

Global Fixed Income Bulletin

The Devil Is in the Details

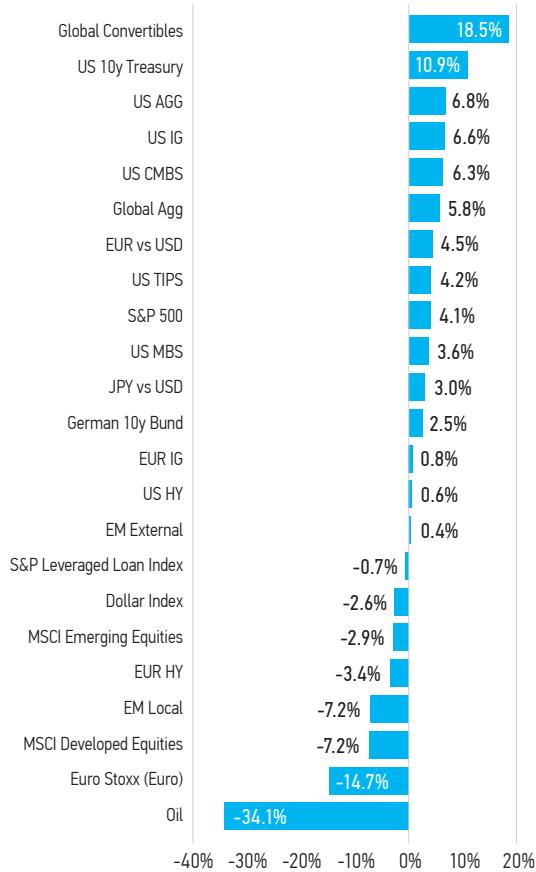
FIXED INCOME | GLOBAL FIXED INCOME TEAM | MACRO INSIGHT | OCTOBER 2020

September proved to be the most challenging month for financial markets since March. Equities and corporate bonds posted negative returns while government bonds rallied only modestly. A lack of new good news and demanding valuations were the primary culprits with government bonds doing well, as they should, when risky assets struggle and economic/policy data disappoints. The news/data flow were distinctly uninspiring relative to the continuous stream of good news seen since April. From the absence of a U.S. fiscal stimulus package, to a relatively lackluster response to the Fed's announcement of a new monetary policy strategy to bad news on the virus front, there was not much to celebrate. Luckily, there is not much to be too worried about either, but given the rebound we've seen in asset prices (S&P 500 up 8.9% in the third quarter), a pause was to be expected. We view recent credit and emerging market underperformance as nothing more than constructive consolidation, potentially creating an attractive entry point to add to risk. Good news has been discounted. Volatility with regard to policy, politics and the pandemic have increased while valuations, in general, have rebounded. That said, fundamentals continue to support an economic recovery, albeit slower than Q3/Q4. Employment continues to rebound, global trade and manufacturing remain in strong recovery mode and consumer spending in particular, remains robust with retail sales moving above pre-COVID levels in many developed countries.

All of this suggests that our modestly long risk position is, in our view, the best way to position portfolios as we navigate between disappointing data and policy (any risk is too much) and potential upside surprises with regard to policy and the pandemic. We remain positioned to potentially benefit from riskier fixed income assets outperforming, and low-risk government bonds trending sideways. These positions will be adapted to changing fundamentals as they relate to monetary and fiscal policy, economic data, vaccine news and, of course, the ever-present pandemic.

Although we continue to hold a positive and upbeat view with regard to the evolution of the economy and credit spreads, risks remain. Rising infection rates leading to larger and more aggressive lockdowns could easily slow economies and upend our views. We do not think this is likely as all governments seem to be adopting more selective, targeted lockdowns to deal with local issues. As long as local issues do not spread and/or hospitalization and mortality rates

DISPLAY 1 Asset Performance Year-to-Date



Note: USD-based performance. Source: Bloomberg. Data as of September 30, 2020. 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 and 7 for index definitions.

