GMO EMD QUARTERLY VALUATION UPDATE

EXECUTIVE SUMMARY

Third quarter 2022 EMD returns reflected the continued deterioration of global economic and market conditions:

- Hard Currency Debt EMBIG-D index was down -4.6%; index losses were driven by the upward trend in U.S. Treasury yields (-4.9% contribution) and widening credit spreads (+0.4%).
- Local Debt GBI-EMGD index was also down, by -4.7%, as both currency returns (-4.3% contribution) and local rates (-0.4%) produced losses during the guarter.

As we enter the fourth quarter of 2022 our valuation metrics for emerging debt are more compelling than they were at the beginning of the quarter:

- Hard currency debt valuations continued to improve and are at very attractive levels, thanks to further widening in sovereign spreads coupled with relatively stable credit ratings.
- Emerging Currencies are currently moving toward the high end of the neutral range of fair value as the inflation and growth environment becomes less negative while long-term valuation signals show more attractiveness.
- Interest rate valuations point to attractive levels of emerging local interest rates relative to U.S. dollar interest rates. Our metric, while lower than in the past one year, remains wide by historical standards.

In this piece, we update our valuation charts and commentary, with additional details on our methodology available upon request.¹

1

For more detail on the methodologies referred to throughout this piece, please contact your GMO representative.

We are assuming a 25% recovery rate in a default state, which is the same for both sovereigns and quasi-sovereigns. We've recently enhanced this process to reflect the ratings of quasisovereign issuers instead of assuming sovereign ratings for all benchmark constituents. The overall effect is minor given the small percentage of quasi-issuers that have a different rating than the sovereign. Specifically, to calculate the weightedaverage credit ratings of the benchmark, the bonds for each country are first divided into sovereign and quasi-sovereign categories. For each quasi-sovereign issuer, we use the S&P credit ratings specific to that entity if available; otherwise, its corresponding sovereign credit ratings are used. The weighted average is a market-value weighted average of the individual ratings corresponding to each bond.

VALUATION METRICS IN EMERGING DEBT

Emerging Country Debt Team | 30 2022

External Debt Valuation

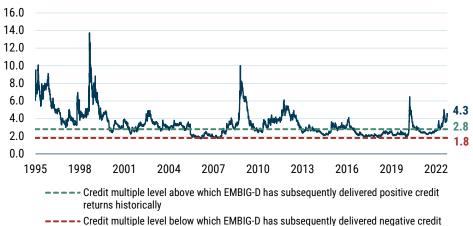
The EMBIG-D benchmark's mid spread over Treasuries widened by 19 bps in Q2, ending the quarter at 570 bps. As seen in Exhibit 1, the fair market multiple is the benchmark's credit spread to the spread that would be required to compensate for credit losses. This ratio rose marginally over the course of the quarter. The multiple stood at 4.3 on September 30, 2022, up from 4.2 on June 30, 2022.

A Note About Our Metrics

QVU metrics are designed to give asset allocators a time series of risk premia associated with the two sovereign emerging debt benchmarks for hard and local currency. The purpose is to help allocators time investing decisions. Our team uses them to create blended benchmark portfolios. We cover the pricing of credit in EMBIG-D; and currencies and rates in GBI-EMGD by comparing prices to relevant fundamentals.

Technical appendices covering methodology are available from your GMO representative.

EXHIBIT 1: LONG-TERM VIEW OF THE "FAIR MARKET MULTIPLE" FOR EMERGING EXTERNAL DEBT



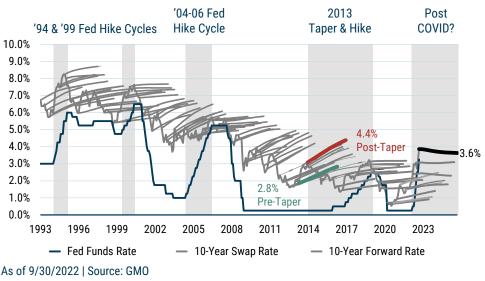
 Credit multiple level below which EMBIG-D has subsequently delivered negative credi returns historically

