

### Global Multi-Asset Viewpoint

# Will the Bond Bear Kill the Equity Bull?

**SOLUTIONS & MULTI-ASSET** | GLOBAL MULTI-ASSET TEAM | MACRO INSIGHT | MARCH 2021

2021 already looks very different from 2020. U.S. GDP is on track for 8% growth in the first quarter with consumer spending powered by enormous fiscal stimulus (and more coming), free money from the Federal Reserve (Fed), and the beginning of economic re-opening. Even corporates are getting in on the action, with capital spending indicators very positive in recent months. With a greater number of vaccines approved, produced, distributed, and into people's arms, the reopening of the economy is likely to proceed further, helping to bring back most of the 10 million jobs lost to the pandemic. Pent-up demand will likely drive even more consumer spending. As it usually does in a recovery, the bond market began to sell off, with 10-year Treasury yields rising more than 100 basis points above the spring 2020 lows of 0.51%, initially driven by inflation breakevens but more recently also by real yields (See *Display 1*).<sup>1</sup> This bond sell-off caused stocks, which started the year at a decent pace, to wobble (See *Display 2*). Global equities have corrected only -5% from the mid-February peak, but the key question in markets has quickly turned to: will the bond bear kill the equity bull?<sup>2</sup>

In this letter, we identify and evaluate the key factors needed to answer this question. As usual, market prices reflect a multitude of fundamental and technical drivers, many of which operate at cross purposes. We see some very supportive factors continuing for the stock market but also some threats, particularly as the second half approaches. We analyze each in turn here:

#### Threats to the equity bull market:

- One of the most worrisome threats to global equities is the excessive speculation visible in many parts of the market, including in the very high level of enthusiasm

#### AUTHORS



#### CYRIL MOULLÉ-BERTEAUX

Portfolio Manager  
Head of Global Multi-Asset Team  
Managing Director

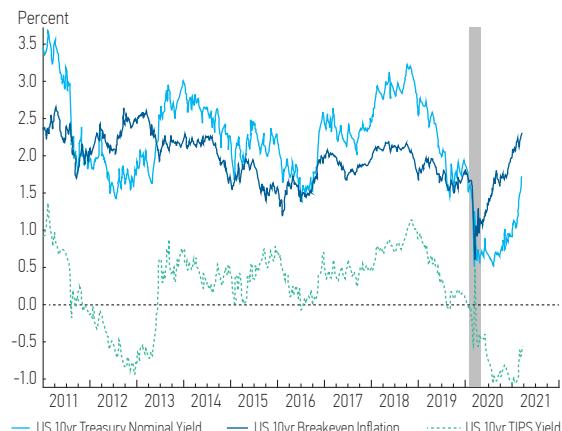


#### SERGEI PARMENOV

Portfolio Manager  
Global Multi-Asset Team  
Managing Director

#### Display 1: Economic Recovery Driving Bond Yields Up From Pandemic Lows

Nominal U.S. 10-Year Yield vs. U.S. 10-Year Breakeven and U.S. 10-Year TIPS Yield



Source: MSIM Global Multi-Asset Team Analysis and Estimates, Datastream. Data as of March 10, 2020.

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

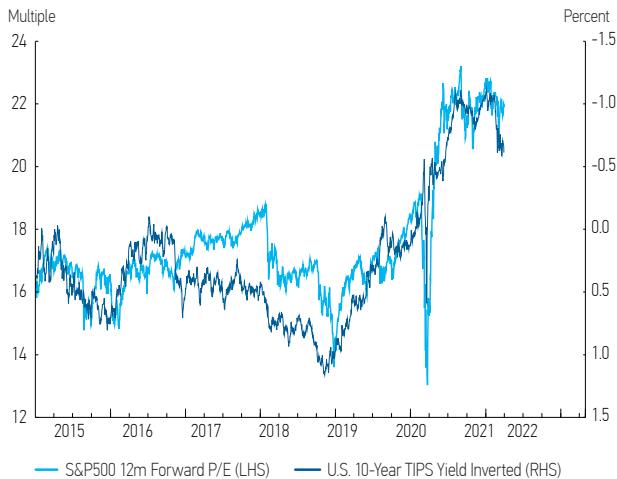
<sup>1</sup> MSIM Global Multi-Asset Team; Bloomberg; as of March 8, 2021.

