Frontier Investing: The Road less Travelled

Emerging Market Debt (EMD) has continued to develop as an asset class, bringing with it a new subset of countries—EM frontiers. We use three criteria to classify frontier economies—investment credit rating status (high yield), income status, and issuance size. The EMD frontier universe currently consists of 38 economies.

» EM has confronted a number of shocks since 2020. This includes the pandemic, the increase in food/energy prices, along with a move higher in global interest rates. For frontiers, which are smaller economies, this has resulted in higher yields and more limited access to dollar denominated funding.

» Recent global challenges raise the question: What is the case for investing in frontier economies? Three are salient. First, among the 38 countries in the space, there is diversification potential. Second, there is plenty of differentiation among the sovereigns. Last and most importantly, since inception frontiers have significantly outperformed the broader dollar-pay EM bond indices.

» We look at macro trends in frontier economies. In broad strokes, growth is higher for the group, which would be expected as they are starting from a smaller base. Turning to monetary policy, the news on inflation is less encouraging; it is higher and food has a larger weight in the CPI baskets.

» For investors, the willingness and ability of a sovereign to pay is the foremost concern. We look at the fiscal and external balance sheets across frontier economies and examine factors that determine payment capacity. We also introduce some simple metrics for thinking about sovereigns' ability to pay.

» Economic metrics and debt ratios are not the entire picture when we analyze sovereign debt. Governance and the strength of institutions matter, particularly in the frontier space.

» Payden has been active in frontier markets since their development. Our investment in frontiers is, however, selective. We have generally been overweight the universe on aggregate but have avoided exposure in countries where we feel uncomfortable with the credit trajectory.

What Is a Frontier Economy?

One of the selling points for EMD exposure has been the breadth of geographical exposure available to investors. The asset class has grown significantly in the last two and a half decades, when Payden opened its flagship EM Debt fund (launched in 1998). As of today, there are 69 countries in JP Morgan's popular EMBI Global (EMBIG) benchmark and 80+ countries that are investable; only 8 countries were part of the EMBI when it launched in 1995.*

* While variations of EM sovereign indices exist, we consider the JP Morgan EMBIG to be an industry standard. All data as of 12/2023.

In line with this expansion, there has been a growing number of smaller, high-yield rated issuers that have entered into the index. Intuitively, these are countries that are "off the radar" versus the more well-trafficked and developed EMs (the Brazil, Mexico, Indonesia and Indias of the world). We refer to these as "frontier economies."

In order to narrow this subset of countries, we employ two definitions. The first is technical; we use JP Morgan's NEXGEM ("Next Generation" Emerging Market) Index, which includes a list of investable sovereigns. This gives investors a reliable flavor of the frontier universe, particularly when it comes to returns over a long period. Definitionally, to be NEXGEM, a country must be high-yield rated and constitute less than 2% of the broader EMBIG. Frontier economies cannot be part of the European Union. Of the 69 EM countries in the EMBIG, 35 of them are in the NEXGEM Index. These smaller countries have less debt outstanding. Despite comprising about half of the list of countries, they only account for about 9.2% of the $1.2 trillion market capitalization of the EMBIG.

In an effort to consider the frontier universe more holistically, we take a broader approach that is not tied to an index. In our classification, we include all NEXGEM countries and add high-yield rated, "low middle income" economies (per the World Bank definition). This broadens our universe by three countries (Egypt, Lebanon, Morocco) and brings the total count to 38, which all have Eurobond issuance that is publicly investable.

Frontier economies are smaller and less wealthy than non-frontier economies. For example, in 2022, the average frontier economy registered a GDP of under $95 billion, and no frontier economy was larger than $500 billion in size. Turning to income, even when adjusting for purchasing power, there is a disparity between frontier and non-frontier countries' GDP per capita, with non-frontier income about 2.5 times higher than frontiers. Switching to regional concentrations, the NEXGEM Index is skewed towards Africa, with almost 40% of the index concentrated there. Latin America and CEEMEA (Emerging Europe and the Middle East) are the second and third largest regions represented in the sample, with 31% and 16% of the countries, respectively.

Why Invest in Frontiers?

There have been a number of shocks that have hit emerging markets in recent years. The top three are: the pandemic, high inflation, and higher advanced economy borrowing costs. These shocks have negatively impacted economic metrics in most countries, with the smaller frontier economies often feeling the brunt. In turn, sovereign defaults have increased; we count 14 defaults in the developing world since the pandemic, though not all are among frontier economies.

