Morgan Stanley

INVESTMENT MANAGEMENT

Global Multi-Asset Viewpoint

Stars Aligned for Higher Inflation

SOLUTIONS & MULTI-ASSET | GLOBAL MULTI-ASSET TEAM | MACRO INSIGHT | MAY 2020

The deep recession in the first half of this year has led to widespread expectations of significant and persistent disinflation. We estimate that the rates markets are pricing in approximately 1% core inflation on average over the next 10 years *(Display 1)*. While we agree that some disinflation in the near term is unavoidable, we think that the potential for inflation to accelerate over the next year or so is substantial. We expect core PCE to end 2021 closer to 2%, compared with 1.5% expected by consensus, and is likely to continue to rise further thereafter.

Thanks to massive and early fiscal and monetary stimulus measures, incomes are likely to remain resilient in most major economies despite a gigantic fall in output and employment. As lockdowns are relaxed and activity rebounds, we expect resilient aggregate demand, supported by resilient incomes, to be met with a shrunken supply as the labor market recovers more gradually. Economic policy activism, both fiscal and monetary, is likely to endure over the medium term in light of greater social and political acceptance. Deficit spending will necessitate some form of financial repression, with higher inflation likely being a major part of this.

The end of disinflation would spell a major regime change in markets. Higher inflation and likely-anchored nominal rates (at the short and the long end) will lead to lower real yields. We also expect a weaker U.S. dollar. This would support TIPS, gold and likely inflation breakevens. Our end-2021 forecast is for the TIPS yield at -1%, and gold at $2100 per ounce. We expect inflation breakevens to widen to 200 basis points (from 136 basis points for the 10-year at present).

Core CPI has averaged sequential monthly declines of -0.25% in April and May, indicating strong deflationary

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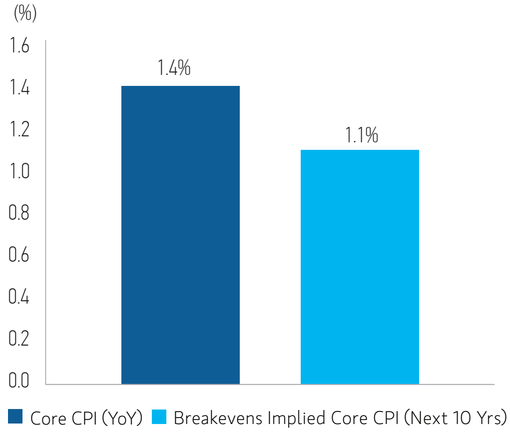
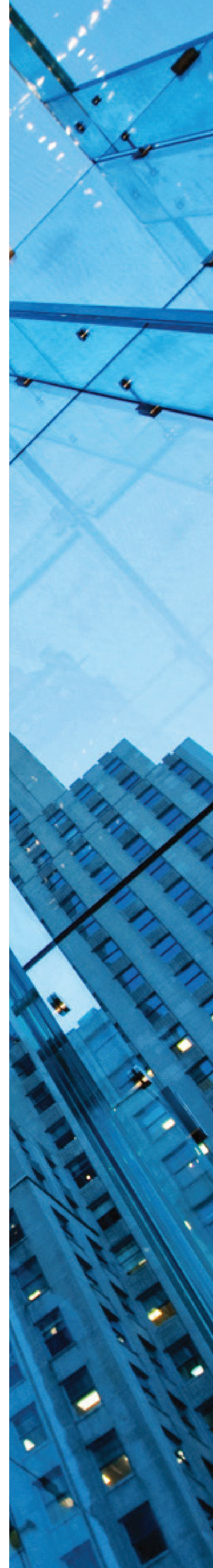
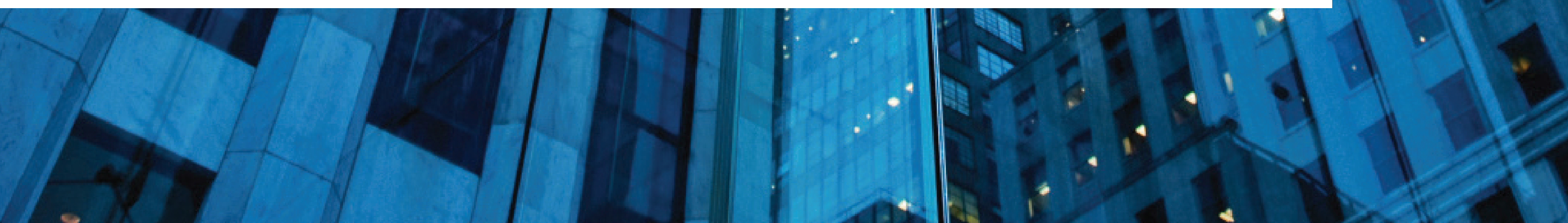
Display 1: **Low Core Inflation is Expected to Persist**



