

January 2023

EMsights Capital Group

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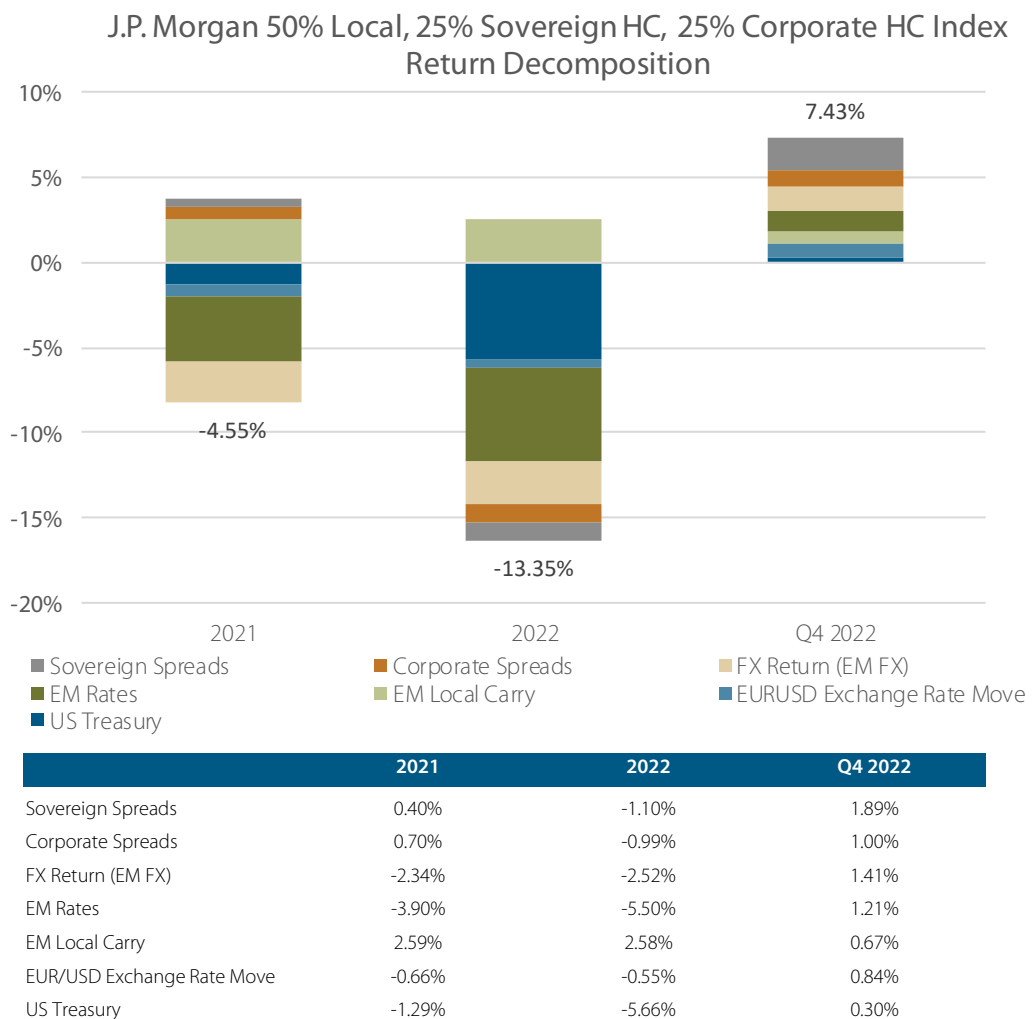
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ARTISAN PARTNERS

J.P. Morgan Blended Benchmark Performance Breakdown

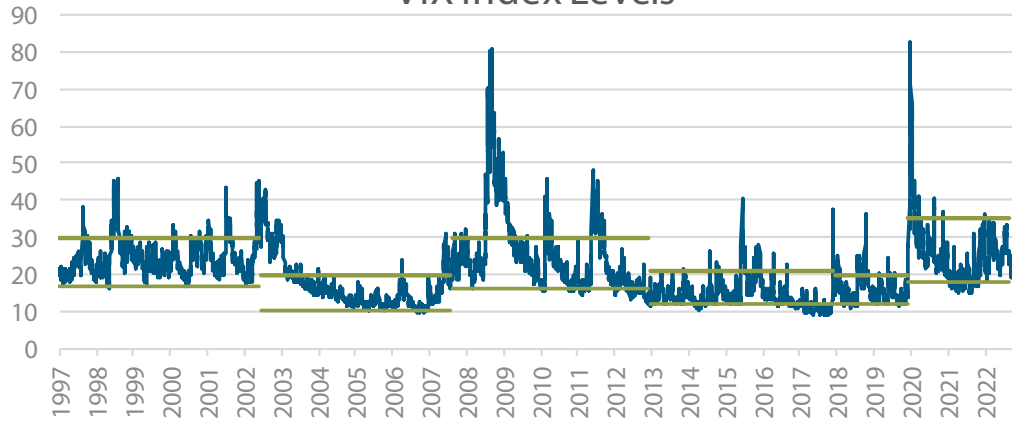


Source: J.P. Morgan. As of December 2022. **Past performance is not indicative of future results.** Returns attributable to Index components may not sum to the index's total return due to rounding. EM Local Carry is considered the return of the interest paid by bonds. See Notes and Disclosures page for index description.

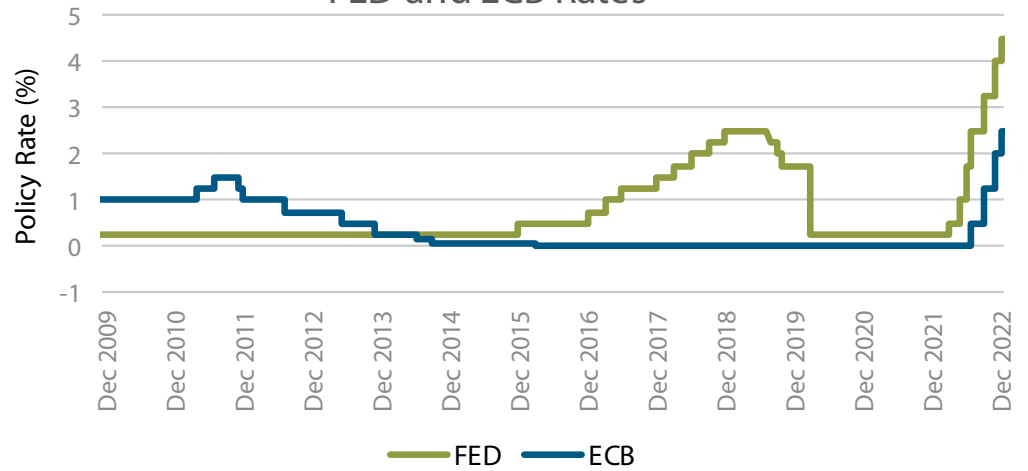
Uncertainty Continues

- Inflation versus recession
 - Perhaps both... or neither?
- Central bank tightening policy globally
 - Nearing an end... or not?
- Ukraine/Russia war continues
 - Winding down or about to ramp up?
- Europe's pending implosion
 - Unaffordable debt or unconditional support?
- China
 - Reopening impact on global growth and inflation
 - Relations with west
- Things are breaking
 - Crypto Winter
 - Pension funds in the UK blew up and were bailed out
 - Real estate pain
- Question: What does the next decade look like?
 - Short answer: Not like the last

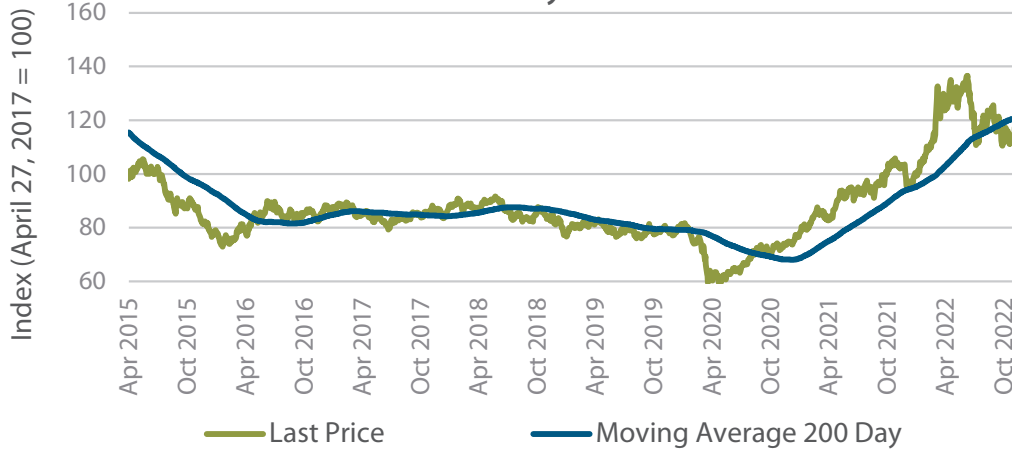
VIX Index Levels



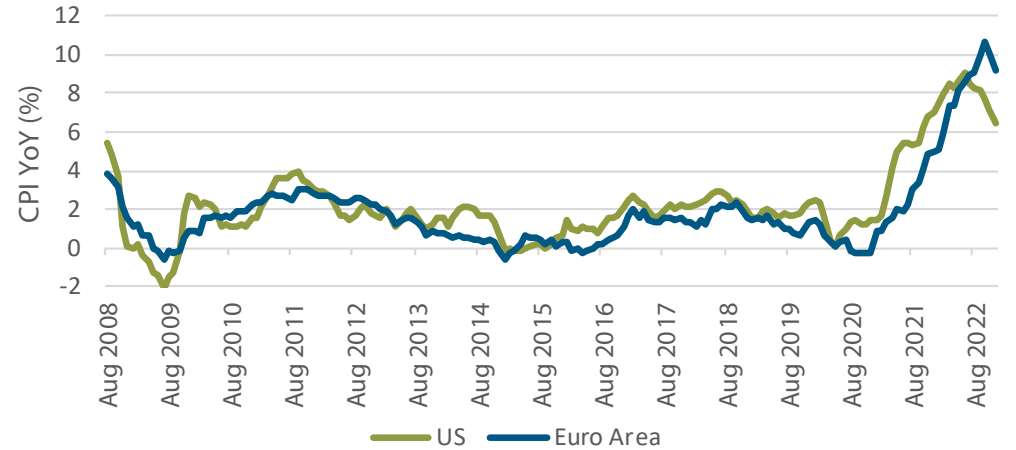
FED and ECB Rates



Commodity Prices



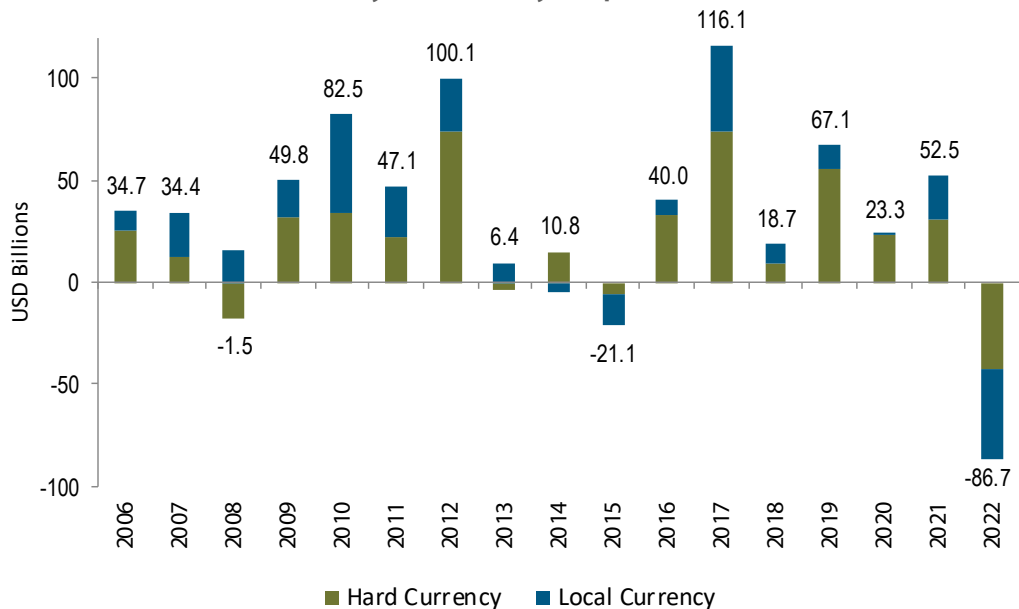
US and Euro Area CPI



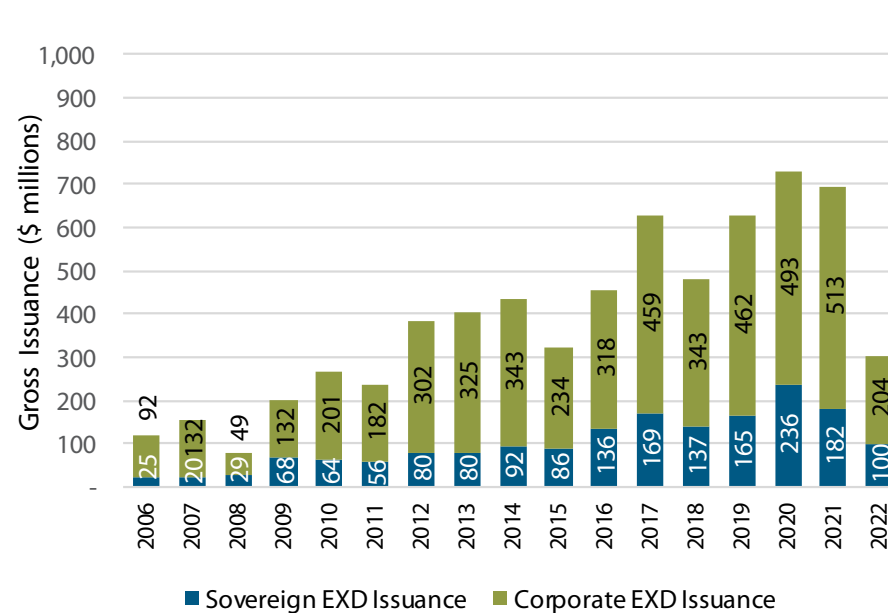
Source: Bloomberg. As of 31 December 2022. **Past performance is not indicative of future results.** The VIX Index is a financial benchmark that estimates the expected volatility of the S&P 500® Index and is calculated by using the midpoint of real-time S&P 500® Index (SPX) option bid/ask quotes. It is commonly used to proxy market risk and/or uncertainty.