The views and opinions expressed are those of the Portfolio Management team as of October 2020 and are subject to change based on market, economic and other conditions. **Past performance is not indicative of future results.**

do not climb too much, economies should be fine. Vaccines continue to be the lynchpin of a broader solution to get the sectors of the economy like travel, leisure and entertainment back to semi-normal, thus allowing national incomes to potentially return back to pre-COVID levels.

In the interim, fiscal and monetary policy loom large. The U.S. fiscal policy, in particular, remains key. Fiscal policy should passively tighten significantly next year and this needs to be addressed. The stalemate in Washington does not look like it will be resolved pre-election. Income growth has been strong and high household savings rates should cushion the blow as long as expectations of a stimulus package next year remain intact. Indeed, a Biden victory, which looks more likely on the back of rising support in polls, could easily raise expectations for an even larger stimulus package next year. What is actually delivered will depend not only on the outcome of the presidential election, but also those for the Senate, and the potential for the Democratic Party to control both the presidency and Congress. If fiscal policy becomes net stimulative next year (taking into consideration the passive tightening of existing programs coming to an end), growth should continue to recover. Higher household savings rates in 2020 could boost consumption as well, to the extent it reflects pent-up demand and household incomes remain robust. Clarity on how the Fed's new monetary policy framework will be implemented looms large. It is one thing to say we want inflation to overshoot, but by how much? For how long? The devil is in the details.

On the positive side, developments could lead to tighter corporate and Emerging Market (EM) spreads by year-end or certainly in 2021. With

inflation well below central bank targets and economic risks (growth and inflation) still skewed to the downside, central banks are likely to remain super accommodative for years to come. The decline in government bond yields means governments have been given freedom (if taken!) to spend more. Corporations have been able to shore up their balance sheets at a historically low price. The economic data still points to improvement, and with medical progress being made on COVID-19, there are both up and downside risks around the pandemic. We are still inclined to believe buying the dip is the right strategy.

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	0.68	-2		
United Kingdom	0.23	-8	-46	-6
Germany	-0.52	-13	-121	-10
Japan	0.02	-4	-67	-1
Australia	0.79	-20	10	-17
Canada	0.56	-6	-12	-4
New Zealand	0.50	-13	-18	-10
(Spread over Bunds)				
France	-0.24	-15	28	-2
Greece	1.03	-8	155	+5
Italy	0.87	-23	139	-10
Portugal	0.26	-16	79	-3
Spain	0.25	-16	77	-4
EM	INDEX LOCAL YIELD (%)	MTD CHANGE (BPS)	USD SPREAD (BPS)	MTD CHANGE (BPS)
EM External Spreads			383	-17
EM Local Yields	4.76	+15		
EM Corporate Spreads			351	-27
Brazil	6.06	+54	343	+22
Colombia	5.21	0	266	+13
Hungary	1.81	+10	123	-5
Indonesia	6.89	+14	209	+12
Mexico	6.05	+4	279	+18
Peru	4.23	+22	135	+16
Philippines	3.59	-2	144	-1
Poland	0.75	-9	26	-4
Russia	5.85	+16	207	+13
South Africa	10.25	+14	515	+38
Turkey	12.83	-58	629	+23
Venezuela	-	-	21390	-2061
CREDIT		SPREAD (BPS)	CHANGE (BPS)	
U.S. IG		136	+7	
EUR IG		119	+5	
U.S. HY		517	+40	
EUR HY		457	+23	
SECURITIZED				
Agency MBS		92	0	
U.S. BBB CMBS		601	-40	

Positive Neutral Negative

Source: Bloomberg, JPMorgan. Data as of September 30, 2020.

Note: Positive change means appreciation of the currency against the USD. Source: Bloomberg. Data as of September 30, 2020.

The views and opinions expressed are those of the Portfolio Management team as of October 2020 and are subject to change based on market, economic and other conditions. **Past performance is not indicative of future results.**

Fixed Income Outlook

The September correction in equities was probably coming for some time. Credit spreads, although wider over the month, outperformed relative to equities and their historical correlations. This is testament to the power of liquidity to drive markets and confidence in policymakers' abilities and willingness to deliver enough stimulus to keep the economy growing above trend in 2021. No doubt these beliefs will be tested in the months ahead, particularly after we see who wins the U.S. presidential election.

