UBS

For marketing purposes
For professional / qualified / institutional investors

There is light at the end of the tunnel

Emerging markets fixed income – Q4 2022
UBS Asset Management

Emerging Markets Fixed Income
Q4 2022 review and Q1 2023 outlook

Contents

Authors
Emerging Market Fixed Income Team

The views expressed are a general guide to the views of UBS Asset Management's Emerging Market Fixed Income team as of December 31, 2022.

Market overview

Emerging markets (EM) between lower global inflation and softer growth

- Emerging markets fixed income (EMFI) delivered positive total returns in Q4, reflecting lower inflation and heightened hopes of a more dovish global monetary policy stance.
- EM spreads and rates tightened substantially on cheap valuations and stability of global rates, while currencies (EMFX) rallied reflecting a weaker US dollar.
- EM asset performance during Q1 2023 should continue to be influenced by developed market (DM) monetary policy, global inflation and growth dynamics.

Emerging markets fixed income showed positive total returns across all asset classes during the fourth quarter of 2022. Sovereign EM credit spreads, as measured by the EMBIGD Index,[1] tightened by 107 basis points (bps). Meanwhile EM corporate credit spreads, as measured by the CEMBID Index,[2] tightened by 59 bps in Q4 to 453 bps and 335 bps, respectively, generating a 8.11% and 4.91% spread return (inclusive of carry).

The US Treasury (UST) yield curve had a volatile quarter, but in the end the 2-year,10-year and 30-year yields sold off by only 15 bps, 5 bps and 19 bps, respectively. The US Treasury (UST) yield moves did not detract from performance in Q4 as was the case in previous quarters. With these positive results in Q4, sovereign (corporate) spreads widened 84 bps (34 bps) in 2022, generating a spread return of -4.39% (-4.72%) during the year.

The massive sell-off in US Treasury yields in 2022 detracted substantially from performance. The 2-year, 10-year and 30-year yields sold off 369bps, 236bps and 206bps US, respectively. As a result, sovereign (corporate) total returns were -17.78% (-12.92%) in 2022.

Local EM fixed income returns (as measured by the GBIEMGD[3] Index) benefited from more stable global rates and a weaker US dollar. The high carry of local EM bonds was able to offset the modest widening in rates, at the end generating a positive total return of 8.45% in Q4. Furthermore, the significant weaking of the dollar benefited emerging market currencies, which returned 4.51% in Q4. In all, the local index returned a hefty 3.76% in Q4. With these positive returns in Q4, returns for the year were: -6.14% for EMFX, -5.91% for rates (inclusive of carry), and -11.69% for the local index (FX and rates together).

Q4 2022 returns[4]

	Total return	Spread return	US Treasury return
JP Morgan EMBI Global Diversified	8.11%	7.56%	0.51%
JP Morgan CEMBI Diversified	4.91%	4.18%	0.70%

	Total return	Currency return	Local debt return
JP Morgan GBI-EM Global Diversified	8.45%	4.51%	3.76%
JP Morgan ELMI+	7.26%	5.11%	2.04%

Source: Data as of 30 December 2022. Bloomberg Finance, JP Morgan.
Past performance is not a reliable indicator of future results.

2022 returns[4]

	Total return	Spread return	US treasury return
JP Morgan EMBI Global Diversified	-17.78%	-4.39%	-14.01%
JP Morgan CEMBI Diversified	-12.92%	-4.72%	-8.61%

	Total return	Currency return	Local debt return
JP Morgan GBI-EM Global Diversified	-11.69%	-6.14%	-5.91%
JP Morgan ELMI+	-7.14%	-6.22%	-0.97%

Source: Data as of December 30, 2022. Bloomberg Finance, JP Morgan.
Past performance is not a guide to future results.

1 As measured by the JP Morgan Emerging Markets Bond Index Global Diversified
2 As measured by the JP Morgan Corporate Emerging Bond Index Global Diversified
3 As measured by the JP Morgan Global Bond Index Emerging Markets Global Diversified
4 EMBI = Emerging Markets Bond Index. CEMBI = Corporate Emerging Markets Bond Index. GBI-EM = Government Bond Index – Emerging Markets. ELMI = Emerging Local Markets Index. The table shows total returns of US dollar and local currency debt plus their return components. The US dollar debt return components: Spread return results from the yield difference between emerging markets debt and US treasuries and from spread movements. US treasury return results from US treasury yield movements. Local currency debt return components: Local debt return results from yield movements and coupons of the underlying bonds in local currency. Currency return results from exchange rate movements.

Negative net issuance continued supporting spreads despite outflows in Q4

Emerging markets debt issuance remained subdued in Q4, while supply continued to be led by investment grade credits. According to Bank of America, sovereign and corporate issuance in Q4 2022 reached USD28.4 billion and USD21.6 billion, respectively. Amortization and coupon payments reached USD27.1 billion for sovereigns and USD90.2 billion for corporates, leading to net negative supply in Q4 2022 of USD67.2bn.

For the full year, EM debt issuance reversed the trend of net new supply. According to Bank of America, sovereign and corporate issuance for the full year 2022 reached USD99.5 billion and USD202.8 billion, respectively. Amortization and coupon payments reached USD129.5 billion for sovereigns and USD394.2 billion for corporates, leading to net negative supply in 2022 of USD221.4bn.

This flow dynamic was very unusual, and it is unlikely to persist into 2023. The net negative supply helped offset the significant outflow experienced in 2022; this supported bond prices, particularly in investment grade (IG) space. IG names are better positioned to withstand such long lack of access to international capital markets, but high yield (HY) credits will probably have to regain access sooner rather than later to avoid payment difficulties in 2023.

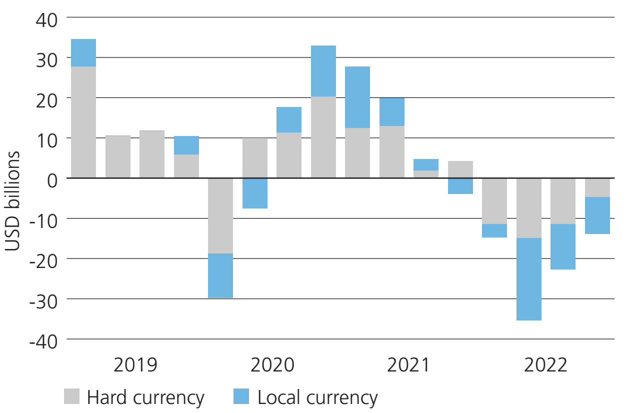
Global factors drove EM returns in Q4

October was volatile, reflecting worse than expected inflation prints in the Eurozone and the US and 75bps hikes in late October (ECB) and early November (Fed) to 2% and 4%, respectively. However, EM credit, rates and FX started to rally as soon as the better-than-expected October US inflation print was released on November 10th. Global markets started to price-in lower terminal rates and earlier rate cuts despite a consistently hawkish message from DM central banks and proceeded to rally strongly with a risk-on tone until mid-December. EMFI benefitted from easier global financial conditions, including lower global rates, a weaker US dollar and a newfound appetite for equities.

In mid-December, broadly-as-expected November inflation prints were released in the Eurozone and the US followed by 50bps hikes by the ECB and Fed to 2.5% and 4.5%. Both central banks repeated a hawkish message. The Fed emphasized that inflation was still too high (core inflation at +6%), and that the terminal rates were likely to be above 5% with low probability of cuts in 2023. Furthermore, on December 20th the central bank of Japan (BOJ) unexpectedly raised the cap on the 10-year bond yield to 0.5% from 0.25%, providing global support for higher global rates.

