Morgan Stanley

INVESTMENT MANAGEMENT

Global Fixed Income Bulletin

Let the Good Times Roll! But for How Long?

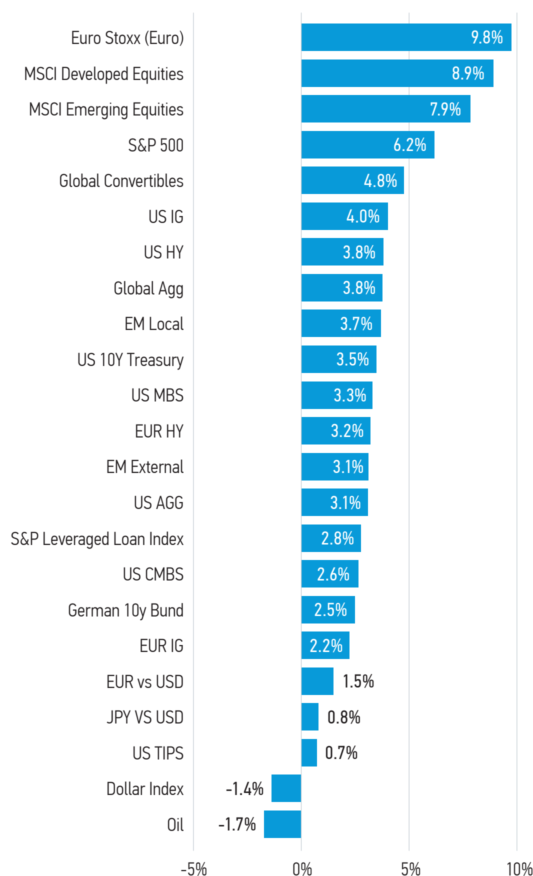
FIXED INCOME TEAM | MACRO INSIGHT | FEBRUARY 2023

What a difference a few days make. 2022 ended with a bear growl. Bond returns were deep in negative territory for December and for the year, as were U.S. equities. Move forward 30 days to the end of January and bonds are generating 4% returns while the S&P 500 index was up over 4.5%, recouping most of December's losses. Indeed, after yields rose dramatically in December, bond markets made a U-turn and fell dramatically in January. Markets do not simply change direction this abruptly without a reason, and in this case, there were many.

First and foremost, the absence of central bank meetings gave markets some freedom to examine the state of the global economy and assess where it stood after the aggressive 2022 rate hikes. Additionally, central banks, by and large, did not come out with hawkish actions or comments in January. Surely, the pace and magnitude will slowdown, reasoned the market. And the market was proven right in early February when both the U.S. Federal Reserve (Fed) and the Bank of England (BoE) reduced the size of rate hikes from 50 basis points (bps) to 25 bps. While this outcome was market consensus, it validated the idea that monetary policy will be less of a drag on economies and markets in 2023. As such, volatility fell, supporting the idea that risk premiums could fall and support risk assets. As volatility diminished, the U.S. dollar continued to fall as the need for safe havens diminished and the economic outlook improved outside the U.S., particularly in Europe and in emerging markets.

DISPLAY 1

Asset Performance Year-to-Date



Note: USD-based performance. Source: Bloomberg. Data as of January 31, 2023. The indexes are provided for illustrative purposes only and are not meant to depict the performance of a specific investment. **Past performance is no guarantee of future results.** See pages 7-8 for index definitions.

The views and opinions expressed are those of the Portfolio Management team as of February 2023 and are subject to change based on market, economic and other conditions. **Past performance is not indicative of future results.**

Second, fundamentals generally went the right way. Inflation came down significantly in the U.S. Goods price inflation was negative. The U.S. housing market continued to weaken. The business outlook, as summarized in the ISM manufacturing and service sectors, pointed to outright recession. And the labor market seemed to be loosening, e.g., deceleration of wage and employment growth, a key factor in reducing service sector inflation. Yields had reached levels that suddenly seemed attractive if fundamentals were likely to continue to improve and generate one of the rarest of beasts, a “soft” economic landing. A big change from 2022 when markets bounced like a pin ball between the walls of fear of recession and inflation.

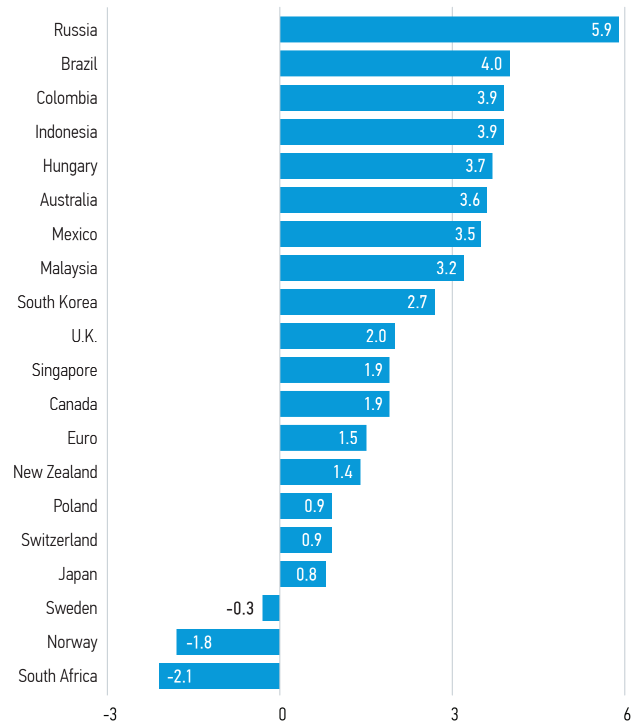
Third, FOMO—fear of missing out—certainly played a role, especially as fundamentals looked like they had turned the corner. After the dire financial performance of most financial assets in 2022, the danger of missing out on a bull market (bear market correction) must have been on people’s minds. After all, the best performing asset (outside of commodities) was U.S. dollar cash. Not a stretch to surmise that the investment community was likely long this asset coming into 2023. So, technical conditions played a role as markets rallied over the month. Short covering by speculators and the reduction of underweights by institutional and retail investors helped drive markets higher.

