Morgan Stanley

INVESTMENT MANAGEMENT

Global Fixed Income Bulletin

Snap Back to Reality

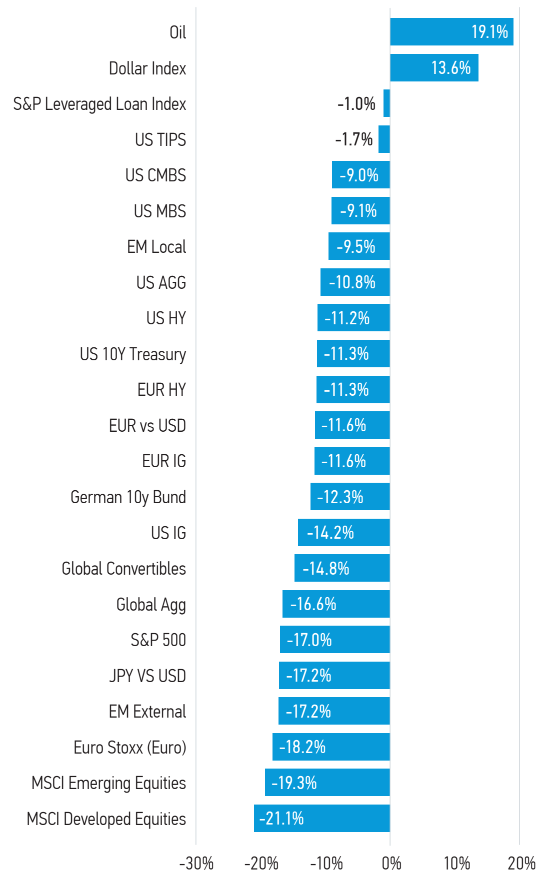
GLOBAL FIXED INCOME TEAM | MACRO INSIGHT | SEPTEMBER 2022

Good times did not last long. August ended the summer flirtation with bull market dreams. After strong recoveries in July, bond markets turned down once again in August, generating large negative returns. Yields, spreads, and equities have not (at least yet) returned to their June nadir. Optimism for a soft landing in the economy has been seriously compromised. The S&P 500 index sold off more than 8% from August 16, while U.S. high yield spreads widened 75 basis points (bps). The culprits: energy prices in Europe, strong labor markets in the U.S. alongside a rebounding (compared to first half of the year) economy and newly credible central banks brandishing their hawkish wares. This has led to growing conviction of investors that markets will have to contend with sticky core inflation (if not headline inflation outside the U.S.), tight labor markets, particularly in the U.S., the risk of a wage price spiral, and irascible central banks for the foreseeable future.

If there were any doubts that central banks were prioritizing the inflation fight over growth they were put to rest in August. In his Jackson Hole speech, U.S. Federal Reserve (Fed) Chairman Powell laid out in no uncertain terms the Fed's intention to take whatever actions were necessary to bring inflation back to target without delay, even at the cost of recession. Additional hawkish comments from the European Central Bank (ECB) and the Bank of England (BoE) made it clear that further, potentially aggressive, policy tightening could also be expected in the

DISPLAY 1

Asset Performance Year-to-Date



Note: USD-based performance. Source: Bloomberg. Data as of August 31, 2022. 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 6-7 for index definitions.

months ahead. Global monetary policy is going to be made restrictive and would stay restrictive until mission accomplished. The so called "pivot" the market thought was occurring this summer is dead; long live the pivot (towards the central banks' views). The roller coaster continues.