Source: MSIM Global Multi-Asset Team Analysis.
Data as of May 27, 2020.
Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.





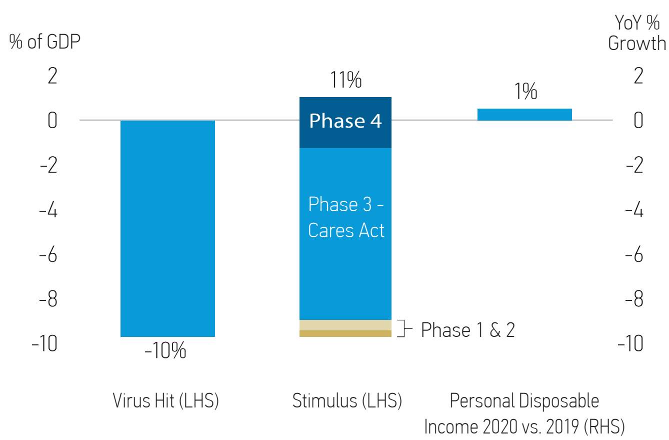
forces are at play. In the short term as activity remains subdued as a result of lockdowns, this is likely to remain the case—inflation will remain very low. We agree that this is likely to remain the case over the next several months, and that this is precisely what is well understood and discounted. The consensus expects the U.S. core PCE deflator to fall from 1.84% in February and to trough at 1.20% (in year over year terms) in the first quarter of 2021. Inflation expectations on a 5-year view have come down to 2.0% from 2.2% earlier in the year. Many inflation-sensitive assets fully reflect this near-term view and reflect expectations for a continuation of this state of affairs. U.S. 10-year inflation breakevens, which over the medium term are most closely linked to inflation, are pricing in core CPI of approximately 1.0% on average over 10 years.[1] Equities, insofar as inflation impacts valuation, appear to be reflecting the expectation that the benign inflation environment will continue, as the current P/E multiple on the S&P appears historically consistent with 1.2-1.9% inflation.

But over the following 12-24 months inflation is likely to head higher. Accelerating inflation in the face of what could still be below-trend activity level and high unemployment rate would represent a major break with history. Why would this happen?

Resilient Demand Thanks to Generous Policy Support

The answer is: an early and aggressive policy response, unprecedented in size and scale in peacetime. It seems clear that policy makers, academics, and investors alike drew three lessons from the Global Financial Crisis: a policy response must be early and big, policy must not be normalized too quickly afterwards, and inflation will not be a problem no matter what is done. And so fiscal stimulus in the U.S. alone has amounted to $2.4 trillion, or 11.4% of GDP so far, by far exceeding the response to previous downturns *(Display 2)*. At present, there is no practical limit to stimulus: we expect additional measures to be enacted to ensure continued income support, especially in light of the social unrest and in case lockdowns take longer to be fully lifted, as seems likely. Even after the eye-popping 20+% budget deficit this year, 2021 fiscal policy will likely remain equally irresponsible with a 10% budget deficit.

Display 2: **Fiscal Stimulus Larger Than Growth Impact of the Virus**



Source: MSIM Global Multi-Asset Team Analysis.
Data as of June 2, 2020.

