An extraordinary finish to an extraordinary year. Asset returns continued their ascent in December. Outside of U.S. Treasuries, it was hard to find something that disappointed. Investment grade, high yield, emerging markets all generated stellar relative and absolute returns, with high yield and emerging markets leading the way. This was all the more surprising given the deteriorating economic data, whether it was employment in the U.S. or growth dynamics in Europe. Of course, this can all be blamed on the resurgence of the pandemic and the inability of governments to stop it. Nevertheless, there was a silver lining: vaccines. Confidence that vaccine rollouts would lead to "normal" economies in 2021 overcame worries about near-term lockdowns, rising hospitalisations and fatalities.

For the year as whole, despite all the challenges both economic and virus related, asset class returns surprised to the upside. Poor returns were confined to directly impacted U.S. sectors like energy and commercial real estate. What was truly amazing was that, for the year as a whole, in many respects, it looked like a boring year, as it looked like hardly anything changed. Investment grade corporate bond spreads widened by 3 basis points (bps); high yield corporate bond spreads widened a whopping 24 bps and global equities returned a pedestrian 4.1%. U.S. Treasury yields did fall meaningfully, though, and the Fed did cut rates by 150 bps, generating well above average returns. Of course, overall market performance hid wide dispersions in returns amongst subsectors, like energy versus tech; EM external debt versus EM currencies. But, the point is that unprecedented policy support was able to turn a desperate year (as of March) into a fine year. One of the biggest questions for 2021 is how much of the surprisingly high returns in 2020 borrowed from 2021, the year when the world is supposed to return to normal.

Definitely some, but not all. While 2021 is looking like a much lower-return year compared to 2020, news

**DISPLAY 1**

<table>
<thead>
<tr>
<th>Asset Performance Year-to-Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Conventibles</td>
</tr>
<tr>
<td>S&amp;P 500</td>
</tr>
<tr>
<td>MSCI Emerging Equities</td>
</tr>
<tr>
<td>US 10y Treasury</td>
</tr>
<tr>
<td>Global Agg</td>
</tr>
<tr>
<td>US IG</td>
</tr>
<tr>
<td>EUR vs USD</td>
</tr>
<tr>
<td>US CMBS</td>
</tr>
<tr>
<td>US AGG</td>
</tr>
<tr>
<td>US HY</td>
</tr>
<tr>
<td>MSCI Developed Equities</td>
</tr>
<tr>
<td>EM External</td>
</tr>
<tr>
<td>US TIPS</td>
</tr>
<tr>
<td>JPY vs USD</td>
</tr>
<tr>
<td>US MBS</td>
</tr>
<tr>
<td>S&amp;P Leveraged Loan Index</td>
</tr>
<tr>
<td>EUR IG</td>
</tr>
<tr>
<td>German 10y Bund</td>
</tr>
<tr>
<td>EUR HY</td>
</tr>
<tr>
<td>EM Local</td>
</tr>
<tr>
<td>Euro Stx (Euro)</td>
</tr>
<tr>
<td>Dollar Index</td>
</tr>
<tr>
<td>Oil</td>
</tr>
</tbody>
</table>

Note: USD-based performance. Source: Bloomberg. Data as of December 31, 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.
that the Democrats won both Georgia Senate seats, giving them a
slim one-vote majority (counting the Vice President’s tie breaking
vote), has re-energised hopes for a strong economy by opening the
door to significantly more fiscal stimulus. Everything’s changed!
Additional fiscal stimulus buttresses the case for no tightening
(passive or active) of fiscal conditions in 2021. This is a meaningful
change from the risks embedded in a divided Federal government.
But, on the other hand, nothing’s changed. Like in 2020, we
believe asset markets will be driven by policy responses. Fiscal
impulse will grow; central banks will maintain accommodative
policies. Monetary policy will stand pat or loosen, depending on
the course of the economy (European monetary policy should
continue to ease at the margin given economic setbacks and low,
low inflation). The Fed has so far not deviated from its 2020
script, whereby it intends to follow an outcomes-based strategy;
meaning no tightening until objectives are achieved, particularly
on employment/wages, and easing if financial conditions tighten
prematurely. While they have an inflation target, this is unlikely to
be achieved if they do not hit their labor market targets. So pay
attention to the unemployment rate and its components! But, as
always, when someone says he intends to change his behavior,
we need to see if he actually follows through. So far there is no
reason to doubt the Fed’s commitment: trust but verify.