In summary, January was a gangbuster month for financial markets. A lot of fear and loathing evident in December disappeared allowing bonds, equities and non-U.S. currencies to rally. The continued decline in volatility was a key factor in allowing bond yields to fall, equities to rally and credit spreads to materially tighten. In fact, we believe the only way to square the circle of these asset returns is to suggest the market was both oversold, under owned, and a “soft” landing was coming, obviating the need for much more central bank tightening.

DISPLAY 2

Currency Monthly Changes Versus U.S. Dollar

(+ = appreciation)



Note: Positive change means appreciation of the currency against the USD. Source: Bloomberg. Data as of January 31, 2023.

The views and opinions expressed are those of the Portfolio Management team as of February 2023 and are subject to change based on market, economic and other conditions. **Past performance is not indicative of future results.**

DISPLAY 3

Major Monthly Changes in 10-Year Yields and Spreads

COUNTRY	10-YR YIELD LEVEL (%)	MONTH CHANGE (BPS)	10-YR SPREAD (BPS)	MONTH CHANGE (BPS)
			(Spread over USTs)	
United States	3.51	-37		
United Kingdom	3.33	-34	-17	+3
Germany	2.29	-29	-122	+8
Japan	0.50	+7	-301	+44
Australia	3.55	-50	4	-13
Canada	2.92	-38	-59	-2
New Zealand	4.17	-31	66	+6
EUROPE			(Spread over Bunds)	
France	2.75	-36	47	-8
Greece	4.30	-32	202	-4
Italy	4.16	-56	187	-27
Portugal	3.19	-40	90	-11
Spain	3.28	-38	100	-10
EM	**10-YR LOCAL YIELD (%)**	**MTD CHANGE (BPS)**	**SPREAD (BPS)**	**MTD CHANGE (BPS)**
EM External Spreads			444	-14
EM Corporate Spreads			393	+4
EM Local Yields	6.89	-23		
			(Spread over USTs)	
Brazil	13.12	+43	961	+80
Colombia	12.20	-81	870	-44
Hungary	8.00	-105	450	-68
Indonesia	6.69	-22	318	+14
Malaysia	3.80	-24	29	+12
Mexico	8.70	-33	519	+4
Peru	8.06	+8	455	+45
Poland	6.01	-83	251	-47
South Africa	10.32	-47	681	-10
CREDIT			**SPREAD (BPS)**	**MTD CHANGE (BPS)**
U.S. IG			117	-13
EUR IG			152	-15
U.S. HY			420	-49
EUR HY			441	-52
SECURITIZED				
Agency MBS			128	-17
U.S. BBB CMBS			473	-10

Positive Neutral Negative

Source: Bloomberg, JPMorgan. Data as of January 31, 2023.

The views and opinions expressed are those of the Portfolio Management team as of February 2023 and are subject to change based on market, economic and other conditions. **Past performance is not indicative of future results.**

Fixed Income Outlook

Investors should not get too giddy about the start to 2023. Performance has been so exceptional in January, we think it will be difficult to replicate in the months ahead. While we do not anticipate giving back too much of the returns so far in 2023, a correction and range trading may be in order.

The market has been oscillating between the idea that the February Federal Open Market Committee (FOMC) 25 bps rate hike will be the last (or the last for a while) and the idea that inflation has not been beaten and more hikes will be warranted Unfortunately, data in February has undermined the "soft" landing thesis which, in conjunction with the January rally in bond markets, is likely to generate a consolidation if not a modest correction in yields and spreads.

If risk-free and investment grade yields are going to fall further, inflation needs to keep falling, the economy cannot rebound too much, and the Fed (and other central banks) must stop raising interest rates. Yet, in no country is there evidence that labor markets are softening enough to bring down wage growth and thus core service sector inflation. Growth needs to be slow enough to bring down inflation, but not so much as to risk inflation and continued central bank rate hikes, and certainly not enough to cause a recession. Do not expect the Fed to lower rates unless there is a meaningful rise in unemployment, meaning well over 4%, unless inflation falls back to 2% on its own. Not impossible, in fact, that is the Fed forecast but, crucially, there is no rate cut in their forecast.

Markets and central banks no longer disagree much on the terminal (or peak) official interest rate in each country. The big debate is over how long they will stay at the peak. And on that question, there are reasonably big differences of opinion, with markets generally hopeful/optimistic that rates will peak no later than mid-year and then begin to fall later this year, and more substantially in 2024. The Fed believes this number, just over 5%, is likely the floor. The market not only believes it is the peak, but that it will fall significantly over the course of late 2023 and into 2024.

If the Fed is right, meaning the U.S. economy is stronger and/or inflation remains sticky, the U.S. bond market will need to reprice. This would likely take U.S. Treasury 10-year yields back toward 4%. The good news is that the likely poor outcome is only about a 25 bps increase. Much less than what happened in 2022 and less detrimental to returns given higher starting yields (and already realized 2023 returns). Similar analysis applies to other developed country bond markets.