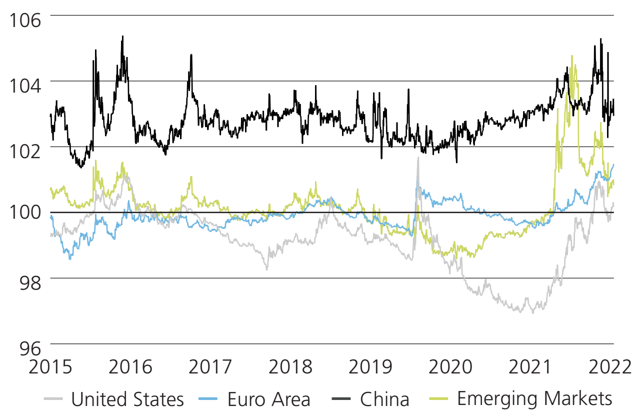
It appears that markets understood the message and started pricing in a scenario more in line with the relatively hawkish actions and communications from DM central banks. All in all, it was a volatile quarter: US Treasury 10-year bond yields started at 3.83%, sold off 41bps to 4.24% by end October, rallied 71bps to 3.43% until mid-December and sold off 44 bps to 3.87% until the end of the year. As such, they ended the year broadly unchanged. Equity markets followed a similar pattern.

Exhibit 1: Another negative quarterly flow (USD bn)



Source: JP Morgan. As of December 30, 2022

Exhibit 2: Easier financial conditions in Q4



Source: Goldman Sachs. As of December 30, 2022

Looking ahead: There is light at the end of the tunnel

As we start 2023, we think there are reasons to believe this year could be better than 2022 for EM assets, albeit with some volatility particularly in H1. We are focusing on the following factors for our assessment:

- Inflation and growth dynamics in developed markets that should determine the path that monetary policy will follow in 2023.
- China's financial and pandemic policies that would determine how supportive it could be for global growth and commodity prices in 2023.
- Geopolitical risks, including the Russia-Ukraine war and associated policies and sanctions (oil price caps among others).
- Enticing valuations in EM high yield credit, high yield rates and FX after the sell-off in 2022.

DM central banks hiking into a recession

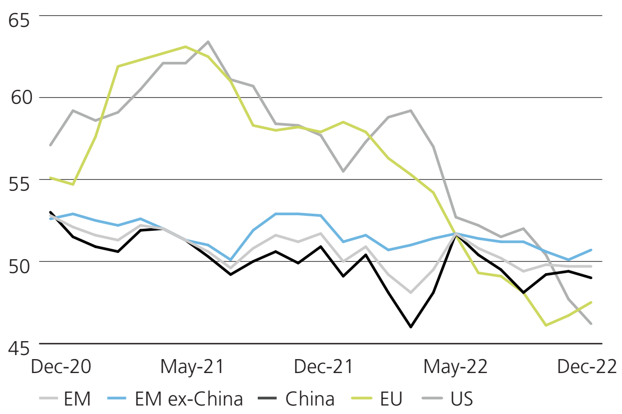
ISM and PMI data indicate the Eurozone and the US will most likely be in recession at some point in H1 2023. If this is the case, DM central banks will be hiking into recessions given the stubbornness of (particularly core) inflation in 2023 (see Juha Seppala's box on 2023 inflation for further details on our inflation views for 2023).

Higher rates, stubborn core inflation and lower or negative growth is not a combination that is likely to be conducive to positive returns in riskier asset classes like EM. However, there are several issues to consider on this regard.

First, it appears that DM inflation peaked in Q4 2022 and absent additional supply shocks it will continue to decline in 2023 – albeit not enough to get back to target by the end of the year. Second, DM central banks are likely to end their hiking cycles in Q1 2023 (we expect both the ECB and Fed to hike another 50bps to +5% and +3%, respectively) and then keep rates at those higher levels until sometime in late 2023 or early 2024.

Markets are already pricing-in those higher rates, which is positive as hikes would not come as a surprise. However, US markets remain very aggressive on their expectations on rate cuts in H2 2023 that may not happen at all (this is a risk that could lead to a repricing of the yield curve at some point in H1, particularly if inflation fails to decline quickly enough).

Exhibit 3: Global PMIs: Still weak across the board



Source: Macrobond. As of December 30, 2022

Third, it is yet not certain how hard would the recession in DM but consensus forecasts look benign. Consensus forecasts have the Eurozone contracting by 0.4% q/q in Q1 2023 and recovering for the rest of the year (+0.2%-+0.4% q/q/). Similar figures for the US are 0.0%, -0.7% and 0.0% in Q1, Q2 and Q3 2023.

Hence, if these projections prove accurate, the negative price effect (higher rates/inflation) should fade in Q1, while the negative income effect (lower growth) should not be that as detrimental. In all, after some volatility in Q1 2023 DM yields could remain stable once hikes are over, inflation is declining and growth is stabilizing in H2 2023. This could be quite beneficial for EMFI.

China is reopening but risks remain

China's economic growth continues to disappoint on weak domestic demand and strict Covid-19 driven lockdowns. At this stage, there is little visibility about any new fiscal or monetary package that could provide support to economic activity.

In mid-October, President Xi was appointed General Secretary of the China Communist party for a third term at the 20th Party Congress. The appointments to the seven-members Politburo Standing Committee (all seven, President Xi allies) and the twenty-four-members politburo (about 80% President Xi allies) as well as vast majorities in other instances (Central Secretariat, the Central Military Commission and the governance body of the People's Liberation Army) indicate that President Xi will have ample powers to implement his agenda in coming years. From the meetings it is evident that in the next five years the main goals will be to build a modern and sustainable socialist China with a big emphasis in national security and self-sufficiency (food and technology come to mind). Real estate was mentioned as a sector of importance, repeating that housing is for living, not speculation.

In mid-November, the People's Bank of China (PBoC) and China Banking and Insurance Regulatory Commission (CBIRC) jointly issued a notice to financial institutions offering a broad framework for the recovery of the sector. This is the most comprehensive announcement since the downturn in the sector started in early 2021. Furthermore, in late November the PBoC lowered the Required Reserve Ratio (RRR) by 25bps (releasing RMB 500bn in base money to the economy). This is the second 25bp cut in the year following the 25bp RRR cut in April 2022.

In mid-December it became clear that China was shifting away from lockdowns and adopting an opposite Covid strategy, emphasizing vaccination for the elderly and allowing internal and domestic movement. This reopening is likely to be bumpy as millions will likely get infected by Covid-19, but it indicates that the most important impediment for the recovery of domestic demand may be coming to an end at some point in H1 2023. Although we expect China to experience low cyclical growth (+2.5%) in 2022, we also envisage a cyclical recovery (+4.5-+5.0%) in 2023 on the back of the reopening and other supportive policies.

Stronger cyclical growth in China is likely to be supportive to EM as China is one of the three most important pillars driving global trade and growth (the other two being the US and the Eurozone) and a large consumer of commodities. We also note that the expected cyclical recovery of China in 2023 would be supportive of commodity prices and hence inflationary at the margin. As we have argued in the past however, China is a medium-income country with adverse demographics that has reached a degree of development which suggests lower growth in the medium to long term. We reckon that, as was the case with Japan and Korea in the past, China's annual growth will stabilize at around 3% over the next decade.

Russian oil price cap and potential supply restrictions in 2023

The Russian invasion of Ukraine continues to backfire on Putin. The latest efforts from the West to contain him and hit Russia's finances include a European prohibition to buy Russian oil (effective December 5th) and agreement to ban insurance services on boats transporting Russian oil. These measures have the potential of closing the 4 million barrels per day European market to Russia (its largest market).

Furthermore, in mid-December, the EU and the group of seven approved a US proposal to cap Russian oil prices at USD60 per barrel. The cap will be reviewed periodically, and if the price is below the cap, Russian oil can be traded, insured, and transported. In February 2023, Russian refined oil products (gasoline, etc.) will be included in the price cap. Russia has reacted negatively to the measures, even threatening to cut oil production and exports to push oil prices up and hurt oil importers in the West – particularly Europe.