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

As a result, personal disposable income this year is likely to remain close to the 2019 level before reaccelerating in 2021.[2] We acknowledge that even as incomes remain resilient, consumption will likely still be subdued in the short term given physical limitations of spending while in lockdown. The savings rate has risen substantially already to 33% in April from 7.5%-8% in January-February. But the savings rate was already elevated entering this downturn and there has not been a significant hit to wealth from falling housing prices or equity markets (as equities are close to the average price of last year). There is potential for a pent-up-demand driven spending spurt later this year, such that aggregate demand would remain intact over a 12 month period. If the effects of the virus linger, if only psychologically, demand for some of the virus-affected areas may not come back fully or quickly (e.g. international leisure travel). This would lead to a situation where largely resilient incomes will have to be spent on a somewhat more limited set of goods and services than what was available before the virus, leading the a shortfall of supply relative to demand.

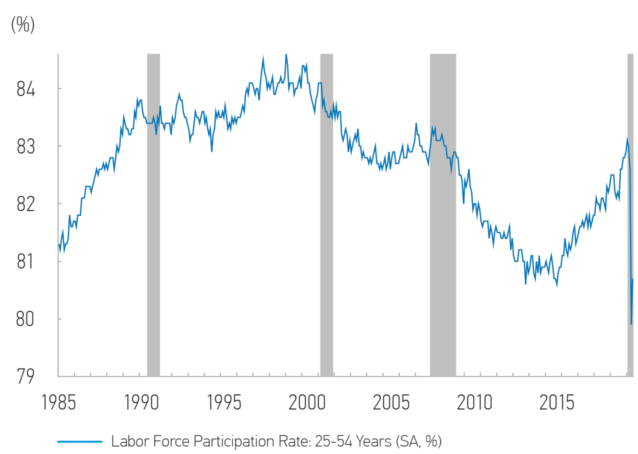
The second crucial lesson the policy makers seem to have learned is not to tighten policy too early. Imminent tightening is also not on the cards politically. In the U.S., instead of the ascendance of the Tea Party and the fiscal austerity in 2011 and 2012 that it inspired, the odds of a blue sweep in the November elections are rising. Not only is Joe Biden leading in polls in battleground states but also Democratic control of the Senate is now more likely than not, according to betting markets. We do not expect fiscal tightening after the virus subsides, unlike what started in the U.S. and the Eurozone in 2011, as this is now considered to have been a mistake. The fiscal spigot will likely remain open, in the absence of clear macroeconomic and social costs which for now are missing.

Supply-Side Hit: Employment Just Contracted by 25%,[3] Negative Hysteresis Ahead

The downturn was caused by a pandemic and lockdowns rather than by the classic unwinding of a credit cycle-fuelled, excess-ridden expansion. It followed a prolonged yet subdued expansion that saw anaemic, nominal GDP-like credit growth, an anomaly as compared to the preceding decades. In a typical recession in recent history, the seeds of the downturn are sown throughout the cycle, as faster-than-GDP credit growth creates excess demand which is met with excess supply build up. Once the credit cycle turns down (usually as excess demand leads to higher inflation and higher interest rates), the excess supply is exposed and usually proves deflationary, taking some time to be absorbed during the subsequent recovery. But during the recent expansion, private sector credit growth, on aggregate, remained close to nominal GDP growth, suggesting a limited amount of excess capacity prior to the outbreak (specific exceptions such as certain segments of corporate credit notwithstanding).

