MACKAY SHIELDS
A NEW YORK LIFE INVESTMENTS COMPANY

INSIGHTS & PERSPECTIVES

Emerging Market Debt Team

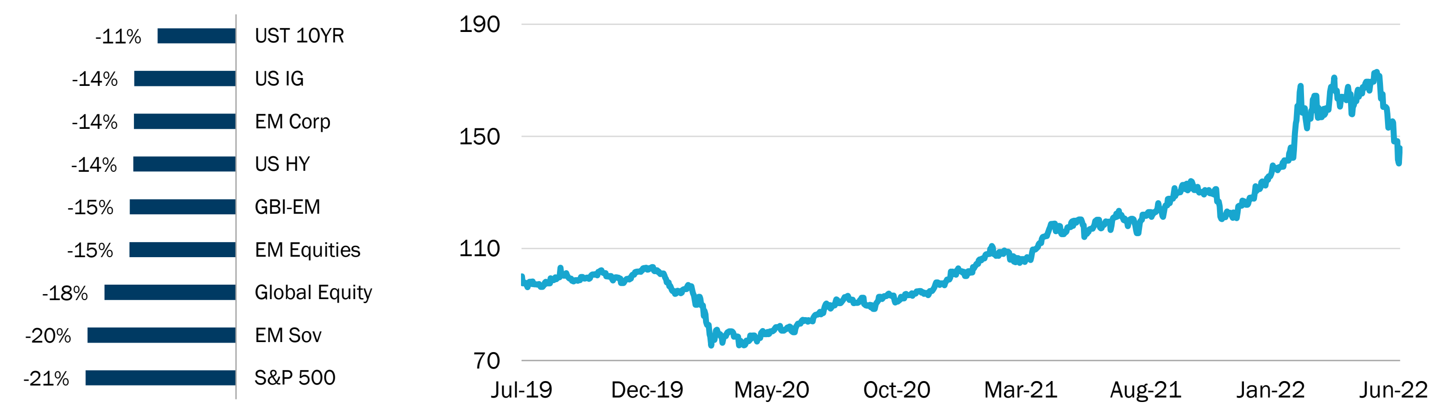
JULY 2022

Emerging Markets Debt: 2022 Mid-Year Outlook

The first half of 2022 will be remembered as one of the most volatile periods in financial markets. Returns for most major asset classes were significantly negative with only few exceptions. The easing of restrictions as the omicron variants of the novel coronavirus proved less fatal than earlier mutations, as well as pent-up demand for goods and services unleashed a powerful surge in inflation worldwide. A sharp rally in commodity prices exacerbated the situation following Russia's invasion of Ukraine in February. Interest rates rose sharply across all major markets and equity returns turned deeply negative, with few exceptions.