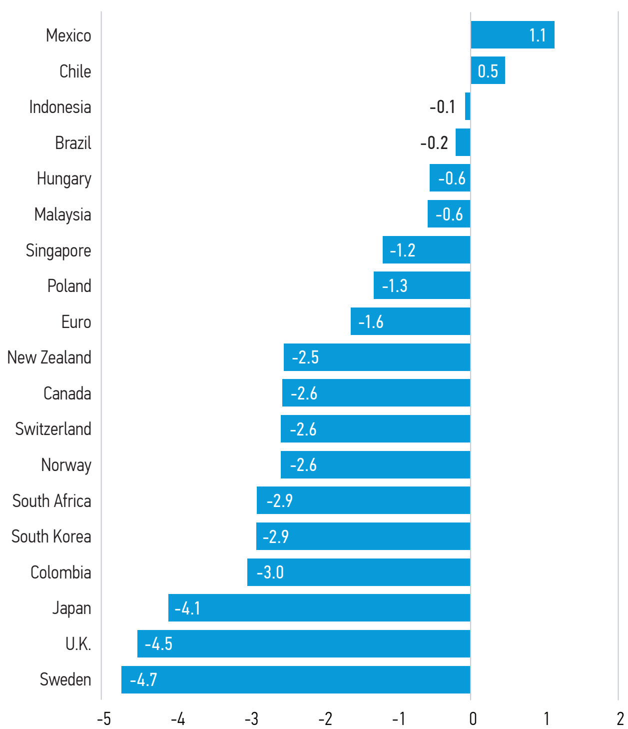
The end result: By the end of the month, really starting in the middle of August, a mini bear market in bonds and stocks began as did a further upward surge in the U.S. dollar. U.S. 10-year Treasury yields rose over 50 bps; 10-year French government bonds rose almost 80 bps! Importantly, the rise in yields was due to a rise in real yields, suggesting tighter monetary policy expectations were to blame. In fact, the rise in real yields this year has been nothing short of breathtaking. U.S. 10-year real yields have risen approximately 200 bps. Normally inflation expectations and fluctuations in risk premiums generate most of the volatility in nominal yields. Not this year. Inflation expectations have been amazingly well anchored considering the inflation shock which occurred. The U.S. dollar's rise is more complex as the complete collapse of current account surpluses in Europe and Asia with concomitant increases in capital flows hurt.

What does the future hold? Most likely more volatility. But, maybe with smaller tails. Central banks have forsworn forward guidance, becoming data watchers like the rest of us. We believe headline inflation should fall in the U.S. and many other parts of the world, but probably not Europe. The global economy is slowing down, while central banks continue their hawkish ways. The good news is that markets have embraced (or maybe more appropriately, grudgingly accepted) central banks' guidance on the need for restrictive monetary policies, implying fewer, less frequent and smaller upward adjustments. Moreover, we think inflation should fall meaningfully next year (Europe a wild card), growth likely below trend and labor markets softer. Could we dare dream that we just might have a soft landing (from here)?

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 August 31, 2022.

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	3.19	+54		
United Kingdom	2.80	+94	-39	+39
Germany	1.54	+72	-165	+18
Japan	0.23	+4	-297	-50
Australia	3.60	+54	40	0
Canada	3.12	+51	-7	-4
New Zealand	3.98	+56	79	+2
EUROPE			(Spread over Bunds)	
France	2.15	+77	61	+5
Greece	4.11	+115	257	+42
Italy	3.89	+87	235	+15
Portugal	2.63	+79	109	+6
Spain	2.74	+82	120	+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	12.29	-69	910	-124
Colombia	12.08	-15	889	-69
Hungary	8.81	+71	561	+16
Indonesia	7.11	+1	392	-54
Malaysia	3.99	+9	79	-46
Mexico	9.04	+48	585	-6
Peru	8.03	-17	484	-72
Poland	6.13	+61	293	+7
South Africa	10.89	+12	770	-43
CREDIT			**SPREAD (BPS)**	**MTD CHANGE (BPS)**
U.S. IG			140	-4
EUR IG			202	+15
U.S. HY			484	+15
EUR HY			552	-27
SECURITIZED				
Agency MBS			140	+25
U.S. BBB CMBS			400	0

Positive Neutral Negative

Source: Bloomberg, JPMorgan. Data as of August 31, 2022.

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Fixed Income Outlook

August put paid to the idea that a soft landing in the economy and financial markets was around the corner. It does not mean one will not occur—only that we believe it is not going to happen this year, or probably in Q1 2023. Imbalances in economies remain too large to call all clear. The probability of a recession in the next 12 months has probably not been higher this year and rightly so, given the level and potential stickiness of inflation and potential—and we emphasize potential—that central banks will have to raise rates by more than currently expected.

While the U.S. economy is experiencing an upswing this quarter, the outlook for the rest of the non-energy producing world looks downbeat. Global manufacturing Purchasing Managers Indexes (PMIs) are in recession territory already. Asian economies are seeing a meaningful slowdown in export orders. China's upswing has been smaller than expected, if not ending much sooner than expected, weighed down by Covid lockdowns, property woes, drought, a weaker global economy—particularly Europe's—and a lackluster policy response. While European hard economic data has held up surprisingly well, Germany's annual natural gas bill will rise by 6% of GDP[1] in 2022, a gigantic tax on the economy before potential rationing issues are factored in. Its resilience to this shock is likely to wan in the months ahead, leading to outright recession by Q4. But the unprecedented surge in energy prices will likely lead to continually higher inflation in the months ahead, unlike the slowdown that is unfolding in the U.S. With Europe unlikely to give into Russian demands, the reverberation of this shock has no end in sight.

