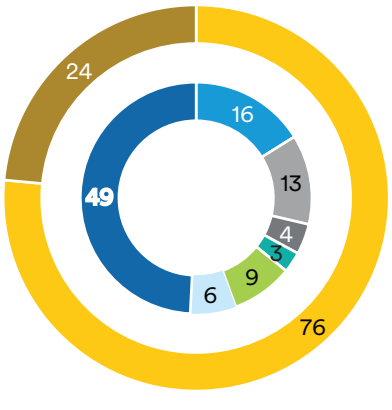


Figure 2 | Euro EMBI Global Diversified



Source: J.P. Morgan (figures are % of total, end-Jan. 2021)

However, EUR issuance is increasingly a global story. There are now 38 EM sovereigns in the EUR market, accounting for 73% of investment-grade EM sovereigns and 30% of sub-IG. (Source: JP Morgan, as of 12/2020). The EUR market is an attractive source of diversification for non-European EM issuers like Mexico, Indonesia and China in terms of investor base (the overlap with

the USD market is relatively small); fx risk management; tenor (non-standard tenors are common); and hedging against the risk of tighter conditions in USD market, à la 2013 taper tantrum.[5]

Issuers and investors are also driven by more tactical considerations, notably swings in the cross-currency swap basis, so there will be fat and lean years for EUR issuance. However, the EUR market may benefit from a virtuous circle: as it grows, drawbacks such as lower liquidity and lack of familiarity (on the part of both global issuers and eurozone investors) become less of a problem. We may, for example, see an increased number of sub-IG sovereign issuers issuing in EUR in the coming years.

The redirection of USD supply into EUR raises some challenges for EMBI investors (notably the scarcity of dollar-issuance out of the CEE region) but also presents opportunities. With careful security selection, EUR issues swapped into dollars can offer significant pickup to the USD curve. As demonstrated in figure 3, historical pricing relationships can be monitored to determine the relative attractiveness of EM sovereign issuers in both currencies. For example, Romania's 2050 EUR-denominated bond (swapped into USD) offers a 153bp spread enhancement over the 2051 USD-denominated security. Another consideration for security selection is the difference in movement of the underlying risk-free curves. The Treasury curve often moves with more volatility and thus EUR-denominated exposures can act defensively against this.

Figure 3 | EUR to USD Cross Market Relative Value Analysis

Bond selection			Amt. outstanding		Price		Asset swap spread			Adjusted differential (EUR - USD)			
Ticker	EUR bond	USD bond	EUR	USD	EUR	USD	EUR	EUR (swapped)	USD	Current (bp)	6m high (bp)	6m low (bp)	6m Z-score
POLAND	07/08/2026	06/04/2026	1,000	1,750	107.6	112.3	12	29	10	19	19	-13	2.3
IVYCST	10/17/2031	06/15/2033	850	1,250	109.8	109.4	487	553	363	190	195	158	1.9
UKRAIN	01/27/2030	01/11/2028	1,250	1,600	94.0	120.4	507	565	575	-10	-10	-103	1.6
EGYPT	11/04/2031	01/15/2032	1,250	1,000	106.0	105.0	571	639	497	142	152	108	1.2
SENEGL	03/13/2028	05/23/2033	1,000	1,100	106.2	108.5	399	440	388	52	62	29	1.0
ROMANI	01/28/2050	02/14/2051	1,600	2,000	108.5	99.2	265	353	200	153	168	106	0.9
TURKEY	02/16/2026	05/02/2025	1,500	3,250	108.8	111.9	382	411	379	32	54	-10	0.4
REPHUN	10/22/2025	03/25/2024	1,000	1,851	106.0	114.1	38	56	47	9	19	1	-0.1
CHILE	05/27/2030	01/31/2031	1,491	1,458	113.3	103.3	55	80	68	12	30	0	-0.7
MEX	02/23/2031	04/16/2030	1,700	2,259	118.2	103.7	159	193	145	48	85	36	-1.9
INDON	10/30/2031	10/15/2030	1,000	1,650	103.3	111.6	107	139	113	25	71	21	-2.0