<sup>2</sup> MSIM Global Multi-Asset Team; Bloomberg; MSCI ACWI in USD, as of March 5, 2021.

for stocks amongst retail investors. Speculative fever is evident in \$160 billion of initial public offerings (IPOs) in 2020 (twice the 1999 total), nearly more SPAC issuance in the first two months of 2021 than in all of 2020 (itself a record by a mile),<sup>3</sup> very high trading volumes by retail investors in short-dated call options and penny stocks, near record levels of M&A activity (indicating high levels of enthusiasm by corporates and CEOs), and net equity exposure of U.S., European, and Asian hedge funds at 11-year-highs. Not to mention localized bubbles in electric vehicles, hydrogen plays, and crypto currencies. Historically, this level of speculative enthusiasm has only been present around major market tops, but “around” can often mean months, quarters, or even years—recalling Alan Greenspan’s Irrational Exuberance speech of December 1996, more than three years before the eventual top in the market in March 2000.<sup>4</sup>

#### Display 2: Higher Interest Rates Pressuring Equity Multiples

U.S. Equities 12M FWD P/E vs. U.S. 10-Year TIPS Yield



Source: MSIM Global Multi-Asset Team Analysis and Estimates. Data as of March 10, 2020.

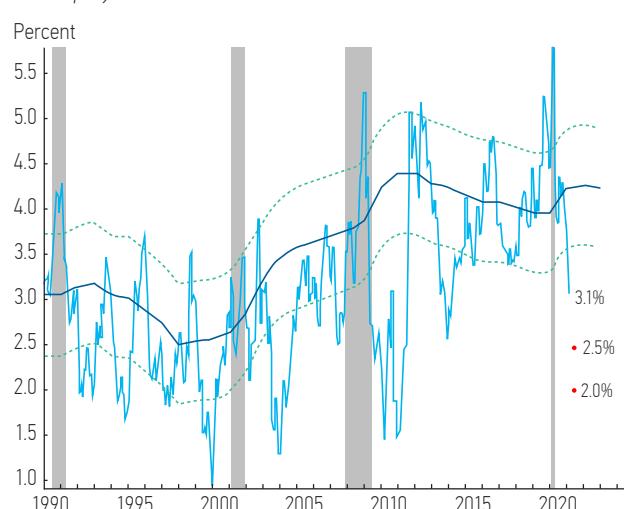
Forecasts / estimates are based on current conditions, subject to change, and may not necessarily come to pass.

- High valuations for the equity market are also a clear vulnerability, though it is well known that valuation does not predict returns over short horizons but rather gives an indication of potential returns in the event that fundamentals revert to the mean. S&P 500 Index valuations reached 23.0x in late 2020, higher than they have been for 99% of the time since 1900. U.S. equity multiples were higher for only a year in 1999-2000, when they reached a peak at 24.5x.<sup>5</sup> It can be argued that these high valuations are justified given that long-term market yields, which serve as both the discount rate for company cashflows and as an investor’s opportunity cost, are still near record lows. As a result, the equity risk premium (ERP) offered on U.S. stocks over 30-year U.S. Treasuries today, though down from more than 600 basis points last March, is still elevated at 300 basis points (compared with 1999-2000 when the ERP was below 100 basis points) (See *Display 3*). This

means that stocks, while expensive in absolute terms, are still more attractive today relative to bonds than they were in the dot-com bubble.<sup>6</sup> Net-net, equity valuations are nearly the most overvalued they have ever been in absolute terms but only overvalued (as opposed to extremely overvalued) relative to bonds.

#### Display 3: Equities Still Offer More Than 300bps Risk Premium Over Bonds

U.S. Equity Risk Premium with Fair Value Bands



Source: MSIM Global Multi-Asset Team Analysis and Estimates, Bloomberg, MSCI, Factset, Haver. Data as of March 10, 2020.