In summary, government bond yields are stuck in a range for now. Markets probed the lower end in mid-December and again in January. Given the strong U.S. labor market data and ECB pushback on the dovish interpretation of its February rate hike, we are not likely to revisit those lows near term. Given prevailing uncertainties and a likely modest rise in volatility, we believe close to neutral positions in interest rate risk look appropriate for now.

In terms of sectors, we remain most positive on the securitized credit market. It has underperformed credit markets in 2023, which bodes well for further gains given the strong performance of credit. The securitized market consists primarily of residential and commercial mortgage-backed securities and asset-backed securities. Yields on most of these bonds are double last year's, with spreads materially wider than in corporate credit markets (except for CCC-rated corporate bonds). We believe credit concerns are overdone and yields (either through spread compression or lower government yields) will end 2023 lower. Our favorite category of securitized credit remains non-agency residential mortgages, despite expectations that U.S. home prices will likely fall in 2023. Agency mortgages should outperform U.S. Treasuries, but we still worry about structural demand given the Fed's quantitative tightening and bank's reduced demand.

Corporate credit has performed exceptionally well in 2023. So well, in fact, we see little upside in further spread tightening in the near term. With U.S. investment grade (IG) spreads near long-term averages and a lot of uncertainty remaining on the economic and policy outlook, we do not think it is a great time to be overly bullish. That said, absolute yields look fine on a longer-term basis, especially if inflation does fall back to target over time and the Fed does not overdo the tightening, meaning they stop hiking around 5.25%. Euro investment grade looks like a better opportunity as the European Union (EU) benefits from falling energy prices, expansionary fiscal policy and a China reopening. This combination should also benefit the euro. We are buyers on weakness.

A similar analysis supports high yield credit markets, albeit with more risk stemming from a possible 2023 recession. Performance has been outstanding in 2023 and cannot continue at this pace. That said, we do not see a recession in the next six months and inflation should continue to improve, buttressing household cash flows and supporting aggregate demand. Default rates are likely to rise, but not spike, and remain more idiosyncratic than systemic. With high yield indexes yielding around 8%, we think there is still ample room for spreads to modestly widen and generate mid-single digit returns, if not higher. We prefer B-rated and selective CCC issuers.

The U.S. dollar is likely to remain under pressure in 2023 despite the January U.S. employment report. Like most assets in 2023, the dollar may have fallen too far too fast, but it should resume its downward trajectory as it becomes clear the U.S. economy is not exceptional currently. Other countries' growth outlooks are better, and their central banks are likely to raise rates more and the dollar still looks overvalued. But further depreciation may take time, particularly if the Fed follows through on NOT cutting rates in 2023. Emerging Market (EM) bonds continue to gain in attractiveness, and we expect local markets and FX to outperform. Real yield differentials to U.S. Treasuries remain at historically wide levels. As usual, investors need to be aware of the various idiosyncratic risks in each country. EM is not a homogenous market. China's reopening should be quite positive for EM in general and helpful for the global economy.

The views and opinions expressed are those of the Portfolio Management team as of February 2023 and are subject to change based on market, economic and other conditions. **Past performance is not indicative of future results.**

	MONTHLY REVIEW	OUTLOOK
Developed Market Rate/ Foreign Currency	Yields fell broadly to start the year, reversing the brief sell-off in December. In the U.S., while economic data continued to show that inflation levels were elevated and labor markets were tight, data also showed that the economic strength was starting to potentially weaken. PMI/ISM data depicted consistent, contractionary levels and retail sales were weak. In terms of inflation concerns, the CPI print was in line with expectations, but showed further progress as inflation rates fell from prior levels. Likewise, the employment cost index was lower than expected, but still at an elevated level. Elsewhere in North America, the Bank of Canada hiked 25 bps as expected, but indicated that it was most likely pausing for now. The data in Europe contrasted with the U.S., as Eurozone economic data surprised to the upside, and core inflation data remained resilient. Finally, the Bank of Japan (BoJ), in a highly anticipated decision, chose to keep the yield curve control policy the same, resulting in Japanese government bonds initially rallying, but subsequently rising back close to the 50-bps level by the end of the month.[1]	While some of the recent economic data has started to show signs of potential weakness, and inflation levels are starting to roll over, there is still considerable uncertainty in terms of the future path for interest rates and economic data. In our view, the rates market is priced close to fair provided the current data; however, central bankers have been quite clear in their determination to keep rates high, and while inflation will continue to come down from their peaks, inflation and labor market data prints are still indicating that the economy is overheated. Following the rally during January, the market is still eagerly hoping that inflation will come down quickly, with the market pricing in considerable cuts from the Fed over the next two years, in direct contrast with the Fed's own messaging. As a result, the risk for rates still seems to be for them to go marginally higher. In terms of foreign exchange, last year the U.S. dollar benefited from tighter Fed policy and growing global growth concerns; however, that trend stopped at the end of 2022 and has continued to reverse as 2023 begins. Broadly, we think that U.S. dollar weakness could continue for now.
Emerging Market Rate/ Foreign Currency	Emerging markets debt (EMD) continued its strong rally from the end of 2022 into the New Year. The U.S. dollar continued to weaken which helped many EM currencies rally, in particular Asia currencies. China's reopening after a dramatic reversal of its longstanding zero-COVID policy is likely to increase growth and eliminate some uncertainty in the region. In Peru, protests escalated in January following an attempted coup and arrest of Peru's former President Catillo, which escalated instability in the country. Technicals started to recover in the last few months of 2022, but January saw a substantial shift in investor interest for the asset class. Both hard and local currency funds experienced notable inflows with $5.8 billion and $1.9 billion, respectively. All EMD risk factors produced positive performance during the month.[2]	The asset class is positioned to continue the rally in 2023. Local rates in particular are attractive, in our view, as real yield differentials between emerging and developed markets remain high. As the Fed continues to moderate policy, this will be supportive for many EM countries. The asset class experienced record outflows in 2022, but sentiment shifted in the fourth quarter and continued in a dramatic fashion in January with strong positive flows for both hard and local currency funds. We expect inflows to continue as investors begin to add risk back to their portfolios. Fundamentals continue to improve and valuations remain compelling, but there is wide dispersion among countries and credits so evaluating all opportunities from the bottom up is critical.