With medium-term trends intact, our investment outlook is also largely unchanged. We remain cautiously bullish, given good economic data (even if the rate of change is slowing) and because we do think more monetary policy stimulus is coming either through clarification of the implications of the Fed's new monetary policy strategy or via larger quantitative easing (QE). Additional fiscal support should come in size after the November election in most scenarios. Indeed, Fed Chairman Powell's remarks in early October indicate the Fed supports more fiscal action with risks being greater from doing too little rather than too much, in their opinion. The heavy sectoral, potentially long lasting impact of the pandemic on the economy strongly supports the need for additional fiscal action. However, valuations in most areas of fixed income are no longer below fair value by our estimation, even with the correction in September, giving rise to an only modestly long position in riskier fixed income assets.

Considerable downside risks persist. Economic growth remains well below potential, especially in the services sector. Pent up demand is fading, as is fiscal support. Many countries are experiencing localized or more general rising COVID-19 infection rates, leading to local lockdowns and restrictions hurting growth. And, we cannot forget those geopolitical risks that will not go away – U.S./China tensions, Brexit, tensions between Russia and Europe and last but not least, the U.S. elections. At the same time, progress continues to be made in developing potential COVID-19 vaccines, which could lead to a more sustained resolution of the pandemic.

The market's reaction to the Fed's announcement of a new monetary policy strategy and targeting framework was lukewarm to say the least. Part of the reason was it was old news. Chairman Powell essentially laid it out in his Jackson Hole speech. And, with little further details added in September, the market yawned. There is no doubt that the Fed's thinking with regard to how they will change interest rates in response to shifting economic conditions (e.g., growth/unemployment and inflation) has changed. But the question is how much? Modest change? A revolution? The fact is the Fed did not release more details, and the language used was ambiguous. Moreover, the fact that there were dissenters and maybe more we do not know about suggests the Fed has not decided on the details. We need more information. What is definitely true is that the Fed does not think the economy is out of the woods. Fiscal policy would be the first policy tool deployed (Chairman Powell's comments support this), but the Fed will play policymaker of last resort if the economy does not perform up to expectations and fiscal policy does not ride to the proverbial rescue. What is true for the Fed is also true for most other central banks. The

risks are skewed toward further global easing in a bid to achieve inflation/employment mandates. Similarly, although economic data have been better than expected, economies are still operating at levels so far below what is normal that stronger data poses little threat to the accommodative bias.

We therefore see little risk of government bond yields rising meaningfully anytime soon. Recent rises in yields, we believe have been more technical in nature and/or related to shifting probabilities of who will be elected the next U.S. president. However, further declines in yields also seem unlikely, given that most central banks have now cut interest rates to as low as they feel comfortable doing. Nonetheless, further cuts and other policy innovations could still happen if there is a turn for the worse, so there is still a case, we believe, for owning high-quality government bonds as a hedge against further stress, even if much less than normal.

The perception that the Fed is likely to pursue an exceptionally easy monetary policy relative to others has caused a cheapening of the U.S. dollar. However, heightened global risk aversion in September caused the dollar to recover some. While we remain longer-term modest-dollar bears, we do not think there is enough clarity on relative economic performances and resolution of who will lead the U.S. to be highly confident the dollar will fall meaningfully in the near term. EM currencies continue to lag as EM growth lags that of developed market (DM) economies. Until this dynamic shifts it is premature to be overly optimistic on EM currencies except in specific situations.

We believe corporate credit, in particular investment grade, also remains very well supported by central bank actions, in particular purchase programs. However, this good news is increasingly factored into prices, with credit spreads at or below their long-term averages in spite of the still-challenging economic outlook. High yield also offers reasonable opportunities. The recent spread widening in September has improved its relative attractiveness. While we remain long, we will sell into meaningful rallies while also looking at meaningful backups in spreads to add to positions.