- Historic outflows in 2022
- Lowest hard currency debt issuance since 2011

Emerging Markets Debt Bond Flows by Currency Exposure

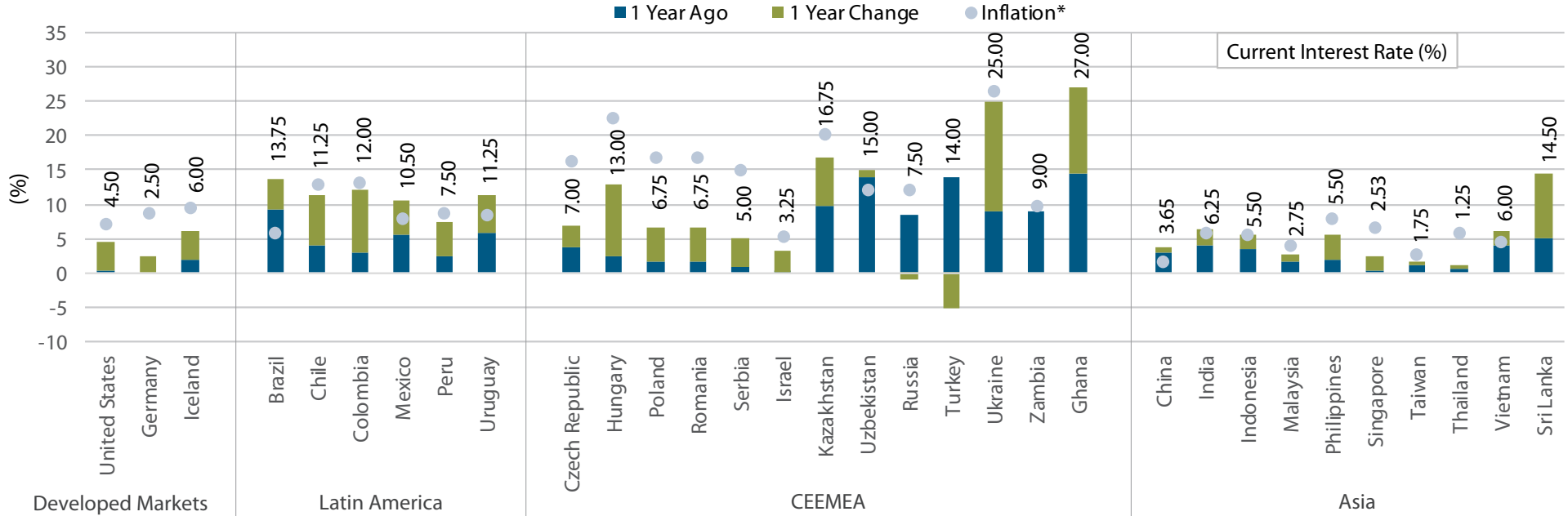


Gross Issuance of External Debt

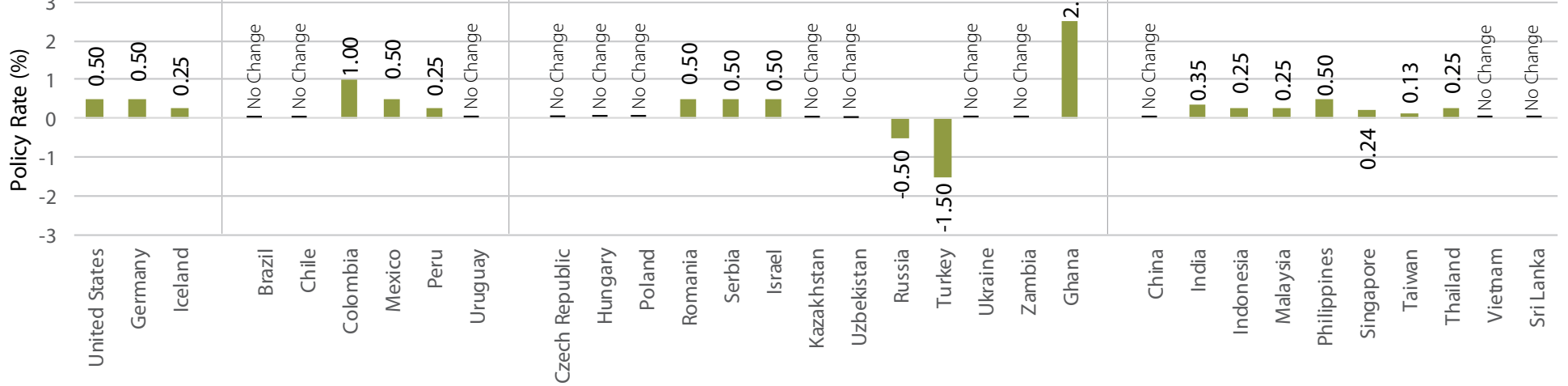


Source: J.P. Morgan, as of 31 December 2022 (left chart). Bank of America, as of 31 December 2022 (right chart). Hard currencies are globally traded currencies issued by developed nations (e.g., US Dollar) and are generally more stable than local currencies from less developed nations.

Central Bank Rates and 12 Month Changes

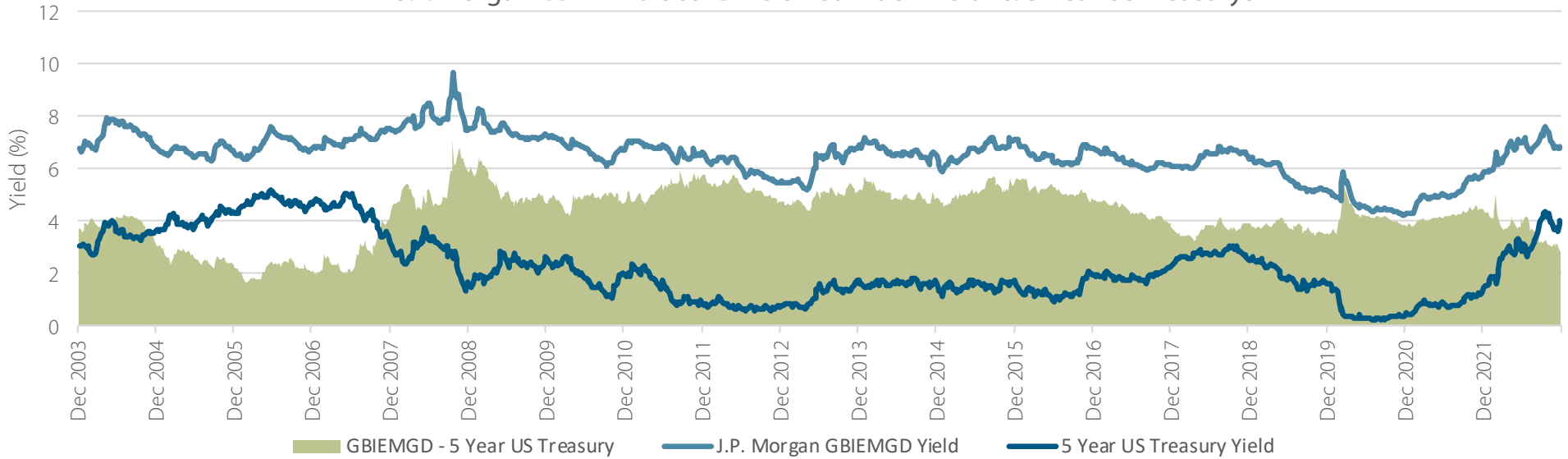


Most Recent Rate Changes

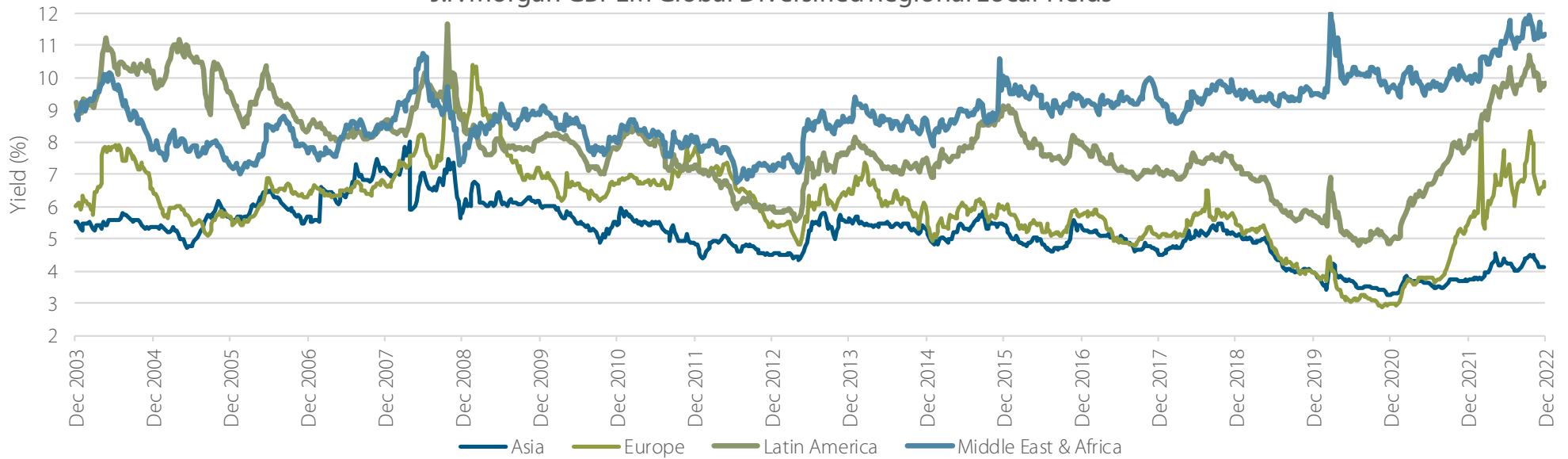


Source: Macrobond Financial, based on central bank public policy statement. As of 31 December 2022. *Outliers not shown: Ghana 54.1%, Turkey 64.2% and Sri Lanka 65%. Central & Eastern Europe, Middle East and Africa (CEEMEA).