There is an asterisk here. Three of the post-2020 defaults— Russia, Ukraine, and Belarus—were a direct result of the conflict between Russia and Ukraine. Two other defaults did not affect publicly traded market debt. Excluding those listed above, there have been 9 sovereign defaults post-2020, seven of which were among frontier markets (Lebanon, Suriname, Zambia, Belize, Sri Lanka, Ghana, Ethiopia).

The concern among investors is whether it is too risky to invest in frontier markets. Reflecting this concern, in a universe of 38 countries, 9 were trading at spreads 900 basis points above U.S. Treasuries as of December 2023 (we remove Lebanon from our market calculations). Excluding

the sovereigns already in default, this leaves 5 countries in “distressed” territory. In this context, we examine arguments in favor of the asset class.

Perspectives on Sovereign Defaults: Most of the economies that have defaulted are smaller and therefore have not had a systemic impact on the asset class. Together, the seven frontier markets that defaulted since 2020 account for just 1.4% of EM GDP (using the EMBI ex-China as our universe). Second, after the shocks of the last four years, many of the weakest countries have already entered into payment difficulty. Colloquially, many of the weakest hands have folded.

With defaults tapering off, there was strong rally in frontier sovereign debt in 2023. For context, the NEXGEM Index returned 21% last year, with countries that were rated CCC or in default returning 50%. We can divide this performance into two different categories. On one side, there are frontiers that many investors, going into 2023, expected to face payment stress. When this did not occur, these countries rallied strongly (El Salvador and Pakistan). The other group of countries are those that already defaulted. The investment thesis is that these sovereigns are prepared to settle with their creditors on terms better than initially feared. Sri Lanka, Suriname, Ghana, and Zambia fall into this category.

This highlights another relevant point. For most countries, the relationship with their creditors does not end after a restructuring. Countries typically renegotiate the terms of their debt and continue to engage with creditors as they restructure. Unlike some of the examples in the corporate universe, the net present value (NPV) on restructured sovereign debt has averaged about 50 cents on the dollar during the 1998-2022 period.* Friendly restructurings can have an NPV over 75 cents on the dollar.

Returns: Looking more closely at the NEXGEM Index, we find it delivers higher returns over time. Since 2001 (as far back as data is available) the NEXGEM delivered 1.7% in additional annual return versus the EMBI Global. This translates to an 8.5% annualized return versus 6.8% for the broader index. A NEXGEM investor would have had a total return about 75% higher than an EMBI Global investor over that time. Over the recent horizon (end-2019 through end-2023), since the pandemic, the returns in NEXGEM countries are about 1% better per year versus the broader EMBI Global. To be fair, these higher total returns do come with more risks. This is evident in the fact that volatility in the NEXGEM returns is higher.

Diversification: Frontier debt investing allows for exposures to countries that can’t easily be found in other asset classes. This is not limited to dollar-denominated debt, as investing in frontier local markets also presents dynamic opportunities. Because frontier markets are smaller, they tend to be driven more by internal market dynamics. This has two implications. First, local currencies in these economies are less correlated with other EM currency markets. Second, because these markets are not as saturated by international investors, macro considerations in these markets can be more important than global drivers. To be sure, in such markets, the potential for higher returns can come at a cost of less liquidity. Differentiation: Looking at frontier economies as a group presents a unique set of challenges because this group of countries is so disparate. All are high-yield rated, though, we argue that not all can be painted with the same brush.

*Yang, L et al. Sovereign Default and Recovery Rates, 1983-2022. Moody’s Investor Service. 13 April 2023.

Some of the frontiers are 'BB' rated economies; within our universe of 38 countries, 14 are rated 'BB' by at least one rating agency. These countries are less vulnerable to event risk and have solid credit metrics. Examples of countries in this category are Ivory Coast, Morocco, Paraguay, and Costa Rica.

On the other end of the spectrum there are 'B' and 'CCC' rated credits, which could, in an adverse case, suffer from credit-worthiness concerns. We have seen some of these countries (Ghana, Zambia, Sri Lanka, Suriname) fall into distress post-pandemic. There are many countries between these two extremes—in some, credit fundamentals may not be rock solid, but there is not currently a high risk of default; examples would be Jordan, Nigeria, and Angola.

Macroeconomic Considerations

Growth: One of the characteristics that makes frontiers attractive for investors is growth. Strong growth is a rising tide that "lifts all boats" in a country. When we look at frontier economies, on average, we see three trends at the aggregate level. The first is that frontier growth is higher than what we see in the "standard EM countries. This makes sense intuitively as most of these countries are poorer than the standard non-frontier EM economies and therefore have more ground to cover, before reaching full middle-income status. The second trend is less intuitive: looking back to 2000, we see that the standard deviation of that growth is on par with non-frontier EM economies. In other words, in frontiers, for a higher level of growth, there is a similar amount of volatility as seen in non-frontier economies.

