

ROB DRIJKONINGEN Global Co-Head of Emerging Markets Debt

Local-Currency Frontier Bonds: EMD's New Horizon

Frontier market issuers have been in the mainstream of hard-currency sovereign debt markets for many years, but most have struggled to build scale and liquidity for their local-currency bonds. That could be set to change, as new indices are planned for the asset class and global institutional investors increasingly recognize the growth, return and diversification potential of these markets.

Here is why we think local-currency frontier market debt is becoming the natural complement to existing fixed income allocations in both developed and emerging markets.

Executive Summary

- We think the tradable local-currency frontier debt market amounts to some \$1tn issued by around 20 countries, after growing by almost three times in the past decade.
- FTSE Russell has published the FTSE Frontier Emerging Markets Government Bond Index since 2021, and J. P. Morgan plans to launch a benchmark index later this year.
- Since inception in December 2017, our equally weighted universe of frontier markets outperformed the benchmark localcurrency emerging markets debt index by almost five percentage points, annualized, with a similar maximum drawdown and substantially lower volatility.
- While drawdowns among individual issuers can be sharp, overall volatility is dampened due to low correlation between issuers, and correlation between local-currency frontier markets and other asset classes is also low.
- Local-currency denomination, the small size of the market and the relatively low participation of global investors limit exposure to global risk factors; material risk factors are local politics or weak institutions, a lack of transparency, fluctuations in foreign direct investment (FDI), and liquidity, tax and operational challenges.
- Over time we would expect liquidity and operational challenges to diminish as new benchmarks are launched and global investors become more involved.
- As many issuers have long been active in the hard-currency markets, seasoned emerging markets debt investors are likely already to have good research coverage and stand ready to meet rising investor demand for exposure.

The first thing a potential investor in local-currency frontier market debt will want to know is how big that market is.

There is no generally accepted size, because there is no generally accepted list of frontier markets. Most investors would agree that frontier markets are characterized by a low degree of development in their economies, institutions and capital markets. There are some large and wealthy frontier markets—most lists would include some big oil and gas exporters, for example—but few would generate a GDP per capita above \$5,000. Nonetheless, a surprising number of these countries finance at least a part of their government budgets by issuing local-currency bonds, which helps to insulate them from exchange rate fluctuations and international market factors, and aligns their assets and liabilities.

Excluding sanctioned countries and dollarized economies and adopting a liberal definition of tradability might leave you with a list of 40 or more, stretching from big markets like Argentina and the Philippines to tiny ones like Botswana and Namibia. Excluding a few that are more like mainstream emerging markets and many more that are effectively non-investable gets you to fewer than 20. Bank of America counts around \$875bn worth of local-currency bonds issued by 17 frontier markets. J.P. Morgan, which plans to launch a local-currency frontier markets index this year, includes 15 countries and arrives at \$750bn. FTSE Russell's benchmark FTSE Frontier Emerging Markets Government Bond Index, launched in 2021, has a market capitalization of around \$420bn, and tracks bonds from 14 issuers.¹

We think it's justifiable to consider local-currency frontier bonds as a \$1tn market of some 25 issuers. In terms of amount outstanding, that is substantially bigger than the euro high yield bond market and about two-thirds the size of U.S. high yield.

For the analysis in this article, however, we follow the FTSE Russell universe of 14 countries plus Ghana, which was in the index until its default in February 2023 and is likely to be readmitted, and Zambia, which we regard as an important issuer in this market. The growth of this market is shown in figure 1.