Source: Bloomberg; data as of Feb. 25, 2021

Endnotes

1 Taking the total value of the undiversified EMBIG and Euro EMBIG indices as proxy for market size ($1,334bn and €244bn respectively at end-Jan. 2021)

2 J.P. Morgan, *EM Sovereign Cross-Currency Analytics Report*, Jan. 2021

3 Dedicated € EMBI mandates account for < 5% of total index value

4 DNB Working Paper No. 676, *Global and local currency effects on euro area investment in emerging market bonds*, Mar. 2020

5 World Bank, *Why are more sovereigns issuing in Euros?* Dec. 2017

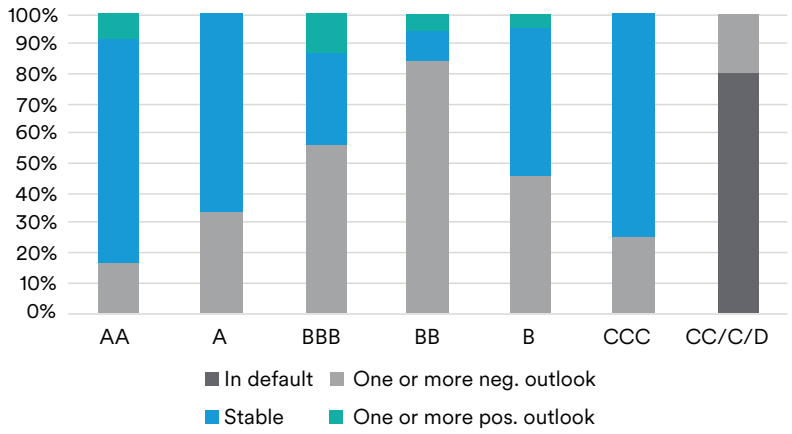
David Heslam
Head of MIM's Global Sovereign Strategy Team
Based in London

"The even sharper rise in debt levels within developed markets means that the pandemic is not an EM-specific shock, which is likely to allow the agencies to show some patience and assess how the overall growth and debt dynamic situation evolves."

EM sovereign ratings: Navigating Higher Debt in a Pandemic World—Is EM Set for a Wave of Sovereign Downgrades and Defaults?

The global pandemic has resulted in sharply higher budget deficits and debt levels across Emerging Markets. Last year saw five sovereign defaults, compared with an annual average of 1.3 over the past two decades.[1] Almost half of rated EM sovereigns carry a negative outlook from at least one of the three main rating agencies (compared with under a third in Dec. 2019), while just one in 20 has a positive outlook (see figure 1) (Source: Bloomberg, February 2021). So how vulnerable are EM ratings? Of the many factors the agencies look at in their assessments, we highlight three that are especially relevant in the current context.

Figure 1 | EM Ratings by Outlook



Source: Moody's, S&P, Fitch; MIM calculations; data as of Mar. 8, 2021

1. **Key fiscal ratios such as debt/GDP** remain important, but credit ratings are relative, so these metrics will be looked at with reference to peer medians. The collapse in global demand and cost of COVID-support measures have worsened fiscal metrics across the sovereign universe; in fact, EM fiscal ratios have deteriorated by less than those of their DM peers on average.[2] That said, there is a large dispersion within EM (debt/GDP rose 20pp or more in 14 sovereigns) which partly explains upfront rating downgrades to countries such as South Africa.
2. **Financing conditions** for both market and official sector borrowing have generally been supportive through this crisis and relatively few EMs are facing hard financing constraints. Sharply higher U.S. Treasury yields would challenge this narrative but, despite the recent repricing of rates, we expect borrowing costs for EMs to remain moderate by historical comparison.