FIGURE 1: EMERGING MARKET YIELD IS ATTRACTIVE RELATIVE TO ITS OWN HISTORY

1H22 ASSET CLASS PERFORMANCE   BLOOMBERG COMMODITY INDEX

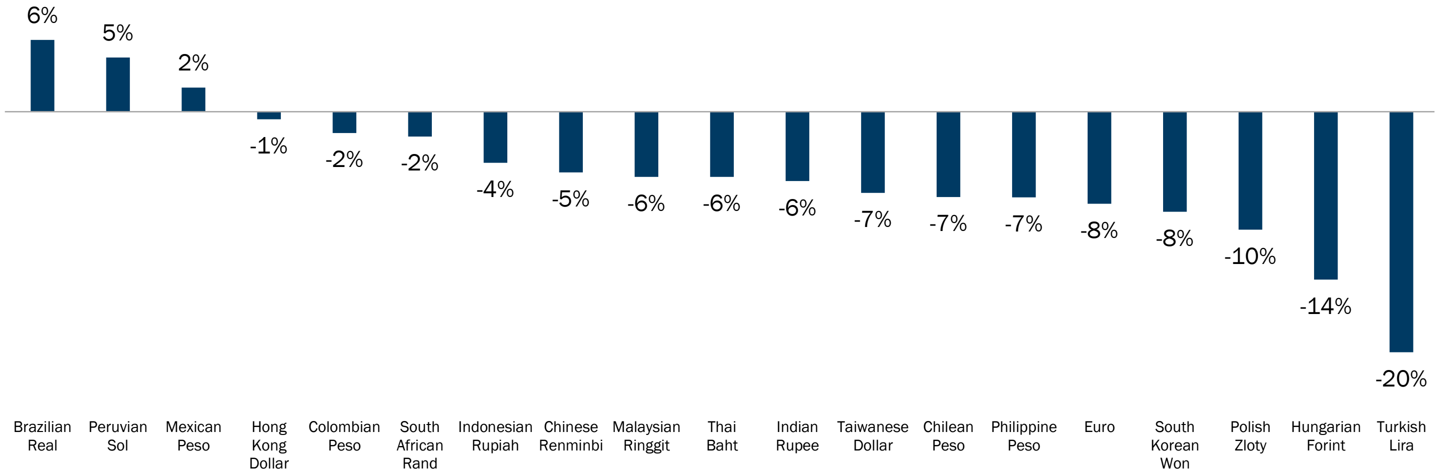


As of June 30, 2022.
See index definitions on page 5.
It is not possible to invest directly in an index. **Past performance is not indicative of future results.**
Sources: Bloomberg, JP Morgan, MSCI, S&P, ICE Data.

Central banks initially guided for a temporary surge in prices, but in the 2nd quarter of 2022 had to pivot to much more hawkish monetary policy frameworks. Only the Bank of Japan and to a lesser degree the European Central Bank remained committed to low policy rates. This contributed to the surge in the US dollar, which by the end of June was approaching parity against the euro for the first time since 2002.

Emerging market policy makers, in a welcome departure from historical behavior, reacted to sharply rising prices in many cases by front-loading interest rate adjustments. This meant that, despite the broadly surging dollar, emerging market currencies were unlikely outperformers, with the Brazilian real, Peruvian sol and Mexican peso all appreciating against the greenback in the first half of 2022. In Asia, where central banks did not front-load their hiking cycles, currencies broadly depreciated against the dollar at a magnitude similar to the move in the euro-dollar exchange rate. Asian export-oriented economies, as long as the deprecation remains orderly, are net beneficiaries from moderately weaker exchange rates.

FIGURE 2: FX PERFORMANCE VS USD
DECEMBER 31, 2021 – JUNE 30, 2022



As of June 30, 2022
Past performance is not indicative of future results.
Source: Bloomberg

Second Half of 2022 Outlook

The path for inflation remains highly uncertain. The impact of the commodity price shock will likely fade, unless raw material prices continue hitting new highs. Furthermore, amid a surge in the cost of living, households are likely to constrain spending or ask for higher compensation from their employers. If the latter will lead to an inflationary surge in wages is also unclear. We believe that amid this uncertainty the path for interest rates could enter a phase of volatility in developed markets, possibly without much directionality.

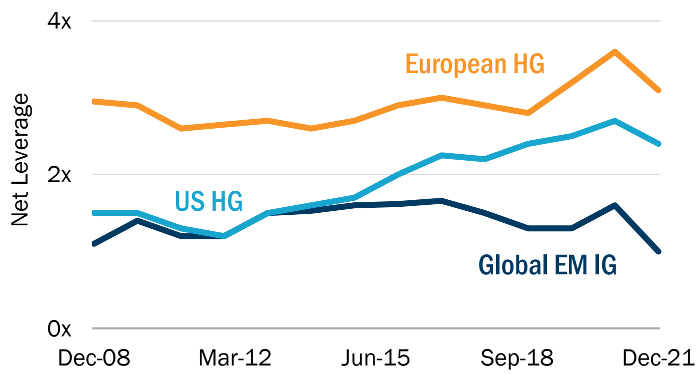
Against the backdrop of high uncertainty and volatile interest rates, we believe that countries in Latin America that have hiked interest rates early, well diversified Asian exporters and Middle Eastern hydrocarbon producers can benefit. On the other hand we think countries with high external financing needs, commodity importers and countries where central banks are behind the curve could find the second half of 2022 challenging.