In response to the virus, employment in the U.S. collapsed by close to a quarter in two months.[4] It is unclear how quickly the labor market will recover. The optimistic assessment is that because nearly 80% of layoffs have been temporary, employment can recover quickly, especially if growth rebounds quickly as well. Although this is hard to forecast with certainty given the unprecedented nature of the situation, we suspect that the probability of permanent damage is more significant and that the labor market is likely to behave similarly to prior recessions rather than to snap right back. The employment decline in the past two months has been extremely broad, as broad as in any other major recession. It is not just limited to the lockdown-affected services sector but is borne out of the broad shock to growth. This makes the recent decline look fairly traditional from a cyclical point of view. From a structural perspective, the damage has already been substantial. The labor force participation rate for 25-54 year olds has declined from 83% in February to 80.7% in May already, outpacing declines seen in most recessions since 1950 and already being comparable to what was seen in the aftermath of the Global Financial Crisis (GFC) *(Display 3)*. Following the GFC, it declined over the following 5 years by 2.4% (from ~83% to 80.6%).[5] The negative hysteresis is likely to be more pronounced and lasting if the structural change to the economy as a result of the virus turns out meaningful and lasting, as seems probable. If the demand for virus-affected services remains subdued for a prolonged period of time, the unemployed workers from such industries could in principle be redeployed to other segments of the economy, thereby helping meet increased demand there. But based on what was observed in the aftermath of the housing bust, such reallocation was difficult due to the relatively low-skilled nature of the housing workforce. The workforce of the currently affected services industry is also likely to be difficult to redeploy quickly. On balance, given the big cyclical downturn and the likely significant structural damage to the labor market, employment is unlikely to recover quickly to match the resilient incomes and demand.

Display 3: **U.S. Labor Force Participation Rate Decline Disproportionately Large and Quick**

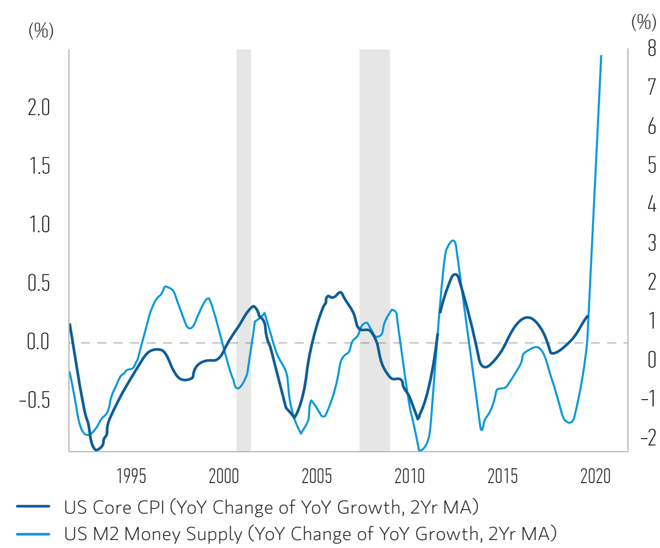


Source: MSIM Global Multi-Asset Team Analysis.
Data as of June 2, 2020.

Monetary Easing Rapid, Large and Effective

The Fed and other central banks' recent actions have been well-documented and widely discussed. In addition to cutting rates to zero (where they were not already there or lower), aggregate G-4 central bank balance sheets have risen by nearly 10% of GDP to nearly 50% of GDP, from 40% in 2019. By comparison they rose by about 8% of GDP in 2008 to 19%. In addition to lowering rates and creating liquidity, the Fed also announced credit easing measures which, in aggregate, have raised the Fed's lending capacity by at least $2 trillion.[6] The Fed's number of facilities doubled as compared to the GFC, unleashing an onslaught of acronyms such as CPFF, PDCF, MMLF, TALF, PMCCF, SMCCF, MSELF, MSNLF and PPLF. And its cooperation with the fiscal authorities has become more extensive, as $454 billion was allocated to the Fed by Congress to underwrite the risks to credit easing through the CARES Act. Unlike the GFC, all these actions have been taken extremely quickly and the funding markets stress was milder and very short-lived. Rather than being in need of fixing, the banking system was in much better health before the downturn, being better capitalized and less leveraged. By eliminating reserve requirements, the Fed was able deploy the banking system to propagate its base money creation much more effectively than in 2008-09. Not only did M1 growth accelerate to a higher pace than in 2008 (27% as of April vs. 18% in 2008), but crucially, M2 accelerated to 20%, vs. just 10% in 2008. This is significant because M2 has remained predictive of core inflation for much of the past 100 years, though the relationship has become somewhat less strong in the past 30 years. The last time M2 growth was as high was during periods of high inflation in the 1940s, 60s and 70s. While by itself this monetary loosening is unlikely to be sufficient to raise inflation, the Fed has put into place something that historically has been a necessary condition for inflation to accelerate *(Display 4)*.