J.P. Morgan GBI-EM Global Diversified Index Yield vs. 5-Year US Treasurys

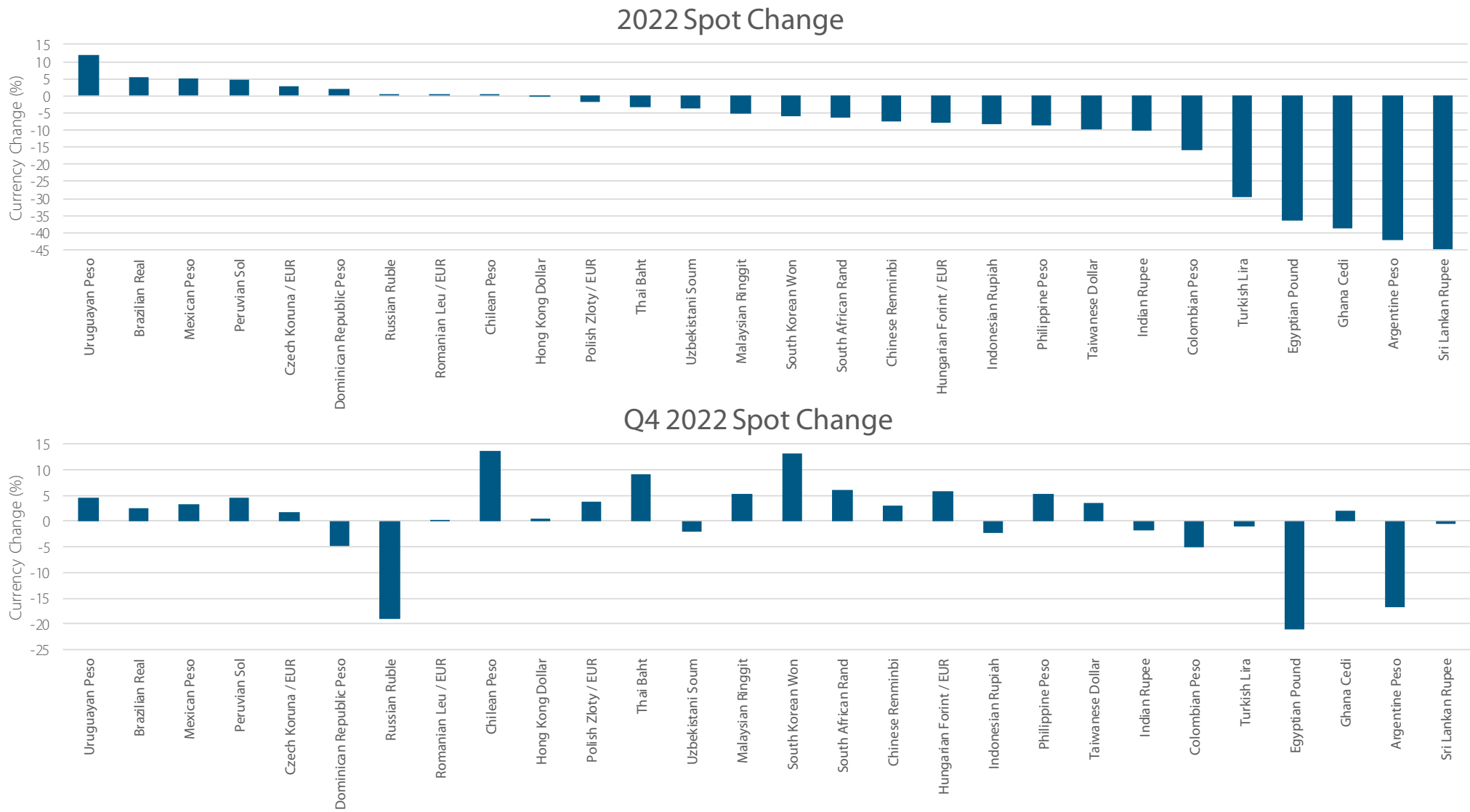


J.P. Morgan GBI-EM Global Diversified Regional Local Yields



Source: J.P. Morgan. As of 31 Dec 2022. Past performance is not indicative of future results. Includes current and prior countries within the GBIEMGD Index as reported by the J.P. Morgan Government Bond Index-Emerging Market Global Diversified. The JPM Government Bond Index-Emerging Market Global Diversified (GBIEMGD) is an index of local-currency bonds with maturities of more than one year issued by EM government.

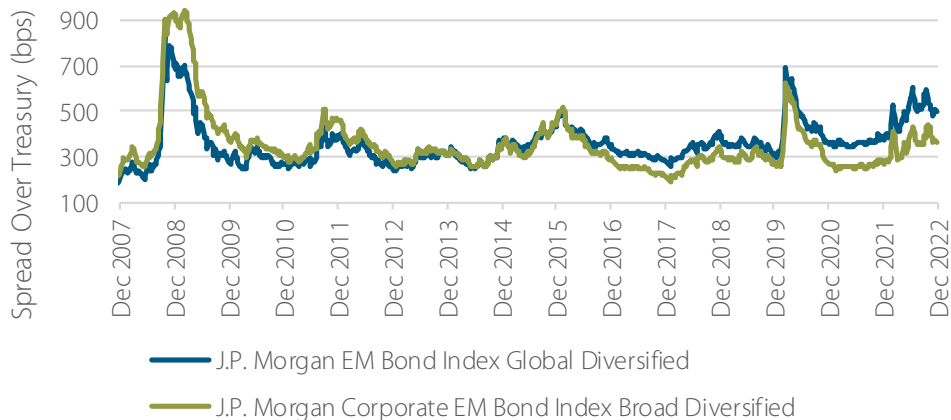
Foreign Exchange Performance - Flight to the US Dollar



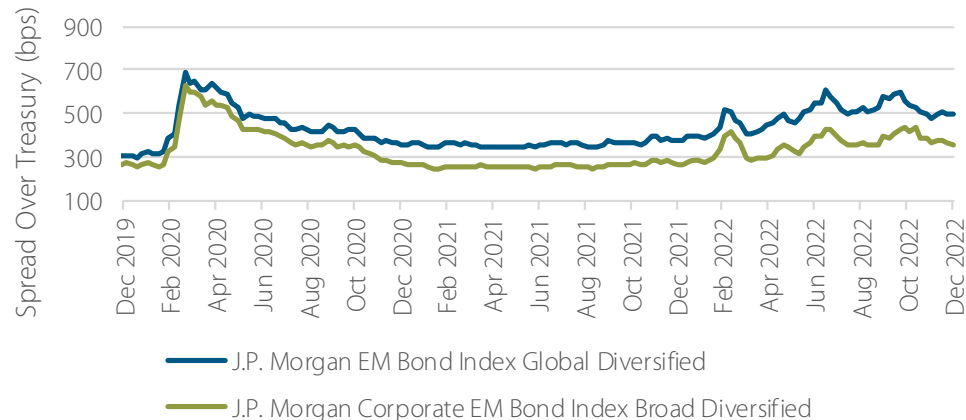
Source: Bloomberg. As of 31 Dec 2022. Illustrates the change of each currency's relative exchange rate change to USD (except those noted as compared to EUR). All currencies shown are indexed to USD except those noted as EUR. Past performance does not guarantee and is not a reliable indicator of future results.

Sovereign and Corporate Spreads

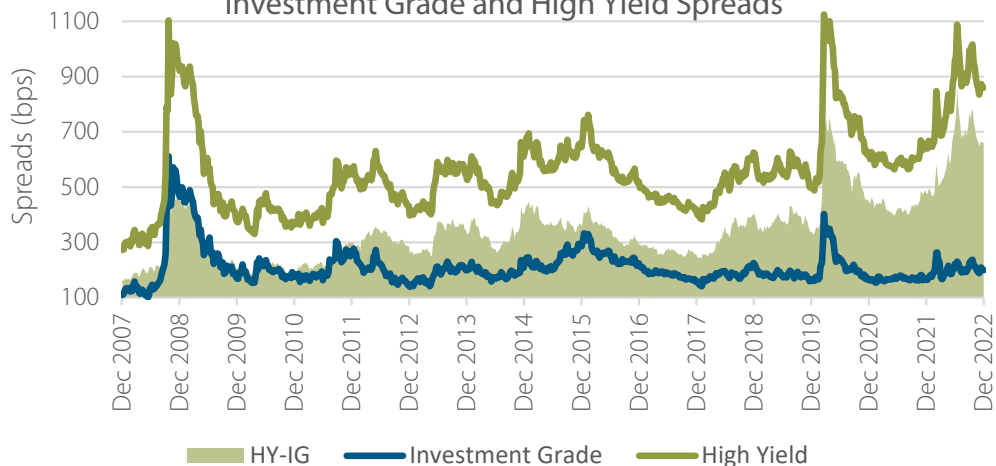
J.P. Morgan EMBI Global Diversified and CEMBI Broad Diversified Index Spreads



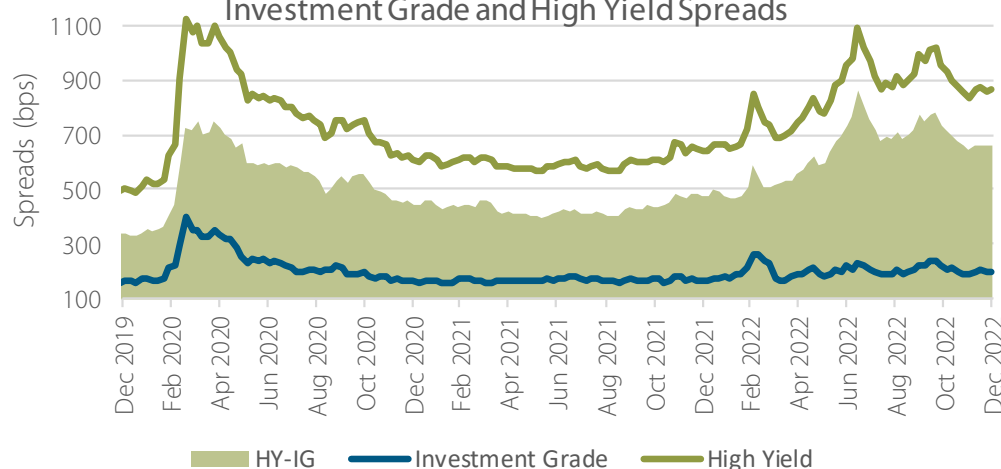
J.P. Morgan EMBI Global Diversified and CEMBI Broad Diversified Index Spreads



J.P. Morgan EMBI Global Diversified Investment Grade and High Yield Spreads

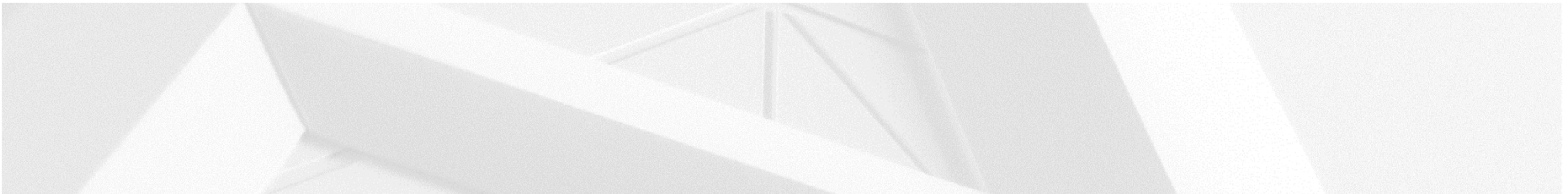


J.P. Morgan EMBI Global Diversified Investment Grade and High Yield Spreads

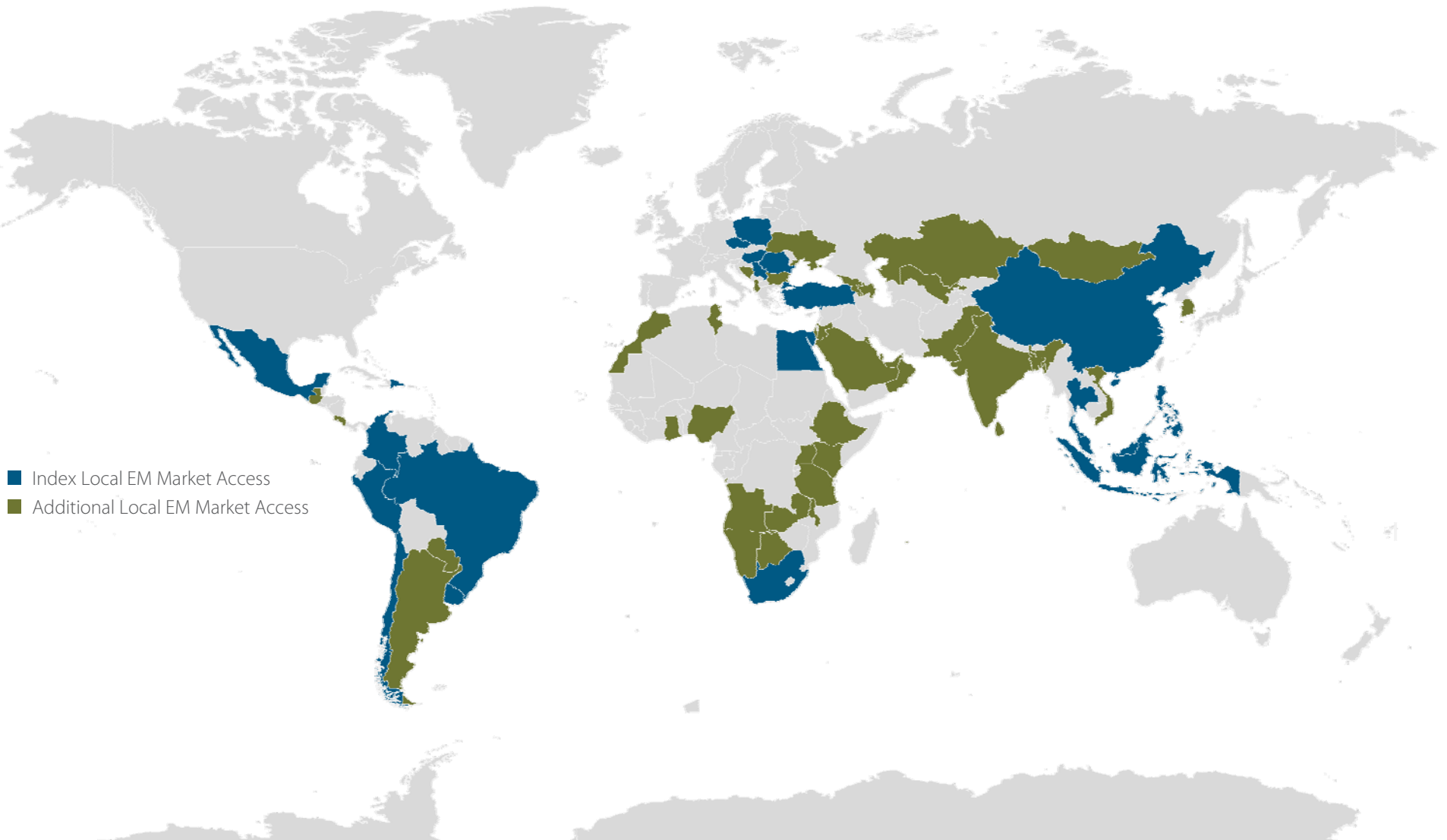


Source: J.P. Morgan. As of 31 December 2022. Left charts show spreads dating back 15 years. Right charts show spreads dating back 3 years. The J.P. Morgan Emerging Markets Bond Index-Global Diversified (EMBIGD) is an index of USD-denominated bonds with maturities of more than one year issued by EM governments. The J.P. Morgan Corporate Emerging Market Bond Index-Broad Diversified (CEMBIBD) is an index of USD-denominated EM corporate bonds.