We believe that amid the very negative overall market reaction in the first half of 2022, underlying improvements in sovereign and corporate balance sheets have not been fully reflected in valuations. This is particularly true for commodity sensitive sectors and regions, where for example we have seen a swing from high budget deficits to surpluses in the Middle East (e.g. Oman, Bahrain) and falling debt ratios in Ecuador and Angola.

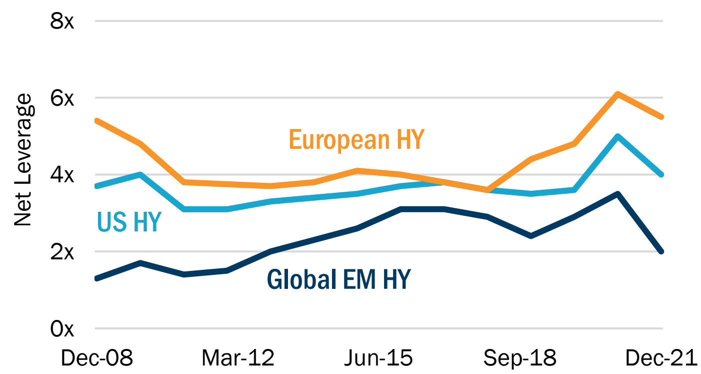
Looking at the USD 1.2 trillion emerging market corporate universe, fundamentals are often better than for developed market corporate peers. The net leverage ratio for example is lower for investment grade and high yield issuers from emerging markets. Financial engineering, a technique where companies borrowed cheaply and paid out dividends to shareholders was largely absent in emerging markets, and the desire to keep accessing external markets has led to a more prudent approach to borrowing among emerging market corporate treasurers. We think for this reason, the current pick-up in yield for emerging market corporate bonds relative to investment grade bonds offers value, and a well-researched portfolio can offer very attractive return potential.

