Morgan Stanley

INVESTMENT MANAGEMENT

Global Multi-Asset Viewpoint

Multi-Asset Portfolios: Low Yields, Inflation Risk Ahead

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The traditional 60% global equities / 40% global bonds (or a "60/40") portfolio has served clients exceptionally well over the last 40 years, returning 6.5% on a real annualized basis with a volatility of 9.5%. Today many investors are questioning the outlook for the traditional 60/40 portfolio, for two main reasons: 1) very low yields on most safe haven bonds and thus low expected returns and 2) higher inflation risks emerging—comparable to the previously dominant deflation risks. In this note, we focus on potential enhancements to the traditional 60/40 benchmark that may help mitigate these risks and improve the outlook for 60/40. Investors may be able to enhance returns in various (inflation, deflation) environments with similar levels of volatility to a 60/40 portfolio by making the following strategic allocation changes: 1) increasing weights of select higher yielding government bonds and decreasing weights of lower yielding bonds and 2) adding an allocation to a diversified portfolio of inflation protection assets.

The benefit of a traditional 60/40 portfolio is that bonds can act as a diversifying asset and a hedge for the dominant (in risk terms) equity exposure against major disinflation and deflation risks while offering attractive returns.2 It has been a successful strategy since the 1980s, as equities rose and bond yields fell from around 11% in 1980 to 0.5% today. From the current starting point of the Bloomberg Barclays Global Treasuries Index, expected returns for bonds will likely be extremely poor. German and Japanese 10-year government bond yields are currently at -0.63% and 0.03%, respectively, and would need to turn deeply negative to hedge against a major selloff in equities.² Based on the Global Multi-Asset Team's long-term expected returns methodology, which takes into account both valuations as well as long term economic trends, in case of deflation (U.S. core PCE

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Display 1: **60/40 May Offer Lower Returns Going Forward**Real Annualized Returns 60/40 Portfolio, %



Source: MSIM Global Multi-Asset Team Analysis and Estimates. Based on data since 1973. Data as of November 2020.

Expected returns are based on current market conditions, subject to change, and may not necessarily come to pass and are not meant to be a target rate of return for a specific investment. The historical index performance and expected returns are provided for illustrative purposes only and are not meant to depict the performance of a specific investment. Past performance is no guarantee of future results.

See Disclosure section for index definitions.

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below 1% and falling), global government bonds are likely to return -1% on a real basis, compared to historical real returns of +4.4% in deflationary environments. And in the event of an inflation outbreak (U.S. core PCE deflator rising and remaining above 2%), we would expect a real return of -2.4% for global government bonds (compared to -1.4% historical real return in inflationary environments). As we discuss below, medium-term inflation risks have likely increased relative to recent history, adding further urgency to rethinking strategic allocations within traditional portfolios.

Enhancing strategic allocations in a traditional 60/40 portfolio

Historically, government bonds have offered investors liquidity, safety, return, and have acted as a hedge in a deflationary environment. U.S. Treasuries, German bunds, and Japanese government bonds are among the most liquid markets in the world, with monthly trading volume in 2020 at 26, 6.4, and 17 trillion dollars, respectively. They are relatively safe in that most G10 government bonds have historically been rated AA or above. Their returns have been attractive: over the past 50 years, U.S. Treasury bonds have returns +7.2% annually, 250 basis points above cash, and 330 basis points above inflation. They have also acted as a hedge during deflationary episodes: during the Global Financial Crisis, when equities (MSCI ACWI, in USD) fell -58%, U.S., German, and Japanese 10-year government bonds retuned +16% on average.⁴

But fewer government bonds have the same attractive characteristics today. While most government bonds remain liquid and relatively safe (Italy and Portugal are the only government bonds in the Bloomberg Barclays Global Government Bond Index with a rating below A), they are unlikely to provide the same levels of return and deflation hedging that they provided over the last 40 years. Given current yields, no developed market government bonds will likely deliver returns above 2-3% per year over the next five years, and we expect the Bloomberg Barclays Global Government Bond Index overall to return +1.3%, the equivalent of carry and rolldown. Even in a deflationary scenario, most safe government bonds wouldn't offer much of a deflation hedge. Given current yield levels, we estimate that Germany and Japan government bonds will provide no deflation mitigation while U.S. government bonds may, at best, provide just one-third of their historical hedging levels.⁵

In light of the meagre returns and deflation mitigation expected for a global government bond portfolio over the next five years, how can investors build a better strategic bond allocation? Investors may consider a two-fold approach of decreasing nominal bond allocations overall, and then within bonds reallocating away from low-carry bonds such as those of core Eurozone and Japan, towards higher carry but still-safe countries, like China, South Korea, Canada, Australia, and the U.S. The compositional change would increase the expected real total return of the Bloomberg Barclays Global Government Bond Index by 15 basis points in an inflationary scenario, and by approximately 20 basis points in a deflationary scenario over the next four years, on our estimates, to -2.3% to -0.8% annualized, respectively.