Russia's finances are likely to be negatively affected by the above measures, particularly if they decide to cut production unilaterally. The effectiveness of the measures would be limited by the extent to which other large countries continue to import Russian oil at cheap prices (China and India in particular). One thing is for sure: the global oil market is no more, and oil prices will remain volatile until the net impact of the announcements are likely to be is better understood.

Oil prices are at level that is still supportive for EM oil exporters, but this is a risk we will follow closely in 2023 as several countries in EM would find their capacity to service debt impaired if oil and other commodity prices were to decline further.

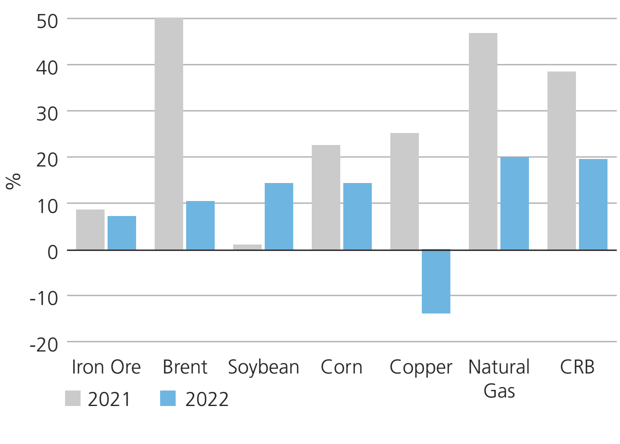
We remain cautious in Q1 but optimistic in 2023

EM asset prices behaved extremely well in Q4 considering the volatile global financial backdrop and uncertain macroeconomic environment.

As was the case throughout 2022, global factors are likely to remain the dominant force driving EM returns in Q1 2023. Hawkish central banks could face resistance from bond vigilantes who expect them to blink and not hike rates as aggressively as they have advertised and/or to cut rates before they have indicated they will do so. These forces could keep yield curves unhinged and volatile as happened in Q4 2022.

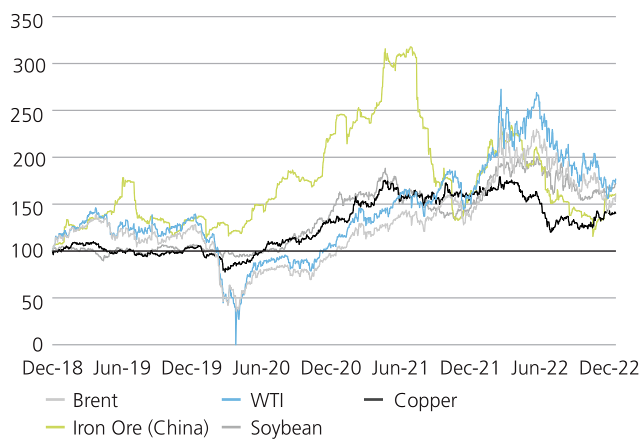
Another factor likely to affect EMFI is global equities (a proxy for risk appetite and an indication of growth strength through earnings dynamics). If bearish forecasters are right and equity markets experience a correction (given the expected recession and hefty valuations), EMFI will likely suffer on risk aversion and outflows.

Exhibit 4: 2022 YTD Commodities price change (%)



Source: Bloomberg. As of December 30, 2022

Exhibit 5: Commodity Prices (Index = 100 as of end Dec' 18)



Source: Bloomberg. As of December 30, 2022.

Finally, the USD continues to be highly negative correlated with EMFX returns, while US Treasury yields continue to be negatively correlated with rates and spread returns. As it was the case in 2022, we believe this will continue to be the case in Q1 2023 as DM central banks continue to hike rates and tighten financial conditions to reduce inflation even as their economies slow down and head towards recession.

However, as the year goes by and DM central banks stop hiking, inflation declines further and growth stabilizes (help by China in H2) we could see a strong recovery in EMFI, possibly fully reversing the losses experienced in 2022. EMFI high yielding rates are particularly interesting as large EM countries – including Brazil, Mexico, South Africa, India and Indonesia – now have high nominal rates and positive real rates in an environment of declining inflation and growth.

Similarly, the carry in EMFX has been reestablished and EMFX (as measured by ELMI+) is some 10% below its level in mid-2021 (before global inflation became a concern). Finally, high yield sovereign (corporate) credit spreads are still 250bps (70bps) over the level of the summer of 2021. We would not be surprised if we were to see double digit returns that could fully revert the losses experienced in 2022.

(Federico Kaune)

Sovereign debt

Value in high yield sovereign spreads

Sovereign credit posted a 8.11% total return in Q4 2022 (measured by the JP Morgan EMBIGD Index). Spreads tightened by 107 bps to 453 bps, generating an impressive 7.56% spread return inclusive of carry. Despite the significant volatility in US Treasury yields during Q4 (+3.4%-4.3%), yields ended up close to where they started, detracting little from total returns. For the year 2022, sovereign credit widened 84bps to 453 bps and returned -17.8% (-4.4% from spread widening inclusive of carry, and -14.0% from the massive US Treasury yield widening).

Investment grade tightened by a massive 57 bps to 139 bps in Q4. This was a remarkable performance given the variety and size of the global shocks facing the asset class. Lack of supply and a net repayment of bonded debt supported debt prices, but the rally in US Treasury yields and equity markets after the better-than-expected October/November inflation figures in DM, brought all riskier asset classes along. Performance for the year 2022 was also quite remarkable: IG sovereign spreads tightened 10 bps. At 139 bps, we believe investment grade spreads are back to fair value when measured relative to historical levels and relative to US IG.

High yield spreads also benefitted from lack of supply, but most importantly from the massive rally that followed the better-than-expected October/November inflation figures. As a result, HY spreads tightened by 169 bps to 822 bps in Q4. HY spreads widened 183 bps in 2022. Five consecutive quarters of spread widening, made EM HY cheap relative to historical levels and to competing asset classes, including US high yield. At 822 bps, HY spreads remain cheap to its own historic spread level and relative to US HY. This result holds after excluding HY sovereigns in default.

Spreads in high yielding and high beta South Saharan Africa (SSA) rallied the most (209 bps) to 818 bps in Q4. Together with the impact of slightly wider US yields, this resulted in a total return of 13.80%. Oil exporter Ghana and copper exporter Zambia were the only credits that showed negative total returns in Q4 (at -5.82% and -6.74% respectively). As expected, Ghana ended up defaulting on its external debt and announced a debt restructuring of both external and domestic debt. Zambia continue to struggle to reach restructuring terms that may be acceptable to bond holders. Prices of Ghana (Zambia) USD denominated bonds are trading in the mid-30s (mid-40s), below (in line with) recovery values in our view. In contrast, Ethiopian bonds tightened 892 bps returning 26.79% in Q4, as the political actors reached a broader and comprehensive agreement to contain tensions.

Eastern European spreads tightened 142 bps to 590 bps as the Russia-Ukraine war remained well contained and the risk of involving other countries dropped. Ukraine spreads widened 248 bps on further destruction of the country's infrastructure, but the rest of Europe tightened substantially on cheap valuation. In all, the total return in Eastern Europe (inclusive of the impact of slightly wider UST yields) was 8.68%, with Ukraine bonds up 1.18% from -28.01% in Q3.

Latin America spreads tightened 109 bps to 416 bps in Q4, resulting in a total return of 9.90%. High yielding Ecuador (+39.26%), Argentina (+37.62%), and El Salvador (+24.95%) tightened the most on increased global risk appetite and better political and macroeconomic prospects, at least in the near term. In contrast, Peru (+5.60%), Brazil (+3.61%), and Bolivia (+2.65%) lagged on election uncertainty or political upheaval. In Brazil, former president Lula defeated President Bolsonaro by a small margin and proceeded to negotiate a constitutional reform to increase fiscal expenditure. Investors still remember his fiscal profligacy when he was president in 2003-2010. In Peru, former president Castillo was ousted by congress after he tried to close it. In Bolivia, the government is confronting continuous push back from the opposition on an array of issues.