Display 4: **Money Supply's Link to Core Inflation Is Not Dead**



Source: MSIM Global Multi-Asset Team Analysis.
Data as of June 2, 2020.
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As is the case with fiscal policy, little attention has been paid to the negative consequences of this extreme monetary policy setting. To the contrary, the Fed is fairly explicitly looking to engineer an inflation overshoot. After missing its target by an average of 1% over 10 years, worrying about inflation appears to be far down on the list of priorities.

To sum up the near-term picture: the collapse in output as a result of lockdowns is leading the market to expect disinflation over the next two years. But despite the fall in activity, aggregate incomes remain resilient thanks to unusually generous policy support. While the savings rate will rise for now, we expect it to normalize shortly, releasing pent up demand in the second half of the year. This pent-up demand will be met with inadequate aggregate supply because of cyclically-high unemployment and structural labor force reduction, to a degree due to the difficulty of redeploying workers from segments of the economy structurally affected by the virus. Thus, resilient aggregate demand will face a shortfall in aggregate supply, leading to greater inflationary pressures than is currently expected by the market. Quick and aggressive monetary easing is working as money supply is actually responding (M2 growing at 27%), unlike in the aftermath of most recent other recessions. In addition to the likely aggregate supply shortfall, the conditions for inflationary pressures of monetary nature are in place.

Oil, US dollar, Housing Not Disinflationary, Unlike the Past 10 years

There are several other factors we believe will turn out to be less disinflationary over the next several years, particularly as compared to the prior decade. The disinflation of the post-GFC recovery is fresh in the minds of most observers and market participants, and a few differences between the current environment and the previous cycle are likely being ignored.

Oil. Oil prices most likely bottomed out in March. Although we are unsure of how quickly excess oil production capacity will be absorbed or how disciplined oil producers will be in maintaining the recently-agreed upon production cuts, the absence of additional downside is still better than the last cycle's persistent decline from the peak of nearly $140 per barrel in 2008 to (briefly) negative $38 per barrel in April 2020.[7] Although oil prices do not explicitly enter into the calculation of core inflation measures, they affect many of its categories. We estimate that during 2003-07 expansion, rising oil prices may have contributed around +76 basis points to core inflation, while oil's decline during the recent decade detracted roughly -21 basis points.[8]

US dollar. WIn contrast to the nearly +15% appreciation (on a real effective basis) during the 2010s, we expect the dollar to weaken this decade. This is likely because of the U.S.'s large budget and balance of payment deficits, a large negative net international investment position, more aggressive monetary easing, and interest rate differentials which are no longer supportive. We estimate that the strong U.S. dollar may have detracted roughly -42 basis points from core inflation in the past 10 years (having contributed approximately +33 basis points during the 2003-07 period as it depreciated -27% during the 2000s). The U.S. dollar weakening by -10% over the next 5 years would contribute roughly +13 basis points to core inflation.[9]

Housing. The housing sector is likely to lift inflation this decade in contrast to its deflationary impact after the bubble popped ten years ago. Then, the housing decline and the consumer and financial system deleveraging that followed proved strongly disinflationary. The collapse of house price appreciation (from +15% per year at the peak of the housing boom to -15% at the worst point of the downturn) depressed the housing-linked owners' equivalent rent component of core inflation. Imputed rent inflation decelerated to approximately zero in 2010 and did not recover to its more normal 2.5-3% pace until nearly five years into the recovery. Residential housing looks undersupplied today while the consumer is in much better financial shape (less leverage and a higher savings rate). Inventory of new homes stood at just three months of demand prior to the downturn, and we believe new home construction, net of obsolescence, has lagged household formation during each of the past 10 years, leading to potential pent-up demand of more than 5 million units.[10]