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

- Equities have been beneficiaries of low interest rates for a couple of decades, but negative real interest rates have significantly boosted the “TINA” (There Is No Alternative) case for equities. Low rates are the reason why equities still offer a 300 basis point risk premium over bonds. But a reset in bond yield levels appears to be occurring as the market prices in the strength of the likely recovery, overheating, as well as the possibility of an inflationary regime change. Of the 110 basis points increase in 10-year U.S. Treasuries since August, 64 basis points came from inflation expectations rising to 2.21% and 44 basis points from real yields (Treasury Inflation Protected Securities, or TIPS) rising to a still very low level of -0.62%.<sup>7</sup> Over the next two to three quarters, when the reopening, fiscal stimulus, free money, and pent-up demand all combine to create the potentially most inflationary environment in 40 or 50 years, we expect that inflation expectations (which reference the CPI, not the PCE) will rise above 2.5%. We believe this will force the Fed to acknowledge the changed environment, taper quantitative easing purchases, and begin to discuss hiking rates. The market will likely move ahead of the Fed and re-price real yields (TIPS) to a positive +0.50% at least (though if inflation expectations become unanchored, they could go much higher).

At this point, it is unclear how quickly this scenario could unfold, but the next +50 basis point increase in real yields would push the equity

<sup>3</sup> MSIM Global Multi-Asset Team; SPAC stands for Special Purpose Acquisition Company, which is a company with no existing business operations which is formed solely to raise capital through an initial public offering (IPO) in order to acquire an existing company.

<sup>4</sup> Greenspan, Alan. “The Challenge of Central Banking in a Democratic Society.” Annual Dinner and Francis Boyer Lecture of The American Enterprise Institute for Public Policy Research, 5 December 1996, Washington, D.C.

<sup>5</sup> MSIM Global Multi-Asset Team; Factset; Based on 12-month forward price-to-earnings ratios.

<sup>6</sup> We estimate that the current ERP is 100 basis points below its “fair” value (of 400 basis points), that suggests equities are too expensive to relative fundamentals, but not as expensive as in the dot-com bubble, when the ERP was 150 basis points below its “fair” value.

<sup>7</sup> MSIM Global Multi-Asset Team; Bloomberg; as of March 8, 2021.

risk premium down to 250 basis points, and the next, to 200 basis points. Even though this level of equity risk premium still indicates that equities offer some compensation over bonds, we expect that such a low level of compensation for the risks associated with holding stocks will force a significant equity multiple de-rating. According to our models, in order to fully offset a move in real yields to +0.50% (from the January low of -1.11%), equity valuations would have to correct from the late 2020 peak of 23x to approximately 16x.

The above scenario is very likely a deep bear case, rather than our base case, for two reasons: first, if growth is indeed as strong as we expect, valuations can stay higher than normal for longer so that only part of the real bond yield increase would need to be offset (investors tend to pay higher price-to-earnings ratios, or P/Es, when economic growth is strong and low P/Es when growth is weak); and second, the “P/E” may need to correct but the “E” will rise strongly (see below under Supports). Net-net, stronger growth and above-target inflation will likely lead to higher bond yields, which could put pressure on very elevated equity multiples.

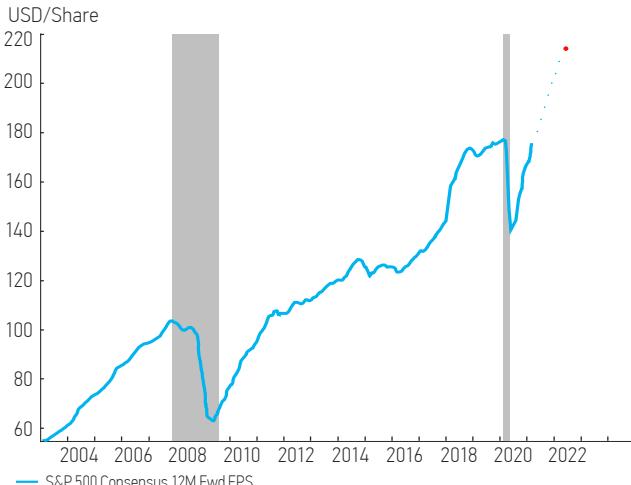
- For now, fiscal policy is highly supportive of the economy and markets with \$2.8 trillion of stimulus hitting the economy in 2021 (13% of GDP!). However, by the second half of 2021, the market will be forced to contemplate the second part of Biden’s agenda, a very large 10-year infrastructure plan funded partially by tax increases. We expect the Biden administration to raise the corporate tax rate to at least 25% (from 21%), to increase taxes on foreign earnings, and to impose a minimum corporate tax. The sum of these tax increases will likely hit S&P profits by approximately -5%, undoing about half of the Trump tax cuts.