Spreads in the Middle East and North Africa (MENA) tightened 70 bps to 314 bps generating a total return (inclusive of the impact of UST yields) of 5.16%. As was the case in Q3, spreads in Gulf Cooperation Countries remained well behaved as they benefited from solid fundamentals and high energy prices, while high yield countries experienced significant spread tightening. Sadly, Lebanon remains mired in a deep crisis and its bonds stuck at 6 cents. However, Egypt (+19.88%) is making progress in stabilizing its economy after it depreciated its currency. Tunisia's (+16.32%) tourism sector keep recovering as the government made further progress with the International Monetary Fund. Finally, Iraq (+13.67%), agreed on a new government thus stabilizing its political situation.

Asia tightened 59 bps in Q4 after experiencing a large spread widening in Q3 on account of Pakistan and Sri-Lanka. Both countries remain in deep trouble but have made some progress towards stabilizing their economies. Sri Lanka's bond prices recovered to 32.5c from to 25c in September, a level that may be too high relative to its capacity to pay in the medium term. Pakistan's bond prices remain stuck at 35c as it struggles to stabilize its economy and secure further financing.

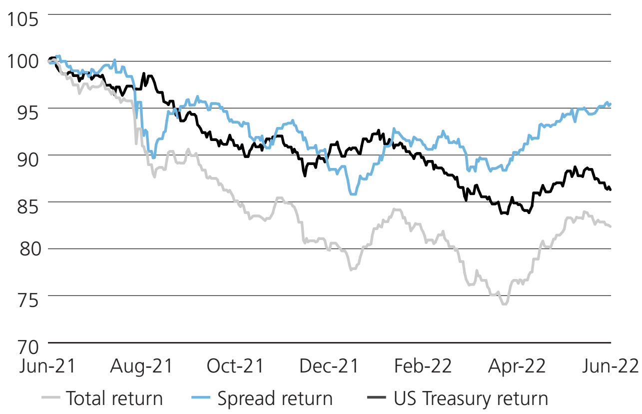
We believe emerging market sovereign debt will continue to be subject to the volatility of US Treasury yields and risks emanating from the decisions of DM central banks.

As we start 2023, it is not only higher and volatile DM rates that could affect EM credit, but also the slowdown in economic activity in Europe and the US. However, we have a more optimistic view for EM sovereign credit for the remainder of the year as we believe central banks will be done tightening, inflation will slow down, and growth will stabilize (with help from China particularly in H2 2023). At 453 bps over US Treasuries, EM spreads screen cheap on different metrics: relative to their fundamental capacity to pay (despite some countries being at risk of default), their historical levels and relative to competing asset classes (US IG and US HY in particular).

HY sovereigns are particularly cheap and can benefit further from global stability (as was the case in Q4 2022). We expect a volatile Q1 2023, but we also believe that as the year goes by, the cheap valuations will be realized as the global environment improves. We would not be surprised if EM sovereign credit stages a strong comeback in 2023, possibly erasing the losses experienced in 2022.

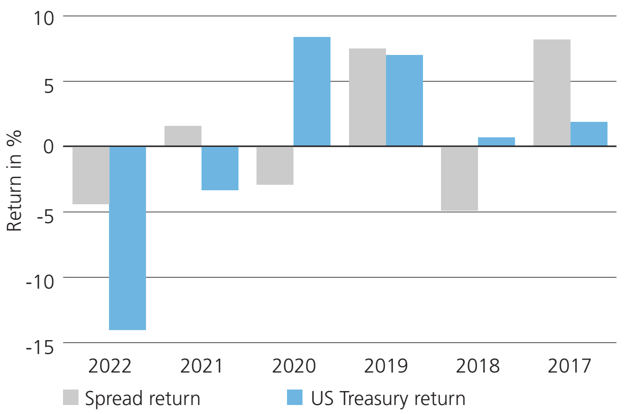
(Federico Kaune)

Exhibit 6: Sovereign credit returns by component
Rebalanced to 100 as of 30 December, 2021



Source: JP Morgan. As of December 30, 2022
Past performance is not a guide to future results.

Exhibit 7: Sovereign credit yearly returns over past 5 years



Source: JP Morgan. As of December 30, 2022
Past performance is not a guide to future results.

Corporate debt

The return of carry

EM corporate credit returns were positive in Q4 2022, resulting in returns of 4.91% (measured as JP Morgan CEMBI Diversified Index). Corporate credit spreads tightened by 59bps in Q4 2022 resulting in a spread return of 4.18%, while US Treasuries contributed 0.70%.

In Q4 2022 corporate bonds in Macau (+22.80%), Ukraine (+17.37%) and Morocco (+15.88%) provided the best returns while the largest underperformers were Philippines (-3.53%), Jamaica (-3.05%), and Singapore (+0.34%).

In a reversal from previous quarters, all sectors provided positive returns in Q4 2022. The top performing sectors were Pulp & Paper (+14.69%), Consumer (+11.23%) and Metals & Mining (+8.35%), while the worst performing sectors were Utilities (+2.85%), Financial (+2.70%), and Transport (+2.12%). In Q4 regional returns were led by Latin America (+7.98%) closely followed by Europe (7.61%), Africa (+5.61%) Asia (+4.06%), and Middle East (+2.42%).

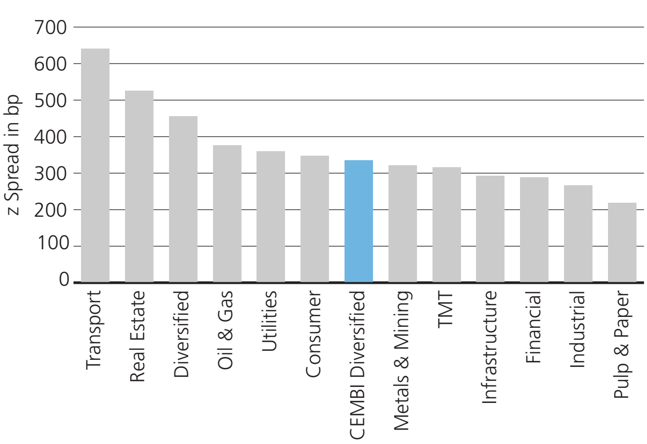
Returns in the first three quarters of 2022 reflected negative shocks. Risk sentiment attempted a rebound to start Q3, that sentiment was reversed by US Fed chair Jerome Powell's hawkish press conference after the Fed's annual Jackson Hole meetings. That negative risk sentiment continued into the Fed's November meeting where Powell signalled a slowdown in pace and size of rate hikes. While this was priced in markets, the confirmation of approaching the Fed's terminal rate and an end of rate hikes, markets shifted to a positive tone.

In late November China began adjusting policies toward Covid; pushing for the vaccination of elderly individuals and loosening policy. This resulted in a fast increase in Covid cases. This spike in cases is creating stress on the health care system and is expected to have a negative impact on China's growth as we close out 2022.

Financials: Higher interest rates are broadly supportive for net interest margin (NIM) expansion benefiting financials with faster asset repricing. A slowdown in growth leads us to prefer large high-quality franchises that have solid capital and liquidity buffers and conservative underwriting standards.

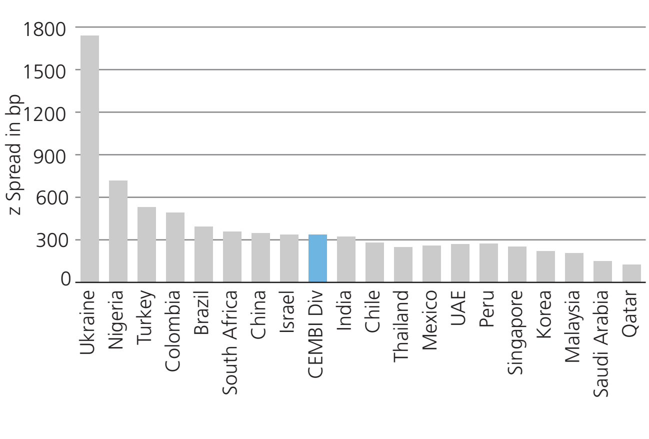
TMT (technology, media & telecom): This sector has a domestic-oriented nature as consumption of mobile, internet and TV subscription services remained resilient and decoupled from Russia/Ukraine war. The long-term investment case remains intact, with increased demand for mobile and fixed broadband traffic, supportive demographic outlook for EM, as well as comparatively lower penetration rates in EM relative to developed economies. While the backdrop remains supportive, this is reflected in prices, and we see selective upside.