New Economic Policy Regime

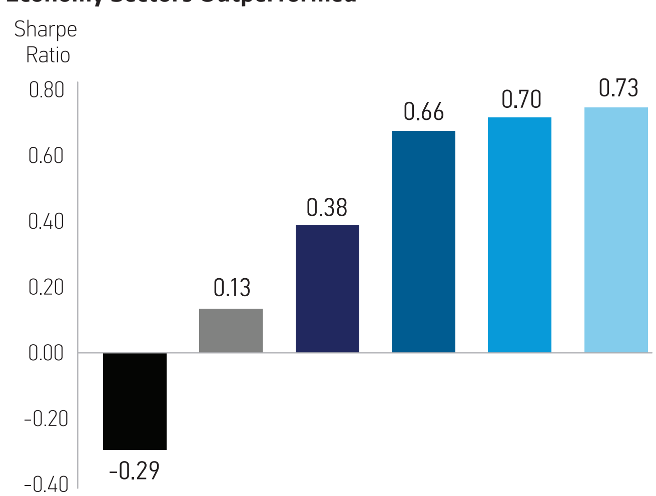
From an esoteric theory discussed mostly in academic circles, Modern Monetary Theory, or MMT, has moved closer to reality over the past two months. Wartime-like fiscal deficits have been largely monetized, as the combined G-4 central bank balance sheet increased by nearly $5 trillion thus far, in addition to an announced $3.5 trillion of fiscal spending. As discussed above, with policymakers having learned their post-GFC lessons, it is unlikely that policy accommodation will be withdrawn and we expect both fiscal and monetary policy largess to endure beyond the current downturn. Social and political preconditions for fiscal and monetary rectitude are absent, and the costs are not yet apparent. Continued fiscal accommodation and an inflation overshoot will become inevitable in light of structural U.S. budget deficits and the difficulty of cutting spending or raising taxes (though both are likely to some degree). We estimate that to stabilize the U.S. debt to GDP ratio at 108% while still running a (primary) budget deficit of 2%, real interest rates on U.S. government debt would need to decline to -1.25%. This would necessitate a combination of higher inflation and potentially a yield curve control policy.

If the government debt build up continues based on the current path of structural deficits, it will reach 125% by 2030.[11] Economies with higher debt-to-GDP ratios tend to grow more slowly. To the proponents of the secular stagnation view (focusing on excess savings and lack of demand) who are unwilling to embrace the naturally slower growth of many developed economies, additional government spending will likely remain the preferred solution. Empirically, more indebted economies tend to turn more fiscally profligate, perhaps making a last-ditch attempt to lift growth in the short term with government spending at the cost of structurally lowering it in the long term. Given the current dominance of the secular stagnation and MMT lines of thinking among policy makers, the pattern of slower growth and government attempts to lift it through stimulus rather than structural reform is likely to continue for some time. In this environment of growing debt/GDP and structural budget deficits even greater financial repression through a combination of yield caps and higher inflation would be required.

Inflation protection assets

A number of assets with somewhat different characteristics have performed strongly in the past when inflation accelerated.[12] Broadly speaking, these assets fall into three groups: monetary-sensitive, i.e. those that respond to excessive monetary easing (especially in response to slowing growth) such as gold and TIPS; growth-sensitive, i.e. those that respond to actual overheating during periods of sustained above-trend growth such as inflation breakevens, commodities, and related industries; and supply-sensitive, such as commodities with disrupted production *(Display 5)*.[13, 14]

Display 5: **Traditional Asset Returns Have Been Lackluster When Inflation Rose. TIPS, Gold, Commodities and Old Economy Sectors Outperformed**



	U.S. 10-YEAR TREASURIES	S&P 500	COMMODITY EQUITY SECTORS	GOLD	COMMODITIES	TIPS
Return over inflation	-1.0%	3.3%	8.9%	18.8%	16.7%	4.4%

Source: MSIM Global Multi-Asset Team Analysis.
Data as of June 2, 2020.
This information 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.