¹ Bank of America, 2024 Emerging Market Local Markets Guide (September 2024); J.P. Morgan, EM as an Asset Class Evolves and Diversifies (October 2024); FTSE Russell at <u>https://research.ftserussell.com/Analytics/FactSheets/Home/DownloadSingleIssue?issueName=FRNTEMGBIC&IsManual=True</u>

FIGURE 1. LOCAL-CURRENCY FRONTIER MARKETS DEBT HAS ALMOST TRIPLED IN A DECADE

Local-currency frontier market bond universe, market capitalization outstanding, \$bn



Source: Haver Analytics, Institute of International Finance, national statistics agencies of the Dominican Republic, Kenya (for 2021 – 23 data), Serbia, Sri Lanka (2022 – 23) and Vietnam (2022 – 23). The universe is an aggregate of the outstanding local-currency debt issued by Costa Rica, Dominican Republic, Egypt, Ghana, Kenya, Nigeria, Zambia, Kazakhstan, Serbia, Ukraine, Pakistan, Sri Lanka, Vietnam, Morocco, Uganda and Bangladesh, as the data becomes available. Historical trends do not imply, forecast or guarantee future results. Nothing herein constitutes a prediction or projection of future events or future market behavior.

Performance and Yield

Figure 2 sets out the performance history of the same universe and its constituent issuers.

Over the past seven years, on an annualized basis, the 16 constituents of our universe, when equally weighted, have exhibited an annualized return almost five percentage points in excess of the mainstream local-currency emerging markets benchmark. Over the same period, local-currency frontier markets even outperformed the J. P. Morgan Next Generation Market Index (NEXGEM) for frontier-market USD sovereign bonds.

We see that as confirmation that frontier market growth and general economic performance has been systematically underpriced: a relatively high risk premium appears to be embedded in local rates and excessive depreciation has been priced into currency forwards. Those risk premia still appear elevated: at the end of 2024, local-currency frontier bonds offered six percentage points of additional yield relative to local-currency emerging markets debt.

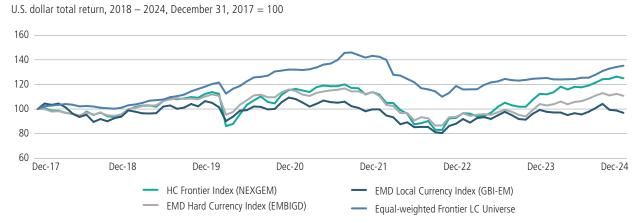


FIGURE 2. HISTORICAL OUTPERFORMANCE, HIGH YIELDS AND SUSPRISINGLY LOW VOLATILITY

Source: Bloomberg. Data as of December 31, 2024. Indices used: Equally weighted basket of bonds issued by the countries in the FTSE Frontier Emerging Markets Government Bond Index, plus Zambia (Local-Currency Frontier Markets Universe); JPMorgan Government Bond Index - Emerging Markets Global Diversified (EMD Hard Currency Index, EMBIGD); JPMorgan Government Bond Index - Emerging Markets (EMD Local Currency Index, GBI-EM); JPMorgan Next Generation Markets Index (HC Frontier Index, NEXGEM). Historical trends do not imply, forecast or guarantee future results.

	Annualized Return	Annualized Volatility	Maximum Drawdown %	Skew	Kurtosis	YTM
Dominican Republic	6.5%	8.6%	-18.7%	(0.45)	2.15	9.8%
Ghana	-16.4%	28.4%	-82.0%	0.04	10.45	-
Bangladesh	-0.3%	7.5%	-35.0%	(0.44)	1.92	12.4%
Costa Rica	15.5%	8.0%	-9.8%	0.10	1.25	5.9%
Egypt	-0.2%	19.1%	-61.6%	(4.30)	21.46	24.8%
Kenya	9.3%	8.2%	-23.1%	1.94	7.59	14.2%
Sri Lanka	3.1%	22.9%	-65.7%	(2.49)	16.99	10.7%
Morocco	2.2%	6.7%	-21.4%	0.21	2.32	3.2%
Nigeria	-9.7%	29.7%	-81.0%	(2.91)	14.50	19.2%
Pakistan	-3.7%	15.3%	-50.6%	(0.73)	3.09	12.3%
Serbia	2.9%	8.3%	-27.8%	0.25	1.36	4.6%
Ukraine	3.9%	31.0%	-71.8%	(2.20)	9.83	24.0%
Vietnam	4.1%	9.5%	-27.3%	(0.30)	5.22	2.9%
Uganda	12.0%	9.7%	-10.6%	(0.59)	1.09	16.9%
Kazakhstan	12.3%	13.0%	-12.2%	(0.81)	1.00	13.3%
Zambia	18.3%	35.3%	-24.8%	2.38	10.26	21.0%
Equal-Weighted Universe	4.4%	7.1%	-24.6%	(1.66)	6.02	13.0%
JPM GBI-EM GD	-0.4%	11.2%	-26.3%	(0.32)	0.55	6.5%