A Different Approach



Many EM Investible Assets Lie Outside Benchmarks



Source: Artisan Partners/J.P. Morgan. As of 31 Dec 2022. "Index" is based off of the JPM Government Bond Index-Emerging Market Global Diversified (GBIEMGD). Colored countries represent a portion of the trading markets accessible by the EMSights Capital Group.

Correlations Within the Benchmark Are High

J.P. Morgan GBI-EM Global Diversified Index Currencies (>5% Weight)

	Brazilian Real	Czech Kurona	Chinese Renminbi	Indonesian Rupiah	Mexican Peso	Malaysian Ringgit	Polish Zloty	Thai Baht	South African Rand
Brazilian Real	1.00								
Czech Kurona	0.41	1.00							
Chinese Renminbi	0.27	0.45	1.00						
Indonesian Rupiah	0.39	0.49	0.36	1.00					
Mexican Peso	0.53	0.67	0.28	0.51	1.00				
Malaysian Ringgit	0.28	0.49	0.58	0.55	0.41	1.00			
Polish Zloty	0.37	0.91	0.41	0.41	0.61	0.45	1.00		
Thai Baht	0.30	0.42	0.51	0.42	0.30	0.60	0.43	1.00	
South African Rand	0.52	0.63	0.39	0.47	0.72	0.45	0.57	0.39	1.00

Non-J.P. Morgan GBI-EM Global Diversified Index Currencies

	GBIEMGD Index	Czech Kurona/EUR	Hungarian Forint/EUR	Polish Zloty/EUR	Indian Rupee	Kenyan Shilling	Kazakhstani Tenge	Costa Rican Colon	Ugandan Shilling	Uzbekistani Som	Ghanaian Cedi	Pakistani Rupee	Nigerian Naira	Zambian Kwacha
GBIEMGD Index	1.00													
Czech Kurona/EUR	0.43	1.00												
Hungarian Forint/EUR	0.24	0.58	1.00											
Polish Zloty/EUR	0.34	0.68	0.66	1.00										
Indian Rupee	0.21	0.23	0.15	0.20	1.00									
Kenyan Shilling	0.16	0.19	0.06	0.14	0.12	1.00								
Kazakhstani Tenge	0.24	0.52	0.31	0.49	0.28	0.21	1.00							
Costa Rican Colon	0.08	0.05	0.12	-0.02	-0.12	-0.10	-0.02	1.00						
Ugandan Shilling	0.17	0.24	0.17	0.27	0.11	0.24	0.37	0.00	1.00					
Uzbekistani Som	0.02	-0.05	-0.06	-0.10	-0.04	-0.06	-0.07	-0.02	-0.11	1.00				
Ghanaian Cedi	-0.07	0.06	0.14	0.01	-0.08	0.04	0.03	0.09	0.14	0.04	1.00			
Pakistani Rupee	-0.04	0.14	0.19	0.01	-0.03	-0.03	-0.05	0.01	0.04	-0.05	0.03	1.00		
Nigerian Naira	0.04	0.17	0.14	0.12	-0.01	-0.01	0.00	0.07	-0.10	0.04	-0.03	0.12	1.00	
Zambian Kwacha	0.12	0.22	0.20	0.16	0.17	0.08	0.26	0.10	0.13	0.05	-0.03	0.02	0.05	1.00

Source: Bloomberg. Correlations shown based on weekly spot rates for the three-year period 2020-2022. Illustrates the change of each currency's relative exchange rate to USD (except those noted as compared to EUR). The JPM Government Bond Index-Emerging Market Global Diversified (GBIEMGD) is an index of local-currency bonds with maturities of more than one year issued by EM government.

Other Challenges With Benchmarks

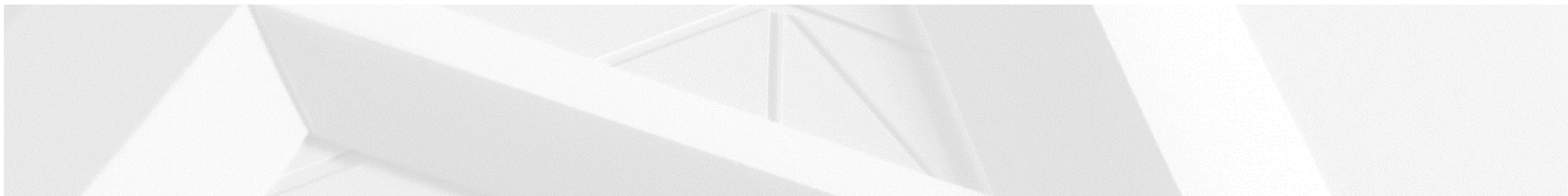
- Significant non-EM risk embedded in benchmarks
 - US duration
 - EUR exchange rate risks
- Long only
- Market cap-weighted
 - Many country weightings are de minimis in size
- Defaulted securities remain
- Significant amount of low to no spread securities
- Arbitrary rules that push you into duration i.e., no maturities under 1 yr.

There Were Opportunities Out There in 2022

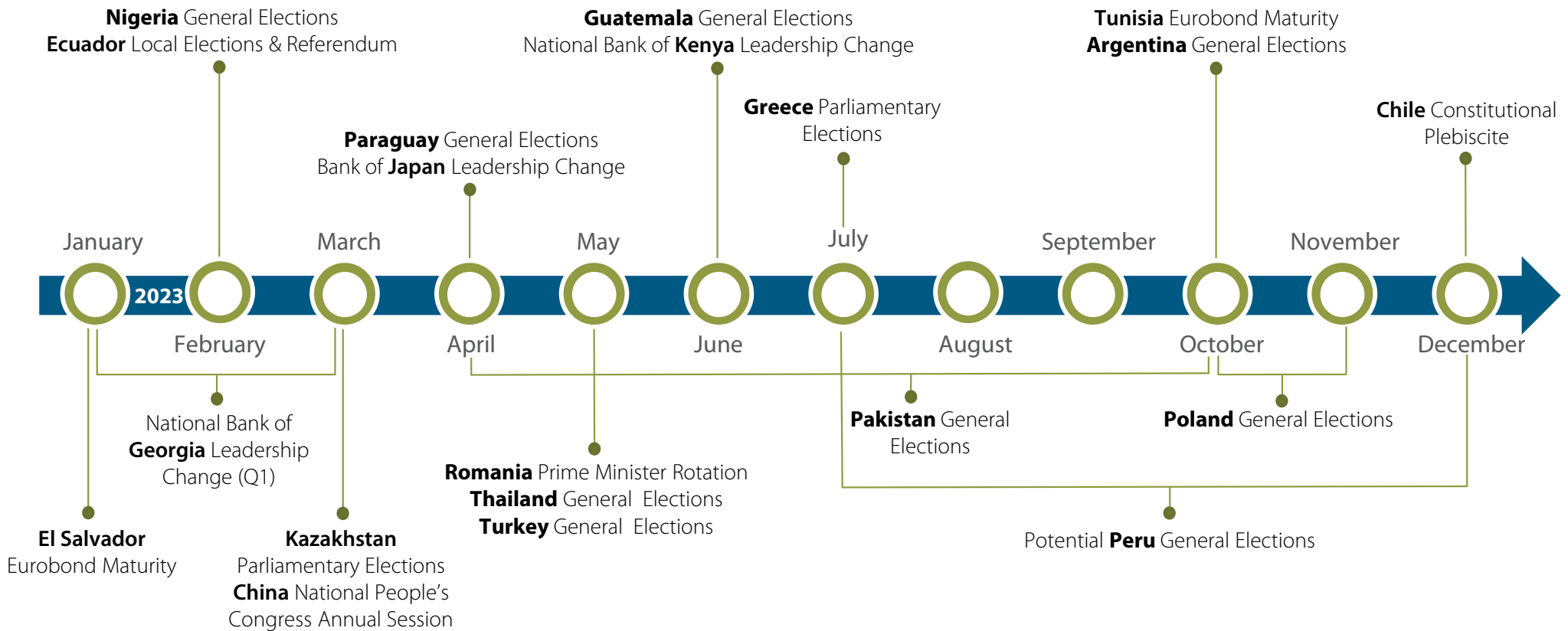


Examples illustrate opportunities identified with the benefit of hindsight and are not indicative of portfolio investments.

2023 – The Year Ahead



Key Events



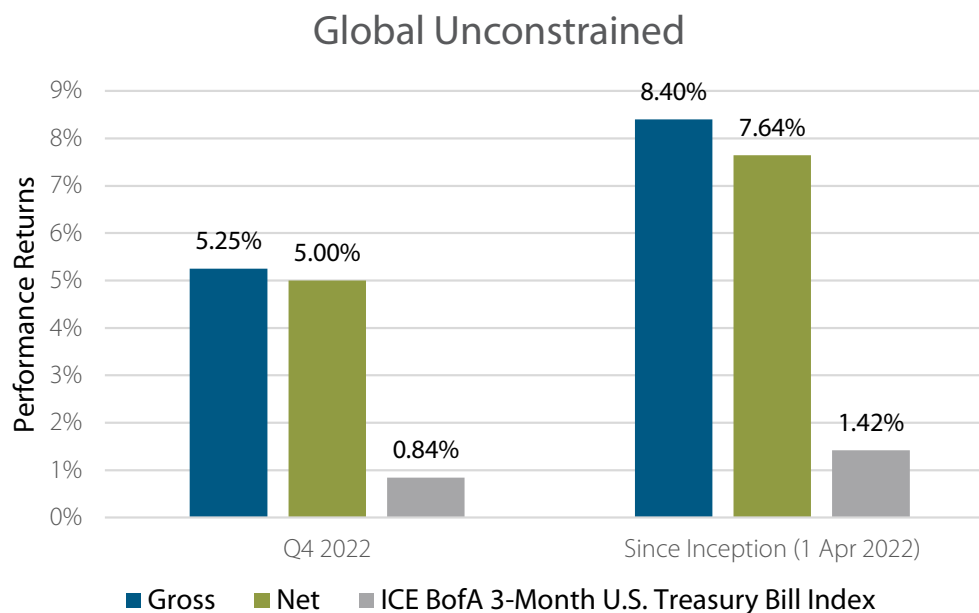
Source: Artisan Partners, based on investment team views and opinions.

Performance and Positioning



Performance

Overall positioning across the strategies has been conservative, given current market headwinds



Q4 Contributors:

- Long Kenya sovereign credit
- Long Benin sovereign credit
- Long Romania sovereign credit

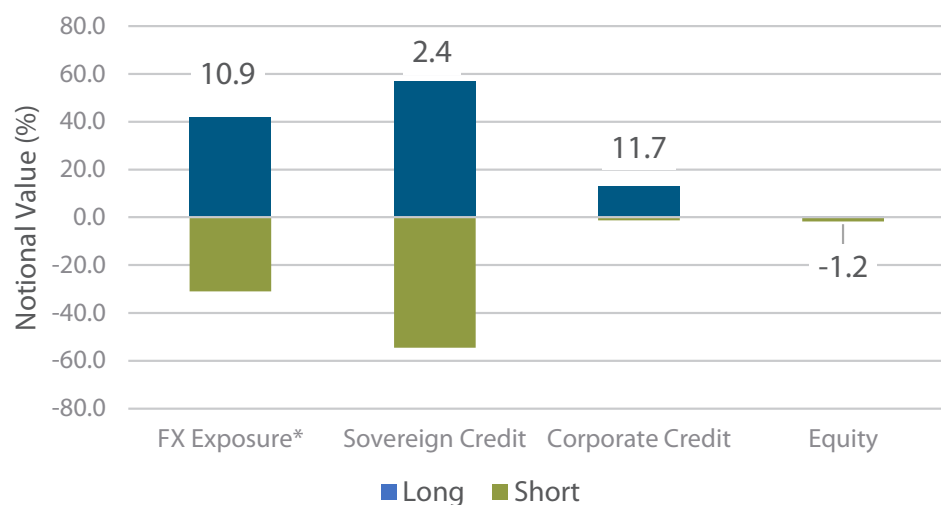
Q4 Detractors:

- Short South Africa currency and sovereign credit
- Long Zambia local rates position*
- Long Iceland currency

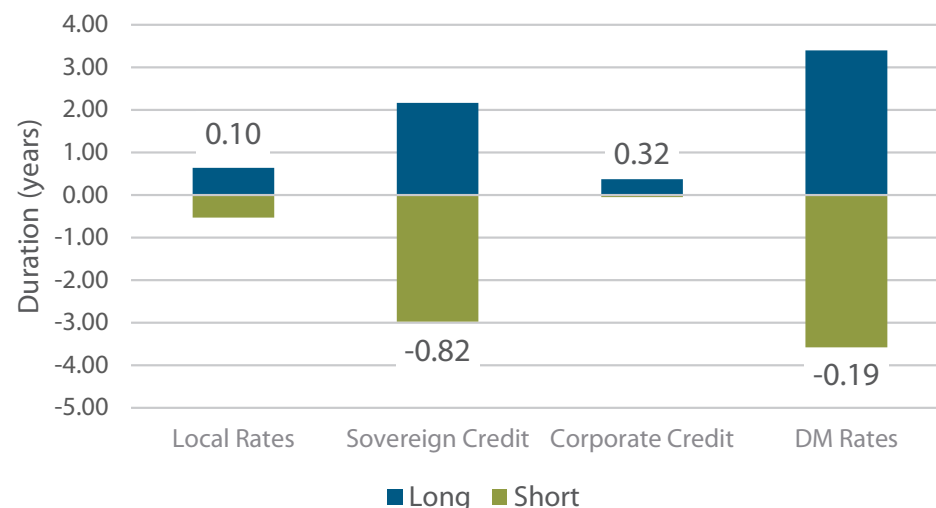
Source: Artisan Partners/JPM/ICE BofA. As of 31 Dec 2022. Past performance does not guarantee and is not a reliable indicator of future results. Gross- and net-of-fees performance shown for the Artisan Global Unconstrained Composite. Returns are unannualized. Current performance may be lower or higher than that shown. The portfolio's return may vary greatly over short periods due to the limited operating period since inception. Contributors and Detractors represent allocations to factors that contributed the most, positively or negatively, respectively, to the portfolio's return for the period. *Factors related to establishing a Zambia local rates position.