Recent performance of these assets has been disparate. In the context of subdued inflation and slowing global growth over the past two years, the monetary easing plays shined: gold is up nearly 50% since Q3 of 2018, and U.S. the 10-year TIPS yield is down just over -160 basis points since the late 2018 peak. They have responded to easier monetary policy and not yet to actual inflation which remains depressed. Growth-sensitive inflation plays have performed abysmally: the GSCI Total Return Index has fallen by -44% since 2017 and related assets such as commodity currencies have also weakened. Value stocks, whose performance relative to broader equity markets has tended to be correlated with inflation in the past, have underperformed by a nearly unprecedented -30% since 2015, and -37% at the trough, which is in excess of their -35% underperformance during the 1990s tech bubble.[15]

We see both the monetary plays and the growth plays as equally attractive at the moment, but for different reasons. (Our assessment of these assets is, as always, based on starting valuation and expected fundamental performance in the context of our inflation and growth assumptions). Despite their strong recent performance, monetary easing plays remain attractive. As discussed above, higher inflation and likely-anchored nominal rates (at the short and the long end) will lead to lower real yields. We also expect a weaker U.S. dollar. This will support TIPS, gold and inflation breakevens. Our end-2021 forecast is for the TIPS yield at -1%, and gold at $2100 per ounce.
We expect inflation breakevens to widen to 200 basis points (from 136 basis points for the 10-year at present). We are less confident about the growth outlook in light of the risk of a gradual rebound to a level lower than pre-crisis and therefore think the fundamental outlook for growth-sensitive assets is clouded. However, after a prolonged bear market, many commodities, commodity equities and value stocks are deeply undervalued and offer an attractive risk-reward even in a moderate growth rebound scenario.

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 t 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.

FOOTNOTES

[1] MSIM Global Multi-Asset Team Analysis. We use gasoline and oil futures prices to derive market-implied energy inflation expectations; and wheat, soybean, and cattle futures prices to derive market-implied food inflation expectations.

[2] For example, expanded unemployment benefits in the form of $600 per week through July (in addition to state-provided benefits) are resulting in unemployment benefits of over $1000 per week for workers earning the median wage (which is $957). Between 2/3 and ¾ of unemployed workers, many of whom worked in low-paying service jobs, would receive unemployment benefits greater than their regular wages.

[3] MSIM Global Multi Asset Team Analysis; adjusted for labor force participation rate and reporting distortions.[4] MSIM Global Multi Asset Team Analysis; adjusted for labor force participation rate and reporting distortions.

[4] MSIM Global Multi Asset Team Analysis; adjusted for labor force participation rate and reporting distortions.

[5] MSIM Global Multi Asset Team Analysis; Bloomberg.

[6] MSIM Global Multi-Asset Team Analysis. Including Fed programs such as PMCCF, SMCCF, TALF, MSLP, and MLF.

[7] MSIM Global Multi-Asset Team; Bloomberg. Based on WTI oil prices.

[8] MSIM Global Multi-Asset Team Analysis.

[9] MSIM Global Multi-Asset Team Analysis; Haver Analytics, Bloomberg.

[10] MSIM Global Multi-Asset Team Analysis; Haver Analytics.

[11] MSIM Global Multi-Asset Team Analysis; Congressional Budget Office.

[12] See April 2018 Global Multi-Asset *Viewpoint*, "Navigating Higher Inflation: An Empirically-Based Multi-Asset Approach" for details.

[13] We recognize that assets can fall into multiple categories, depending on the circumstances.

[14] Equities overall have been less reliable as an inflation hedge. Real EPS have not always passed through inflation; for example equities were roughly flat in real terms in the 1970s. And valuation has generally tended to compress during outbreaks of inflation.

[15] MSIM Global Multi-Asset Team Analysis; Bloomberg; based on GMA team-constructed value baskets.

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.

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