Exhibit 8: Emerging market corporate spreads by sector



Source: JP Morgan. As of December 30, 2022
Diversified index, as of 30 December 2022. The z-spread, also known as the zero-volatility spread or the static spread, measures the spread over the benchmark zero coupon swap curve.

Exhibit 9: Emerging market corporate spreads by country



Source: JP Morgan. As of December 30, 2022
Diversified index, as of 30 December 2022. The z-spread, also known as the zero-volatility spread or the static spread, measures the spread over the benchmark zero coupon swap curve.

Oil & Gas: Russia's war in Ukraine disrupted traditional supply of Oil & Gas. The sector will face headwinds due to a slowdown in global economic activity, the long-term outlook remains positive given structural underinvestment in favor of energy alternatives (such as, biofuels, solar, wind).

Consumer: Within the consumer sector we are defensive cyclical names. We prefer packaged food, beverages and household products while remaining selective given higher costs of raw materials.

Metals & Mining: This sector was disrupted by Russia's war in Ukraine then further depressed given the slow growth in China. While our outlook for Metals & Mining remains broadly positive, lower growth outlook in US and Europe will create headwinds until we see sustained recovery in China.

While our outlook for returns in 2023 is positive we still expect uncertainty and volatility to remain high especially in the first half of 2023. With lower global growth we recommend avoiding credits with low to negative cash flow generation and tight liquidity buffers.

In this new higher interest rate environment, carry will have a larger impact on returns. Coupling a higher carry environment with possible positive growth surprise from China, EM corporate credit is in a prime position to capitalize on a better risk environment in 2023.

(David Michael)

Local currency debt

Regional rotation – we favor Latin America

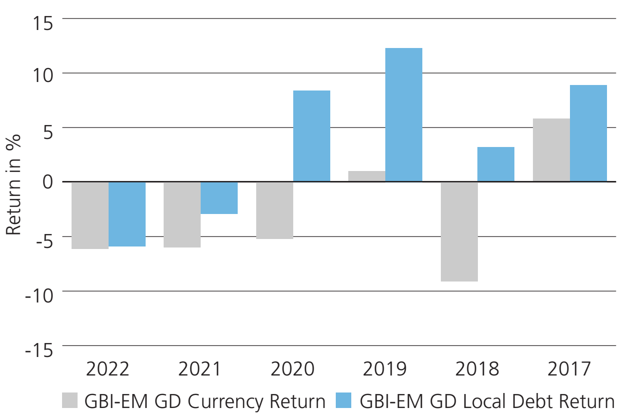
EM local debt (measured by JP Morgan GBI-EM Global Diversified index) gained 8.45% in Q4 bringing full-year return to -11.69%. The gains were evenly split between local bond returns and currencies, helped by the depreciation of the US dollar against G10 currencies in Q4. The main driver of local returns was the rally in US Treasuries as well as signs of peaking of inflation in Latin America.

The outlook for Q1 2023 continues to hang on the balance of slowing inflation and peaking interest rates versus the prospect of growth slowdown or even recession in the US and a probable recession in Europe. The abandoning of the zero-Covid policy in China and the rapid reopening should bode well for demand for EM exports, but the timing of the growth trough is uncertain. In addition, resurgent demand from China may push higher commodity prices and benefit exporter while creating inflationary pressure in China, APAC and beyond.

Latin American markets stand out as most promising given peaking inflation, high interest rates, attractive currency valuations and commodity-geared export baskets. In Brazil, the incoming Lula administration has been rocky as the transition team rushed to secure spending for the next year generating concerns about fiscal sustainability. Nevertheless, inflation is likely to continue to decline and real rates are high bolstering the currency and bonds. In Mexico, the central bank is close to the end of its hiking cycle – pacing the Fed. High interest rates and restrained fiscal policy during the pandemic has dampened currency volatility. Bond yields (particularly linkers) are attractive by historical standards. The markets in Chile and Colombia have started to stabilize in Q3 after the sharp bouts of volatility induced by populist policies. Colombian bonds look attractive if our projections for a plateau in inflation prove to be correct. Political risks are high in Peru where the attempted coup and removal of President Castillo have precipitated mass protests.

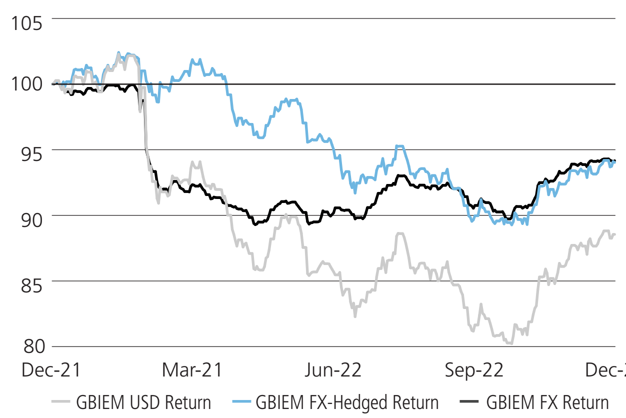
In EMEA, Russian assets were removed from indices at the end of March and are no longer investable due to sanctions. Turkey's government and central bank have lost control of inflation, with little hope for a return to more orthodox policies. Given the upcoming general election, the government is ramping up expansionary economic policies while tightening capital controls. Bond yields are out-of-line with fundamentals and are likely to rise after elections as the low-volatility regime may suddenly unravel. Egypt devalued its currency in March and November as the shocks of higher oil and food prices were severe and led to portfolio flight. The outlook for the Egyptian pound is still uncertain because external accounts remain unbalanced. South African growth and fiscal balance have improved earlier on significant gains in the terms of trade; however, the best trade windfall is behind us. In addition, political risks are on the rise ahead of the 2024 elections when the ruling ANC is slated to lose majority in parliament.

Exhibit 10: EM local debt yearly returns over past 5 years



Source: JP Morgan. As of December 30, 2022
Past performance is not a guide to future results

Exhibit 11: EM local debt total returns
(rebalanced to 100 at the start of the period)



Source: JP Morgan. As of December 30, 2022
The graph shows the total return of JP Morgan GBI-EM Gl12obal Diversified and its components, local debt return with FX hedged into US dollar and currency returns. Local debt return results from yield movements and coupons of the underlying bonds in local currency. Currency return results from exchange rate movements and carry.
Past performance is not a guide to future results.

Central Europe is suffering the brunt of the Russian war in Ukraine, outside the combatants. The volatility in rates has been extremely high. The outlook will depend on the path of the conflict and the degree of the recession in Europe. Inflation is still high pressured by energy prices, influx of refugees from Ukraine and earlier stimulus and recovery from Covid. Central banks, however, have raised rates and the yield curves have partially adjusted. Even though central banks have ended rate hikes we continue to see upside risk to bond yields in the region as additional shocks are likely. In addition, EU transfers are at risk in Poland and Hungary as these countries are reneging of rule-of-law commitments.

The APAC medium-term outlook has brightened after the end of zero-Covid in China and the recovery in the CNY. The timing of growth recovery in China is uncertain and could be the story for Q2 rather than Q1 of next year. However, once growth picks up, there could be inflationary side effects both in China and in the region strongly integrated in the Chinese supply chains. Thailand and other ASEAN countries may start seeing return Chinese tourists. Inflation has been gradually increasing in Asia, putting pressure on the low-yielding bonds across the region. In addition, the relaxing of the long-standing yield-curve control by the Bank of Japan makes us cautious on the bond markets.