As of 9/30/2022 | Source: GMO calculations based on Bloomberg and J.P. Morgan data

Credit spread widening was the main driver for the increase in the multiple over the quarter, as the multiple's denominator – the fair value spread or expected credit loss – rose only marginally to 133 at the end of September. Regular readers will recall that this fair value spread is a function of the weighted-average credit rating of the benchmark, along with historical sovereign credit transition data and an assumption about recovery values given default.²

U.S. Treasury yields rose sharply, and the curve inverted during the quarter, with the 10-year yield rising by 82 bps and having a negative impact on benchmark returns. While long-end U.S. Treasury yields trended upward during the quarter, the slope of the 10-year forward curve inverted from 5 bps to -23 bps as of the end of September (the entire curve shifted higher by about 50-80 bps). This indicates the market is pricing in less of a cushion for rising rates, as the forward curve represents the path that would make an investor indifferent to holding Treasuries and cash. We view the decline in slope as reducing the prospective relative valuation of 10-year risk-free rates versus cash relative to the previous quarter.

EXHIBIT 2: 10-YEAR U.S. TREASURY SWAP CURVES AT QUARTERLY INTERVALS



Local Debt Markets Valuation

In local EM markets, we use a similar valuation metric to consider the relative attractiveness of the asset class. Our overall GBI EM FX return barometer improved toward the upper end of the neutral range during the quarter. The sharper depreciation of EM currencies in the third quarter in response to the risk-off sentiment led to a more attractive long-term valuation. On the other hand, our new EM local interest rate valuation metric, which looks at the deviations of current yields from their fair value yield, while lower than a year ago, remains high versus historical standards and very wide when compared to the same measure of U.S. interest rate valuations.

Exhibit 3 shows a time series of our EM FX model estimate of the GBI-EMGD benchmark's spot FX valuation. EM currencies ended September moving toward the upper end of the neutral range. When we decompose our EM FX valuation signal into proxies of its three components (long-term valuation, balance of payment, and economic cycle), we find that EM FX cheapened from a long-term valuation perspective during the quarter while remaining neutral from a balance of payment perspective. What continues to hold EM FX back somewhat versus the pre-2008 period is the lower growth and higher inflation environment, as mentioned above (economic cycle pillar of the model), even though the environment improved slightly in the third quarter as inflation receded in some countries. As growth recovers and inflation continues to come down, we are mindful that this pillar could also turn around at a faster pace.

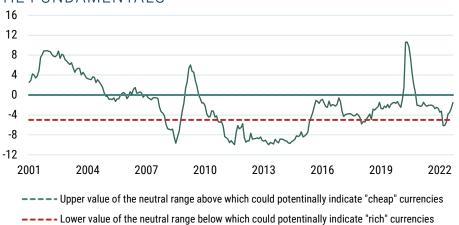
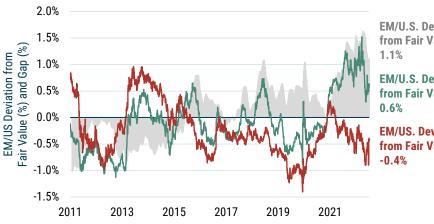


EXHIBIT 3: GBI-EMGD EXPECTED SPOT FX RETURN GIVEN THE FUNDAMENTALS

As of 9/30/2022 | Source: GMO

As for EM local interest rates, we are introducing a new framework to assess EM interest rate valuation this quarter. We now consider the deviations of current 5-year yields from their fair value to gauge relative attractiveness of EM against the U.S. (see Exhibit 4). In this regard, we believe that the best time to buy local debt is when EM deviation from Fair Value is positive and higher than the U.S. deviation from fair value. We continue to see a substantial positive gap between EM and U.S. deviations. However, that spread between EM and U.S. deviations tightened by 50 bps during the quarter to 109 bps. Having been stable for several years, the 5-year average of the spread between EM and U.S. deviations rose in Q3, from 58 bps to 65 bps.