Emerging markets remain an enticing source of potential yield enhancement. The open monetary spigot in developed countries remain highly supportive for the asset class. However, considerable macro risks persist, with many emerging economies not performing better than their developed peers. Valuations have also richened, so while we do see opportunities in specific countries and situations, we exercise caution toward broad-based exposure to the asset class. Idiosyncratic opportunities remain the name of the game.

High-quality securitized products continue to quietly perform well, offering what we consider to be limited upside, given low yields and refinancing risk, but also limited downside, given central bank support. The low volatility outlook means the asset class is still attractive for portfolios, even if this means a lower level of expected return. Higher return opportunities exist in lower-rated securitized products, where spreads have retraced less, but fundamental risks are greater. In general, delinquencies have been far lower than initially feared.

MONTHLY REVIEW

**Developed
Market (DM)
Rate/Foreign
Currency
(FX)**

In September, markets pivoted to a “risk-off” stance as markets saw several bouts of volatility caused by the upcoming U.S. presidential election, coronavirus, as well as other geopolitical events. Several developed market central banks met during the course of the month and gave markets an update on what to expect for the remainder of this year in terms of economic data and monetary policy. The global economic recovery appeared to stall as some stimulus package benefits expired or ran out. Ten-year yields across the developed markets fell, with the U.S. being the outlier as yields remained largely unchanged over the month.

OUTLOOK

Going into the final quarter of 2020, we continue to expect monetary policy to remain accommodative and risky assets to be well supported across developed markets. In the near term, the U.S. election and an upward trend in cases in the coronavirus may cause continued volatility in the financial markets. Additionally, a Brexit agreement must be reached by mid-October if a deal is going to be completed by year end. While better-than-expected economic data may also push yields higher, this is likely to come mainly from a rise in interest rate risk premia, rather than higher central bank rate expectations. We expect the dollar to continue to weaken in the coming months versus other G10 currencies given how easy financial and monetary policy conditions are.

**Emerging
Market
(EM) Rate/FX**

Global yields declined in September, with 10-year U.S. Treasury yields dropping by 2bp to 0.68%, and the yield curve flattened amid risk-off sentiment. September was the first month since this Spring during which risk aversion drove price action. Economic data lost some of the momentum built up over the summer, as rising levels of infection stoked fears of greater restrictions and the consequent economic damage. This put pressure on risky assets and pushed the USD higher, providing an unfavorable backdrop for emerging markets. From a broad market perspective, Venezuela, Suriname, Romania and Georgia were the best performers in September, while Venezuela and Suriname remain in deeply negative territory year-to-date. Conversely, bonds in Sri Lanka, Argentina, El Salvador and Ecuador were the worst performers. From a sector perspective, companies in the pulp and paper, transport, and diversified led the market, while those in the oil and gas, consumer, metals and mining underperformed.

We remain cautiously optimistic on EM debt in the near term on the back of continued global monetary and fiscal policy accommodation. A continued rebound in China growth, to the extent that it spills over to the global economy, should also provide a further boost to risky assets, as well as any positive developments on COVID-19 treatments/vaccines. On the other hand, our relatively constructive view on EM assets in the near term is tempered by less compelling valuations, increased volatility due to the upcoming U.S. presidential election, and some setbacks on the fight against the pandemic, as evidenced in increasing case counts in Europe, and stricter lockdown measures imposed by several countries (though we think a return to all-out lockdowns is unlikely).

MONTHLY REVIEW

OUTLOOK

Credit

Spreads were wider in the month. The key driver was the reduced positive momentum in the fundamental news coupled with the large supply post-summer. Economic data improvements started to slow (and in some cases missed expectations), no new monetary or fiscal policy support programs were added contrary to expectation (specifically of an additional U.S. fiscal package), coronavirus news was focused on increased second wave infections without any definitive news of a vaccine coupled with concerns over the outcome of the U.S. election.

