Morgan Stanley

INVESTMENT MANAGEMENT

2021 Market Outlook

The World Will Look Radically Different in 2021

2020 was a dramatic year by many measures. The global economy saw the worst annual GDP contraction (-4%) in 75 years, and a global pandemic took over 1.5 million lives. We expect an equally dramatic 2021, with immunity to COVID-19 reached in 2Q in the U.S. The combination of reopening, monetary and fiscal stimulus, and pent-up demand will supercharge growth in 2021. But stocks may only make modest returns, tempered by multiple compression, and overall equity returns will hide performance differentials at the region, sector, and style level, similar to 2020. As the world goes back to normal, the premium for highly valued stocks should also return to normal. It is more important to position for this rotation in style performance than to be overweight stocks in our view.

CYRIL MOULLE-BERTEAUX
Portfolio Manager
Head of Global Multi-Asset Team
Managing Director

SERGEI PARMENOV
Portfolio Manager
Global Multi-Asset Team
Managing Director

SOLUTIONS & MULTI-ASSET | GLOBAL MULTI-ASSET TEAM

The cover of *Time* magazine recently proclaimed 2020 "the worst year ever."[1] While historians might argue that, in the past hundred years, the Great Depression, Stalin's famines and purges in the 1930s and 1940s, World War II, Mao's Great Leap Forward, or the Vietnam War included worse years for humanity, 68 million people—and counting—have been infected by COVID-19 in 2020 and a staggering one and a half million have died as a result of the virus. The global economy collapsed in the first half of the year and will shrink by nearly 4% in 2020, the worst annual contraction in nearly 75 years.

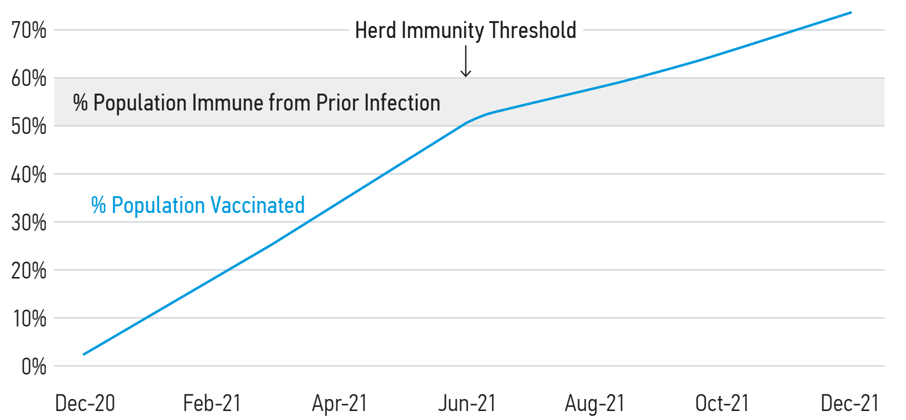
Millions lost their jobs, including more than 20 million in the U.S. and five million in the Eurozone. Corporate profits also collapsed by -17% for the year (and by -30% during the second and third quarters), with defaults of highly-indebted U.S. companies hitting nearly 9% despite significant monetary and fiscal support programs. Though the virus continues to rip through the global population, most of the economic damage occurred in the first half of the year, with the second half seeing the beginning of a recovery aided by unprecedented fiscal and monetary policy stimulus and the partial reopening of economies.

From an investment perspective the most extraordinary aspect of 2020 was that, despite the damage to people's lives and livelihoods, global stocks rose +10% with China up +25%, the U.S. up +16%, and with Japan and EM ex-China up more modestly at +6% and +2% (the Eurozone was the only major region with slightly negative returns at -3%) year-to-date as of November 30.[2] Most bond indices also rose strongly, led by U.S. Treasuries (+8%), TIPS (+10%) and high grade corporates (+9%), with only emerging market local currency bonds lagging, at -4%.[3] Commodities had highly bifurcated performance, with gold and industrial metals rising +17% and +15%, respectively but oil dropping -29%.[4]

DISPLAY 1

U.S. Should Reach Herd Immunity by Summer 2021

Population Immune (From Vaccination + Immunity From Prior Infection), %



Source: MSIM Global Multi-Asset Team Analysis and Estimates, Youyang Gu. Data as of December 2020. Assuming 0-10% population with prior COVID-19 infection has immunity and does not get vaccinated. Forecasts/estimates are based on current conditions, subject to change, and may not necessarily come to pass.