In the U.S., resiliency in economic data contrasts with weakness elsewhere. The labor market is robust, GDP growth based on the Atlanta Fed's nowcasting model is forecasted to be over 2.5% on an annualized basis. And goods prices are finally coming down as supply chains improve and demand shrinks. More importantly, gasoline prices are falling meaningfully. The implications of this may be underestimated. Consumer confidence has ticked up as pump prices fall, real incomes look better, and consumer spending could rebound nicely into the holiday season. Although falling gasoline prices (and maybe used car prices) will lead to lower headline inflation like in July, it may make the Fed's job harder to bring down core inflation if households regain their spending habits, particularly on services. Given this, is it surprising Fed Chair Powell delivered such a hawkish message at Jackson Hole? Indeed, in September, this is what has happened already: Reserve Bank of Australia raised rates 50 bps, Bank of Canada raised rates 75 bps, central bank of Chile raised rates 100 bps; and the Polish central bank raised rates 25 bps. Later in September, the Fed and ECB have said they will raise rates 50 or 75 bps. It is not really important which amount they choose; less now means more later.

The good news is that yields and credit spreads are much more reasonably priced than a month ago. U.S. Treasury 10-year yields were 2.58% on August 1. This was too low and was about 100 bps lower than their June peak. Now, with 10-year yields back to around 3.25% this looks reasonable. Could we revisit the June highs of 3.5%? Absolutely. Will yields get to 4%? Unlikely, in our view.

European government bond yields also returned close to their June highs, making them look much more attractive. Could they go higher still? Of course, but we would not suggest getting more bearish near historical highs in yields. That said, it is premature to believe the bear market in rates is over. The inflation situation is not yet under control. Just because July data showed a slowdown does not mean it will continue, or assuming it does continue, it will be at a disappointing pace, keeping central banks hawkish.

Credit markets also retraced from their strong July performance, continuing their volatile pattern of returns. Given the dire state of European energy markets, we do worry more about euro issuers than U.S., especially given the ECB is likely to deliver as much or more rate hikes as the Fed for the remainder of the year. That said, euro investment grade (IG) credit is priced cheaper, compensating for at least some of the extra risk. But the much higher probability of recession in Europe makes European high yield corporates and securitized credit less attractive than U.S. alternatives.

All in all, given the likelihood of a mild recession sometime over the next 12 months, the need for restrictive financial conditions (including above average credit spreads) maintaining an upward quality bias in credit is preferred. It is hard to see a big rally with economies slowing; policy rates rising and potentially cheaper alternatives like equities. Selling strength, buying dips, towards June wides is our preferred strategy.

Of course, the hoped-for soft-landing is still possible, particularly for the U.S. economy. For this to occur, growth needs to slow and stay below trend for a meaningful period of time. Labor markets need to loosen, slowing wage growth (no sign of that yet), financial conditions need to stay restrictive (as of this month they will be), and inflation needs to decline a lot. There are signs that these conditions are being met. If there continues to be progress on these fronts, markets may become more sanguine about rates, spreads and equities. Since this is a non-trivial possibility, and markets have moved a long way to pricing themselves defensively, we do not advocate getting too defensive in portfolio positioning. Below average risk-taking still seems appropriate, but we are not likely to take aggressive actions from here. Particularly because any rallies in the near term loosen financial conditions, which are likely to be met with stern warnings from central banks if not with hostile rate hikes!

[1] Source: J.P. Morgan. Data as of August 31, 2022.