Securitized Products

September continued the Q3 trend where agency MBS returns were mediocre, while securitized credit spreads continued to tighten. Agency MBS were slightly weaker in September and essentially flat for the third quarter, supported by the Fed's continued MBS purchases and constrained by prepayment risk. Depending on sector and rating, U.S. ABS spreads were unchanged or tightened in September. European RMBS spreads were largely unchanged in September, but have almost fully recovered to pre-COVID levels. Aircraft ABS, non-performing loan RMBS and CMBS backed by hotels and shopping centers continue to lag behind auto and credit card ABS and single family rental CMBS.

Looking forward, we see the September correction as a healthy rotation of risk during a period of heavy supply. Our base case reflects the consensus view that coronavirus is transitory and monetary policy is credit risk friendly, likely driving spreads tighter in the medium term, close to the long run average offering investors carry but limited capital gain.

Agency MBS look fair at current valuations and should continue to be supported by the Fed's purchases. We particularly favor To-Be-Announced (TBA) securities in lower coupon 30-years (2% and 2.5%), where the roll offers additional value due to the Fed purchases and prepayment concerns are less pronounced. We expect the U.S. housing market to remain stable and non-agency RMBS to continue performing relatively well from a credit perspective in Q4. Additional monetary and fiscal stimulus continues to help the situation, and is very supportive of many securitized assets

Risk Considerations

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, 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

R* is the real short term interest rate that would occur when the economy is at equilibrium, meaning that unemployment is at the neutral rate and inflation is at the target rate. **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.

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

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

The **Bloomberg Barclays U.S. Corporate Index (Bloomberg Barclays U.S. IG Corp)** is a broad-based benchmark that measures the investment-grade, fixed-rate, taxable corporate bond market.

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

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

The **ICE BofAML U.S. High Yield Master II Constrained Index (ICE BofAML U.S. 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 views and opinions expressed are those of the Portfolio Management team as of October 2020 and are subject to change based on market, economic and other conditions. **Past performance is not indicative of future results.**

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 U.S.-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 U.S. 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 U.S.-dollar corporate emerging market bonds representing Asia, Latin America, Europe and the Middle East/Africa.

JPY vs. USD—Japanese yen total return versus U.S. dollar.

The **National Association of Realtors Home Affordability Index** compares the median income to the cost of the median home.

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

The **S&P/LSTA U.S. 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 (U.S.), 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 **U.S. 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 U.S. trade partners' currencies.

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

DISTRIBUTION

This communication 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.

United Kingdom: Morgan Stanley Investment Management Limited 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, authorised and regulated by the Financial Conduct Authority. **Dubai:** Morgan Stanley Investment Management Limited (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). **Germany:** Morgan Stanley Investment Management Limited Niederlassung Deutschland, Grosse Gallustrasse 18, 60312 Frankfurt am Main, Germany (Gattung: Zweigniederlassung (FDI) gem. § 53b KWG).

Ireland: Morgan Stanley Investment Management (Ireland) Limited. Registered Office: The Observatory, 7-11 Sir John Rogerson's, Quay, Dublin 2, Ireland. Registered in Ireland under company number 616662. Regulated by the Central Bank of Ireland. **Italy:** Morgan Stanley Investment Management Limited, Milan Branch (Sede Secondaria di Milano) is a branch of Morgan Stanley Investment Management Limited, a company registered in the U.K., authorised and regulated by the Financial Conduct Authority (FCA), and whose registered office is at 25 Cabot Square, Canary Wharf, London, E14 4QA. Morgan Stanley Investment Management Limited Milan Branch (Sede Secondaria di Milano) with seat in Palazzo Serbelloni Corso Venezia, 16 20121 Milano, Italy, is registered in Italy with company number and VAT number 08829360968. **The Netherlands:** Morgan Stanley Investment Management, Rembrandt Tower, 11th Floor Amstelplein 1 1096HA, Netherlands. Telephone: 31 2-0462-1300. Morgan Stanley Investment Management is a branch office of Morgan Stanley Investment Management Limited. Morgan Stanley Investment Management Limited is authorised and regulated by the Financial Conduct Authority in the United Kingdom. **Switzerland:** Morgan Stanley & Co. International plc, London, Zurich Branch Authorised and regulated by the Eidgenössische Finanzmarktaufsicht ("FINMA"). Registered with the Register of Commerce Zurich CHE-115.415.770. Registered Office: Beethovenstrasse 33, 8002 Zurich, Switzerland, Telephone +41 (0) 44 588 1000. Facsimile Fax: +41(0)44 588 1074.