As eventful as 2020 has been for individuals and for economies, we expect an equally dramatic 2021. With two extremely efficacious vaccines soon to be widely available, we expect that broad herd immunity will be reached in the second quarter in the U.S., with the virus likely fully conquered by the third quarter (see *Display 1*). The Eurozone and other developed countries are likely to be less than a couple of months behind the U.S., while emerging markets may take six to 12 months longer to achieve total immunity. Clearly, the second (and potential third) waves are disrupting economic activity and could continue to do so for another few months. However, one thing is clear: if 2020 was the year of living with the virus, 2021 will be about the return to normalcy. Thanksgiving and the holidays in 2021 will be radically different than they were in 2020, in many ways the exact opposite, with people eager to return to normal, to gather in groups with family and friends indoors, in homes, bars, restaurants, sporting venues, and theaters, without fear; to return to shopping in person, traveling to see much-missed family or for vacation, adventure, and relaxation. Of course, some things will have changed, but most things—much more than expected—will go back to normal. We use China as a template for how the population might behave post-COVID-19, since China succeeded in controlling the spread of the virus earlier and better than most other countries. In China, hotel occupancy is back to 100% of pre-COVID-19 levels, domestic air travel is also back to 100%, as are restaurant sales. On the other hand, international travel is still down by 95% because COVID-19 is out of control outside of China and, maybe as an indication of a permanent shift in consumer preferences, movie

[1] Zacharek, Stephanie. "~~2020~~ The Worst Year Ever" Time. December 14, 2020.

[2] Bloomberg; all returns MSCI net total return indices in local currency terms.

[3] Bloomberg Barclays US Treasury Index; Bloomberg Barclays US TIPS Index; Bloomberg Barclays US Corporate Bond Index; JP Morgan GBI EM Index (USD unhedged).

[4] Spot prices for gold and Brent crude oil; S&P GSCI Industrial Metals Index.

theater attendance is still at only 80% of pre-COVID-19 levels. Interestingly, while virtual video calls in China are still higher than they were before COVID-19, they have already collapsed -60% from this year's peak levels (after having quintupled from pre-COVID-19 levels).

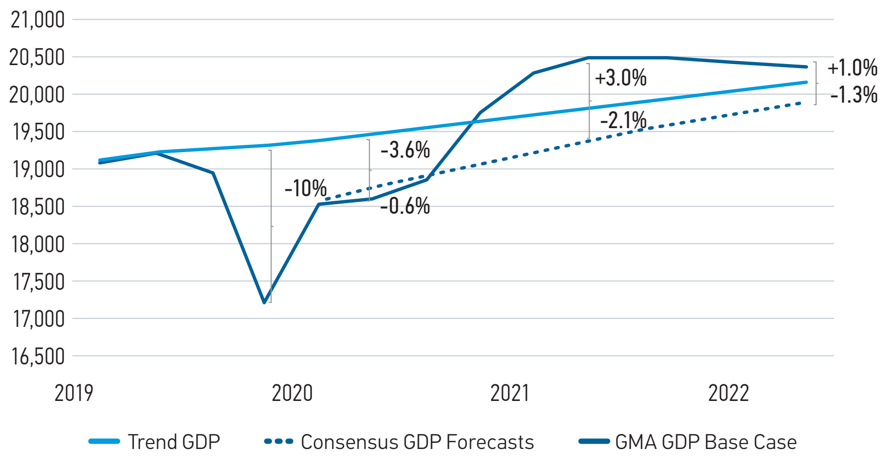
With normalcy returning—as the vaccines bring new infections down to zero—we expect the global economy to rebound as strongly as it was hit in 2020. In addition to the reopening of the economy driving a surge in activity, most countries, apart from China, have both their monetary and fiscal policy settings at maximum ease. We expect all developed countries to continue with zero or negative interest rates for years to come until inflation has fully returned to, or exceeded, target levels, supplemented by quantitative easing for at least the next year or two. Fiscal stimuli are continually being added to and increased, with the U.S., Eurozone, Japan and the U.K. all planning additions. Though clearly, the magnitude will be smaller in 2021 than in 2020 once lockdowns and restrictions are lifted. In 2021, we expect a fiscal deficit of 11% in the U.S. (down from 15% in 2020), with a 6% deficit in the Eurozone (down from nearly 10% in 2020). In addition, significant pent-up demand is likely to be released in 2021, as the economy reopens, especially in certain services which saw demand collapse during COVID-19, such as travel, hospitality, leisure and live entertainment, but also in depressed goods segments of the economy such as apparel and footwear.