3. **Policy credibility** varies considerably across even similarly rated EMs, but it has generally improved since previous crises. For example, over a dozen EM central banks engaged in QE for the first time to stabilize domestic markets at the height of the crisis, demonstrating the flexibility and resilience afforded by a credible policy framework. On rare occasions, a successful EM response to a crisis can even lead agencies to positively reassess the assumptions underpinning their ratings.

Factors such as these can buy governments time, postponing the moment of reckoning for a rating, but they generally do not eliminate the need to make a fiscal adjustment. Over the next year or so, potential fallen angels like Colombia, India, Romania and Uruguay will need to show credible fiscal consolidation plans to lower the risk of a sub-IG rating. Similarly, Brazil and South Africa (both BB-) risk falling to the single-B category if they don't make fiscal adjustments of their own.

We do not expect a sharp rise in distress or defaults of large sovereign market borrowers this year. Rather we think that severe credit events will be concentrated in low-income frontier markets, predominately involving the restructuring of debt owed to official creditors. Frontier markets in particular would benefit from initiatives to provide additional liquidity from the IMF, as well as the G20 Debt Service Suspension Initiative, supporting their eventual recovery from the crisis.

Endnotes

[1] 2020 sovereign defaults: Argentina, Ecuador, Lebanon, Suriname and Zambia. Historical data: Moody's, Sovereign default and recovery rates, 1983-2019, May 2020

[2] In 2020, deficit/GDP and debt/GDP rose on average 6pp and 11pp, respectively, across EM sovereigns, compared with 9pp and 14pp for the average DM.

Felipe Perigo
Emerging Markets
Sovereign Research Analyst
Latin America
Based in Santiago

"We expect that future restructurings will be more complicated and take longer, ultimately impacting investor perceptions of exit yield and recovery long before a sovereign has defaulted."

The Future of Sovereign Restructurings: Recent Lessons From Argentina and Ecuador

During the Covid-19 pandemic of 2020, sovereign debt increased in virtually every country in the world, as fiscal deficits ballooned amid extraordinary spending and collapsing revenues. Higher debt is a legacy of the pandemic and will likely beget more sovereign defaults and restructurings over the coming decade. Since defaulted issuers do not fall out of the index, EMBI investors cannot simply ignore these countries as they restructure. Instead, we believe it is critical to understand how the restructuring process itself will influence recovery value.

There is a long history of default and restructuring in EM sovereign debt, with periods of intensity in the early 80's and then '97-05. As the most recent cycle aged and abruptly ended in 2020 with the covid pandemic, we have once again observed a sharp upturn in EM sovereign defaults. A longer essay would focus on the qualitative and quantitative factors that lead to defaults. Here we focus on the restructuring process itself and review the details of recently completed restructurings in Argentina and Ecuador, which we believe will serve as a guide for restructurings to come.

Achieving debt sustainability is the goal of any restructuring and requires a comprehensive evaluation of a country's fiscal situation, long-term growth prospects, debt composition by currency and lender type, maturity profile and expected access to funding sources. Here, the IMF plays an important role. For Argentina, the Fund issued a technical assistance report with parameters that guided the restructuring process. The report argued that debt sustainability could be restored by reducing gross financing needs (GFN) to 5% of GDP (from ~13%) and the debt/GDP ratio to 40% (from ~85%) over 10 years. This would require cash flow relief from the restructuring of $50-85bn, as estimated by the IMF.

Unlike Argentina, Ecuador did have a formal IMF program in place, which helped legitimize the negotiations. The EFF program report outlined an approach for achieving debt sustainability very similar to the one Argentina received: $18bn cash flow relief and similar long-term targets (GFN ~6% and D/GDP ~40%).