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 percent per annum (including tax)) shall be incurred in

The views and opinions expressed are those of the Portfolio Management team as of October 2020 and are subject to change based on market, economic and other conditions. **Past performance is not indicative of future results.**

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, MSIM 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 MSIM, 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.

U.S.

A separately managed account may not be appropriate for all investors. Separate accounts managed according to the Strategy include a number of securities and will not necessarily track the performance of any 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 manager, please refer to Form ADV Part 2.

Please consider the investment objectives, risks, charges and expenses of the funds carefully before investing. The prospectuses contain this and other information about the funds. To obtain a prospectus please download one at morganstanley.com/im or call 1-800-548-7786. Please read the prospectus carefully before investing.

Morgan Stanley Distribution, Inc. serves as the distributor for Morgan Stanley Funds.

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

Hong Kong: This document has been issued 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 document 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 relevant law, this document shall not be issued, circulated, distributed, directed at, or made available to, the public in Hong Kong. **Singapore:** This document should not be considered to be the subject of an invitation for subscription or purchase, whether directly or indirectly, to the public or any member of the public in Singapore other than (i) to an institutional investor under section 304 of the Securities and Futures Act, Chapter 289 of Singapore ("SFA"), (ii) to a "relevant person" (which includes an accredited investor) pursuant to section 305 of the SFA, and such distribution is in accordance with the conditions specified in section 305 of the SFA; or (iii) 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 publication is disseminated in Australia by Morgan Stanley Investment Management (Australia) Pty Limited ACN: 122040037, AFSL No. 314182, which accept responsibility for its contents. This publication, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act.

IMPORTANT INFORMATION

EMEA: This communication has been issued by Morgan Stanley Investment Management Limited ("MSIM"). Authorised and regulated by the Financial Conduct Authority. Registered in England No. 1981121. Registered Office: 25 Cabot Square, Canary Wharf, London E14 4QA.

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. Prior to investing, investors should carefully review the strategy's / product's relevant offering document. There are important differences in how the strategy is carried out in each of the investment vehicles.

A separately managed account may not be appropriate for all investors.

Separate accounts managed according to the Strategy include a number of securities and will not necessarily track the performance of any index. Please consider the investment objectives, risks and fees of the Strategy carefully before investing.

The views and opinions 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 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 teams at Morgan Stanley Investment Management (MSIM) or the views of the firm as a whole, 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. These conclusions are speculative in nature, may not come to pass and are not intended to predict the future performance of any specific Morgan Stanley Investment Management product.

Certain information herein is based on data obtained from third party sources believed to be reliable. However, we have not verified this information, and we make no representations whatsoever as to its accuracy or completeness.

This communication is not a product of Morgan Stanley's Research Department and should not be regarded as a research recommendation. The information contained herein has not been prepared in accordance with legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research.

This material is a general communication, which is not impartial and 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. All investments involve risks, including the possible loss of principal. 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.

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.

MSIM has not authorised financial intermediaries to use and to distribute this document, 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 document is appropriate for any person to whom they provide this document in view of that person's circumstances and purpose. MSIM shall not be liable for, and accepts no liability for, the use or misuse of this document by any such financial intermediary.

This document 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 document in another language, the English version shall prevail.

The whole or any part of this work 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 MSIM's express written consent. The work 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 law.

Morgan Stanley Investment Management is the asset management division of Morgan Stanley.

Explore our site at www.morganstanley.com/im