This combination of reopening, monetary and fiscal stimulus, and pent-up demand will supercharge growth next year and allow many countries to close their output gaps in 2021 and 2022. We expect the U.S. economy to grow by 6-8% next year, nearly double the consensus' expectation, and as a result, the U.S. output gap to close by summer 2021 (see *Display 2*) and Europe's to close two quarters later. This is a crucial difference from the post-Global Financial Crisis (GFC) period: today

DISPLAY 2

U.S. Output Gap Could Close by Summer and Exceed +3% by End-2021

U.S. GDP Forecasts, Billions of Chained 2012 US$



Source: GMA forecasts assume a $900bn COVID-19 relief package in Jan-2021 and no additional fiscal measures in 2022. Source: MSIM Global Multi-Asset Team Analysis and Estimates, Bernstein Research. Data as of December 14, 2020.

Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

there is no crippled banking system to fix and revive, no housing bubble bust, no household deleveraging to work through, no peripheral crisis in Europe—in short, the world is not facing the long hangover of a balance sheet recession that it was 11 years ago. Therefore, rather than taking nearly a decade to return to full employment, two or three years may suffice.

If the output gap closes in 2021 with the support of monetary and fiscal policy, inflation is unlikely to stay depressed for as long as it did during the 2010s. Though core CPI inflation did average 1.85% during the 2010s (and the core PCE deflator favored by the Fed, 1.6%), economists and markets puzzled over the apparent failure of inflation to sustainably rise above 2.0%. Much of these inflation misses can be attributed to the hangover from the GFC and the years it took for the labor market to get back to full employment. Other idiosyncratic factors such as weak healthcare inflation, or cyclical ones such as a strong dollar and collapsing energy and commodity prices are already in the process of reversing. As a result, we expect inflation to continue to grind higher from 1.4% today to end 2021 at 1.75%, still below target but clearly nowhere near deflation and heading in the right direction. Given the Federal Reserve's new Flexible Average Inflation Targeting framework, we expect that policy makers will not think about raising interest rates until inflation is above 2% and the economy is back at maximum employment, which may not occur until 2022 or 2023, but clearly deflation fears still present in the minds of many investors are no longer warranted. If correct, this means that long-term government bond yields which almost everyone expects to rise very modestly next year could surprise on the upside, despite the Fed anchoring the short end.

With the global economy growing 7% in 2021, we expect corporate profits to rebound spectacularly in 2021. After shrinking -17% in 2020, we expect global profits to rise as much as 35% in 2021, with bigger rebounds in the worst-hit regions in 2020. For example, in the Eurozone, where corporate profits shrank -35% in 2020, we expect them to rise +63% in 2021. In principle, big rebounds in profits should be positive for stock markets. However, while profits fell in 2020, stocks actually rose +10%.[5] Obviously, that was driven by a massive re-rating of stocks, which went from trading at 19x trailing earnings-per-share (EPS) to 26x today (or 16.5x to 20x in forward price to earnings terms). Unlike 2020, stocks may only make modest returns in 2021, possibly as low as +5-6%, driven by a big profit rebound but tempered by multiple compression to more reasonable levels around 17-18x forward EPS—a typical pattern in the second year of a recovery.

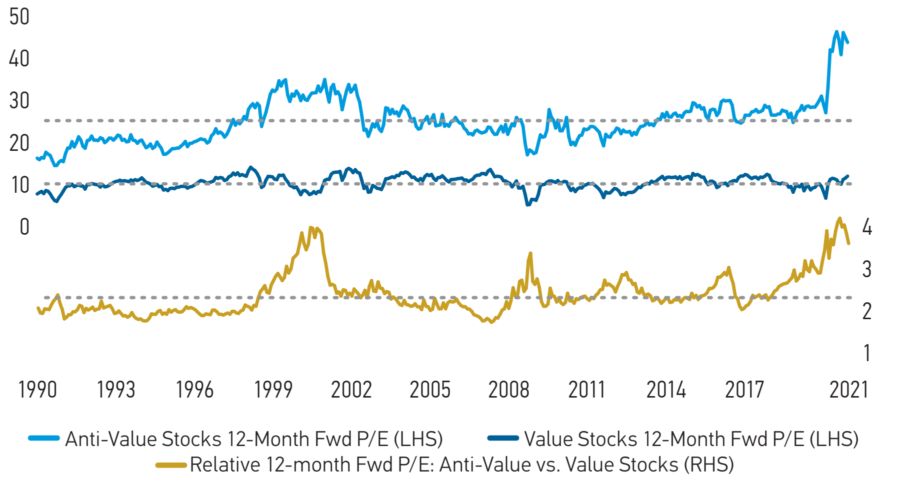
Modest returns for broad equity indices in 2021 will likely hide substantial performance differentials "under the hood" (e.g. at the region, sector, and style level), similar to 2020. This is what we are focused on and what we think investors should be focused on. Global equity indices generally did well in 2020, but expensively-valued stocks of fast-growing companies had spectacular returns. Using the Russell 1000 indices, Growth stocks returned +31% while Value stocks fell by -1% year-to-date as of November 30. On top of the prior nine years of strong performance, Growth's return for the decade is now +364% (versus +130% for Value).[6] We saw a similar bifurcation in the performance of countries and regions, with the U.S. and China massively outperforming Japan and the Eurozone, both last year and over the past decade. The majority of this regional performance differential can be explained by sector composition: technology and internet stocks make up 40-50% of the outperforming U.S. and Chinese indices; by contrast they make up less than one quarter of Japanese indices and less than 10% of Eurozone indices.