[1] Source: Bloomberg. Data as of January 31, 2022.

[2] Source: Bloomberg. Data as of January 31, 2022. EM corporates represented by The **JP Morgan CEMBI Broad Diversified Index**.

The views and opinions expressed are those of the Portfolio Management team as of February 2023 and are subject to change based on market, economic and other conditions. **Past performance is not indicative of future results.**

	MONTHLY REVIEW	OUTLOOK
Corporate Credit	Euro IG spreads outperformed U.S. IG spreads in the rally this month as a combination of improving sentiment and a strong technical supported the market (consensus expectation was reported as moving from a mild recession to a soft landing). Drivers in the month included inflation data trending lower, China policy focusing more on growth and fourth quarter corporate reporting that exceeded expectations.[3] The U.S. and global high yield markets kicked off 2023 with a strong opening act in January. Investors took advantage of historically attractive starting yields, on average, amid increasing expectations that the Fed was nearing the end of its aggressive campaign of rate increases. The supply/demand balance was supportive in January as the high yield primary market reopened and retail funds experienced net-inflows.[4] The lower quality segments of the market generally outperformed and the top performing sectors for the month were natural gas utility, brokerage, asset managers and exchanges and finance companies.[5] Global convertibles started the year strongly on a rebound in high-growth assets as investors began to forecast a slow down to rising rates. In January, convertibles performed in between global stocks and global bonds with the Refinitiv Global Convertibles Focus Index returning 4.76%. This was the best month for convertibles performance since November 2020 as it was pushed up by most of the key underlying factors—equities, spreads and rates. The only detractor to asset class valuation was a drop in volatility which typically acts as a hedge against equity markets, where vol often rises when stocks are up and falls when stocks are down. There was, however, a slow start in the primary market, as just $2.4bn in new paper was priced.[6]	Looking forward, our base case view is that we are compensated to own credit as we view corporate fundamentals to be resilient and the macro backdrop to likely improve as monetary policy pivots and China re-opens. We view companies as having built liquidity and implemented cost efficiencies under the COVID-era. We expect margins to be pressured and top-line revenue to be challenging, but given the starting point, we believe corporates will be able to manage a slowdown without significant downgrades or defaults. The rally in high yield bond markets in January may persist in the near term; however, it seems likely that it will eventually fade given the extent to which valuations have already compressed in January and the risks that still lay on the horizon.
Securitized Products	Agency MBS spreads and securitized credit spreads were tighter in January. Securitized credit spreads lagged much of the corporate credit spread tightening in the fourth quarter and continue to look attractive on a relative value basis. New issue securitized supply remains very low as loan origination in both residential loans and commercial loans has declined substantially. Securitized fundamental credit remains stable—delinquencies are rising slowly, but remain low from a historical basis, and do not appear to be threatening to the thick levels of structural credit protection for most securitized assets. U.S. home prices have fallen ~5% from the peak in June, and we expect home prices to fall another 5-10% in 2023.[7]	U.S. residential credit remains our favorite sector, despite our expectations of home price declines, with a strong preference for seasoned loans (originated in 2020 or earlier) due to the sizable home price appreciation over the past few years. We remain more cautious of commercial real estate, which continues to be negatively impacted in the post-pandemic world and could also be impacted by a recession. We pivoted meaningfully away from our European overweight to the U.S., as risk-adjusted opportunities looked more compelling in the U.S., but as spreads have normalized and economic conditions have improved, we have become less concerned with European opportunities

[3] Source: Bloomberg Indices: U.S. Corporate Index and the European Aggregate Corporate Index. Data as of January 31, 2023.

[4] Source: J.P. Morgan, January 31, 2023

[5] Source: J.P. Morgan and Bloomberg US Corporate High Yield Index. Data as of January 31, 2023.

[6] Source: Bloomberg and Refinitiv Global Convertibles Focus Index. Data as of January 31, 2023.

[7] Source: Bloomberg. Data as of January 31, 2023.

The views and opinions expressed are those of the Portfolio Management team as of February 2023 and are subject to change based on market, economic and other conditions. **Past performance is not indicative of future results.**

Risk Considerations

Diversification neither assures a profit nor guarantees against loss in a declining market.