SUMMARY STATISTICS FOR COUNTRIES IN THE LOCAL-CURRENCY FRONTIER MARKET UNIVERSE, 2018 – 2024

Source: Bloomberg, NB calculations. Data as of December 31, 2024. Local-currency Frontier Markets Universe, Equally Weighted is an equally weighted basket of bonds issued by the countries in the FTSE Frontier Emerging Markets Government Bond Index, plus Zambia. Zambia's YTM is calculated assuming a seven-year maturity, which is the average maturity in the FTSE Index. For comparison, the average annual return and YTM of the published market capitalization-weighted FTSE Index are 2.9% and 10.3%, respectively. The FTSE Frontier Emerging Markets Government Bond Index was launched in April 2021 but is published with data backfilled to January 2018. Start dates differ for Costa Rica (March 2019), Uganda (August 2021), Zambia (February 2020) and Kazakhstan (April 2022); all other countries' returns data start at January 2018. Ghana was removed from the FTSE Index in February 2023; after that time, the performance data shown here comprises the currency, plus the bonds with a 40% haircut applied and no coupon payments or carry assumed. For illustrative and discussion purposes only. Historical trends do not imply, forecast or guarantee future results. Nothing herein constitutes a prediction or projection of future events or future market behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed. Historical trends do not imply, forecast or guarantee future results.

Risk and Diversification

Perhaps more notable than the outperformance is how investors would have experienced the risk of the asset class.

The local-currency frontier market returns were markedly more skewed and fatter-tailed than those of the local-currency emerging markets debt index. That reflects the higher frequency of credit and currency shocks in frontier markets. While more countries tend to make the transition from frontier to emerging markets (the Philippines looks likely to make that transition this year, for example), some countries, such as Egypt, have gone in the other direction, at least temporarily, in this case due to foreign-exchange liquidity issues. Just in the last year, Nigeria and Egypt have devalued their currencies.

Even so, between 2018 and the end of 2024, the maximum drawdown of the local-currency frontier market was no bigger than that of the emerging markets index, and its annualized volatility was considerably lower, at 7.1% versus 11.2%.

To some extent, that is a function of the asset class's elevated yields and limited liquidity. If a bond is paying out 5%, 10% or even 12% every six months, and if it is difficult to sell, the incentive for investors to hold on and ride out shocks is strong. That helps to dampen volatility.

More importantly, in our view, the low volatility of the market in aggregate—lower than the volatility of all but one of the individual issuers—reflects the highly idiosyncratic nature of most of the credit and currency shocks experienced. Local-currency bond markets in general are less exposed than hard-currency markets to global risk factors, such as dollar strength, portfolio flows and the U.S. Federal Reserve's policy stance. That is even more the case for local-currency bonds issued by relatively small, frontier countries where global investor participation remains limited. The material risk factors are more likely to involve local politics or weak institutions, a lack of transparency, fluctuations in foreign direct investment (FDI), or liquidity, tax and operational challenges.

As the volatility benefit suggests, we believe this makes local-currency frontier issuers not only an effective diversifier next to global asset classes, but also next to both hard and local-currency emerging market debt—and even next to other local-currency frontier issuers (figure 3).