■ Selective positioning in long credits and Eastern European currencies

Asset Type — Net (%)



Duration Exposure — Net (years)



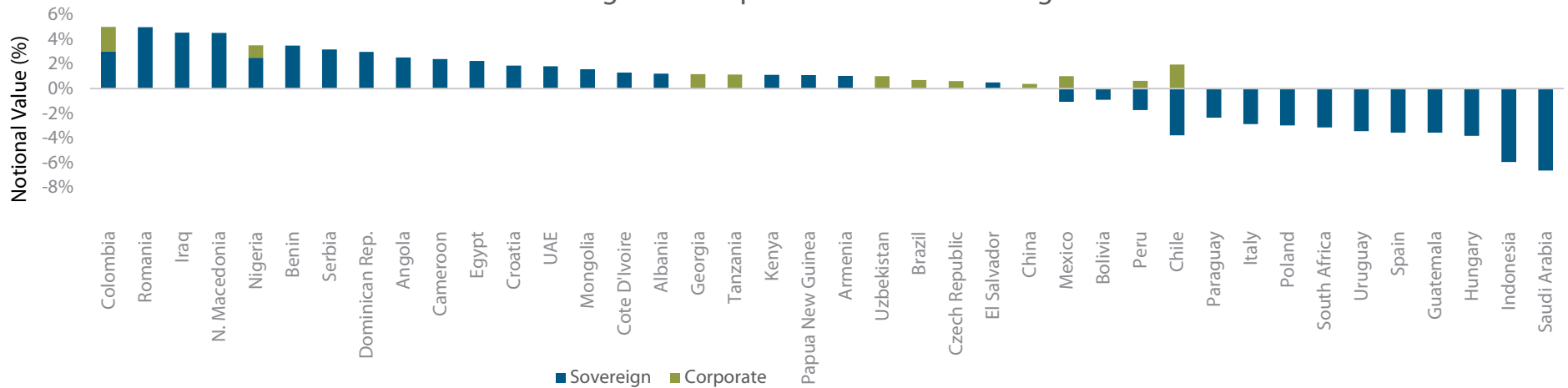
Risk Factor	Q4 Exposure (%)			Q3 Exposure (%)		Change Net
	Long	Short	Net	Long	Short	
FX Exposure*	41.8	-31.0	10.9	30.1	-25.2	6.0
Sovereign Credit	57.0	-54.6	2.4	49.9	-47.3	-0.2
Corporate Credit	12.9	-1.2	11.7	11.0	-1.3	2.0
Equity	0.5	-1.7	-1.2	0.2	-1.2	-0.2

Risk Factor	Q4 Exposure (years)			Q3 Exposure (years)		Change Net
	Long	Short	Net	Long	Short	
Local Rates	0.63	-0.53	0.10	0.35	-0.63	0.38
Sovereign Credit	2.16	-2.98	-0.82	1.83	-2.61	-0.04
Corporate Credit	0.37	-0.05	0.32	0.35	-0.06	0.03
DM Rates	3.39	-3.58	-0.19	2.54	-2.74	0.01

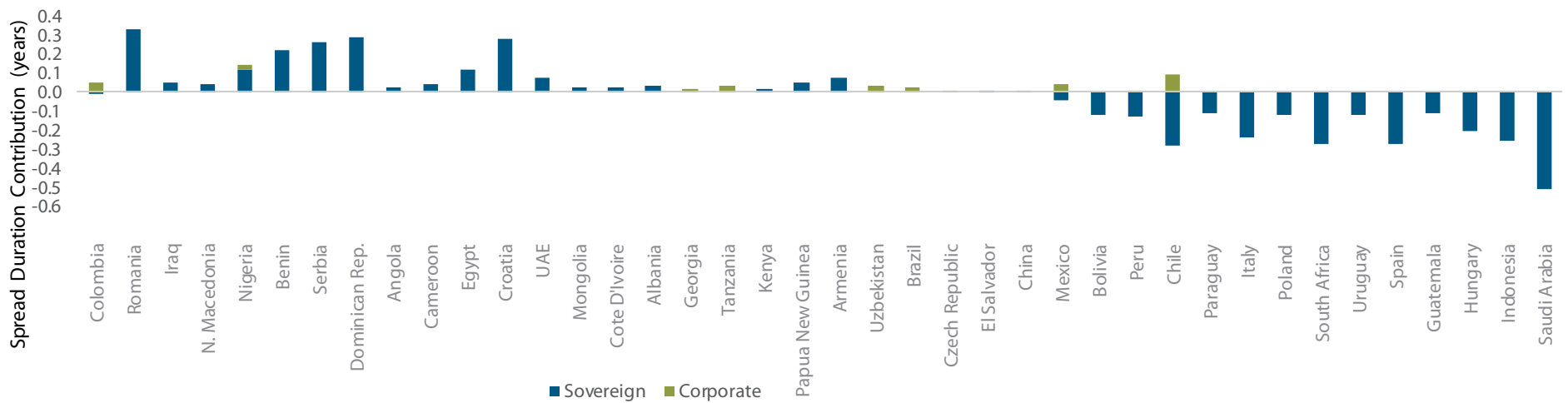
Source: Artisan Partners. As of 31 Dec 2022. *FX Exposure excludes hard currencies and reflects Market Value (%). Sovereign and corporate credit are the sums of the notional exposure; notional bonds and derivatives (CDS).

Positioning—Sovereign and Corporate

Sovereign and Corporate Credit Positioning

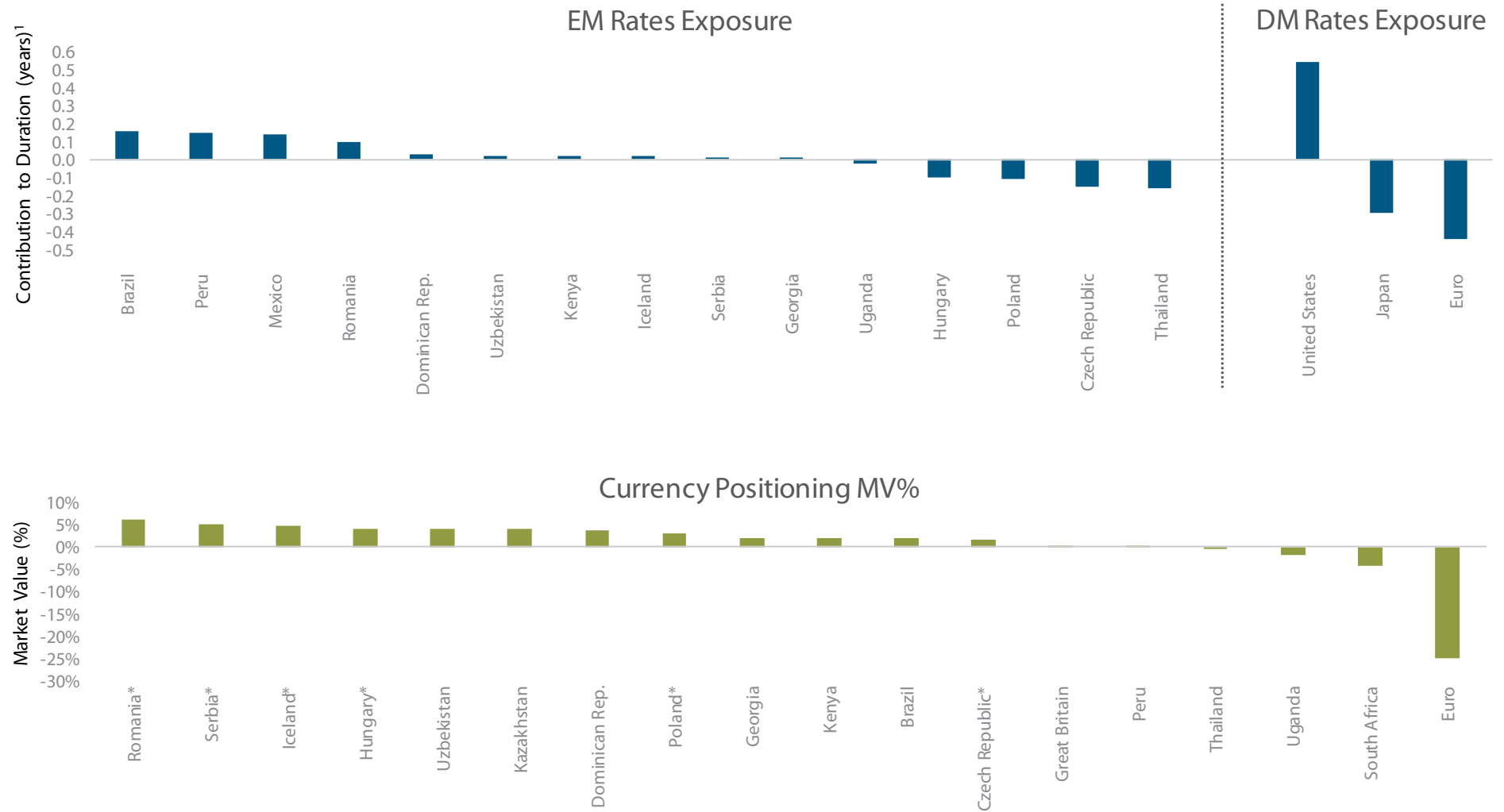


Sovereign and Corporate Spread Duration Contribution



Source: Artisan Partners. As of 31 Dec 2022. Portfolio exposures presented exclude US Treasuries, USD-denominated derivatives, USD and cash equivalents, unless otherwise noted. Sovereign and Corporate Credit reflect positions payable in hard currencies, including national exposure of derivative positions.

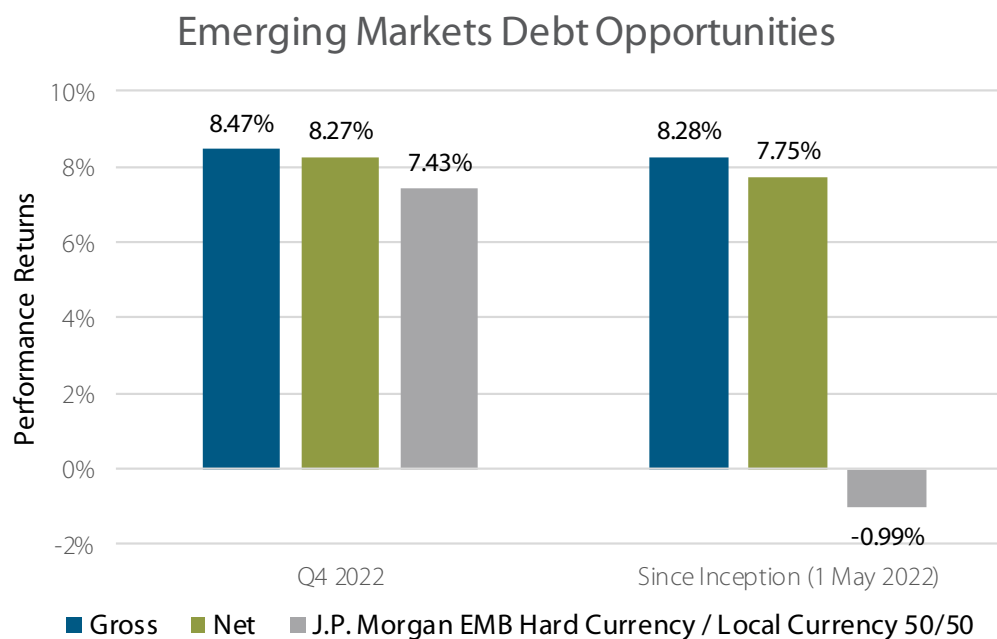
Positioning—Rates and Currency



Source: Artisan Partners. As of 31 Dec 2022. Portfolio exposures presented exclude US Treasuries, USD-denominated derivatives, USD and cash equivalents, unless otherwise noted. ¹Based on notional value of total portfolio securities. *Countries whose currencies are typically traded versus the Euro.