Supports for the equity bull market:

- We forecast that the best economic growth since World War II to lead to very strong earnings growth in 2021 and 2022: the consensus expects +25% and +15% earnings per share (EPS) growth for the U.S., but our models indicate that these estimates will prove too low by at least 5%. As a result, over the course of this year, consensus 12-month forward EPS estimates, which already bake in +25% for 2021, will likely climb by +20% or more (+5% because of surprises to 2021 earnings and +15% as the 12 month forward window rolls to 2022 earnings) (See *Display 4*). This strong earnings growth should be a partial—though significant—offset to yield-driven multiple compression.

#### Display 4: S&P 500 Forward Earnings Per Share Likely to Grow 20% Over Next Twelve Months

S&P 500: Consensus 12M Fwd EPS



Source: MSIM Global Multi-Asset Team Analysis and Estimates, IBES, Factset. Data as of March 10, 2020.

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

- It is important to note that, even though yields are likely to rise further from here, putting pressure on equity valuations, historically bear markets in bonds have NOT led to bear markets in stocks. In the past 30 years, bonds have sold off an average of 160 basis points in a variety of early, mid and late stages of the economic cycle, but stocks have never fallen into a bear market (see *Display 5*). As discussed above, rising bond yields do sometimes cause equity multiple compression but, in most cases, earnings growth completely offsets it for a simple reason: in the past 30 years, bond bear markets have tended to occur in economic recoveries or expansions. What has killed equity bull markets is the Fed hiking rates, which eventually causes a recession and falling earnings.

#### Display 5: Impact of Bond Market Sell-offs on Equities (1991-2021)

	Increase in 10-Year Yields (bps)	S&P 500 Return (%)	Fwd P/E Multiple Change (%)	Fwd EPS Change (%)
1993 - 1994	286	-1	-20	20
1996	153	7	5	2
1998 - 2000	263	50	39	12
2003 - 2004	177	13	-7	18
2005 - 2006	135	4	10	14
2008 - 2009	120	5	26	-14
2012 - 2013	157	34	22	9
2016 - 2018	159	34	-5	30
MEDIAN	158	10	0	13

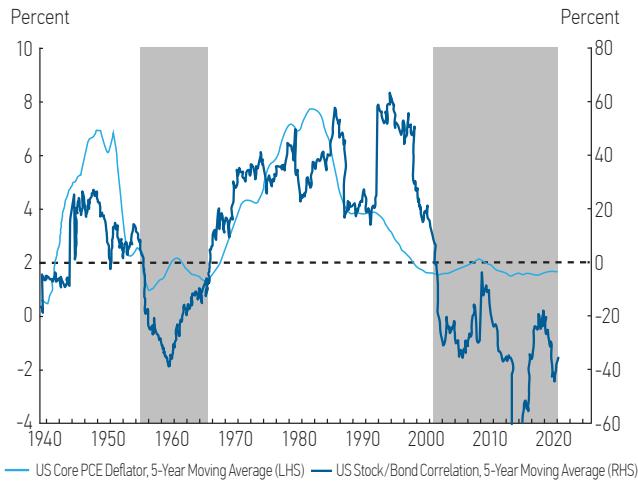
Source: MSIM Global Multi-Asset Team Analysis and Estimates. Data as of March 10, 2020. The index performance is provided for illustrative purposes only and is not meant to depict the performance of a specific investment. **Past performance is no guarantee of future results.**