This bifurcated performance between Anti-Value (high multiple stocks) and Value (low multiple stocks) has resulted

DISPLAY 3

Record Gap: Value Trades at 11x While Anti-Value Trades at 43x

S&P 500 Anti-Value vs. Value: Absolute and Relative 12-month Fwd P/E



Source: MSIM Global Multi-Asset Team Analysis, Haver Analytics. Data as of December 22, 2020.
The index performance is provided for illustrative purposes only and is not meant to depict the performance of a specific investment. Past performance is no guarantee of future results.
See Disclosure section for index definitions.

in one of the widest valuation gaps between the two that we have ever seen. In the past 30 years, using the Global Multi-Asset (GMA) team's definitions of the Value and Anti-Value styles,[7] Anti-Value stocks have, on average, traded at 25x forward earnings, compared with 11x for Value, a 138% premium. Anti-Value stocks now trade at 43x forward earnings, a 272% premium to Value stocks' 11.6x (see *Display 3*). Note that in February 2000, Anti-Value stocks traded at 30x compared with Value at 7.9x, a 384% premium—incidentally the same premium as in March 2020, when Value was at 7.0x and Anti-Value at 27x.[8]

This kind of valuation premium for highly valued stocks—which do have lower debt, higher margins and higher returns on capital—might have been justified when the global economy was collapsing as panic over COVID-19 forced most of the world into lockdowns, and fears of deflation were pervasive. However, that was 2020. As mentioned, 2021 will look radically different with a vaccine and "pedal to the metal" policy. As the world goes back to normal, the premium for highly valued stocks should also return to normal. Prior cyclical rebounds in Value have seen rallies of +20% to +30% relative to Anti-Value, as in 2012-13 and 2016-17. But Value recoveries after recessions have seen outperformance of +80% to +140%, as in 2000-03 and 2008-2010. Given the degree of undervaluation of low multiple stocks today (relative to high multiple stocks), we are inclined to believe the latter is more likely than the former.

Given that we expect global equities to rally only modestly and government bonds to modestly sell off (to 1.25-1.50% on the U.S. 10-year Treasury), it is, in our opinion, much more important to position for this rotation in style

5 MSIM Global Multi-Asset Team Analysis; Bloomberg; Factset; MSCI ACWI Net Total Return Index in local currency as of November 30, 2020.

6 Russell 1000 Value and Growth Price Return Indices, as of November 30, 2020.

7 The MSIM Global Multi-Asset team defines Anti-Value and Value as the 20% of stocks with the highest multiples, and the 20% with the lowest, respectively, on a sector-neutral, equal-weighted basis.

8 MSIM Global Multi-Asset Team analysis; Factset, Datastream, as of December 15, 2020.

performance, than to be overweight stocks overall in order to "play" the return to normalcy. Consequently, the majority of the risk in our portfolios is allocated to Value-related positions around the world. Our regional allocations are broadly a reflection of this view, with underweights in U.S. and China equities, and overweights in Eurozone, Japanese and EM ex-China equities. In addition, we expect the U.S. dollar to continue to weaken as the U.S. borrows from the rest of the world at real interest rates which will continue to fall as inflation rises. We also expect commodities and commodity stocks to outperform and have positioned accordingly. Given the negative carry on underweight positions in U.S. Treasuries, we are positioned with long-end steepeners and overweight positions in inflation breakevens.