Once the parameters for debt sustainability were defined, negotiation followed to determine the structure of the exchange for new debt securities. Because cash flow relief was the biggest priority for both Argentina and Ecuador, the proposed exchanges focused on maturity extensions and coupon reductions, while applying very small principal haircuts. In both countries the government made a first offer and later made concessions

based on investor feedback. These focused on improving NPV by adjusting coupons (higher), shortening maturities and issuing a PDI bond (past due interest).

Of relevance, these are among the first restructurings to play out with collective action clauses (CACs), an embedded "drag along" feature incorporated in bond indentures since the early 2000's. Ultimately, the government's goal is to complete its restructuring without any potential for future litigation by reaching the CAC threshold and "dragging" the remaining creditors. Preferential treatment was given to securities with more investor-friendly CACs (Argentina's "exchange bonds" and two of Ecuador's bonds). Except for these cases, the exchange offers were structured to equalize NPVs across securities.

We expect many aspects of Argentina and Ecuador's 2020 restructurings to be instructive for future sovereign bond restructurings. For instance, the role of the IMF in setting parameters for achieving debt sustainability, the focus on cash flow relief over principal haircuts, preferential treatment given to certain securities with unique features or blocking positions, and the usage of CACs to prevent future litigation. Looking toward to the next round of restructurings in a post-pandemic world, including recently defaulted Zambia and Lebanon, we acknowledge the hefty increase in financing provisions from "super senior" official sector institutions (*see our broader discussion in Official Support in a Post Pandemic World*). The combination of these programs along with market borrowing and non-Paris Club bilateral lending (e.g. from China or GCC countries) will likely result in more complicated restructuring deals in the future, given the number of parties involved and the quantity of debt to be restructured. We expect that more complicated restructurings will take more time to reach agreement, which will ultimately impact investor perceptions of exit yield and recovery long before a sovereign has defaulted.

Emerging Markets Bond Trading 2021: A Trader's Perspective

Christopher Magnus
Emerging Markets
High Yield Trader
Based in USA

"We estimate around 15-20% of EM trading volumes occur over electronic trading platforms (ECN's) which have become a valuable tool within the trader's toolbox."

Michael De Fazio
Emerging Markets
Investment Grade Trader
Based in USA

"We expect the EM new issue market to be driven by sovereign issuance along with the continuation of liability management and sustainable bonds (ESG)."

The Emerging Market (EM) fixed income market continues to grow in both asset size and number of issuers/issues while trading volumes are steadily increasing as well. Liquidity remains situational across the various regions, sectors and rating buckets but in normal market environments we tend to see a pattern of higher liquidity in larger and recently issued bonds. We observe less relative liquidity in corporate bonds, as they are often "tucked away" in investors' portfolios and only emerge when there is a credit event that impacts valuations.

Several trends have been playing out that affect the EM fixed income liquidity environment in varying ways. First, traditional counterparties are more sensitive about offering liquidity since there is less balance sheet available post the Global Financial Crisis. Nonetheless, these counterparties still take the lion's share of trading volumes driven by larger sized or thematic trades. Second, we estimate around 15-20% of EM trading volumes occur over electronic trading platforms (ECN's) which have become a valuable tool within the trader's toolbox. However, these orders tend to be on the smaller side as larger orders shown to multiple participants could be disruptive to the market. As electronic platforms evolve, the number of end-to-end users (buy side to buy side) is growing, but most trades still face Wall Street. Third, Exchange Traded Funds (ETF) have grown over the years and their flows often impact pricing since they are willing to trade at aggressive levels for liquidity purposes. This creates opportunities for the disciplined investor to capture the other side of this ETF driven trade.

We expect the EM new issue market to be driven by sovereign issuance along with the continuation of liability management and sustainable bonds (ESG). Issuers will continue to try and take advantage of historically low yields to refinance into cheaper, longer bonds. A typical operation is a tender of one or more near-dated tenors (<5 years to maturity) and extension into a longer "on the run" security. This option has been exercised regularly by sovereigns and corporates independent of credit rating. Many issuers are using the excess market liquidity to extend maturities beyond the typical 30-year "long bond" to 40, 50 and even 100-year maturities at marginal incremental cost. Meanwhile, a dramatic increase in ESG focused funds has created a strong demand for sustainable bonds. Issuers taking advantage of this trend made up ~ 4% of total issuance in 2019, rising to ~7% in 2020 and ~15% in the first 6 weeks of 2021 (Source: Bond Radar).