The third trend is most relevant from a forward-looking perspective. Many frontier countries have entered or are entering the "demographic dividend" territory associated with higher growth. Specifically, falling fertility rates and rising dependency rates (ratio of adults versus children and pensioners) could set the stage for higher growth. The crux of the argument is summed up well in recent work by Renaissance Capital's former-Chief Economist Charlie Robertson. He writes: "When we have fewer children, the ratio of adults to children/pensioners improves and GDP growth per capita trebles. Based on 1,586 data points in as many countries as possible since 1960, we find the biggest jump is when that ratio improves from 1.2-1.4 to 1.4-1.6. It is the difference between a Nigeria that should have per capita growth of just over 1% annually from 2020 and Kenya where it should be nearly 3% annually. At the same time savings rise and investment gets cheaper as the ratio of adults rises further."* In simple terms, if you have many children, your resources may be stretched too thin, hindering savings. Reducing family size increases space for savings and, in turn, creates one of the conditions for domestically driven investment. And, as domestic savings increases, interest rates decline.

This link between fertility, savings, and interest rates is controversial. Moreover, Mr. Robertson notes that other factors such as education and electricity are very important drivers in the quest to deliver higher growth. Our takeaway from this work is that a decline in the fertility rates in lower-income EM countries can be positive for growth outcomes.

Inflation and Monetary Policy Trends and Structural Considerations: Turning to inflation, the trends are more nuanced. First, in the last 10 years, average inflation in frontier markets has been higher than non-frontier EMs.

*Charlie Robertson. Let's Talk about Sex (and Money). Renaissance Capital.14 November 2019. Fertility cases below 3 children per woman are consistent with a dependency ratio of 1.4-1.6. This is when deposits tend to rise most.

The caveat is that there is a lot more dispersion when it comes to inflation outcomes in frontier economies. In more recent history (post-pandemic), frontier markets suffered from the global shock to inflation. The trend was similar to that of other EMs — frontier headline inflation spiked in the second half of 2022 before starting to turn, particularly in Latin America, Europe, and the Middle East. There are two caveats. In frontier Asia, headline inflation numbers are largely driven by Pakistan, which is mostly attributable to domestic drivers. Second, in Africa inflation momentum is high—this is related to a combination of FX depreciation, domestic pricing rigidities, and idiosyncratic factors.

When looking at inflation in any EM country, the structure of the consumer basket is an important consideration. In EM economies, the food weighting is usually elevated compared to developed countries, and in frontier economies, the food weight tends to be even higher. Our sample of frontier economies shows that the weight of food and non-alcoholic beverages is 35.1% on average, versus 25.5% in non-frontier EM economies. This makes sense as food typically makes up a greater share of consumption for lower income populations.

At a broad level, JP Morgan's work on this issue suggests that food prices have a larger impact on EM inflation (versus DM) and there is a shorter lag between the variables.* One possible reason is that EM food baskets contain less processed food than DM food baskets. On a forward-looking basis, this provides some "food for thought." Global food prices, as proxied by the UN's Food and Agriculture Price Index, are down 25% from their peak following the Russia-Ukraine War. If history is a good indicator, this should put downward pressure on frontier inflation.

Turning to monetary policy, in response to the 2022 inflation shock, frontiers increased policy rates aggressively. This is in line with global trends. Interestingly, the magnitude of the hikes between EM frontier and non-frontier economies was similar—between 500 and 600 basis points from the trough (January 2021) to the peak. The largest hikes occurred in frontier Africa, particularly in countries experiencing balance of payments stress and or financial stability concerns (Ghana, Egypt, Nigeria). In contrast, in the less volatile frontier markets (Guatemala, Morocco, Vietnam, and Jamaica) hikes have been modest. Just as larger EM central banks have started to ease, some frontier central banks have also initiated cuts; policy rates in about a third of our frontier sample are below recent highs.