Performance

Overall positioning across the strategies has been conservative, given current market headwinds



Q4 Contributors:

- Overweight Kenya sovereign credit
- Overweight Benin sovereign credit
- Underweight Egypt currency and overweight sovereign credit

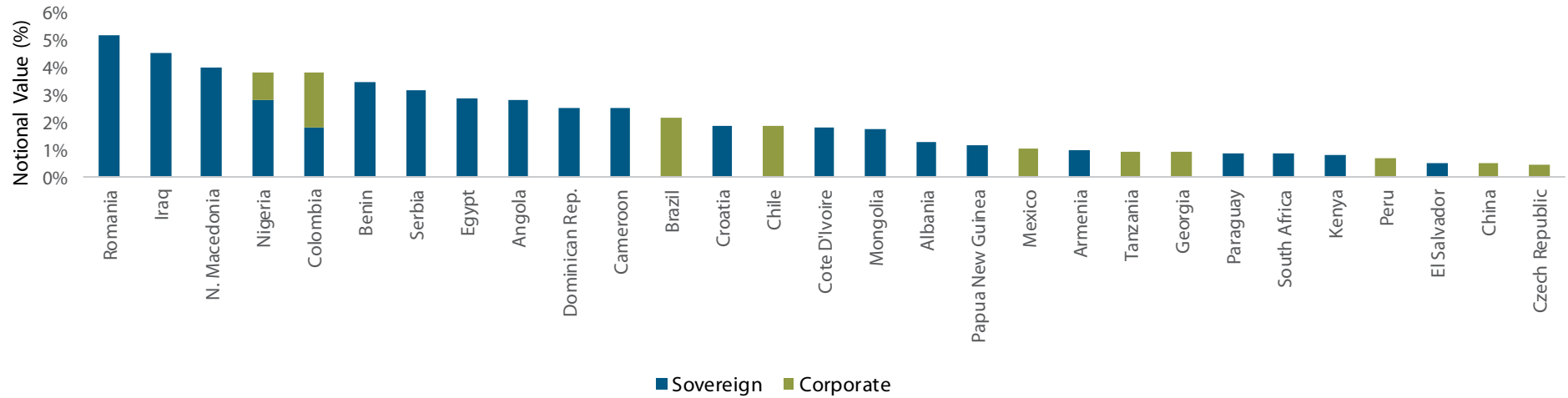
Q4 Detractors:

- Underweight South Africa currency and local rates
- Underweight Thailand currency and local rates
- Underweight Brazil currency

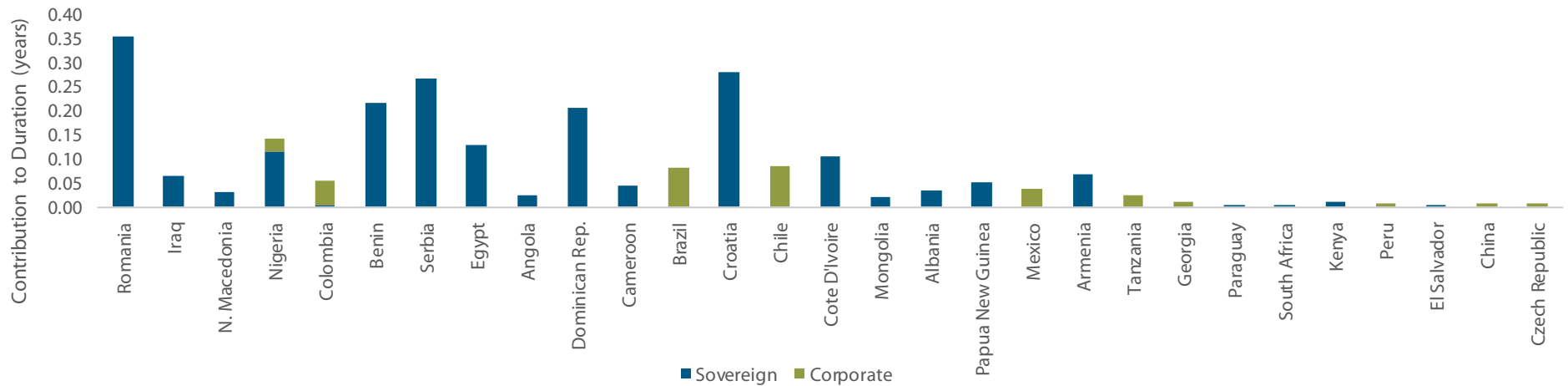
Source: Artisan Partners/JPM/ICE BofA. As of 31 Dec 2022. Past performance does not guarantee and is not a reliable indicator of future results. Gross- and net-of-fees performance shown for the Artisan Emerging Markets Debt Opportunities Composite. Returns are unannualized. Current performance may be lower or higher than that shown. The portfolio's return may vary greatly over short periods due to the limited operating period since inception. Contributors and Detractors represent allocations to factors that contributed the most, positively or negatively, respectively, to the portfolio's return for the period.

Positioning—Sovereign and Corporate

Sovereign and Corporate Credit Positioning

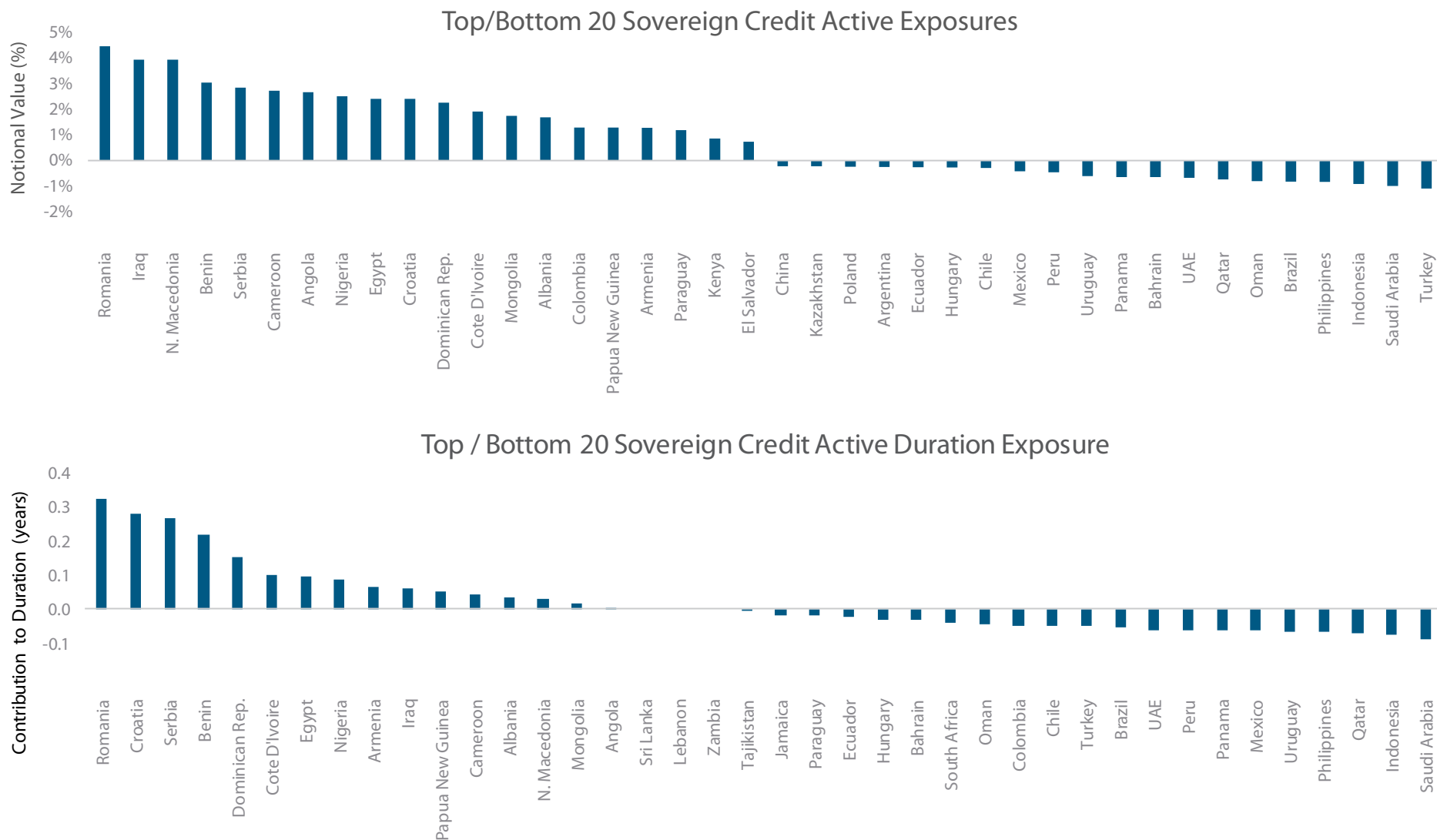


Sovereign and Corporate Credit Spread Contribution to Duration



Source: Artisan Partners. As of 31 Dec 2022. The portfolio exposures presented exclude US Treasuries, US dollars and euros and US dollar/euro-denominated derivatives and cash equivalents, unless otherwise noted. Sovereign and Corporate Credit reflect positions payable in hard currencies, including notional exposure of derivative positions.

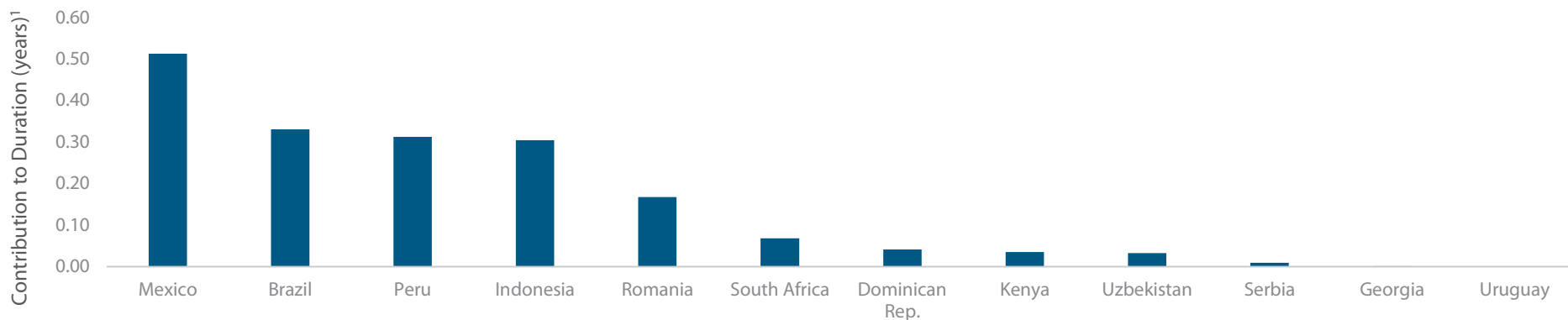
Positioning—Active Sovereign Exposure



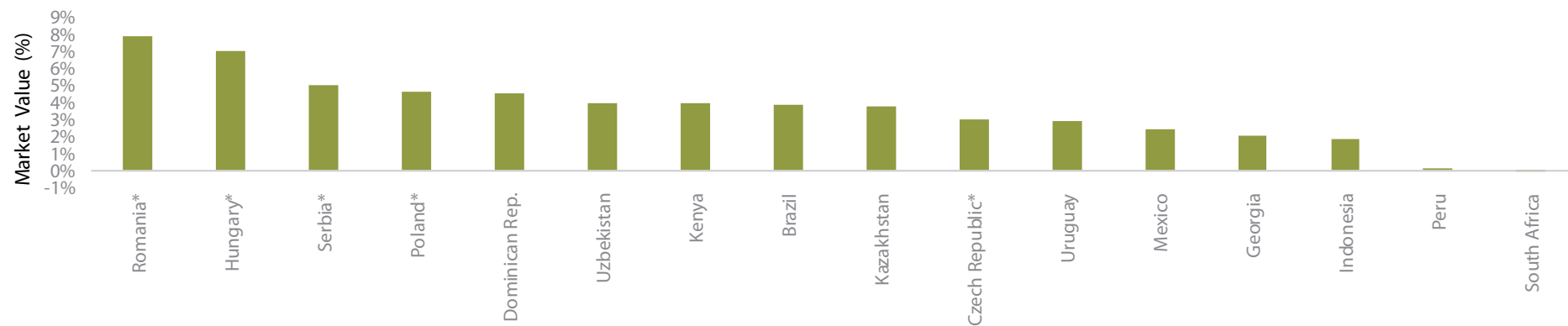
Source: Artisan Partners/J.P. Morgan. As of 31 Dec 2022. The portfolio exposures presented exclude US Treasuries, US dollars and euros and US dollar/euro-denominated derivatives and cash equivalents, unless otherwise noted. Top / Bottom 20 charts reflect the portfolio's 20 largest and smallest exposures, respectively, relative to those of the benchmark—J.P. Morgan EMB Hard Currency/Local Currency 50-50 Index—and may not be representative of all portfolio exposures. Sovereign and Corporate Credit reflect positions payable in hard currencies, including national exposure of derivative positions.