While many EM trading themes are impactful to both the IG and HY portions of the market, some factors are more relevant to each individual quality bucket:

- In general, the *investment grade* universe enjoys both greater liquidity and a broader investment base. SEC-registered sovereign bonds are included in the Bloomberg Barclays index suite and are particularly important for crossover managers out the curve while Asian demand has remained robust given the region's focus on a combination of higher quality assets as well as insurance demand from areas like Taiwan. Combining these factors with the surge in issuance from investment grade sovereigns in the GCC, IG supply remains supported across multiple different investor bases albeit to varying degrees depending on market volatility.
- The *high yield* space is dramatically different. There is not the same amount of buy-in from the U.S. investment community as it remains a small part of the more widely followed benchmarks and therefore, remains dominated by dedicated EMBI and CEMBI portfolios or even local private banking players. Interestingly, the high yield space has continued to develop despite the limited crossover participation with lower rated sovereigns often issuing 30-year debt and some now issuing 40+ year maturities, which is not a feature of the domestic high yield market. This phenomenon allows investors to diversify portfolios from both a risk as well as duration standpoint while allowing corporates to further extend their maturity profiles given the willingness to lend longer down the quality spectrum.

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For more information, visit: investments.metlife.com/public-fixed-income

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[2] As of December 31, 2020. Includes all public fixed income assets managed by MIM.

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MetLife Investment Management

Appendix

This appendix contains details for the preceding charts and provides additional information for greater accessibility.

Bonded and Chinese debt have increased the most across frontier markets

Note:

- Source: World Bank, J.P. Morgan
- DSSI countries
- The combined total bars rise gradually from 2014 to 2016 and then slightly faster from 2016 to 2018.

Market	Year 2014	Year 2015	Year 2016	Year 2017	Year 2018
Official multilateral	166.4	173.3	181.4	207.6	219.6
Official bilateral	62.9	63.9	66.1	72.7	76.0
Non-official	26.6	27.2	26.7	30.7	31.3
China	53.7	61.5	78.6	91.2	101.7
Bondholders	23.6	30.1	32.0	44.1	60.4
Total	333.2	356.0	384.8	446.3	489.1
Relative Size of Totals	0.68	0.73	0.79	0.91	1.00

EMX exports by destination

Note:

- All values are approximate.
- Source: J.P. Morgan
- The line for “Destination: To U.S.” rises from 1996 to 2000 and then falls from 2000 to 2010. After 2010 the line levels off.
- The line for “Destination: To CN” rises at a moderately steady rate from 1996 to 2018.
- The line for “Destination: To Euro Area” generally falls from 1996 to 2018, with a couple of slight rises in 1998 and 2008.

Year	Destination: To U.S.	Destination: To CN	Destination: To Euro Area
1996	9.8%	4.3%	9.8%
1998	11.4%	4.1%	10.5%
2000	12.5%	4.9%	8.8%
2002	11.0%	6.0%	8.1%
2004	8.9%	6.8%	8.4%
2006	7.9%	7.0%	8.5%
2008	7.1%	6.9%	9.5%
2010	5.7%	9.3%	7.1%
2012	5.5%	10.0%	7.0%
2014	5.6%	10.4%	7.4%
2016	5.6%	10.5%	6.0%
2018	5.4%	12.3%	6.3%

Better Governance Correlates with Tighter Bond Spreads and Higher Credit Ratings

Note:

- Values as of March 9, 2021
- All values are approximate.
- Source: United Nations, Fitch, Bloomberg, MIM
- The WB Governance Indicator on the x axis is unitless and shows the relative position on the graph of countries to each other. The indicator improves the further a country is to the right on the graph. The table below gives relative values for the indicator, between 0 (worst) and 8 (best). The indicator comprises political stability, government effectiveness, rule of law, control of corruption, regulatory quality, voice & accountability.
- A trend line is shown from Benchmark Bond Spread 460, WB Governance Indicator 0.7 to Benchmark Bond Spread 140, WB Governance Indicator 7.0.