EXHIBIT 4: LOCAL INTEREST RATE RELATIVE VALUATION VS. U.S. RATES



EM/U.S. Deviation from Fair Value Gap,

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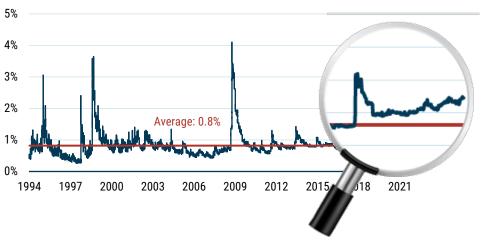
Fair value estimates and differentials are based on 20-day rolling averages.

As of 9/30/2022 | Source: GMO

Liquidity

One key feature of EM debt is low baseline and occasionally very poor liquidity. We consider this a feature of EM and GMO's portfolios seeking to manage this risk while extracting well-compensated illiquidity premia as appropriate. Over the course of the quarter, we observe a renewed deterioration in liquidity, although not to the stressed levels that occurred around the initial shock of Russia's invasion of Ukraine in February (see Exhibit 5).

EXHIBIT 5: EMBIG-D BID-ASK SPREAD (% OF PRICE), SINCE DECEMBER 1993



As of 9/30/2022 | Source: GMO

Investing from a Non-USD Perspective

The preceding discussion addresses asset class valuations from a USD-based investor's perspective. For investors from other home currencies, we discuss the valuation of the USD relative to the EUR, CAD, and AUD (Exhibit 6) and current hedging costs (Exhibit 7). We note that while hedging costs for EUR have risen, hedging costs for AUD and CAD have been generally quite stable through the extraordinary macro conditions of the past year. Currently, we view all three major non-USD base currencies as becoming increasingly cheap. This also points to the fact that the USD looks expensive against largely all other developed market currencies. Our fixed income quantitative team sees this as a signal of a potential long-term downward trend of the USD based on its long-term PPP valuation model.

In summary, we note the favorable credit environment for external debt but emphasize the uncertainty of current events and rate movements on this outlook. The EM FX valuation outlook offers a mixed but improving picture, given EM FX looks cheap from a pure valuation perspective (Pillar 1) but expensive from an economic cycle's perspective (Pillar 3). Lastly, a stretched USD valuation could suggest a secular downward trend with the related medium-term expectations of stronger EM currency valuations down the road. Finally, the deviation of local yield from the Fair Value between EM and the US, while lower, remains wide versus history, making EM local debt relatively attractive from that perspective.

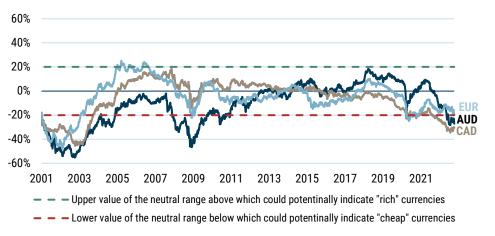


EXHIBIT 6: HISTORICAL CURRENCY VALUATION SINCE 2001

As of 9/30/2022 | Source: Bloomberg, J.P. Morgan, GMO

EXHIBIT 7: ANNUAL ROLL YIELD DIFFERENCE WHEN HEDGING USD TO AUD, CAD, AND EUR BASE



Disclaimer

The views expressed are the views and understanding of the Emerging Country Debt team through the period ending September 2022 and are subject to change at any time based on market and other conditions. While all reasonable effort has been taken to ensure accuracy, no representation or warranty for accuracy is provided nor should be assumed. This is not an offer or solicitation for the purchase or sale of any security and should not be construed as such. References to specific securities and issuers are for illustrative purposes only and are not intended to be, and should not be interpreted as, recommendations to purchase or sell such securities.

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