FIGURE 3: EMERGING MARKETS VS. DEVELOPED MARKETS

EM VS DM IG NET LEVERAGE



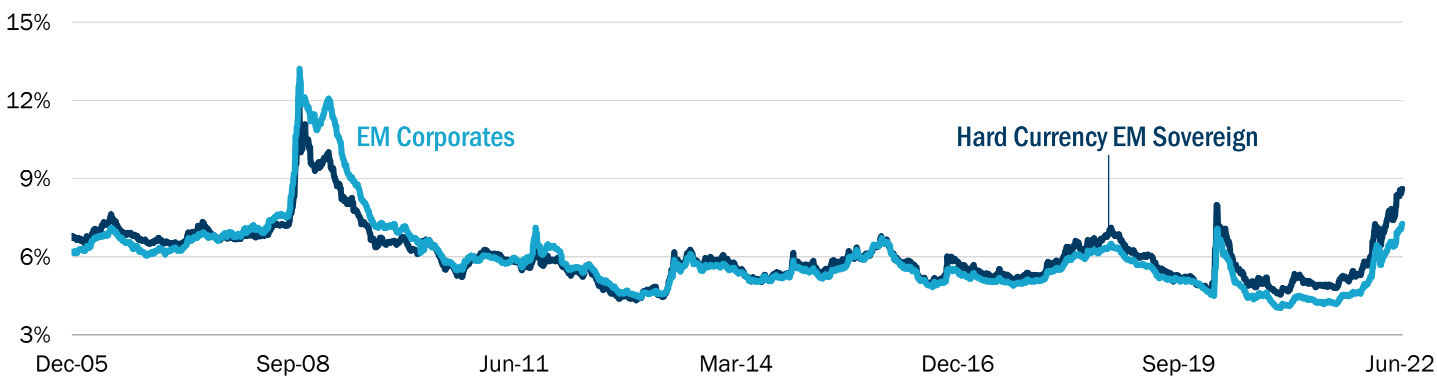
EM VS DM HY NET LEVERAGE



As of December 31, 2021
Source: JP Morgan

Emerging market dollar debt has repriced sharply in the first half of 2022, and broad indices for sovereigns and corporates are now at levels not seen since the global financial crisis in 2008. We believe that, while the exact timing is difficult, current valuations offer an attractive entry point for the long term investor. The robustness of the policy response, improving terms of trade for commodity exporters and a remarkable resilience in the face of the inflationary shock means that many emerging markets have weathered the global storm so far. Our process is specifically designed to identify which countries or credits will thrive in this environment and where a more cautious approach is warranted.

FIGURE 4: HARD CURRENCY EM SOVEREIGN AND CORPORATE YIELDS



As of July 11, 2022
EM Corporates = J.P. Morgan CEMBI Diversified Broad Composite Blended Yield; Hard Currency EM Sovereign = JPMorgan EMBI Global Diversified Blended Yield. Please see index descriptions on p.5.
Past performance is not indicative of future results.
Source: JP Morgan

Meet the MacKay Shields EMD Team

Diverse team with average **17 years experience** brings unique perspectives and skills:

A combination of bond experience across sovereign, local currency, and emerging market corporates

10 unique languages spoken among the team members

Prior to joining MacKay, the team led management of approximately **$4 billion** across EMD sovereigns and corporates.

Valentina Chen
CO-HEAD & PORTFOLIO MANAGER

Philip Fielding
CO-HEAD & PORTFOLIO MANAGER

Henry Stipp
PORTFOLIO MANAGER & MACRO ECONOMIST

Gordana Ilic
CORPORATE ANALYST

Christopher Garcia
QUANTITATIVE ANALYST

SOURCE DISCLOSURES

ICE Data Indices, LLC ("ICE Data"), is used with permission. ICE® is a registered trademark of ICE Data or its affiliates and BofA® is a registered trademark of Bank of America Corporation licensed by Bank of America Corporation and its affiliates ("BofA") and may not be used without BofA's prior written approval. ICE data, its affiliates and their respective third party suppliers disclaim any and all warranties and representations, express and/or implied, including any warranties of merchantability or fitness for a particular purpose or use, including the indices, index data and any data included in, related to, or derived therefrom. Neither ICE data, its affiliates nor their respective third party suppliers shall be subject to any damages or liability with respect to the adequacy, accuracy, timeliness or completeness of the indices or the index data or any component thereof, and the indices and index data and all components thereof are provided on an "as is" basis and your use is at your own risk. ICE data, its affiliates and their respective third party suppliers do not sponsor, endorse, or recommend MacKay Shields LLC, or any of its products or services.

"Bloomberg®", "Bloomberg Indices®", Bloomberg Fixed Income Indices, Bloomberg Equity Indices and all other Bloomberg indices referenced herein are service marks of Bloomberg Finance L.P. and its affiliates, including Bloomberg Index Services Limited ("BISL"), the administrator of the indices (collectively, "Bloomberg") and have been licensed for use for certain purposes by MacKay Shields LLC ("MacKay Shields"). Bloomberg is not affiliated with MacKay Shields, and Bloomberg does not approve, endorse, review, or recommend MacKay Shields or any products, funds or services described herein. Bloomberg does not guarantee the timeliness, accurateness, or completeness of any data or information relating to MacKay Shields or any products, funds or services described herein.

NOTE TO EUROPEAN INVESTORS

This document is intended for the use of professional and qualifying investors (as defined in the Alternative Investment Fund Manager's Directive) only. Where applicable, this document has been issued by MacKay Shields Europe Investment Management Limited, Hamilton House, 28 Fitzwilliam Place, Dublin 2 Ireland, which is authorized and regulated by the Central Bank of Ireland.