At a high level, there are structural considerations that are more relevant for the frontier universe. Credit penetration is lower in frontier economies (by about half), making monetary policy transmission more challenging. That makes policy rates a weaker tool for frontier central banks. Historically, monetary authorities in these countries have relied on other nominal variables as policy anchors. For example, in our experience as country analysts, it is more common for frontier central banks to lean more heavily on the stability of the exchange rate in order to curtail inflation or protect financial stability. This is supported by the data at a high level. Per the International Monetary Fund's (IMF) currency regime classifications, of 38 frontier economies, less than 25% are classified as "floating" currency regimes whereas the rest are soft or hard pegs.**

* Szentibanyi, Nora and Katherine Marney. Food Inflation: From Boil to Simmer. JP Morgan, 7 July 2022

** The IMF Annual Exchange Rate Report divides currency regimes into four broad categories: Hard Pegs, Soft Pegs, Floating Regimes (market determined), and "residual" arrangements.
https://www.elibrary.imf.org/display/book/9798400235269/9798400235269.xml?code=imf.org

Fiscal and External Considerations: One of the more complicated issues when analyzing emerging market economies is how to evaluate government debt. Frontier debt has increased over the 15 years since the Global Financial Crisis (2008/2009). This coincided with a broader increase in public sector debt globally. It is useful to remember why countries borrow in the first place. Many sovereigns borrow because they lack domestic savings and want to kick-start growth. Sovereigns invest in areas such as health, education, and infrastructure to move more quickly up the development ladder. Sometimes this is successful and debt is used to enhance growth and productivity (particularly in the export sector). In this case growth surges, and a country can "grow" out of its debt. One example of this is the Ivory Coast. Since the country transitioned to a more technocratic government in 2011, real growth has averaged comfortably over 6.5% per year.

That is not always the case. This is because debt dynamics are not just determined by growth. While growth is one important piece of the puzzle, there are other variables at play including real interest rates and a government's primary fiscal balance (the budget balance excluding interest payments). These are a function of policy settings and market pricing, two variables where there is a feedback loop.

There are two interrelated considerations that determine whether a sovereign has the "ability" to service its debt. The first is debt affordability. Whether a given sovereign's debt is "affordable" is both an economic and political question. For simplicity's sake, we proxy this by looking at a country's interest payments-to-revenue ratio: that is, how much revenue a country must dedicate to servicing its interest burden. Rating agencies find that the interest-to-revenue burden is more significant than the debt burden when predicting which countries will go into distress.* In a country where this ratio is high, there can be a struggle between meeting government obligations that are socially important and servicing debt. When we look at sovereign risk premiums, we see a correlation with the interest-to-revenue ratio: countries with higher spreads tend to have higher interest burdens. This is particularly noticeable in the last 5 years, when EM growth has been slower.

A second (and related) consideration revolves around a country's debt denominated in foreign currency. Historically, one of the common pitfalls faced by emerging market economies is what is referred to as "original sin"—a country borrows in a foreign currency but its revenues are predominantly in domestic currency. To gauge this risk, investors look at a country's sources of foreign exchange. This includes the balance of payments (measuring the flow of foreign currency entering and exiting the economy) and foreign reserves (measuring the stock of hard currency held by the central bank).

At a broad level, one indicator that captures the economy's external vulnerability is a country's current account balance. If a country has a current account deficit, the natural question is how it is financed. Positively, on the current account side, frontier (and non-frontier) current account balances narrowed during the pandemic, reducing external financing needs. For example, in 2022, current account balances in frontiers were, on a GDP weighted basis, flat. Of course, aggregates hide dispersion within the frontier markets.

* Merino, Renzo. Panama's Rating Outlook with Moody's. 12. October 2023. Investor call with Citi

There is also nuance within countries with current account deficits; deficits that are the result of foreign direct investment (FDI) tend to be viewed more favorably. As an extension, analysts look at the 'basic balance', which is the current account deficit excluding net FDI. Examples of countries that had negative basic balances in the first half of 2023 included Kenya, Uzbekistan, and El Salvador.*In cases where basic balances are negative, it is important to gauge whether there are other sources of external inflows.

Looking at government debt specifically, we find two metrics useful for assessing the affordability of external debt. First is a government's external debt relative to its exports. This is a variant of one metric that the IMF uses to determine debt sustainability in low-income countries. The lower government external debt is as a percent of export revenues, the stronger the economy is positioned to service this debt using its export earnings. We use 2022 data and plot this ratio versus a measure of foreign exchange reserves (to do this, we use Moody's external vulnerability indicator, EVI).** A handful of countries fall into the higher reserves/lower external-debt-to-exports quadrant (bottom left). These countries, all else equal, screen as having a more solid external picture. On the other end of the spectrum are a few sovereigns (Sri Lanka, Pakistan, and Ethiopia, for example) that screen as weaker on both metrics. Over a longer time horizon, the data present challenges of measurement, a point noted by the economist Charlie Robertson.*** One way to correct for this is to look at the trend in external debt/ exports over the last several years. To be fair, many frontiers countries exhibit an increase in external debt v. exports (deterioration) but there are a few (Lebanon, Kenya, and Rwanda) where this increase is more dramatic.