(Igor Arsenin)

EM inflation in 2023: Back to Earth, slowly

In our Q1 2022 EM Fixed Income Quarterly, Bye Bye Globalization, Hello Stagflation, one of the box-out sections was titled "Inflation is here to stay." Given that it now looks like that the US core inflation peaked in September it is worth asking what the outlook for inflation is and, by implication, for local rates in different EM countries in 2023.

The starting point are that box-out and our Q3 2022 EM Fixed Income Quarterly We aren't out of the woods yet. The former documented how historically US inflation has led the rest of the world's inflation by several quarters and the latter provided possible quarterly projections for the US core inflation for the rest of 2022 and the full year 2023. EM central banks, by and large, react to headline inflation so in this note we attempt to understand headline inflation. Since headline inflation is composed of core inflation and food and energy inflation, we use the US core inflation as the proxy for the first factor, World Bank Food Price Index as the proxy for the second factor, and Brent oil price as the third factor. In order to obtain future realizations of the first factor, we use our Q3 Quarterly and linearly interpolate the monthly numbers from the quarterly projections. World Bank Food Price Index peaked in May 2022. We assume it will come down at the same pace as it increased from May 2020 to May 2022. For the third factor, we use Brent futures.

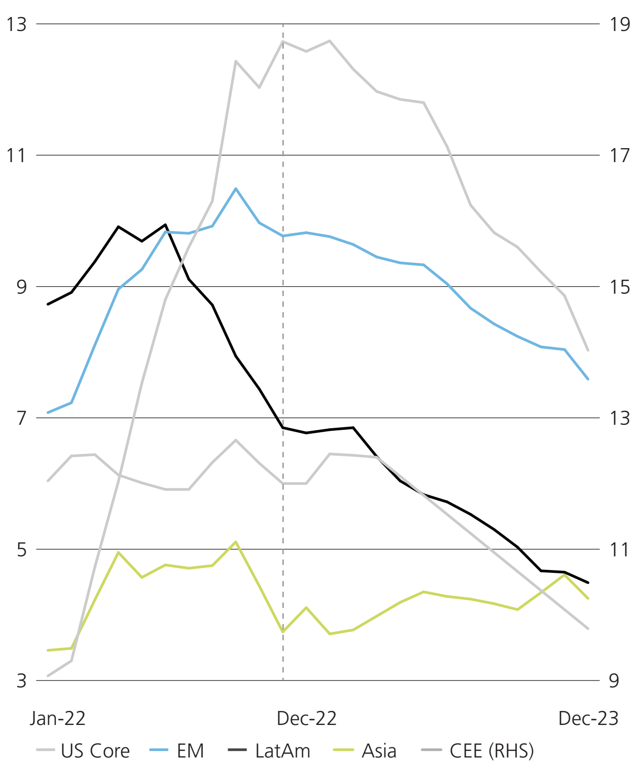
To obtain regional and aggregate EM inflation numbers, we use Brazil and Mexico as proxies for Latin America, Czech Republic, Hungary, and Poland as proxies for Central and Eastern Europe, and China and India as proxies for EM Asia. We then estimate the optimal lags for our three factors for each country separately and finally take averages of our country-specific results to aggregate countries into regions and regions into EM. As far as country-specific regressions are concerned, consistent with our Q1 Quarterly, outside Asia the US core inflation is the most important driver of EM inflation individual countries. However, in China and India the US core inflation is not statistically significant at any lag. For China we use China nominal GDP annual growth as the first factor. For its future evolution, we assume that it increases linearly until Q2 2023 to 8.1% and then decreases at the same pace until the end of 2023. Once we have China headline inflation projections, we can use those as the first factor in our India projections.

Exhibit 12: Possible future path for the EM regional inflation

Date	US Core	EM	LatAm	CEE	Asia
Jan-22	6.04	7.08	8.73	9.07	3.46
Feb-22	6.42	7.23	8.91	9.30	3.49
Mar-22	6.44	8.11	9.38	10.73	4.23
Apr-22	6.13	8.96	9.91	12.03	4.95
May-22	6.01	9.26	9.69	13.53	4.57
Jun-22	5.91	9.83	9.94	14.80	4.76
Jul-22	5.91	9.81	9.11	15.60	4.71
Aug-22	6.32	9.92	8.72	16.30	4.75
Sep-22	6.66	10.49	7.94	18.43	5.11
Oct-22	6.31	9.97	7.44	18.03	4.44
Nov-22	6.00	9.77	6.85	18.73	3.74
Dec-22	6.00	9.82	6.77	18.58	4.11
Jan-23	6.45	9.76	6.82	18.74	3.71
Feb-23	6.43	9.64	6.85	18.31	3.77
Mar-23	6.40	9.45	6.41	17.97	3.98
Apr-23	6.11	9.36	6.04	17.85	4.19
May-23	5.82	9.33	5.83	17.80	4.35
Jun-23	5.53	9.04	5.72	17.13	4.28
Jul-23	5.24	8.67	5.53	16.24	4.24
Aug-23	4.95	8.43	5.30	15.82	4.17
Sep-23	4.66	8.24	5.03	15.60	4.08
Oct-23	4.37	8.08	4.67	15.22	4.34
Nov-23	4.08	8.04	4.65	14.86	4.61
Dec-23	3.79	7.59	4.49	14.03	4.25
Change from Oct-22 to Dec-23	-221	-218	-236	-470	51

Source: Predicted values from UBS Asset Management; Realized values from Macrobond, and Bloomberg. Date as of January 3, 2023

Exhibit 13: EM inflation in 2022–2023



Source: Predicted values from UBS Asset Management; Realized values from Macrobond, and Bloomberg. Date as of January 3, 2023

In general, the fit of the regressions is the best in CEE-3. The adjusted R^2s vary from 0.65 in Hungary to 0.81 in Czech Republic. In LatAm, both R^2s are 0.6 while they are around 0.4 in Asia. One should take our country-specific projections with some skepticism. There are a lot of country-specific features we are likely missing. This is illustrated by the fact that our 2022 fitted values are higher than the realized values in Brazil and lower in CEE-3. The former can probably be explained by both the fact that central bank of Brazil was the first central bank in the world to hike rates and the Bolsonaro administration's targeted tax cuts before the elections. These policies significantly reduced headline inflation in Brazil. The latter can probably be explained by the war in Ukraine which has had a negative impact on inflation expectations. Moreover, European central banks have not been as aggressive at fighting against inflation the ones in Latin America. Due to these idiosyncratic issues, in the table below and chart below we report our regional projections only. The objective is to mitigate idiosyncratic problems in country-level data that by aggregating across regions.

While one should view our results as qualitative views as opposed to as precise predictions, they show some interesting patterns. Although inflation is expected to fall most in the CEE region, the starting point is so high that the result at the end of 2023 is still 14%. One reason for this is the above mentioned war in Ukraine. The second reason is that CEE central banks have extremely dovish for an extended period of time. In Czech republic, the real policy rate, as measure by the difference between the nominal policy rate and core inflation, turned negative in 2014. The same happened in Hungary in 2016 and in Poland in 2019. Since then the real policy rates have been very significantly negative in all three countries. In Hungary, the real policy rate is -10.9%. Perhaps not surprisingly, the fall in inflation in Hungary is expected to be much smaller than in Czech Republic or Poland. In contrast, in Brazil the real policy rate turned positive in September 2021 and in Mexico one year later. LatAm has the earliest peak in inflation and the most consistent realized and projected future declines in inflation. Monetary policy actions have consequences. Finally, as mentioned above, Asian inflation is not related to the US inflation in the same way and the dynamics will be quite different. Asia hasn't had a similar boom and bust dynamics in headline inflation as Americas but rather Chinese nominal GDP growth, which has been the key driver, has fallen consistently since Q1 2021. Our assumption is that it reached the bottom in Q2 2022 and will improve until Q2 2023 with the expected reopening now that the Zero-Covid policies have been retired.