Thus, we remain comfortable with modestly long risk positions
in portfolios, modestly underweighting interest rate risk. In 2021,
we still see economies improving with the slowdown confined
to Europe Q4 2020 and U.S. Q4 2020 but less of a slowdown in
Q1 as stimulus programmes are rolled out and vaccination rates
rise. We remain positioned to benefit from riskier fixed income
assets outperforming and government bonds underperforming,
with duration likely to be a headwind to returns rather than a tail
wind, like in 2020.

### DISPLAY 3
Major Monthly Changes in 10-Year Yields and Spreads

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>10-YR YIELD LEVEL (%)</th>
<th>MONTH CHANGE (BPS)</th>
<th>10-YR SPREAD (BPS)</th>
<th>MONTH CHANGE (BPS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>0.91</td>
<td>+7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.20</td>
<td>-11</td>
<td>-72</td>
<td>-18</td>
</tr>
<tr>
<td>Germany</td>
<td>0.57</td>
<td>0</td>
<td>-148</td>
<td>-7</td>
</tr>
<tr>
<td>Japan</td>
<td>0.02</td>
<td>-1</td>
<td>-89</td>
<td>-9</td>
</tr>
<tr>
<td>Australia</td>
<td>0.97</td>
<td>+7</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Canada</td>
<td>0.68</td>
<td>+1</td>
<td>-24</td>
<td>-7</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0.99</td>
<td>+14</td>
<td>7</td>
<td>+7</td>
</tr>
<tr>
<td>EUROPE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>-0.34</td>
<td>-1</td>
<td>23</td>
<td>-1</td>
</tr>
<tr>
<td>Greece</td>
<td>0.63</td>
<td>0</td>
<td>120</td>
<td>-1</td>
</tr>
<tr>
<td>Italy</td>
<td>0.54</td>
<td>-8</td>
<td>111</td>
<td>-9</td>
</tr>
<tr>
<td>Portugal</td>
<td>0.03</td>
<td>0</td>
<td>60</td>
<td>-1</td>
</tr>
<tr>
<td>Spain</td>
<td>0.05</td>
<td>-3</td>
<td>62</td>
<td>-4</td>
</tr>
</tbody>
</table>

Note: Positive change means appreciation of the currency against the USD. Source: Bloomberg. Data as of December 31, 2020.

The views and opinions expressed are those of the Portfolio Management team as of January 2021 and are subject to change based on market, economic
and other conditions. Past performance is not indicative of future results.
Fixed Income Outlook

There are several good reasons to be optimistic about the reflation/recovery theme and the expected outperformance of credit-sensitive assets. Growth will likely be strong, with consensus estimates of 5%-7% looking very possible; the global economic rebound is likely to be synchronised; policy rates are zero (in most of the world outside of EM); short- and long-term real yields are negative; financial conditions are at record easy levels in the U.S. and easy everywhere else; additional fiscal easing appears to be coming in the U.S. and Europe; commodity prices are rising; and inflation is stuck at a low level. These conditions are an excellent backdrop for risk-taking.

Indeed, as has been the case for much of the past few years, monetary and fiscal policy are likely to play a critical role in asset performance in 2021. The key difference, in our view, is that policy support will accompany an economic rebound (i.e., be pro-cyclical) in 2021, versus offsetting an economic deterioration (i.e., being counter-cyclical) in 2020. The goal of policy is to ensure that the economic rebound is big enough and lasts long enough to produce enough aggregate demand to close the output gap, raise wages and engineer a return to trend growth. This process is unlikely to be smooth, and asset prices and interest rates will fluctuate along the way. In this environment, we believe active management, security selection and valuation will be critical to generate a robust fixed income strategy.

A major risk to this upbeat view is that the resurgence in the pandemic in much of the world in recent weeks/months is dampening demand, output and employment. Longer lockdowns will further lengthen the recovery trajectory. However, this should prove temporary and if vaccine distribution proves to be lengthier than anticipated, markets are likely to be able to count on macro policymakers to step in and provide more support during the transition to a fully inoculated economy. Markets tend to care more about the future than they do the present.