As balance of payments data are released with a lag, we also look at higher frequency data to gauge external vulnerability. One way to do this is to look at the change in foreign exchange reserves. Countries where reserves decline precipitously are likely facing external pressures. In line with the shock seen in 2022, reserve losses (and gains among commodity exporters) were larger. During that year, Bolivia, Pakistan, and Ghana, for example, show important reserve deterioration in percentage terms, with Ghana now in a restructuring process and Bolivia and Pakistan trading in distressed territory. In contrast, Costa Rica and Iraq's reserves have improved significantly in the last two years.

Environmental, Social and Governance (ESG) Considerations

Servicing debt is not just a question of a country's ability but also its willingness to pay. This speaks to a larger point: governance, institutions, social dynamics and environmental changes matter in emerging markets. This is particularly relevant in middle-to-lower income countries like frontiers.

* Alexandru-Chidesciuc, Nicolaie, and Katherine Marney. 2024 Outlook: David Takes on Goliath (EM Edge Data Watch). JP Morgan, 24 November 2023

** The external vulnerability ratio is defined as the stock of official foreign exchange reserves at the end of year t-1 as the denominator, and the residual maturity short-term debt (including original maturity short-term debt and principal payments on long-term debt) falling due in year t in the numerator. Also included in the numerator are deposits in domestic banks by non-residents with a maturity greater than one year.

*** Robertson, Charlie. The Time Traveling Economist. Palgrave Macmillan, 2022. Pg 186-187

Moody's speaks to the significance of governance in their sovereign rating methodology:

"The strength of institutions and governance are important determinants of a sovereign's creditworthiness... They influence the sovereign's capacity and willingness to formulate and implement economic, fiscal and monetary policies that support growth, socioeconomic stability and fiscal sustainability, which in turn protect the interests of creditors over the long term."

Environmental factors are expected to be of growing importance for EM countries. A 2023 report by the Organization for Economic Co-operation and Development (OECD), Poverty and Climate Change, discusses how developing countries, in particular, face the greatest risks from climate change, stating: "In general, the vulnerability is highest for least developed countries... Hence, the countries with the fewest resources are likely to bear the greatest burden of climate change..."

Measuring and comparing ESG factors is not straightforward. One way to evaluate them is through research; for example, we take research trips to frontier countries, engage with experts, non-governmental organizations and think tanks, and we form relationships with various in-country contacts. There are also data providers that attempt to quantify aspects of sovereign ESG. While the data are imperfect and often backward-looking, they do help highlight the difference between frontier and non-frontier EM countries. Using data from MSCI as an example, we observe that frontier countries have weaker metrics, particularly in the Social and Governance categories, relative to their non-frontier peers. Environmental scores appear closer, highlighting that lower income and less industrialized frontier economies are likely to have lower carbon emissions.

Payden's Case for Investing in Frontiers: Selection Matters

We have two broad takeaways about frontier economies. First, this group has experienced superior returns compared to the broader EM universe since inception. Second, with the greater return, there is greater risk, which has been brought into starker relief by a more challenging global economic backdrop. How should investors evaluate this risk-return puzzle?

At Payden, our investment philosophy—which we have refined for twenty-five years— revolves around the premise that country selection is key. We continuously evaluate whether country fundamentals are improving or deteriorating. In the case of frontier market investing, this has translated into an overweight position but one that is concentrated in the countries where we have a positive outlook. Our active positioning in frontiers has typically been above their share of the benchmark, but where we see a challenging outlook, we will take zero exposure. For context, within the NEXGEM universe described earlier, we have no exposure in 17 of the 35 countries.

As we consider the volatile environment countries face today, we think it is worth keeping longer historical arcs in mind. When Payden launched its first dedicated EM debt strategy in 1998, countries that investors feel comfortable with today – "mainstream" EMs like Brazil, Mexico, or Indonesia – felt like frontier markets. They had low incomes, greater vulnerability to global shocks, and they went through "original sin" crises. Yet today, such countries are robust and more self-reliant, having shown impressive resilience through the global financial crisis, taper tantrum, and pandemic periods. When we look back in 25 years, we imagine many of today's frontier markets will also have matured, rewarding investors along the way. Some will surely struggle. The job, as we see it, is to do our part in making that determination.

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