Positioning—Local Rates and Currency

Local Rates Contribution to Duration (yrs)

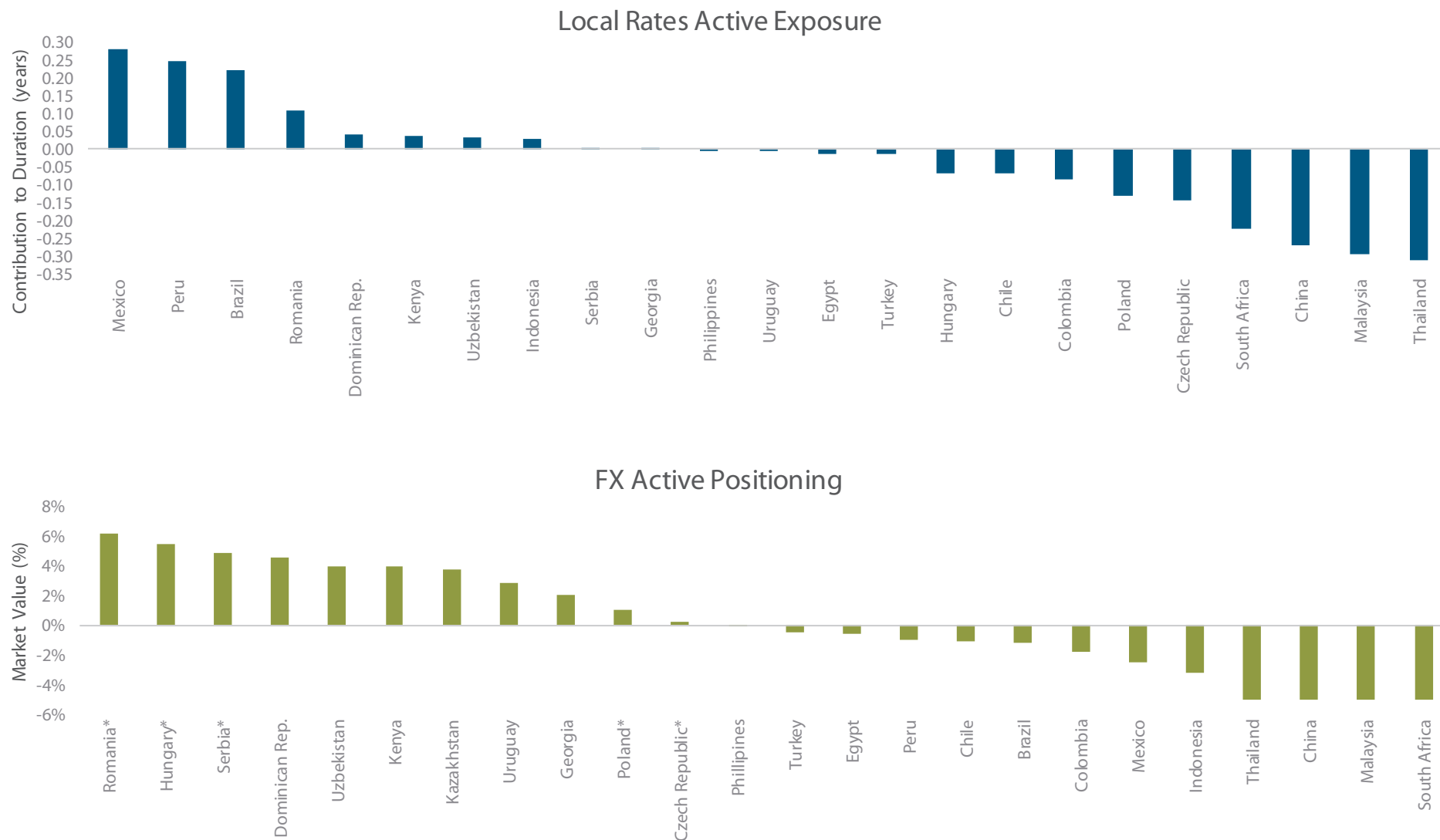


Currency Positioning MV%



Source: Artisan Partners. As of 31 Dec 2022. The portfolio exposures presented exclude US Treasuries, US dollars and euros and US dollar/euro-denominated derivatives and cash equivalents, unless otherwise noted. Local Rates and Currency exclude hard currency debt instruments. ¹Based on notional value and excludes cash and cash equivalents. *Countries whose currencies are typically traded versus the Euro.

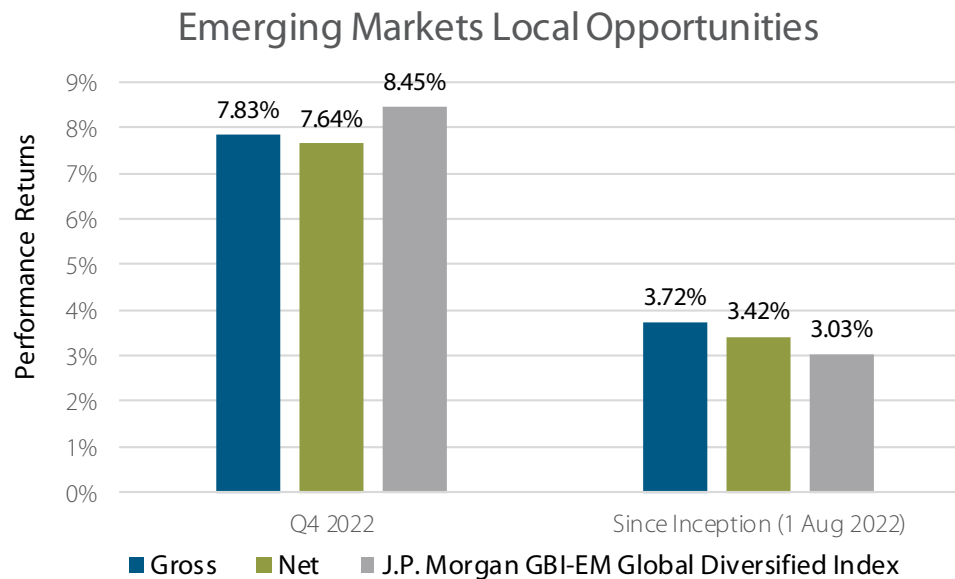
Positioning—Active Local Rates and Currency



Source: Artisan Partners/J.P. Morgan. As of 31 Dec 2022. The portfolio exposures presented exclude US Treasuries, US dollars and euros and US dollar/euro-denominated derivatives and cash equivalents, unless otherwise noted. Local Rates and FX exclude hard currency debt instruments. Active Exposure/Positioning represents the portfolio's exposures relative to those of the benchmark — J.P. Morgan EMB Hard Currency/Local Currency 50-50 Index. *Countries whose currencies are typically traded versus the Euro.

Performance

Overall positioning across the strategies has been conservative, given current market headwinds



Q4 Contributors:

- Overweight Mexico currency and local rates
- Underweight Egypt currency
- Overweight Hungary currency

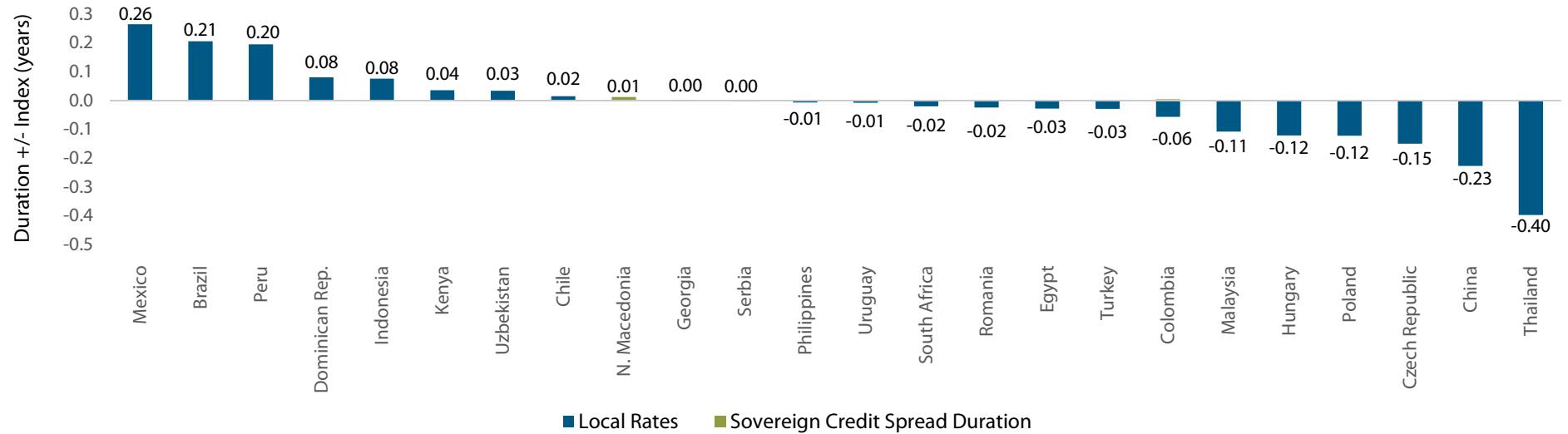
Q4 Detractors:

- Underweight Thailand currency and local rates
- Underweight South Africa currency
- Overweight Zambia local rates position

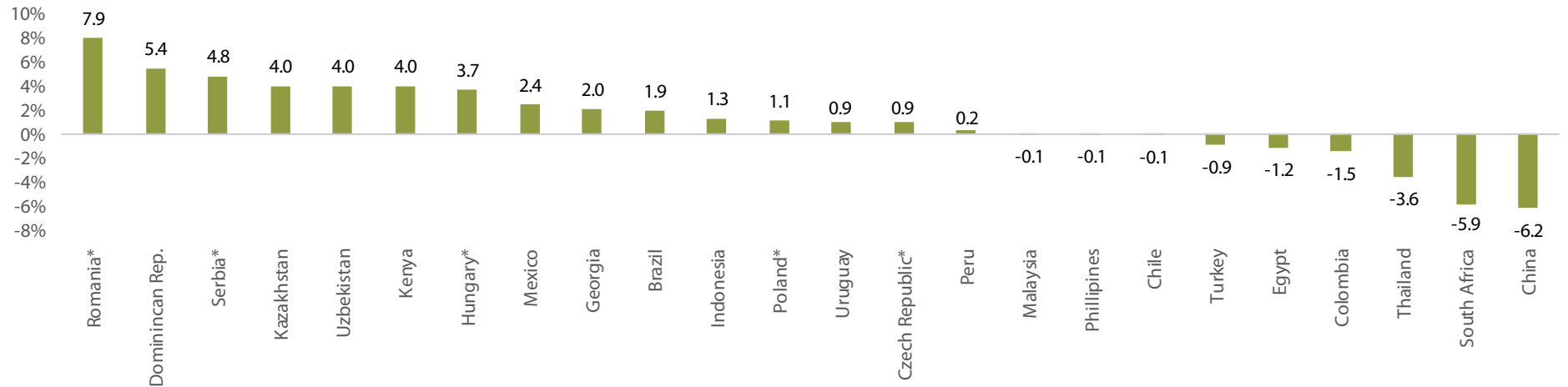
Source: Artisan Partners/JPM/ICE BofA. As of 31 Dec 2022. Past performance is not indicative of future returns. Gross- and net-of-fees performance shown for the Artisan Emerging Markets Local Opportunities Composite. Returns are unannualized. Current performance may be lower or higher than that shown. The portfolio's return may vary greatly over short periods due to the limited operating period since inception. Contributors and Detractors represent allocations to factors that contributed the most, positively or negatively, respectively, to the portfolio's return for the period.

Positioning—Active Local Rates and Currency

Duration Contribution versus J.P. Morgan GBIEMGD Index



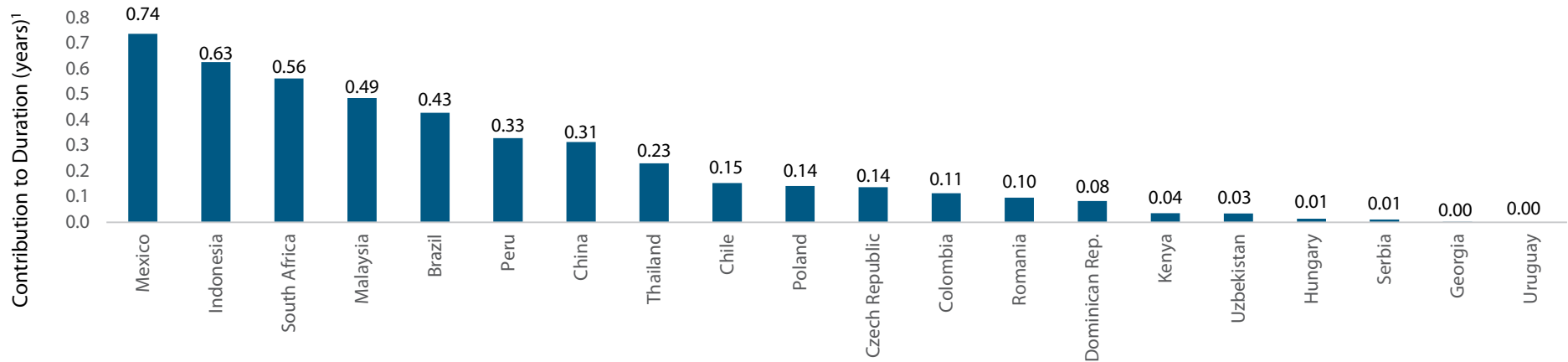
Active Currency Positioning versus J.P. Morgan GBIEMGD Index (%)