Recently, U.S. Treasury yields have been rising and breaching at least the psychologically important level of 1% on 10-year notes in early January. While we expect the Fed and other central banks to take actions to try to prevent financial conditions from tightening prematurely, the rise in yields has been confluent with easier financial conditions due to the performance of credit spread tightening, low mortgage yields and rising equity prices. This suggests that one of the impediments to investment returns in 2021 might be duration, the reverse of 2020 when falling government bond yields significantly boosted returns from other assets. The duration of the bond universe has lengthened significantly in recent years, helping boost returns as yields fell. Now markets are at risk of the reverse: longer duration bonds with higher yields lead to lower returns. As such, while we do not think developed market global government bond yields will rise significantly in the near term, they are likely to trend higher. This points to having an investment strategy that helps reduce interest rate sensitivity where it can.

Therefore, while duration was a portfolio’s friend in 2020 it is likely to be neutral/negative in 2021. Given the pro-cyclical policies expected in 2021 and beyond; the synchronised nature of the global business cycle and the relatively low level of yields, fixed income asset allocation should shift towards more cyclical assets and away from high quality/high interest rate-sensitive ones. However, discrimination remains key given valuation levels. The search for yield in a yield-starved world, which has been backstopped by unprecedented policy support (monetary and fiscal), has eliminated undervaluation in most sectors. But, we believe to generate reasonable income, more risk needs to be taken. Given the very strong macro outlook, a movement to generally reduce credit quality; reduce interest rate sensitivity; overweight emerging markets and look for compression of risk premium seems appropriate. This includes moving down the credit spectrum in high yield from BB to B; from A to BBB in investment grade. More default risk, less interest risk is the outcome.

Therefore, discrimination remains key in our choice of assets, and we continue try to avoid the two tails of the risk spectrum: very high-quality/low yielders and very low-quality/high yielders, in credit, securitized and sovereign markets. We want to own exposure in those areas that can withstand some further volatility in macro/virus backdrop and higher yields but have enough yield/spread to offer reasonable 2021 return potential.

The views and opinions expressed are those of the Portfolio Management team as of January 2021 and are subject to change based on market, economic and other conditions. Past performance is not indicative of future results.
MONTHLY REVIEW

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

Despite a dramatic spike in coronavirus cases around the world, markets remained optimistic as an end to the pandemic started to become a reality. 10-year government yields were slightly higher, with the U.S. 10-year Treasury yield rising by seven bps.

Outlook

We expect a global economic recovery, especially in pro-cyclical sectors. Central banks are likely to remain accommodative and keep yields low, almost regardless of how robust the recovery turns out to be, given output gaps remain very large and inflation below central bank targets. Nonetheless, we think the risks are skewed to government bond yields rising. In terms of currencies, we expect the U.S. dollar to weaken due to continued easy monetary policy and fiscal policy, risk-positive sentiment and a relative decline in U.S. real yields versus other currencies.

Emerging Market (EM) Rate/FX

Like other risk assets, EM debt performed positively in December. From a sector perspective, companies in the Metals & Mining, Infrastructure and Real Estate segments led the market, while those in the Transport, Diversified, and Financial sectors underperformed.

Conditions for EM debt outperformance in the near term remain in place. Our constructive view on risk assets is predicated on a global backdrop of steady, extended monetary accommodation, an ongoing rollout of multiple vaccines in the developed world (and parts of EM), and expectations of looser fiscal policy under the incoming Biden administration. Finally, the consensus weak U.S. dollar view, if proven accurate, would further strengthen the case in favor of EM FX. Excessive optimism about reduced trade frictions under a Biden administration (particularly, in U.S.-China relations) could challenge our positive scenarios for global trade and growth, and thus negatively impact the performance of growth-sensitive EM assets.

The views and opinions expressed are those of the Portfolio Management team as of January 2021 and are subject to change based on market, economic and other conditions. Past performance is not indicative of future results.
## MONTHLY REVIEW

### Credit

Spreads were tighter in the month, driven by continued positive sentiment from vaccine announcements and with the first doses administered. Strong demand for credit in a month of limited supply ahead of year-end also drove spreads tighter.