Country	Benchmark Bond Spread	WB Governance Indicator (Higher relative values are better)
ANGOLA, CCC	705	0.9
AZERBAIJAN, BB	180	1.8
BAHRAIN, B+	405	3.8
BELARUS, B	555	2.6
BRAZIL, BB-	295	3.4
C. IVOIRE, B+	395	2.2
CHILE, A	105	6.7
COSTA RICA, B	450	6.2
EGYPT, B	525	1.4
EL SALVADOR, B-	655	3.1
GHANA, B-	660	4.3
GUATEMALA, BB-	230	1.7
INDONESIA, BBB	125	3.6
KENYA, B.	525	2.2
MEXICO, BBB	190	2.7
NIGERIA, B-	545	0.7
OMAN, BB-	450	4.8
PHILIPPINES, BBB	105	3.0
RUSSIA, BBB-	160	2.1
S. AFRICA, BB-	355	4.8
SAUDI ARABIA, A	110	3.6
TURKEY, B+	475	2.9
UAE, AA	90	5.9
UKRAINE, B	575	2.2
URUGUAY, BBB-	120	7.1

We Can See a Similar Relationship with Indicators of Social Development

Note:

- Values as of March 9, 2021
- All values are approximate.
- Source: World Bank, Fitch, Bloomberg, MIM
- The UN Human Development Index on the x axis is unitless and shows the relative position on the graph of countries to each other. The index improves the further a country is to the right on the graph. The table below gives relative values for the index, between 0 (worst) and 8 (best). The index comprises life expectancy, years of schooling, GNI per cap PPP.
- A trend line is shown from Benchmark Bond Spread 530, UN Human Development Index 0.4 to Benchmark Bond Spread 225, UN Human Development Index 7.4

Country	Benchmark Bond Spread	UN Human Development Index (Higher relative values are better)
ANGOLA, CCC	750	1.2
AZERBAIJAN, BB	225	4.3
BAHRAIN, B+	445	6.8
BELARUS, B	595	6.2
BRAZIL, BB-	340	4.6
C. IVOIRE, B+	440	0.4
CHILE, A	140	6.7
COSTA RICA, B	480	5.7
DOM. REP., BB-	355	4.3
EGYPT, B	560	2.8
EL SALVADOR, B-	690	2.4
GHANA, B-	690	1.6
GUATEMALA, BB-	260	2.3
INDONESIA, BBB	150	3.2
KENYA, B.	555	1.4
MEXICO, BBB	225	4.9
MOROCCO, BB+	240	2.6
NIGERIA, B-	575	0.4
OMAN, BB-	475	5.8
PARAGUAY, BB	250	3.6
PERU, BBB+	170	4.8
PHILIPPINES, BBB	140	3.2
RUSSIA, BBB-	185	6.3
S. AFRICA, BB-	380	2.9
UAE, AA	125	7.4
UKRAINE, B	620	4.9

EM Ratings by Outlook

Note:

- All values are approximate.
- Source: Moody's, S&P, Fitch; MIM calculations
- Data as of Mar. 8, 2021

Rating	In default	Stable	One or more neg. outlook	One or more pos. outlook
AA	0%	75%	14%	9%
A	0%	67%	33%	0%
BBB	0%	31%	56%	13%
BB	0%	10%	83%	6%
B	0%	49%	46%	5%
CCC	0%	75%	25%	0%
CC/CD	80%	0%	20%	0%