IMPORTANT DISCLOSURE

Availability of this document and products and services provided by MacKay Shields LLC may be limited by applicable laws and regulations in certain jurisdictions and this document is provided only for persons to whom this document and the products and services of MacKay Shields LLC may otherwise lawfully be issued or made available. None of the products and services provided by MacKay Shields LLC are offered to any person in any jurisdiction where such offering would be contrary to local law or regulation. This document is provided for information purposes only. It does not constitute investment or tax advice and should not be construed as an offer to buy securities. The contents of this document have not been reviewed by any regulatory authority in any jurisdiction.

This material contains the opinions of certain professionals at MacKay Shields but not necessarily those of MacKay Shields LLC. The opinions expressed herein are subject to change without notice. This material is distributed for informational purposes only. Forecasts, estimates, and opinions contained herein should not be considered as investment advice or a recommendation of any particular security, strategy or investment product. Information contained herein has been obtained from sources believed to be reliable, but not guaranteed. Any forward-looking statements speak only as of the date they are made and MacKay Shields assumes no duty and does not undertake to update forward-looking statements. No part of this document may be reproduced in any form, or referred to in any other publication, without express written permission of MacKay Shields LLC.

Information included herein should not be considered predicative of future transactions or commitments made by MacKay Shields LLC nor as an indication of current or future profitability. There is no assurance investment objectives will be met.

Past performance is not indicative of future results.

The following indices may be referred to in this document:

BLOOMBERG COMMODITY INDEX

The Bloomberg Commodity Index tracks prices of futures contracts on physical commodities on the commodity markets. The index is designed to minimize concentration in any one commodity or sector. It currently has 23 commodity futures in six sectors. No one commodity can compose more than 15% of the index, no one commodity and its derived commodities can compose more than 25% of the index, and no sector can represent more than 33% of the index (as of the annual weightings of the components). The weightings for each commodity included in BCOM are calculated in accordance with rules account for liquidity and production data in a 2:1 ratio, which ensures that the relative proportion of each of the underlying individual commodities reflects its global economic significance and market liquidity. Annual rebalancing and reweighting ensure that diversity is maintained over time.

BLOOMBERG US TREASURY 10 YEAR TERM INDEX TOTAL RETURN

The Bloomberg US Treasury 10 Year Index measures US dollar-denominated, fixed-rate, nominal debt issued by the US Treasury with 10 years to maturity. Treasury bills are excluded by the maturity constraint, but are part of a separate Short Treasury Index.

ICE BOFA US CORPORATE IG INDEX

The ICE BofA US Corporate IG Index tracks the performance of U.S. dollar-denominated investment-grade corporate debt publicly issued in the U.S. domestic market. Qualifying securities must have an investment-grade rating (based on an average of Moody's, S&P and Fitch) and an investment-grade rated country of risk (based on an average of Moody's, S&P and Fitch foreign currency long term sovereign debt ratings). In addition, qualifying securities must have at least one year remaining term to final maturity, a fixed coupon schedule and a minimum amount outstanding of $250 million.

ICE BOFA US HIGH YIELD INDEX

ICE BofA U.S. High Yield Index tracks the performance of U.S. dollar denominated below investment grade corporate debt publicly issued in the U.S. domestic market. Qualifying securities must have a below investment grade rating (based on an average of Moody’s, S&P and Fitch), at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of $250 million. In addition, qualifying securities must have risk exposure to countries that are members of the FX-G10, Western Europe or territories of the U.S. and Western Europe. The FX-G10 includes all Euro members, the U.S., Japan, the U.K., Canada, Australia, New Zealand, Switzerland, Norway and Sweden. Original issue zero coupon bonds, 144a securities (both with and without registration rights), and pay-in-kind securities (including toggle notes) are included in the index. Callable perpetual securities are included provided they are at least one year from the first call date. Fixed-to floating rate securities are included provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Contingent capital securities (“Cocos”) are excluded, but capital securities where conversion can be mandated by a regulatory authority, but which have no specified trigger, are included. Other hybrid capital securities, such as those issues that potentially convert into preference shares, those with both cumulative and non-cumulative coupon deferral provisions, and those with alternative coupon satisfaction mechanisms, are also included in the index. Securities issued or marketed primarily to retail investors, equity-linked securities, securities in legal default, hybrid securitized corporates, Eurodollar bonds (USD securities not issued in the U.S. domestic market), taxable and tax-exempt U.S. municipal securities and DRD-eligible securities are excluded from the index. Index constituents are market capitalization weighted. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index.