The risks to these views are manifold, but we highlight three near-term ones:

First, the consensus appears to have radically shifted since Pfizer's vaccine announcement in early November and almost all sell-side 2021 outlooks now expect an economic recovery and risky assets to perform well. Such uniform consensus, mostly in synch with our views, makes us uncomfortable. We do draw comfort from the fact that our portfolios have little active risk in expensive and frothy equities. Our portfolios are instead focused on positioning for a rotation "under the hood," or below the asset class level, for example in Value stocks which are still not popular with investors (given their dire underperformance for many years). In addition, we expect much stronger growth than the consensus and thus potentially higher inflation and higher yields than most, which would favor this rotation. But we are concerned about the increasing frothiness in overall stock market indices as exemplified by record inflows into equity mutual funds in the past six weeks, as this could cause some indigestion in the near term.

Second, COVID-19 new cases continue to grow around the world and it increasingly looks like nothing short of full lockdowns or a vaccine can prevent the spread of the virus. At the same time, governments' and populations' appetite for such restrictions has dramatically waned. This could lead to eventually more severe medical system crises and eventually more draconian measures with their attendant impact on economies and markets.

Finally, even though a vaccine is a game changer, reopenings are still a few months away. This makes fiscal relief essential as a bridge or offset for job losses and business failures that will occur in the interim. Months of difficult negotiations in the U.S. and the latest holdup of the European recovery fund by two countries show that fiscal stimulus may not be as easy to implement when the economy and markets are not in full crisis mode. Further delays in stimulus would increase the chances of a double-dip recession in the economy, which could cause a mini-version of March 2020.

In summary, we believe that the world will look radically different in 2021, and the following table (see *Display 4*) provides a summary of some of the key investment and economic trends we expect in the year ahead.

DISPLAY 4

Key Investment and Economic Trends We Expect in the Year Ahead

2020 – OUT	2021 – IN
Virus	Vaccine
Recession	Expansion
Wall Street	Main Street
Working from home	Back in the office
Virtual	Real
Deflation	Inflation
Negative Oil prices	Oil bull market
Quality / Safety / Growth	Junk / Risk / Value
Tech, Internet	Commodities, Banks
Megacaps	Small Caps
US & China	EAFE and EM ex-China
Polarization	Moderation

Source: MSIM Global Multi-Asset Team Analysis.. Views as of December 22, 2020.

Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

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 this portfolio. Please be aware that this portfolio may be subject to certain additional risks. In general, **equity securities'** values fluctuate in response to activities specific to a company. 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 risks associated with investments in foreign developed countries. **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. **Mortgage- and asset-backed securities (MBS and ABS)** 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. Certain **U.S. government securities** purchased by the Portfolio, such as those issued by Fannie Mae and Freddie Mac, are not backed by the full faith and credit of the United States. It is possible that these issuers will not have the funds to meet their payment obligations in the future. The issuer or governmental authority that controls the repayment of **sovereign debt** may not be willing or able to repay the principal and/or pay interest when due in accordance with the terms of such obligations. 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 risks associated with investments in foreign developed countries. **Real estate investment trusts** are subject to risks similar to those associated with the direct ownership of real estate and they are sensitive to such factors as management skills and changes in tax laws. **Restricted and illiquid securities** may be more difficult to sell and value than publicly traded securities (liquidity risk). **Derivative instruments** can be illiquid, may disproportionately increase losses and may have a potentially large negative impact on the Portfolio's performance. Trading in, and investment exposure to, the commodities markets may involve substantial risks and subject the Portfolio to greater volatility.

Nondiversified portfolios often invest in a more limited number of issuers As such, changes in the financial condition or market value of a single issuer may cause greater volatility. By investing in **investment company securities**, the portfolio is subject to the underlying risks of that investment company's portfolio securities. In addition to the Portfolio's fees and expenses, the Portfolio generally would bear its share of the investment company's fees and expenses.

Subsidiary and Tax Risk. The Portfolio may seek to gain exposure to the commodity markets through investments in the Subsidiary or commodity index-linked structured notes. The Subsidiary is not registered under the 1940 Act and is not subject to all the investor protections of the 1940 Act. Historically, the Internal Revenue Service ("IRS") has issued private letter rulings in which the IRS specifically concluded that income and gains from investments in commodity index-linked structured notes or a wholly-owned foreign subsidiary that invests in commodity-linked instruments are "qualifying income" for purposes of compliance with Subchapter M of the Internal Revenue Code of 1986, as amended (the "Code"). The Portfolio has not received such a private letter ruling, and is not able to rely on private letter rulings issued to other taxpayers. If the Portfolio failed to qualify as a regulated investment company, it would be subject to federal and state income tax on all of its taxable income at regular corporate tax rates with no deduction for any distributions paid to shareholders, which would significantly adversely affect the returns to, and could cause substantial losses for, Portfolio shareholders.