There is no assurance that a portfolio will achieve its investment objective. Portfolios are subject to **market risk**, which is the possibility that the market values of securities owned by the portfolio will decline and that the value of portfolio shares may therefore be less than what you paid for them. Market values can change daily due to economic and other events (e.g. natural disasters, health crises, terrorism, conflicts and social unrest) that affect markets, countries, companies or governments. It is difficult to predict the timing, duration, and potential adverse effects (e.g. portfolio liquidity) of events. Accordingly, you can lose money investing in a portfolio. **Fixed-income securities** are subject to the ability of an issuer to make timely principal and interest payments (credit risk), changes in interest rates (interest rate risk), the creditworthiness of the issuer and general market liquidity (market risk). In a rising interest-rate environment, bond prices may fall and may result in periods of volatility and increased portfolio redemptions. In a declining interest-rate environment, the portfolio may generate less income. **Longer-term securities** may be more sensitive to interest rate changes. Certain **U.S. government securities** purchased by the strategy, such as those issued by Fannie Mae and Freddie Mac, are not backed by the full faith and credit of the U.S. It is possible that these issuers will not have the funds to meet their payment obligations in the future. **Public bank loans** are subject to liquidity risk and the credit risks of lower-rated securities. **High-yield securities (junk bonds)** are lower-rated securities that may have a higher degree of credit and liquidity risk. **Sovereign debt securities** are subject to default risk. **Mortgage- and asset-backed securities** are sensitive to early prepayment risk and a higher risk of default, and may be hard to value and difficult to sell (**liquidity risk**). They are also subject to credit, market and interest rate risks. The **currency market** is highly volatile. Prices in these markets are influenced by, among other things, changing supply and demand for a particular currency; trade; fiscal, money and domestic or foreign exchange control programs and policies; and changes in domestic and foreign interest rates. Investments in **foreign markets** entail special risks such as currency, political, economic and market risks. The risks of investing in **emerging market** countries are greater than the risks generally associated with foreign investments. **Derivative instruments** may disproportionately increase losses and have a significant impact on performance. They also may be subject to counterparty, liquidity, valuation, and correlation and market risks. **Restricted and illiquid securities** may be more difficult to sell and value than publicly traded securities (liquidity risk). Due to the possibility that prepayments will alter the cash flows on **collateralized mortgage obligations (CMOs)**, it is not possible to determine in advance their final maturity date or average life. In addition, if the collateral securing the CMOs or any third-party guarantees are insufficient to make payments, the portfolio could sustain a loss.

DEFINITIONS

Basis point: One basis point = 0.01%.

INDEX DEFINITIONS

The indexes shown in this report are not meant to depict the performance of any specific investment, and the indexes shown do not include any expenses, fees or sales charges, which would lower performance. The indexes shown are unmanaged and should not be considered an investment. It is not possible to invest directly in an index.

"Bloomberg®" and the Bloomberg Index/Indices used are service marks of Bloomberg Finance L.P. and its affiliates, and have been licensed for use for certain purposes by Morgan Stanley Investment Management (MSIM). Bloomberg is not affiliated with MSIM, does not approve, endorse, review, or recommend any product, and does not guarantee the timeliness, accurateness, or completeness of any data or information relating to any product.

The **Bloomberg Euro Aggregate Corporate Index (Bloomberg Euro IG Corporate)** is an index designed to reflect the performance of the euro-denominated investment-grade corporate bond market.

The **Bloomberg Global Aggregate Corporate Index** is the corporate component of the Bloomberg Global Aggregate index, which provides a broad-based measure of the global investment-grade fixed income markets.

The **Bloomberg US Corporate High Yield Index** measures the market of USD-denominated, non-investment grade, fixed-rate, taxable corporate bonds. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below. The index excludes emerging market debt.

The **Bloomberg US Corporate Index** is a broad-based benchmark that measures the investment grade, fixed-rate, taxable, corporate bond market.

The **Bloomberg US Mortgage Backed Securities (MBS) Index** tracks agency mortgage-backed pass-through securities (both fixed-rate and hybrid ARM) guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA) and Freddie Mac (FHLMC). The index is constructed by grouping individual TBA-deliverable MBS pools into aggregates or generics based on program, coupon and vintage. Introduced in 1985, the GNMA, FHLMC and FNMA fixed-rate indexes for 30- and 15-year securities were backdated to January 1976, May 1977 and November 1982, respectively. In April 2007, agency hybrid adjustable-rate mortgage (ARM) pass-through securities were added to the index.

Consumer Price Index (CPI) is a measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food and medical care.

Euro vs. USD—Euro total return versus U.S. dollar.

German 10YR bonds—Germany Benchmark 10-Year Datastream Government Index; **Japan 10YR government bonds**—Japan Benchmark 10-Year Datastream Government Index; and **10YR US Treasury**—US Benchmark 10-Year Datastream Government Index.

The **ICE BofAML European Currency High-Yield Constrained Index (ICE BofAML Euro HY constrained)** is designed to track the performance of euro- and British pound sterling-denominated below investment-grade corporate debt publicly issued in the eurobond, sterling

The views and opinions expressed are those of the Portfolio Management team as of February 2023 and are subject to change based on market, economic and other conditions. **Past performance is not indicative of future results.**

The **ICE BofAML US Mortgage-Backed Securities (ICE BofAML US Mortgage Master) Index** tracks the performance of US dollar-denominated, fixed-rate and hybrid residential mortgage pass-through securities publicly issued by US agencies in the US domestic market.

The **ICE BofAML US High Yield Master II Constrained Index (ICE BofAML US High Yield)** is a market value-weighted index of all domestic and Yankee high-yield bonds, including deferred-interest bonds and payment-in-kind securities. Its securities have maturities of one year or more and a credit rating lower than BBB-/Baa3, but are not in default.

The **ISM Manufacturing Index** is based on surveys of more than 300 manufacturing firms by the Institute of Supply Management. The ISM Manufacturing Index monitors employment, production inventories, new orders and supplier deliveries. A composite diffusion index is created that monitors conditions in national manufacturing based on the data from these surveys.

Italy 10-Year Government Bonds—Italy Benchmark 10-Year Datastream Government Index.

The **JP Morgan CEMBI Broad Diversified Index** is a global, liquid corporate emerging markets benchmark that tracks US-denominated corporate bonds issued by emerging markets entities.

The **JPMorgan Government Bond Index**—emerging markets (**JPM local EM debt**) tracks local currency bonds issued by emerging market governments. The index is positioned as the investable benchmark that includes only those countries that are accessible by most of the international investor base (excludes China and India as of September 2013).