J.P. MORGAN CEMBI BROAD DIVERSIFIED COMPOSITE BLENDED YIELD

The CEMBI Broad Diversified is a uniquely weighted USD-denominated emerging markets corporate credit index. It employs a unique approach which uses only a certain portion of the current face amount outstanding for instruments from countries with larger debt stocks. This helps to limit country weights, while reducing index turnover. The blended yield of this index is the market value weighted average yield of its constituents.

J.P. MORGAN CORPORATE EMBI BROAD DIVERSIFIED COMPOSITE INDEX

The J.P. Morgan CEMBI Broad Diversified Core Index (CEMBI CORE) tracks the performance of US dollar-denominated bonds issued by emerging market corporate entities. The CEMBI CORE follows the methodology of the flagship J.P. Morgan CEMBI Broad Diversified (CEMBIB Div) closely, while offering a more liquid and higher credit quality subset. The CEMBI CORE is based on the composition of the CEMBIB Div but removes the instruments with face amounts outstanding less than US$500 million and the instruments that are closer to maturity. The diversification methodology limits the weights of the larger index countries by only including a specified portion of those countries' eligible face amount outstanding, thus reducing single issuer concentration and providing a more even distribution of weights.

J.P. MORGAN EMBI GLOBAL DIVERSIFIED INDEX

The Emerging Market Bond Index Global Diversified (EMBIGD) is a uniquely weighted USD-denominated emerging markets sovereign index. It has a distinct diversification scheme which allows a more even weight distribution among the countries in the index.

J.P. MORGAN EMBI GLOBAL DIVERSIFIED BLENDED YIELD INDEX

The Emerging Market Bond Index Global Diversified (EMBIGD) is a uniquely weighted USD-denominated emerging markets sovereign index. It has a distinct diversification scheme which allows a more even weight distribution among the countries in the index. The Diversification methodology constrains a country’s weight by first adjusting the face amount outstanding and then applying an additional layer of maximum weight cap of 10%. The blended yield of this index is the market value weighted average yield of its constituents.

J.P. MORGAN GBI-EM GLOBAL DIVERSIFIED UNHEDGED USD INDEX

The J.P. Morgan EMBI Global Diversified Index tracks liquid, US Dollar emerging market fixed and floating-rate debt instruments issued by sovereign and quasi-sovereign entities.

MSCI EMERGING MARKETS 100% HEDGED TOTAL RETURN USD INDEX

The MSCI Emerging Markets (EM) 100% Hedged to USD Index represents a close estimation of the performance that can be achieved by hedging the currency exposures of its parent index, the MSCI EM Index, to the USD, the "home" currency for the hedged index. The index is 100% hedged to the USD by selling each foreign currency forward at the one-month Forward weight. The parent index is composed oflarge and mid cap stocks across 24 Emerging Markets (EM) countries* and its local performance is calculated in different currencies.

MSCI WORLD 100% HEDGED TOTAL RETURN USD INDEX

The MSCI World 100% Hedged to USD Index represents a close estimation of the performance that can be achieved by hedging the currency exposures of its parent index, the MSCI World Index, to the USD, the "home" currency for the hedged index. The index is 100% hedged to the USD by selling each foreign currency forward at the one-month Forward weight. The parent index is composed of large and mid-cap stocks across 23 Developed Markets (DM) countries* and its local performance is calculated in 13 different currencies, including the Euro.

S&P 500 INDEX

The S&P 500 is a capitalization-weighted stock index that includes 500 of the largest companies traded on American stock markets, and its performance is often used as a benchmark by investors.