DEFINITIONS

The **Russell 1000® Growth Index** measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000® Index companies with higher price-to-book ratios and higher forecasted growth values. The Russell 1000® Index is an index of approximately 1,000 of the largest U.S. companies based on a combination of market capitalization and current index membership.

The **Russell 1000® Value Index** is an index that measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

The **S&P 500 Total Return Index** is an index that consists of 500 stocks chosen for market size, liquidity and industry group representation. The S&P Index is a market value weighted index with each stock's weight proportionate to its market value. The S&P Index is one of the most widely used benchmarks of U.S. equity performance. The performance of the S&P Index does not account for any management fees, incentive compensation, commissions or other expenses that would be incurred pursuing such strategy. Total return provides investors with a price-plus-gross cash dividend return. Gross cash dividends are applied on the ex-date of the dividend.

The **S&P GSCI®** is a composite index of commodity sector returns representing an unleveraged, long-only investment in commodity futures that is broadly diversified across the spectrum of commodities. The returns are calculated on a fully collateralized basis with full reinvestment. The combination of these attributes provides investors with a representative and realistic picture of realizable returns attainable in the commodities markets. Individual components qualify for inclusion in the S&P GSCI® on the basis of liquidity and are weighted by their respective world production quantities.

The **Sharpe ratio** was developed by Nobel laureate William F. Sharpe and is used to help investors understand the return of an investment compared to its risk. The ratio is the average return earned in excess of the risk-free rate per unit of volatility or total risk. Volatility is a measure of the price fluctuations of an asset or portfolio.

The **S&P U.S. Treasury Bond Current 10-Year Index** is a one-security index comprising the most recently issued 10-year U.S. Treasury note or bond.

The **MSCI USA Energy Index** is designed to capture the large and mid cap segments of the US equity universe. All securities in the index are classified in the Energy sector as per the Global Industry Classification Standard (GICS®).

The **MSCI USA Materials Index** is designed to capture the large and mid cap segments of the US equity universe. All securities in the index are classified in the Materials sector as per the Global Industry Classification Standard (GICS®). The S&P GSCI Gold Index, a sub-index of the S&P GSCI, provides investors with a reliable and publicly available benchmark tracking the COMEX gold future.

Treasury Inflation-Protected Securities, or TIPS, provide protection against inflation. The principal of a TIPS increases with inflation and decreases with deflation, as measured by the Consumer Price Index

IMPORTANT DISCLOSURES

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

Charts and graphs provided herein are for illustrative purposes only.

Past performance is no guarantee of future results.

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.

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

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.

DISTRIBUTION

This communication is only intended for and will be only 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. 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:** MSIM Fund Management (Ireland) Limited Niederlassung Deutschland, Grosse Gallusstrasse 18, 60312 Frankfurt am Main, Germany (Gattung: Zweigniederlassung (FDI) gem. § 53b KWG). **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, 11th Floor Amstelplein 1 1096HA, Netherlands. Telephone: 31 2-0462-1300. 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. **Spain:** MSIM Fund Management (Ireland) Limited, Sucursal en España 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, Sucursal en España with seat in Calle Serrano 55, 28006, Madrid, Spain, is registered in Spain with tax identification number W0058820B. **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.

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.

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

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 DEPOSIT

IMPORTANT INFORMATION

EMEA: This marketing communication has been issued by MSIM Fund Management (Ireland) Limited. MSIM Fund Management (Ireland) Limited is regulated by the Central Bank of Ireland. MSIM Fund Management (Ireland) Limited is incorporated in Ireland as a private company limited by shares with company registration number 616661 and has its registered address at The Observatory, 7-11 Sir John Rogerson's Quay, Dublin 2, D02 VC42, Ireland.

The information contained in this communication is not a research recommendation or 'investment research' and is classified as a 'Marketing Communication' in accordance with the applicable European or Swiss regulation. This means that this marketing communication (a) has not been prepared in accordance with legal requirements designed to promote the independence of investment research (b) is not subject to any prohibition on dealing ahead of the dissemination of investment research.

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 reproduced, copied or transmitted or any of its contents disclosed to third parties without MSIM's express written consent

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

9962322_KC_0121 CRC 3431460 Exp. 1/31/2022