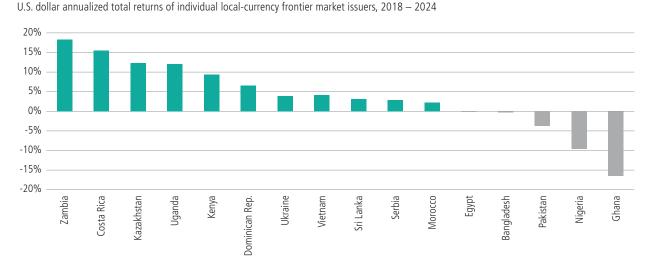


FIGURE 3. A HIGHLY DIVERSIFIED MARKET, AND A DIVERSIFIER NEXT TO OTHER ASSET CLASSES

Source: Bloomberg. Data as of December 31, 2024. Historical trends do not imply, forecast or guarantee future results.

	ŀ	Kazakhs	-							Sri			Costa	Bangla-		Dominican
	Zambia	tan	Uganda	Vietnam	Ukraine	Serbia	Pakistan	Nigeria	Morocco	Lanka	Kenya	Egypt	Rica	desh	Ghana	Rep.
Dominican Rep.	0.34	0.32	0.21	0.26	0.14	0.19	0.07	-0.04	0.32	0.18	0.11	0.09	0.25	0.30	-0.02	1.00
Ghana	0.12	-0.17	0.39	0.16	0.24	0.09	0.06	0.10	0.25	0.06	0.12	0.38	0.04	0.14	1.00	
Bangladesh	-0.11	0.00	0.39	0.13	-0.13	0.17	0.23	0.14	0.24	0.15	0.15	0.02	0.10	1.00		
Costa Rica	0.13	0.04	0.29	0.42	0.26	0.37	-0.24	0.14	0.10	0.41	0.01	-0.19	1.00		-	
Egypt	0.18	-0.16	0.01	0.20	0.19	0.06	0.23	-0.09	0.23	0.15	-0.25	1.00				
Kenya	0.12	-0.21	0.00	-0.22	0.06	0.01	0.07	-0.07	0.07	0.06	1.00					
Sri Lanka	-0.05	-0.15	0.14	0.31	0.40	0.45	0.13	0.01	0.21	1.00						
Morocco	0.16	-0.04	0.30	0.53	0.27	0.66	0.22	-0.02	1.00							
Nigeria	-0.11	-0.05	0.02	0.14	0.06	-0.09	0.03	1.00								
Pakistan	0.01	0.05	0.16	0.00	0.22	-0.03	1.00									
Serbia	0.02	-0.08	0.42	0.52	0.34	1.00										
Ukraine	0.19	-0.11	0.14	0.19	1.00		_									
Vietnam	0.08	0.01	0.31	1.00												
Uganda	0.19	-0.01	1.00													
Kazakhstan	-0.11	1.00														
Zambia	1.00															

Intra-frontier market correlations, 2018 - 2024

Frontier market correlations with other asset classes, 2018 - 2024

	EM Corporate Debt	EM Debt Hard Currency	EM Debt Local Currency	U.S. High Yield	Global Gov. Bonds	Global Equities	U.S. Equities	U.S. Treasuries
Equal-Weighted Frontier Markets Universe	0.62	0.48	0.45	0.38	0.29	0.21	0.17	0.12