### Securitized Products

Both agency mortgage-backed securities (MBS) and securitized credit performed reasonably well in December. Mortgage prepayment speeds showed no signs of slowing as mortgage rates again hit new historic lows in December. U.S. asset-backed securities (ABS) were generally tighter, while European RMBS spreads were largely unchanged in December. U.S. Non-agency residential mortgage-backed securities (RMBS) and U.S. commercial mortgage-backed securities (CMBS) spreads tightened in December, with AAA CMBS spreads now trading 80-100 bps above comparable duration swaps.¹

### OUTLOOK

We see 2021 starting off with a positive backdrop for credit supported by (1) expectations of an economic rebound in 2021 (2) continued positive support from monetary and fiscal policy as rates stay accommodative and QE creates strong demand (ECB could potentially own close to 40% of eligible corporates by the end of 2021) (3) corporates that are expected to maintain conservative strategies until the real economy normalises; (4) demand for credit to stay strong as risk free assets offer negative real and absolute yields.

Agency MBS looks moderately expensive, having tightened consistently since March when the Fed renewed its MBS purchase program, but agency MBS should benefit from continued Fed MBS buying in 2021. U.S. non-agency RMBS have largely recovered to pre-pandemic levels, but still offer reasonably attractive relative value. U.S. ABS has a mixed outlook for 2021, with traditional consumer ABS (credit cards and auto loans) looking relatively expensive while the most COVID-19 challenged ABS sectors offer much greater recovery potential. CMBS remains a stressed but potentially opportunistic sector. Multifamily housing (apartments) and office buildings have performed better and have lower risks of near-term defaults, but these sectors could still face challenges if there are fundamental shifts in how people want to live and work in the post-pandemic world. European markets are experiencing similar sector-specific performance dynamics, and overall European credit performance has been comparable to U.S. markets.

---

¹ Source: Bank of America, as of December 31, 2020.

The views and opinions expressed are those of the Portfolio Management team as of January 2021 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, 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.

The 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.

The 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 views and opinions expressed are those of the Portfolio Management team as of January 2021 and are subject to change based on market, economic and other conditions. Past performance is not indicative of future results.
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 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 JP Morgan 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 JP Morgan 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 225S) 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.

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

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 (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 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 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.

Ireland: MSIM Fund Management (Ireland) Limited. Registered Office: The Observatory, 7-11 Sir John Rogerson’s Quay, Dublin 2, D02 VC42, Ireland. Registered in Ireland as a private company limited by shares under company number 616661. MSIM Fund Management (Ireland) Limited is regulated by the Central Bank of Ireland. United Kingdom: Morgan Stanley Investment Management Limited is authorised and regulated by the Financial Conduct Authority. Registered in England. Registered No. T918121. 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, D06S01, United Arab Emirates. Telephone: +97 (0)4 709 7158). Germany: MSIM Fund Management (Ireland) Limited Niederlassung Deutschland, Kanzleistraße 18, 60312 Frankfurt am Main, Germany (G Beautification: Zweigniederlassung (FDI) gem. § 53 b KG). Italy: MSIM Fund Management (Ireland) Limited, Milan Branch (Sede Secondaria di Milano) is a branch of MSIM Fund Management (Ireland) Limited, a company registered in Ireland, regulated by the Central Bank of Ireland and whose registered office is at The Observatory, 7-11 Sir John Rogerson’s Quay, Dublin 2, D02 VC42, Ireland. MSIM Fund Management (Ireland) 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 11488280964. The Netherlands: MSIM Fund Management (Ireland) Limited, Rembrandt Tower, Tenth Floor Amstelplein 1 1096HA, Netherlands. Telephone: 31 20 046 1300. Morgan Stanley Investment Management is a branch office of MSIM Fund Management (Ireland) Limited. MSIM Fund Management (Ireland) Limited is regulated by the Central Bank of Ireland. France: MSIM Fund Management (Ireland) Limited, Paris Branch is a branch of MSIM Fund Management (Ireland) Limited, a company registered in Ireland, regulated by the Central Bank of Ireland and whose registered office is at The Observatory, 7-11 Sir John Rogerson’s Quay, Dublin 2, D02 VC42, Ireland. MSIM Fund Management (Ireland) Limited Paris Branch with seat at 61 rue de Monceau 75008 Paris, France, is registered in France with company number 890 071 863 RCS. Japan: For professional investors, this document is circulated or distributed for informational purposes only. For those who are not professional investors, this information is not indicative of future results.
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 risk, 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.

For any questions or comments about this document, please contact Morgan Stanley's Client Services team at: 1-800-546-7786.