	MONTHLY REVIEW	OUTLOOK
Developed Market Rate/ Foreign Currency	August saw July's rally in developed market rates reverse, with yields rising sharply over the course of the month as central banks made it clear that they were serious about tackling inflation. Consumer price levels were again elevated but appear to have peaked, at least in the U.S.; however, the case globally is still uncertain as further inflation highs could be in store, especially as Europe continues to face an energy crisis. Most economic data and indicators still depict a healthy economy, but one that is showing signs of slowing down.[2]	We find that the market's current pricing for rates is close to fair, especially following Powell's statement. With that said, we also believe that central banks will struggle to effectively lower inflation using their current tools and strategy. While the market has repriced rates higher, we still see risks that short-term rates will have to go even higher than the market is currently pricing in. As the energy crisis in Europe worsens, the situation remains especially problematic. Overall, the continuation of volatility appears to be the most certain prospect in a situation filled with uncertainty.
Emerging Market Rate/ Foreign Currency	The summer rally for EMD was cut short following comments by U.S. Fed officials at the annual Jackson Hole Economic Symposium near the end of the month. Differentiation continued to be a theme as various growth and inflation profiles appear to vary widely by country. Performance was mixed for the three major EMD indices.[3]	Inflationary pressures remain, and corresponding central bank reactions for both emerging and developed markets will be important factors. In aggregate, EM inflation eased in August indicating that it may have peaked in some countries already and those central banks may consider adjusting monetary policy appropriately. Additionally, technical pressures on EMD may have hit a turning point as outflows have eased over the past couple months and segments of the market have received inflows. Differentiation among countries, credits, and currencies will be important for deriving value in the asset class.

[2] Source: Bloomberg. Data as of August 31, 2022.

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

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	MONTHLY REVIEW	OUTLOOK
Corporate Credit	In August, U.S. IG corporates outperformed Euro IG corporates. One notable feature of the month was the outperformance of BBB corporates versus A corporates. We believe the driving factors behind this were the impact of supply which was biased to higher quality financials and the unwinding of the European central bank (ECB) quantitative easing programme.[4] The tone in the high yield market was initially strong in August. On average, earnings releases exceeded modest expectations and a positive stretch of inflows into U.S. high yield mutual funds, which began in July, continued for the first couple of weeks of August.[5] The tone eventually soured amidst increased concern regarding Fed policy. As Treasury yields climbed and risk sentiment shifted, the average spread in the U.S. high yield market moved steadily higher. Default activity increased in August. The top performing sectors for the month were basic industry, energy and other industrial.[6] Global convertibles held up relatively well during volatile markets in August. Despite finishing the month in the red, the Refinitiv Global Convertibles Focus Index strongly outperformed both MSCI Global equities and the Bloomberg Global Credit index.[7] The senior floating-rate corporate loan market notched another positive month of performance in August—one of few capital market asset classes to do so.[8]	Looking forward the outlook is little changed. Spreads offer attractive valuations and carry that look inconsistent with the fundamentals we are seeing at the corporate level based on results to date. We remain cautious on the U.S. high yield market as we enter September. Volatility returned in August, and we expect it to remain elevated over the near term. Liquidity and financial conditions are tightening, consumer sentiment in the U.S. is near a record low and the health of corporate fundamentals has likely peaked. Meanwhile, geopolitical risk remains elevated. August-end valuations appear somewhat attractive from a long-term perspective, but near-term risk appears to be skewed to the downside in light of the aforementioned catalysts as well as a general sense of risk aversion. We remain constructive on the prospects for the loan market and believe this asset class is well positioned heading into the final four months of the year. Despite our ongoing conviction, the outlook is certainly clouded by a growing number of question marks compared with just a quarter or two ago.
Securitized Products	August was almost an exact reversal of July: interest rates rose sharply, agency MBS spreads widened, and securitized credit spreads tightened. Agency MBS spreads widened in August above comparable duration U.S. Treasuries. U.S. non-agency RMBS spreads tightened meaningfully in August, as new issue and secondary supply declined sharply. U.S. ABS spreads also tightened in August, and new issue deals were generally over-subscribed. U.S. CMBS spreads also tightened in August, but AAA rated CMBS outperformed lower rated CMBS securities, as fundamental credit conditions remain challenging in many commercial real estate markets. European securitized markets remain under pressure and European securitized spreads were largely unchanged in August.[9]	Our fundamental credit outlook remains positive, and we believe credit spreads now offer attractive risk premiums for risk. Credit spreads for many securitized sectors remain at levels last seen at the depths of the pandemic, but credit conditions appear materially better today than during that period.

[4] Source: Bloomberg Indices: U.S. Corporate Index and the European Aggregate Corporate Index. Data as of August 31, 2022.

[5] Source: J.P. Morgan. Data as of August 31, 2022.

[6] Source: Bloomberg US Corporate High Yield Index. Data as of August 31, 2022.

[7] Source: Refinitiv Global Convertibles Focus Index. Data as of August 31, 2022.

[8] Source: S&P/LSTA Leveraged Loan Index. Data as of August 31, 2022.

[9] Source: Bloomberg, as of August 31, 2022.

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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.

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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 US 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 **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

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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 US 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.

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