Source: Bloomberg, Neuberger Berman calculations. Data as of December 31, 2024. Indices used: FTSE Frontier Emerging Markets Government Bond Index, plus Ghana and Zambia, equally weighted (Equal-Weighted Frontier Markets Universe); JPMorgan Corporate EMBI Diversified Index (EM Corporate Debt); JPMorgan EMBI Global Diversified Composite Index (EM Debt Hard Currency); JPMorgan GBI-EM Global Diversified Index (EM Debt Local Currency); Bloomberg U.S. Corporate High Yield Total Return Index (U.S. High Yield); FTSE World Government Bond Index (Global Government Bonds); MSCI World Net Total Return Index (Global Equities); S&P 500 Total Return Index (U.S. Equities); Bloomberg U.S. Treasury Total Return Index (U.S. Government Bonds). Start dates differ for Costa Rica (March 2019), Uganda (August 2021), Zambia (February 2020) and Kazakhstan (April 2022); all other countries' returns data start at January 2018. All asset-class calculations are based on index returns in U.S. dollars. For illustrative and discussion purposes only. Historical trends do not imply, forecast or guarantee future results. Nothing herein constitutes a prediction or projection of future events or future market behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed. **Past performance is no guarantee of future results**.

Current Challenges and Future Outlook

For those with long enough memories, all of this may sound familiar. Local-currency frontier markets still exhibit many of the characteristics of emerging markets debt in its early days. But as well as attractive returns, high yields and diversification benefits, that also brings "old-style" challenges.

Liquidity. Outside of Bangladesh and Ukraine, where less than \$2mn of local-currency bonds change hands on the average day, we would describe the 15 markets in our analysis as tradable but not liquid. The most liquid market is Egypt's, where some \$1.2bn of bonds and \$150mn of foreign exchange trades each day, but that is an outlier.

The day-to-day background is one of low participation by global investors and a buy-and-hold approach by the banks and domestic pension funds that are the typical domestic investors. In our view, that means portfolio managers are likely to have to build and unwind positions gradually, plan for long holding periods and limit turnover. Beyond the day-to-day, should an issuer fall into distress, liquidity can evaporate completely—sometimes due to capital controls.

Operational Challenges. Local custody accounts are required to buy bonds in these markets—but as many issuers have long been active in the hard-currency markets, this should not be an issue for seasoned emerging markets debt investors. Settlement can be slow, however. Some countries allow for settlement in U.S. dollars via Euroclear, Clearstream or the Depositary Trust and Clearing Corporation (DTC), but others require domestic settlement.

One potential way around these operational hurdles is to invest in local currency bonds issued by multilateral development banks (MDBs) that settle in Euroclear. This can provide generic funding to MDBs, or more specific financing for their projects in these countries. This route can make for more socially and environmentally sustainable frontier markets exposure, as the United Nations Sustainable Development Goals (SDGs) are embedded into MDB mission statements. The MDBs assume project risk, so MDB bonds can be used to dial down a portfolio's direct country credit risk exposure. The MDBs themselves are preferred creditors, and their bonds are typically AA or AAA rated and governed under U.K. or New York law—as with the International Monetary Fund (IMF), a country that defaults to an MDB can be locked out of multilateral financing for a long time, and this has proven a strong incentive to service the debt. MDBs still issue mostly in hard currency, but they do issue in local currencies as part of their mission to help develop local capital markets, and issuance in frontier market currencies is also becoming more common. In the case of generic funding, MDBs would hedge their proceeds to the U.S. dollar through the forward and cross-currency market, providing a way for investors to get local-currency FX exposure and local rates exposure as the other side of the trade.

Reputational Risk. The lack of transparency and typically weaker institutions of frontier markets can pose reputational risks to investors. Sophisticated analysis of evolving environmental, social and governance standards is critical for avoiding headline risk, in our view—although, again, the fact that many frontier market issuers have long been active in the hard-currency markets means that seasoned emerging markets investors are likely already to have research coverage. Investing indirectly via MBD bonds can also mitigate reputational risk.

As with emerging markets and frontier markets hard-currency debt, over time we would expect the liquidity and operational challenges associated with these markets to diminish, and some of these countries to graduate out of frontier into mainstream emerging markets classification, as others, such as Serbia and the Dominican Republic, have before them. Issuance has been growing steadily for years and the high yields and diversification benefits on offer are attracting the attention of many more institutional investors. We expect the rollout of the J. P. Morgan index to give that additional impetus later this year. And the asset management industry, which already knows most of these issuing countries intimately, stands ready to meet this growing demand.