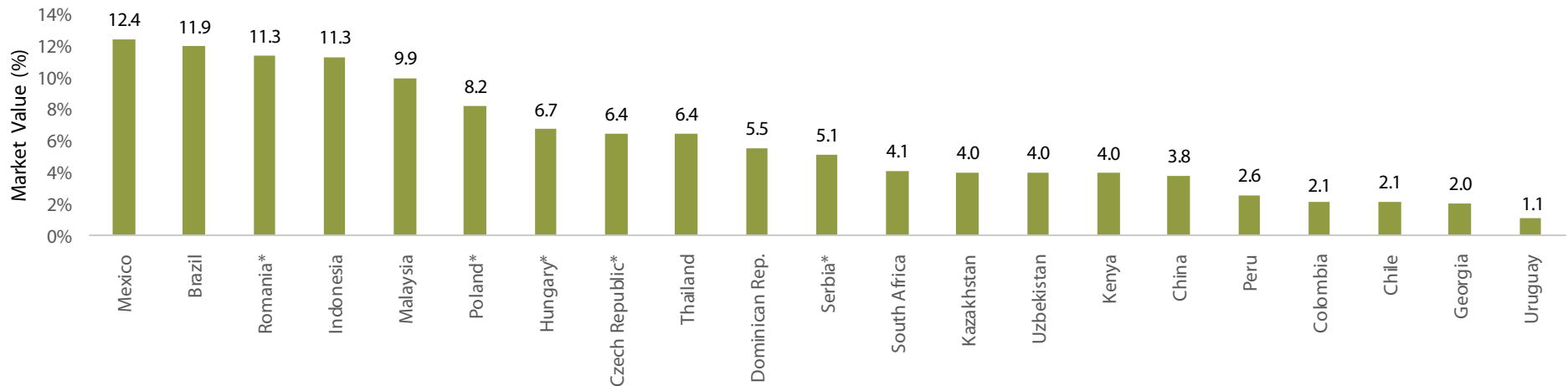
Source: Artisan Partners/J.P. Morgan. As of 31 Dec 2022. The portfolio exposures presented exclude US Treasuries, US dollars and euros and US dollar/euro-denominated derivatives and cash equivalents, unless otherwise noted. Excludes hard currency debt instruments, USD and EUR FX forward legs, cash and cash equivalents. Active Exposure/Positioning represents the portfolio's exposures relative to those of the benchmark—J.P. Morgan GBI-EM Global Diversified Index. *Countries whose currencies are typically traded versus the Euro.

Positioning—Local Rates and Currency

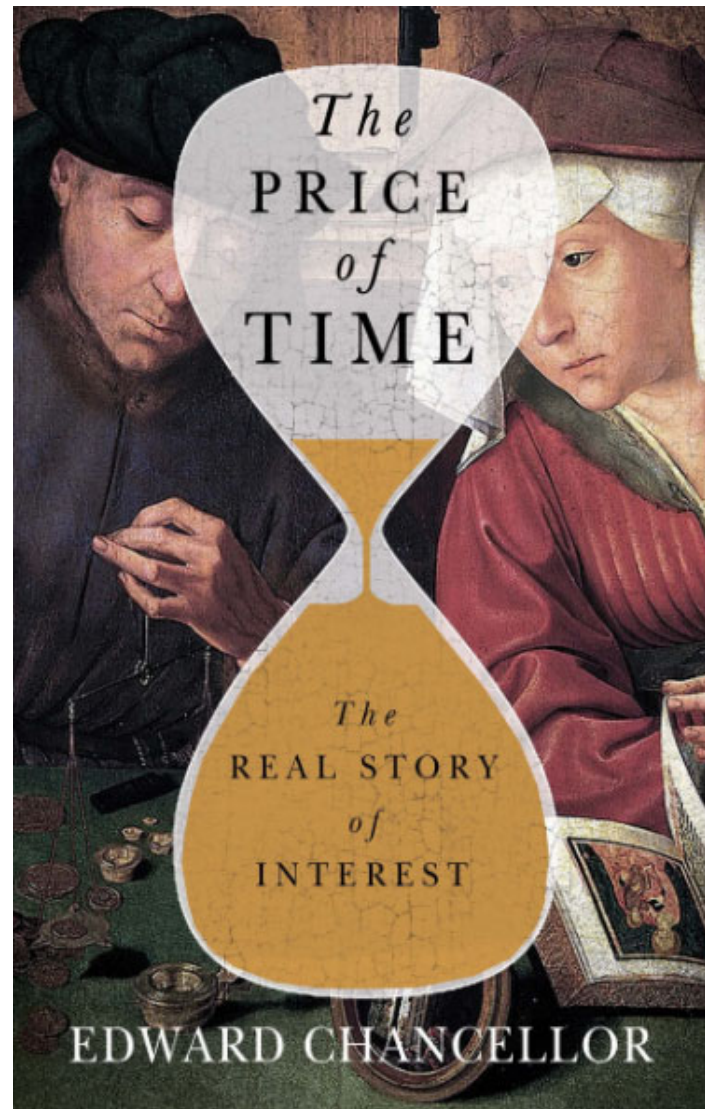
Local Rates Contribution to Duration (years)



Currency Positioning MV (%)

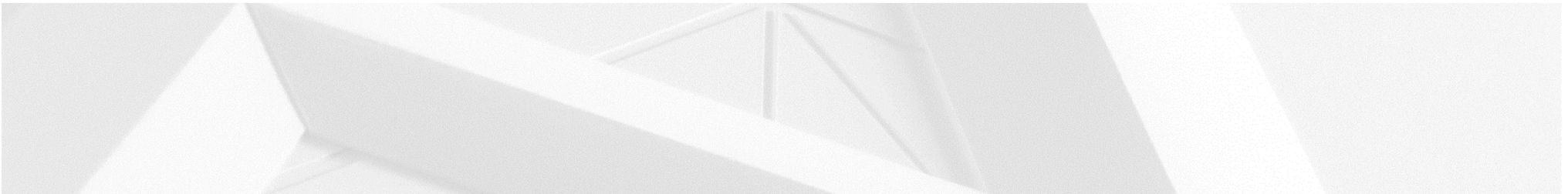


Source: Artisan Partners. As of 31 Dec 2022. The portfolio exposures presented exclude US Treasuries, US dollars and euros and US dollar/euro-denominated derivatives and cash equivalents, unless otherwise noted. Excludes hard currency debt instruments, USD and EUR FX forward legs, cash and cash equivalents. ¹Based on notional value and excludes cash and cash equivalents. *Countries whose currencies are typically traded versus the Euro.



Author: Chancellor, Edward. The Price of Time: The Real Story of Interest. Penguin Books Limited, London. 2022.

Q&A



Notes and Disclosures

This section of this presentation contains information important to a complete understanding of the material presented. Please review it carefully.

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Form ADV: Additional information about APLP or APUK, the firms, its partners, ownership, investment strategies, fees and expenses and policies is contained in each firm's respective Form ADV. Each firm will supply a copy of its Form ADV upon request.

Artisan Emerging Markets Debt Opportunities, Artisan Global Unconstrained and Artisan Local Opportunities Strategies

A non-diversified portfolio may invest a larger portion of assets in securities of a smaller number of issuers and performance of a single issuer may affect overall portfolio performance greater than in a diversified portfolio. International investments involve special risks, including currency fluctuation, lower liquidity, different accounting methods and economic and political systems, and higher transaction costs. These risks typically are greater in emerging and less developed markets, including frontier markets. Such risks include new and rapidly changing political and economic structures, which may cause instability; underdeveloped securities markets; and higher likelihood of high levels of inflation, deflation or currency devaluations. Fixed income securities carry interest rate risk and credit risk for both the issuer and counterparty and investors may lose principal value. In general, when interest rates rise, fixed income values fall. High income securities (junk bonds) are speculative, experience greater price volatility and have a higher degree of credit and liquidity risk than bonds with a higher credit rating. The use of derivatives in a portfolio may create investment leverage and increase the likelihood of volatility and risk of loss in excess of the amount invested. Investments will rise and fall with market fluctuations and investor capital is at risk. Investors investing in strategies denominated in non-local currency should be aware of the risk of currency exchange fluctuations that may cause a loss of principal. These risks, among others, are further described in Artisan Partners Form ADV, which is available upon request.

This material may include the views of the portfolio manager and other information relating to the portfolio and portfolio securities. While we believe the data accurately reflects the investment process, this information is presented as of the date indicated and will change over time.

Net-of-fees composite returns were calculated using the highest model investment advisory fees applicable to portfolios within the composite. Fees may be higher for certain pooled vehicles and the composite may include accounts with performance-based fees. All performance results are net of commissions and transaction costs, and have been presented gross and net of investment advisory fees. Dividend income is recorded net of foreign withholding taxes on ex-dividend date or as soon after the ex-dividend date as the information becomes available to Artisan Partners. Interest income is recorded on the accrual basis. Performance results for the Index include reinvested dividends and are presented net of foreign withholding taxes but, unlike the portfolio's returns, do not reflect the payment of sales commissions or other expenses incurred in the purchase or sale of the securities included in the indices.

Portfolio Statistics: Global Unconstrained portfolio exposures presented exclude US Treasuries, US dollars and euros and US dollar/euro-denominated derivatives and cash equivalents, unless otherwise noted. Emerging Markets Debt Opportunities and Emerging Markets Local Opportunities portfolio exposures presented exclude US Treasuries, US dollars and euros and US dollar/euro-denominated derivatives and cash equivalents, unless otherwise noted. In aggregate, these instruments make up a material portion of the portfolio's exposures and may be impactful to the portfolio's return, but are typically utilized for liquidity management and reflect negative exposures due to currency emerging markets. Hard currencies are defined by the investment team to include currencies of developed market countries, including US dollars, euros, British pounds, and Japanese yen, among others. Portfolio statistics are intended to provide a general view of the entire portfolio, or Index, at a certain point in time. Statistics are calculated using information obtained from various data sources. Portfolio statistics include accrued interest unless otherwise stated. Portfolio holdings, data and statistics are subject to change without notice. Totals may not sum to 100% due to rounding, derivative exposures, unsettled transactions and other factors.

Notional Market Value represents the portfolio's exposures based on the economic value of investments by adjusting for derivatives exposure to the market value of the contract's underlying security and accounts for the sensitivity to changes in price of the underlying security. In comparison, measuring the exposure of a derivative contract at market value or notional value can understate or overstate, respectively, the economic exposure and risk. This estimate of portfolio exposure is only an approximation of the portfolio at a point in time.

Duration estimates the sensitivity of underlying fixed income securities to changes in interest rates—the longer the duration, the greater the sensitivity to changes in interest rates.

The J.P. Morgan (JPM) EMB Hard Currency/Local Currency 50-50 is an unmanaged, blended index consisting of 50% JPM Government Bond Index-Emerging Market Global Diversified (GBIEMGD), an index of local-currency bonds with maturities of more than one year issued by EM governments; 25% JPM Emerging Markets Bond Index-Global Diversified (EMBIGD), an index of USD-denominated bonds with maturities of more than one year issued by EM governments; and 25% JPM Corporate Emerging Market Bond Index-Broad Diversified (CEMBIBD), an index of USD-denominated EM corporate bonds. **The ICE BofA 3-Month US Treasury Bill Index** is an unmanaged index that comprises a single U.S. Treasury issue with approximately three months to final maturity, purchased at the beginning of each month and held for one full month. **The VIX Index** is a calculation designed to produce a measure of constant, 30-day expected volatility of the U.S. stock market, derived from real-time, mid-quote prices of S&P 500® Index (SPXSM) call and put options. The index(es) are unmanaged; include net reinvested dividends; do not reflect fees or expenses; and are not available for direct investment.

Notes and Disclosures

Spread is the difference in yield between two bonds of similar maturity but different credit quality. **Foreign Exchange (forex or FX)** is the trading of one currency for another. **Flows** are the cash that flows into and out of various financial assets for specific periods of time. **The European Central Bank (ECB)** is the central bank responsible for monetary policy of the European Union (EU) member countries that have adopted the euro currency. **The Consumer Price Index (CPI)** measures the monthly change in prices paid by U.S. consumers. **CEEMEA** is defined as Central & Eastern Europe, Middle East and Africa. **High Yield Spread** is the percentage difference in current yields of various classes of high-yield bonds compared against investment-grade corporate bonds, Treasury bonds, or another benchmark bond measure. **HY (High yield bonds)** are bonds that have lower credit ratings and are more likely to default, so they pay a higher yield than investment-grade bonds to compensate investors. **IG (Investment grade bonds)** are corporate and government debt that bond rating agencies judge as very likely to be paid back, with interest. **Duration** estimates the sensitivity of underlying fixed income securities to changes in interest rates, the longer the duration, the greater the sensitivity to changes in interest rates. **EM (emerging markets)** is the economy of a developing nation that is becoming more engaged with global markets as it grows. **DM (developed markets)** is the economy of a country that is most developed in terms of its economy and capital markets. **CDS (credit default swap)** is a derivative contract in which two parties exchange the risk that an underlying credit instrument will go into default. **Yield** is the income returned on an investment, such as the interest received from holding a security. **A fixed interest rate** is an unchanging rate charged on a liability, such as a loan or mortgage. **A floating interest rate** is one that changes periodically: the rate of interest moves up and down, or "floats," reflecting economic or financial market conditions. **Market capitalization** refers to the total dollar market value of a company's outstanding shares of stock.

All Progressives Congress (APC), People's Democratic Party (PDP), Monetary Policy Committee (MPC), Treasury Bills (T-Bills), International Monetary Fund (IMF).

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