The **JPMorgan Government Bond Index Emerging Markets (JPM External EM Debt)** tracks local currency bonds issued by emerging market governments. The index is positioned as the investable benchmark that includes only those countries that are accessible by most of the international investor base (excludes China and India as of September 2013).

The **JP Morgan Emerging Markets Bond Index Global (EMBI Global)** tracks total returns for traded external debt instruments in the emerging markets and is an expanded version of the EMBI+. As with the EMBI+, the EMBI Global includes US dollar-denominated Brady bonds, loans and eurobonds with an outstanding face value of at least $500 million.

The **JP Morgan GBI-EM Global Diversified Index** is a market-capitalization weighted, liquid global benchmark for US-dollar corporate emerging market bonds representing Asia, Latin America, Europe and the Middle East/Africa.

JPY vs. USD—Japanese yen total return versus US dollar.

The **Markit ITraxx Europe Index** comprises 125 equally weighted credit default swaps on investment grade European corporate entities, distributed among 4 sub-indices: Financials (Senior & Subordinated), Non-Financials and HiVol.

The **Nikkei 225 Index (Japan Nikkei 225)** is a price-weighted index of Japan's top 225 blue-chip companies on the Tokyo Stock Exchange.

The **MSCI AC Asia ex-Japan Index (MSCI Asia ex-Japan)** captures large- and mid-cap representation across two of three developed markets countries (excluding Japan) and eight emerging markets countries in Asia.

The **MSCI All Country World Index (ACWI, MSCI global equities)** is a free float-adjusted market capitalization weighted index designed to measure the equity market performance of developed and emerging markets. The term "free float" represents the portion of shares outstanding that are deemed to be available for purchase in the public equity markets by investors. The performance of the Index is listed in US dollars and assumes reinvestment of net dividends.

MSCI Emerging Markets Index (MSCI emerging equities) captures large- and mid-cap representation across 23 emerging markets (EM) countries.

The **MSCI World Index (MSCI developed equities)** captures large and mid-cap representation across 23 developed market (DM) countries.

Purchasing Managers Index (PMI) is an indicator of the economic health of the manufacturing sector.

The **Refinitiv Convertible Global Focus USD Hedged Index** is a market weighted index with a minimum size for inclusion of $500 million (US), 200 million (Europe), 22 billion Yen, and $275 million (Other) of Convertible Bonds with an Equity Link.

The **Russell 2000® Index** is an index that measures the performance of the 2,000 smallest companies in the Russell 3000 Index.

The **S&P 500® Index (US S&P 500)** measures the performance of the large-cap segment of the US equities market, covering approximately 75 percent of the US equities market. The index includes 500 leading companies in leading industries of the U.S. economy.

S&P CoreLogic Case-Shiller US National Home Price NSA Index seeks to measure the value of residential real estate in 20 major US metropolitan areas: Atlanta, Boston, Charlotte, Chicago, Cleveland, Dallas, Denver, Detroit, Las Vegas, Los Angeles, Miami, Minneapolis, New York, Phoenix, Portland, San Diego, San Francisco, Seattle, Tampa and Washington, D.C.

The **S&P/LSTA US Leveraged Loan 100 Index (S&P/LSTA Leveraged Loan Index)** is designed to reflect the performance of the largest facilities in the leveraged loan market.

The **S&P GSCI Copper Index (Copper)**, a sub-index of the S&P GSCI, provides investors with a reliable and publicly available benchmark for investment performance in the copper commodity market.

The **S&P GSCI Softs (GSCI soft commodities) Index** is a sub-index of the S&P GSCI that measures the performance of only the soft commodities, weighted on a world production basis. In 2012, the S&P GSCI Softs Index included the following commodities: coffee, sugar, cocoa and cotton.

Spain 10-Year Government Bonds—Spain Benchmark 10-Year Datastream Government Index.

The **Thomson Reuters Convertible Global Focus USD Hedged Index** is a market weighted index with a minimum size for inclusion of $500 million (US), 200 million euro (Europe), 22 billion yen, and $275 million (Other) of convertible bonds with an equity link.

U.K. 10YR government bonds—U.K. Benchmark 10-Year Datastream Government Index. For the following Datastream government bond indexes, benchmark indexes are based on single bonds. The bond chosen for each series is the most representative bond available for the given maturity band at each point in time. Benchmarks are selected according to the accepted conventions within each market. Generally, the benchmark bond is the latest issue within the given maturity band; consideration is also given to yield, liquidity, issue size and coupon.

The **US Dollar Index (DXY)** is an index of the value of the United States dollar relative to a basket of foreign currencies, often referred to as a basket of US trade partners' currencies.

The **Chicago Board Options Exchange (CBOE) Market Volatility (VIX) Index** shows the market's expectation of 30-day volatility.

There is no guarantee that any investment strategy will work under all market conditions, and each investor should evaluate their ability to invest for the long-term, especially during periods of downturn in the market.

A separately managed account may not be appropriate for all investors. Separate accounts managed according to the particular strategy may include securities that may not necessarily track the performance of a particular index. Please consider the investment objectives, risks and fees of the Strategy carefully before investing A minimum asset level is required. For important information about the investment managers, please refer to Form ADV Part 2.

The views and opinions and/or analysis expressed are those of the author or the investment team as of the date of preparation of this material and are subject to change at any time without notice due to market or economic conditions and may not necessarily come to pass. Furthermore, the views will not be updated or otherwise revised to reflect information that subsequently becomes available or circumstances existing, or changes occurring, after the date of publication. The views expressed do not reflect the opinions of all investment personnel at Morgan Stanley Investment Management (MSIM) and its subsidiaries and affiliates (collectively "the Firm") and may not be reflected in all the strategies and products that the Firm offers.