An extremely important caveat to this analysis is that most of the past 30 years has seen muted inflation: either stable around or below 2%, or declining quickly towards it. And because of low inflation, the correlation between stocks and bonds has been negative. In other words, when bond prices fell (and yields rose), equities have tended to go up—because rising yields implied better growth and a lower chance of deflation. Things were radically different in the higher inflation environment from 1965 to the 1990s, when the correlation between stocks and bonds was positive. Inflation first broke out above 2% in 1966 and remained there for three decades until the late 1990s. During that whole period, rising bond yields actually caused most of the bear markets. This occurred because bond yields rose as a result of the Fed’s struggles to contain inflation which progressively spiked higher (to 6% in 1970, 10% in 1974 and 14% in 1980). And each behind-the-curve Fed tightening cycle caused deep recessions (oil shocks did not help either). Thus, higher yields meant economic recession, profit declines and high cash rates competing with equities: stocks fell when bond prices fell (yields rose).

The key in the current environment, therefore, is how fast and how far inflation rises: if it rises sustainably and significantly above 2% due to an overstimulated and overheated economy, the stock-bond correlation is likely to reverse (from negative to positive) and higher bond yields will cause deep multiple compression that earnings will not be able to offset, especially as Fed tightening eventually will cause a recession and double digit earnings declines (See *Display 6*). Our expectation is that the initial inflation increases will be seen as temporary and thus benign, but that by the second half of 2021, any sustained, above 2.0-2.5% inflation will cause a disproportionate reaction from the bond market that equities will have difficulty withstanding.

**Display 6: Stock / Bond Correlation Turns Positive When Inflation Goes Above 2%**

U.S. Core PCE Deflator vs. U.S. Stock / Bond Correlation



Source: MSIM Global Multi-Asset Team Analysis and Estimates. Data as of March 10, 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.**

- The Fed's new dovish Flexible Average Inflation Targeting framework is a potential support for equities as they wrestle with rising inflation expectations and rising bond yields. The Fed has made clear that it does not intend to raise rates until inflation is sustainably above 2% and the economy has reached full employment. This is likely to cause the Fed to lag in tapering quantitative easing and raising interest rates. It may even cause the Fed to consider measures to prevent market yields from rising excessively. These inflationary policy actions would be positive for equities in the near term as they would suppress a rise in the price of money, a boon for all assets. In the

## 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, these policies do run the risk of unanchoring inflation expectations, ultimately requiring more tightening in response.

On balance, given the cross currents between threats and supports to equities, we conclude that stock market multiples are likely to compress, potentially significantly, from 22x forward EPS to 16-18x, but that the majority of this multiple compression will be offset by forward earnings climbing at a 20% annual pace. We do worry that, as the second half of the year approaches, the yield-reset-driven multiple compression may occur more rapidly than the steady monthly increase in forward earnings, making stocks vulnerable to a (potentially deep) correction, particularly given the very high level of speculative activity in markets. This would be the case particularly if inflation were to show signs of rising above 2% on a more permanent basis (i.e. not driven by base effects or one-time reopening effects).

Because the bond market (and eventually the Fed) and economic and earnings growth are in a tug-of-war and the outcome for equities is not decisive, we believe it is more important to continue to focus on where the asymmetries and investment opportunities are—"underneath the hood", or below the asset class level. While stronger growth, higher inflation and higher bond yields may be a mixed bag for an expensive and frothy stock market, they are an unequivocal boon to cheap and cyclical Value stocks. Value stocks have been victims of "Low Nominals" for the past few years: low nominal growth has hurt the earnings growth of lower margin, more indebted Value companies and low nominal rates have boosted the valuation of long duration Anti-Value (i.e. expensive) and Growth stocks. But 2021 is seeing a clear shift to "Higher Nominals", with nominal economic growth likely to rise 10% or more (8%+ real GDP growth and around 2% inflation) and nominal rates rising (the magnitude is uncertain but a return to sub-1% 30-year yields seems very unlikely). As a result, we have reduced our modest equity overweight to neutral and continue to concentrate our risk budget on cheap reopening plays and still-extremely-cheap Value stocks (relative to very expensive Anti-Value stocks).

**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, Ireland. Registered in Ireland under company number 616661. 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 Junghofstrasse 13-15 60311 Frankfurt Deutschland (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](http://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 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. This 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 and other applicable law.

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

Explore our site at [www.morganstanley.com/im](http://www.morganstanley.com/im)