The above analysis suggests the EM long-end local currency bonds are attractive in general but much more so in LatAm than other regions. CEE bonds is more attractive than those in Asia as Asian bonds don't have a similar carry cushion and inflation is actually expected to increase slightly due to the economic rebound in China as the country exits Zero-Covid policy. In summary, the road to get inflation back to target will be a long and hard one. It will also vary from region to region. In some sense, the scenario presented in the chart and table below is an optimistic one. It assumes we won't end up in the stagflationary world we wrote about in Q1 quarterly. Whether that happens will depend on future inflationary shocks and if the central banks take their main responsibility seriously.

Juha Seppala

Sovereign debt restructurings: changes ahead

The global monetary policy tightening and impact of Russia's invasion of Ukraine have led to funding challenges in smaller and more vulnerable EM countries which had already accumulated significant debt burden since the onset of the Covid pandemic. Although we are likely to avoid a systemic EM sovereign debt crisis of the 1980s and late1990s, distressed debt exchanges and other restructurings have become more frequent in the last couple of years. Moreover, countries with unsustainable debt now face more complex circumstances than those of previous rounds of debt crises. We look at how the shifts in the sovereign debt landscape have led to significant changes in restructuring processes, in both creditors' and debtors' approach to solving the debt crisis.

A Common Framework – a template for future restructuring?

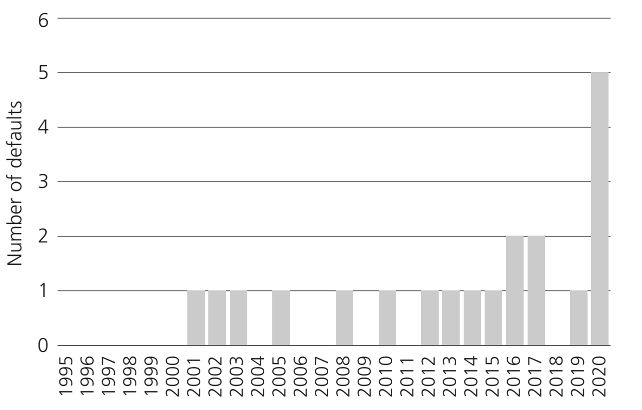
For low-income countries (LICs) that previously only borrowed from official lenders on concessional terms, a surge in borrowing from new lenders like China – under the Belt and Road Initiative over the past decade – and from the international capital markets that opened up to them in the post-GFC search-for-yield environment now face different circumstances dealing with debt restructuring. With an understanding that a sovereign debtor now needs to negotiate beyond the Paris Club and commercial creditors, G20 introduced the Common Framework – a way to deal with insolvency by providing debt relief and incorporating non-Paris Club member lenders in addition to private creditors – to ensure "fair" burden sharing across all creditors, including China. However, for the countries that sought debt treatment processes under the Framework – Chad, Ethiopia, and Zambia – the progress has been slow. For Zambia in particular, a lack of agreement on a process for restructuring the debt to the different entities of China, where the distinction between state and commercial lending remains unclear, had been a stumbling block. After a drawn-out negotiation during the last two years, there now seems to be an agreement. Despite the slow progress and other issues, we could see more countries going for the Common Framework as the Zambia case can form a template for future instances of sovereign debt restructuring for LICs.

China's evolving role

The most notable outcome from the Common Framework has been the participation of China's banks in an internationally supervised debt restructuring process. After over a decade of borrowing from Chinese institutions for infrastructure projects under the Belt and Road Initiative, the total value of loans from Chinese institutions that had to be renegotiated in 2020 and 2021 surged to USD52bn, far more than the USD16bn of the previous two years. In case of Sri Lanka, which owed Chinese lenders USD7.4 billion – nearly a fifth of its public external debt, China will play one of the most important roles in its debt restructuring. Going forward, China's exposure to a number of distressed sovereigns across Asia and Africa may force China to continue to play an active role, with new rules and expectations set from the current Zambia and Sri Lanka debt treatments. Chinese lenders largely wanted to avoid nominal principal haircut in its previous bilateral, often opaque, debt restructuring agreements; now as part

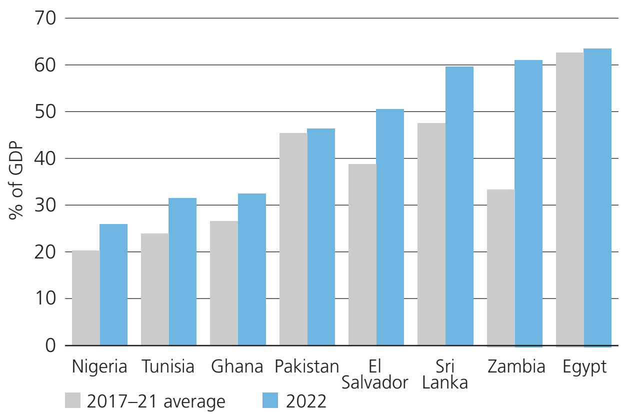
[5] Rhodium Group

Exhibit 14: Foreign currency debt defaults



Source: Fitch Ratings. Date as of December 28, 2022

Exhibit 15: Local currency borrowing, % GDP



Source: Fitch Ratings. Date as of December 28, 2022 of a bigger multilateral framework – China is a co-chair of the Official Creditor Committee for Zambia – China seems to demonstrate its evolving role as an important part of a more transparent, multilateral restructuring process. Recent agreement by Chinese officials to participate in a global sovereign debt "roundtable" together with a wide variety of stakeholders including private sector creditors, although too early to tell, is a positive step towards improving the debt treatment process.

Local debt treatment: A different type of debt crisis
The role of local currency debt holders has changed as well as many countries, unable to access international capital markets, turned to domestic borrowing while inflation and rise in yields developed markets also pushed up domestic borrowing costs. Sri Lanka expects domestic interest payments to double between 2021 and 2023; and Zambia forecasts its domestic debt bill will rise by 66% in that period. As a result, there is a high chance that both countries will have to include local currency debt in their restructuring process. In case of Ghana, which recently proposed the terms of domestic debt program, the local currency portion of debt service represented almost 80% of the interest bill. The result is a different type of debt crisis: while sovereigns have more flexibility in restructuring domestic debt, restructuring local currency debt may have more consequences in domestic financial sector stability and economic activity due to a large share of domestic government debt in domestic banks and pension funds' balance sheets. It also has significant consequences for the recovery in external debt negotiations: Zambian and Sri Lankan governments' desire to exclude local currency debt from restructuring will require external debt treatment to be sufficiently deep to restore debt sustainability.

Debt for climate swaps
As part of international pandemic economic rescue package, debt for climate (or nature) swaps has been promoted as a way to tackle the triple crisis coming from debt, climate, and nature loss post-pandemic. As recently seen in agreements in Barbados, Belize and Seychelles, these deals allow a country to restructure its debt at lower interest rate or longer maturity with the proceeds being allocated to conservation or green projects. These instruments have existed for a while, but we are likely to see more countries considering them especially as there is increasing investor appetite for ESG criteria. And while these types of deals should not come at the expense of traditional debt relief, they can be scaled up to complement existing instruments and support countries particularly vulnerable to climate change such as small island nations.

(Yuni Kim)

A deep dive into net issuance and investment flows in EM Fixed income

2022 has been a challenging year for EM Fixed Income for multiple reasons. Total returns have been deeply negative in the three main benchmarks (EMBIGD for EM USD Sovereigns, CEMBI Diversified for EM USD Corporates and GBI EM GD for EM Local currency bonds). Geopolitical risks have increased materially, and soaring inflation has impacted every country, although with different magnitudes. Market conditions have become more challenging, with yields rising and spreads widening, therefore making it more difficult to access markets. In this special box, we analyze flows and net issuance in 2022 and discuss expectations for 2023.