Forecasts and/or estimates provided herein are subject to change and may not actually come to pass. Information regarding expected market returns and market outlooks is based on the research, analysis and opinions of the authors or the investment team. These conclusions are speculative in

The views and opinions expressed are those of the Portfolio Management team as of February 2023 and are subject to change based on market, economic and other conditions. **Past performance is not indicative of future results.**

nature, may not come to pass and are not intended to predict the future performance of any specific strategy or product the Firm offers. Future results may differ significantly depending on factors such as changes in securities or financial markets or general economic conditions.

This material has been prepared on the basis of publicly available information, internally developed data and other third-party sources believed to be reliable. However, no assurances are provided regarding the reliability of such information and the Firm has not sought to independently verify information taken from public and third-party sources.

This material is a general communication, which is not impartial and all information provided has been prepared solely for informational and educational purposes and does not constitute an offer or a recommendation to buy or sell any particular security or to adopt any specific investment strategy. The information herein has not been based on a consideration of any individual investor circumstances and is not investment advice, nor should it be construed in any way as tax, accounting, legal or regulatory advice. To that end, investors should seek independent legal and financial advice, including advice as to tax consequences, before making any investment decision.

Charts and graphs provided herein are for illustrative purposes only. **Past performance is no guarantee of future results.**

The indexes are unmanaged and do not include any expenses, fees or sales charges. It is not possible to invest directly in an index. Any index referred to herein is the intellectual property (including registered trademarks) of the applicable licensor. Any product based on an index is in no way sponsored, endorsed, sold or promoted by the applicable licensor and it shall not have any liability with respect thereto.

This material is not a product of Morgan Stanley's Research Department and should not be regarded as a research material or a recommendation.

The Firm has not authorised financial intermediaries to use and to distribute this material, unless such use and distribution is made in accordance with applicable law and regulation. Additionally, financial intermediaries are required to satisfy themselves that the information in this material is appropriate for any person to whom they provide this material in view of that person's circumstances and purpose. The Firm shall not be liable for, and accepts no liability for, the use or misuse of this material by any such financial intermediary.

This material may be translated into other languages. Where such a translation is made this English version remains definitive. If there are any discrepancies between the English version and any version of this material in another language, the English version shall prevail.

The whole or any part of this material may not be directly or indirectly reproduced, copied, modified, used to create a derivative work, performed, displayed, published, posted, licensed, framed, distributed or transmitted or any of its contents disclosed to third parties without the Firm's express written consent. This material may not be linked to unless such hyperlink is for personal and non-commercial use. All information contained herein is proprietary and is protected under copyright and other applicable law.

Eaton Vance is part of Morgan Stanley Investment Management. Morgan Stanley Investment Management is the asset management division of Morgan Stanley.

DISTRIBUTION

This material is only intended for and will only be distributed to persons resident in jurisdictions where such distribution or availability would not be contrary to local laws or regulations.

MSIM, the asset management division of Morgan Stanley (NYSE: MS), and its affiliates have arrangements in place to market each other's products and services. Each MSIM affiliate is regulated as appropriate in the jurisdiction it operates. MSIM's affiliates are: Eaton Vance Management (International) Limited, Eaton Vance Advisers International Ltd, Calvert Research and Management, Eaton Vance Management, Parametric Portfolio Associates LLC and Atlanta Capital Management LLC.

This material has been issued by any one or more of the following entities:

EMEA:

This material is for Professional Clients/Accredited Investors only.

In the EU, MSIM and Eaton Vance materials are issued by MSIM Fund Management (Ireland) Limited ("FMIL"). FMIL is regulated by the Central Bank of Ireland and is incorporated in Ireland as a private company limited by shares with company registration number 616661 and has its registered address at The Observatory, 7-11 Sir John Rogerson's Quay, Dublin 2, D02 VC42, Ireland.

Outside the EU, MSIM materials are issued by Morgan Stanley Investment Management Limited (MSIM Ltd) is authorised and regulated by the Financial Conduct Authority. Registered in England. Registered No. 1981121. Registered Office: 25 Cabot Square, Canary Wharf, London E14 4QA.

In Switzerland, MSIM materials are issued by Morgan Stanley & Co. International plc, London (Zurich Branch) Authorised and regulated by the Eidgenössische Finanzmarktaufsicht ("FINMA"). Registered Office: Beethovenstrasse 33, 8002 Zurich, Switzerland.

Outside the US and EU, Eaton Vance materials are issued by Eaton Vance Management (International) Limited ("EVMI") 125 Old Broad Street, London, EC2N 1AR, UK, which is authorised and regulated in the United Kingdom by the Financial Conduct Authority.

Italy: MSIM FMIL (Milan Branch), (Sede Secondaria di Milano) Palazzo Serbelloni Corso Venezia, 16 20121 Milano, Italy. **The Netherlands:** MSIM FMIL (Amsterdam Branch), Rembrandt Tower, 11th Floor Amstelplein 1 1096HA, Netherlands. **France:** MSIM FMIL (Paris Branch), 61 rue de Monceau 75008 Paris, France. **Spain:** MSIM FMIL (Madrid Branch), Calle Serrano 55, 28006, Madrid, Spain. **Germany:** MSIM FMIL (Frankfurt Branch), Grosse Gallusstrasse 18, 60312 Frankfurt am Main, Germany (Gattung: Zweigniederlassung (FDI) gem. § 53b KWG). **Denmark:** MSIM FMIL (Copenhagen Branch), Gorrissen Federspiel, Axel Towers, Axeltorv2, 1609 Copenhagen V, Denmark.