We see local-currency frontier market debt becoming a natural complement to existing emerging markets debt allocations over time.

Index Definitions

The **FTSE Frontier Emerging Markets Government Bond Index** is part of the FTSE Frontier Emerging Markets Government Bond Index Series and is a market capitalization-weighted benchmark of local-currency government bonds from 14 countries.

The JPMorgan Emerging Government Bond Index—Emerging Markets Global Diversified (GBI-EM GD) tracks the performance of bonds issued by emerging market governments and denominated in the local currency of the issuer, excluding countries with explicit capital controls and with a 10% cap for each issuing country.

The J. P. Morgan Next Generation Market Index tracks the performance of a set of non-investment grade rated, smaller, less liquid countries from the Emerging Government Bond Index—Emerging Markets Global Diversified (GBI-EM GD).

The JPMorgan Corporate EMBI Diversified Index tracks liquid, U.S. Dollar-denominated emerging market fixed and floating-rate debt instruments issued by corporates.

The **Bloomberg U.S. Corporate High Yield Total Return Index** measures the total return of the liquid component of the USD-denominated high-yield fixed-rate bond market.

The **FTSE World Government Bond Index** measures the performance of fixed-rate, local currency, investment-grade sovereign bonds. It comprises sovereign debt from over 20 countries, denominated in a variety of currencies.

The MSCI World Net Total Return Index tracks the performance of large- and mid-cap stocks across 23 developed markets countries.

The **S&P 500 Total Return Index** consists of 500 U.S. stocks chosen for market size, liquidity and industry group representation. It is a market value-weighted index (stock price times number of shares outstanding), with each stock's weight in the Index proportionate to its market value.

The Bloomberg U.S. Treasury Total Return Index measures the total return of USD-denominated, fixed-rate U.S. Treasury bonds with a maturity longer than one year.

This material is provided for informational and educational purposes only and nothing herein constitutes investment, legal, accounting or tax advice. This material is general in nature and is not directed to any category of investors and should not be regarded as individualized, a recommendation, investment advice or a suggestion to engage in or refrain from any investment-related course of action. Investment decisions and the appropriateness of this material should be made based on an investor's individual objectives and circumstances and in consultation with his or her advisors. Information is obtained from sources deemed reliable, but there is no representation or warranty as to its accuracy, completeness or reliability. All information is current as of the date of this material and is subject to change without notice. Any views or opinions expressed may not reflect those of the firm as a whole. Neuberger Berman products and services may not be available in all jurisdictions or to all client types.

This material may include estimates, outlooks, projections and other "forward-looking statements." Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed. Investing entails risks, including possible loss of principal. Investments in hedge funds and private equity are speculative and involve a higher degree of risk than more traditional investments. Investments in hedge funds and private equity are intended for sophisticated investors only. Indexes are unmanaged and are not available for direct investment. **Past performance is no guarantee of future results.**

The views of the research analyst and the firm and its employees on medical topics should not be relied upon as medical advice and are not intended to serve as a substitute for consulting with a qualified medical professional. There is no representation or warranty as to its accuracy, completeness or reliability. All information is current as of the date of the material and is subject to change without notice. The firm, its employees and advisory accounts may hold positions of the manufacturers of the products discussed.

No part of this document may be reproduced in any manner without prior written permission of Neuberger Berman Europe Limited.

This material is being issued on a limited basis through various global subsidiaries and affiliates of Neuberger Berman Group LLC. Please visit www.nb.com/disclosure-globalcommunications for the specific entities and jurisdictional limitations and restrictions.

The "Neuberger Berman" name and logo are registered service marks of Neuberger Berman Group LLC.

NEUBERGER BERMAN

Neuberger Berman 1290 Avenue of the Americas New York, NY 10104-0001

AA0053 02/25 2221001 ©2025 Neuberger Berman Group LLC. All rights reserved.

www.nb.com