Extreme outflows in 2022 have materialized across the board.

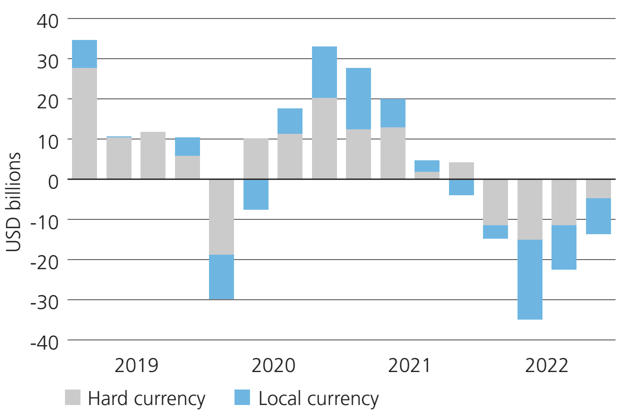
According to JPMorgan data, 2022 has been the worst year on record by far over the last 15 years in term of flows to EM bond funds. This is because of outflows from hard currency funds of USD42.5bn, outflows from local currency funds of USD44.1bn – bringing the total YTD outflow to USD86.6bn. This number is materially worse than 2015, which had been the worst year on record with total outflows at USD21.1bn. When examining the monthly breakdown during 2022, we note that 60% of the year's outflows occurred in four months: May (USD15.0bn), September (USD13.0bn), June (USD12.5bn) and October (USD11.7bn). In the last few weeks, however, moderate inflows (especially in hard currency) have started to come in, supported by the rally in US Treasuries and as valuations became more attractive toward end October (EMBIGD yield above 10% and spread approaching 600).

Net issuance: deeply negative in 2022, partially offsetting the large outflows.

When analyzing net supply data in US dollar and EUR by Citi at 9 Dec 2022, we understand that the current year has been extraordinary as well, as it has been by far the most negative on record over the last 15 years with net new issuance at -USD187.1bn (-USD23.0bn in EM Sovereigns and -USD164.1bn in EM Corporates). This has occurred as market conditions, after multiple years of low borrowing costs for EM issuers, have materially deteriorated during 2022 due to rising US Treasury yields and spread widening. Market access has been particularly prohibitive for EM high yield issuers, which posted -USD24bn net supply YTD, a level not seen since 2013. For many low-rated EM sovereigns, the inability to issue in a context of high fiscal needs led them to seek concessional sources of financing and in some cases to go to the IMF. EM Investment grade issuers, on the other hand, suffered less, and posted positive net supply YTD at USD1.0bn, although materially lower compared to 2020 and 2021, at USD117.5bn and USD39.1bn respectively.

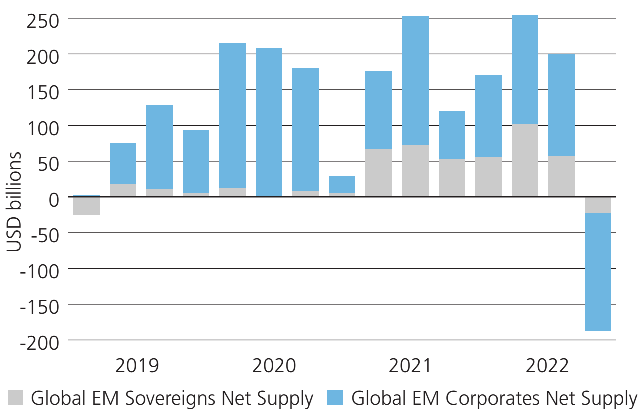
Who were the largest issuers in 2022? In the EM Sovereign market, the top issuers (in USD/EUR) were Turkey at USD11.0bn, Romania at USD8.6bn and Indonesia at USD7.7bn. Meanwhile for EM Corporates, Korea EXIM Bank at USD7.1bn, JBS at USD6.0bn and Bank of China at USD4.8bn.

Exhibit 16: EM bond fund flows by year (USD bn)



Source: JP Morgan. As of December 15, 2022

Exhibit 17: EM bond net supply by year and category (USD bn)



Source: JP Morgan. As of December 30, 2022

2023 outlook: market environment for issuers likely to remain challenging.
2022 has been very negative in terms of outflows, although offset by large negative issuance. For 2023 we expect the environment to remain challenging, especially for high yield sovereigns, as market conditions (US Treasury yield and spread level) continue to be unfavorable, despite the recent rally.
At the same time, 2023 cashflows for EM Sovereigns should remain elevated at similar levels of 2022 at USD122.2bn (USD63.7bn amortizations and USD58.5bn coupons), with roughly 50% of them to take place early in the year (Jan-Apr). While this could lead to more issuance in the early part of 2023, we believe that issuers will continue to be opportunistic and tap into markets when conditions allow it.

(Gianandrea Moccetti)

China
The securities may not be offered or sold directly or indirectly in the People's Republic of China (the "PRC"). Neither this document or information contained or incorporated by reference herein relating to the securities, which have not been and will not be submitted to or approved/verified by or registered with the China Securities Regulatory Commission ("CSRC") or other relevant governmental authorities in the PRC pursuant to relevant laws and regulations, may be supplied to the public in the PRC or used in connection with any offer for the subscription or sale of the Securities in the PRC. The securities may only be offered or sold to the PRC investors that are authorized to engage in the purchase of Securities of the type being offered or sold. PRC investors are responsible for obtaining all relevant government regulatory approvals/licenses, verification and/or registrations themselves, including, but not limited to, any which may be required from the CSRC, the State Administration of Foreign Exchange and/or the China Banking Regulatory Commission, and complying with all relevant PRC regulations, including, but not limited to, all relevant foreign exchange regulations and/or foreign investment regulations.

Hong Kong
This document and its contents have not been reviewed by any regulatory authority in Hong Kong. No person may issue any invitation, advertisement or other document relating to the Interests whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to the Interests which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571) and the Securities and Futures (Professional Investor) Rules made thereunder.

Japan
This document is for informational purposes only and is not intended as an offer or a solicitation to buy or sell any specific financial products, or to provide any investment advisory/management services.

Korea
The securities may not be offered, sold and delivered directly or indirectly, or offered or sold to any person for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except pursuant to the applicable laws and regulations of Korea, including the Capital Market and Financial Investment Business Act and the Foreign Exchange Transaction Law of Korea, the presidential decrees and regulations thereunder and any other applicable laws, regulations or rules of Korea. UBS Asset Management has not been registered with the Financial Services Commission of Korea for a public offering in Korea nor has it been registered with the Financial Services Commission for distribution to non-qualified investors in Korea.

Malaysia
This document is sent to you, at your request, merely for information purposes only. No invitation or offer to subscribe or purchase securities is made by UBS Asset Management as the prior approval of the Securities Commission of Malaysia or other regulatory authorities of Malaysia have not been obtained. No prospectus has or will be filed or registered with the Securities Commission of Malaysia.

Singapore
This document has not been registered with the Monetary Authority of Singapore pursuant to the exemption under Section 304 of the SFA. Accordingly, this document may not be circulated or distributed, nor may the Securities be offered or sold, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor pursuant to Section 304 of the SFA.

Taiwan
This document and its contents have not been reviewed by, delivered to or registered with any regulatory or other relevant authority in the Republic of China (R.O.C.). This document is for informational purposes and should not be construed as an offer or invitation to the public, direct or indirect, to buy or sell securities. This document is intended for limited distribution and only to the extent permitted under applicable laws in the Republic of China (R.O.C.). No representations are made with respect to the eligibility of any recipients of this document to acquire interests in securities under the laws of the Republic of China (R.O.C.).

Source for all data and charts (if not indicated otherwise): UBS Asset Management.

® www.ubs.com/am-linkedin

www.ubs.com/am
For Global professionals/qualified/institutional clients and investors.

UBS