MIDDLE EAST

Dubai: MSIM Ltd (Representative Office, Unit Precinct 3-7th Floor-Unit 701 and 702, Level 7, Gate Precinct Building 3, Dubai International Financial Centre, Dubai, 506501, United Arab Emirates. Telephone: +97 (0)14 709 7158). This document is distributed in the Dubai International Financial Centre by Morgan Stanley Investment Management Limited (Representative Office), an entity regulated by the Dubai Financial Services Authority ("DFSA"). It is intended for use by professional clients and market counterparties only. This document is not intended for distribution to retail clients, and retail clients should not act upon the information contained in this document.

This document relates to a financial product which is not subject to any form of regulation or approval by the DFSA. The DFSA has no responsibility for reviewing or verifying any documents in connection with this financial product. Accordingly, the DFSA has not approved this document or any other associated documents nor taken any steps to verify the information set out in this document, and has no responsibility for it. The financial product to which this document relates may be illiquid and/or subject to restrictions on its resale or transfer. Prospective purchasers should conduct their own due diligence on the financial product. If you do not understand the contents of this document, you should consult an authorised financial adviser.

US

NOT FDIC INSURED | OFFER NO BANK GUARANTEE | MAY LOSE VALUE | NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY | NOT A DEPOSIT

Latin America (Brazil, Chile Colombia, Mexico, Peru, and Uruguay)

This material is for use with an institutional investor or a qualified investor only. All information contained herein is confidential and is for the exclusive use and review of the intended addressee, and may not be passed on to any third party. This material is provided for informational purposes only and does not constitute a public offering, solicitation or recommendation to buy or sell for any product, service, security and/or strategy. A decision to invest should only be made after reading the strategy documentation and conducting in-depth and independent due diligence.

ASIA PACIFIC

Hong Kong: This material is disseminated by Morgan Stanley Asia Limited for use in Hong Kong and shall only be made available to "professional investors" as defined under the Securities and Futures Ordinance of Hong Kong (Cap 571). The contents of this material have not been reviewed nor approved by any regulatory authority including the Securities and Futures Commission in Hong Kong. Accordingly, save where an exemption is available under

The views and opinions expressed are those of the Portfolio Management team as of February 2023 and are subject to change based on market, economic and other conditions. **Past performance is not indicative of future results.**

the relevant law, this material shall not be issued, circulated, distributed, directed at, or made available to, the public in Hong Kong. **Singapore:** This material is disseminated by Morgan Stanley Investment Management Company and may not be circulated or distributed, whether directly or indirectly, to persons in Singapore other than to (i) an accredited investor (ii) an expert investor or (iii) an institutional investor as defined in Section 4A of the Securities and Futures Act, Chapter 289 of Singapore ("SFA"); or (iv) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA. This publication has not been reviewed by the Monetary Authority of Singapore. **Australia:** This material is provided by Morgan Stanley Investment Management (Australia) Pty Ltd ABN 22122040037, AFSL No. 314182 and its affiliates and does not constitute an offer of interests. Morgan Stanley Investment Management (Australia) Pty Limited arranges for MSIM affiliates to provide financial services to Australian wholesale clients. Interests will only be offered in circumstances under which no disclosure is required under the Corporations Act 2001 (Cth) (the "Corporations Act"). Any offer of interests will not purport to be an offer of interests in circumstances under which disclosure is required under the Corporations Act and will only be made to persons who qualify as a "wholesale client" (as defined in the Corporations Act). This material will not be lodged with the Australian Securities and Investments Commission.

Japan:
For professional investors, this document is circulated or distributed for informational purposes only. For those who are not professional investors, this document is provided in relation to Morgan Stanley Investment Management (Japan) Co., Ltd. ("MSIMJ")'s business with respect to discretionary investment management agreements ("IMA") and investment advisory agreements ("IAA"). This is not for the purpose of a recommendation or solicitation of transactions or offers any particular financial instruments. Under an IMA, with respect to management of assets of a client, the client prescribes basic management policies in advance and commissions MSIMJ to make all investment decisions based on an analysis of the value, etc. of the securities, and MSIMJ accepts such commission. The client shall delegate to MSIMJ the authorities necessary for making investment. MSIMJ exercises the delegated authorities based on investment decisions of MSIMJ, and the client shall not make individual instructions. All investment profits and losses belong to the clients; principal is not guaranteed. Please consider the investment objectives and nature of risks before investing. As an investment advisory fee for an IAA or an IMA, the amount of assets subject to the contract multiplied by a certain rate (the upper limit is 2.20% per annum (including tax)) shall be incurred in proportion to the contract period. For some strategies, a contingency fee may be incurred in addition to the fee mentioned above. Indirect charges also may be incurred, such as brokerage commissions for incorporated securities. Since these charges and expenses are different depending on a contract and other factors, MSIMJ cannot present the rates, upper limits, etc. in advance. All clients should read the Documents Provided Prior to the Conclusion of a Contract carefully before executing an agreement. This document is disseminated in Japan by MSIMJ, Registered No. 410 (Director of Kanto Local Finance Bureau (Financial Instruments Firms)), Membership: The Japan Securities Dealers Association, the Investment Trusts Association, Japan, the Japan Investment Advisers Association and the Type II Financial Instruments Firms Association.

Explore our site at **www.morganstanley.com/im**

© 2023 Morgan Stanley. All rights reserved.

CRC 5456801 Exp. 2/29/2024 10361453_KC_0223