Hedging traditional multi-asset portfolios against inflation

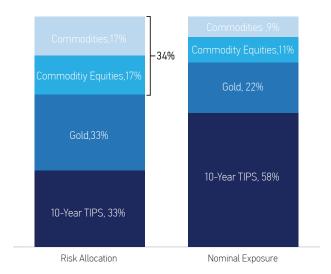
We believe that higher inflation is an underappreciated risk for portfolios. Many investors are expecting the deflation risk to remain predominant and may be underestimating the probability of higher inflation. In the near term, availability of COVID vaccines and rising

immunity combined with stimulative monetary and fiscal policy settings are likely to lead to a substantial acceleration in economic growth in the next year. We expect the output gap in the U.S. to turn positive in the second half of next year, leading to a cyclical acceleration in U.S. core inflation over the next 12-24 months. In addition, we see many structural changes in place supporting higher inflation in the medium term: continued deficit spending, the Fed's focus on achieving above-target inflation for a time, and supply-side pressures from deglobalization. In addition, deep hysteresis is apparent in the U.S. labor market. These combined forces are likely to lift inflation above the Fed's long-term target of 2% by 2022. A further acceleration to above 3% by 2024 appears probable.

In order to hedge portfolios against the risk of inflation, we would look to a diversified basket of assets that have high correlation to inflation, that have performed well historically under inflationary environments, and that are liquid, allowing investors to tactically manage exposures based on evolving growth and rates conditions. Among liquid assets, our analysis finds that TIPS, gold, commodities, and commodity equities ("core real assets") have historically had the highest Sharpe ratios in inflationary environments (0.6-0.7), while other traditional inflation hedges, such as real-estate investment trusts (REITs) and infrastructure securities have performed less well (Sharpe ratio of 0.2-0.3). A "core real assets" portfolio with an even risk allocation among commodities/commodity equities, gold, and TIPS (see Display 2) has historically had a correlation to inflation of 0.45, and an +8.7% real return in accelerating inflation environments since 1973, compared to +7.5% for global equities, and +0.1% for the Bloomberg Barclays Global Government Bond Index.7

Display 2: "Core Real Assets", %

Risk Allocation Evenly Split Between Commodities, Gold and TIPS

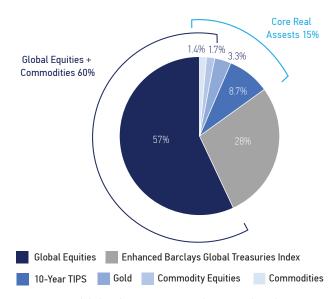


Source: MSIM Global Multi-Asset Team Analysis. Data as of November 2020. The information shown above is provided solely to illustrate the investment style and characteristics of the strategy and is speculative, subject to change at any time and may not come to pass due to economic and market conditions. The statements above reflect the views and opinions of the Investment Manager as of the date hereof and not as of any future date, and describe how the portfolio management team generally implements its investment process under normal market conditions.

Enhanced 60/40 outlook

We believe investors may be able to achieve superior returns compared with a traditional 60/40 portfolio in inflationary and deflationary environments by adding exposure to a diversified portfolio of inflation protection assets (Core Real Assets in Figure 3), and within fixed income exposure, by reducing exposure to the lowest-carry bonds within the bond index, replacing them with higher carry bonds which maintain the properties of safety and liquidity (the Enhanced Barclays Global Aggregate Index as shown in Figure 3). Based on our expected returns

Display 3: GMA Enhanced 60/40 Allocation, %

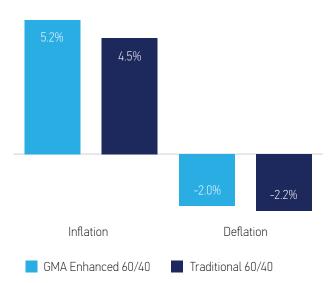


Source: MSIM Global Multi-Asset Team Analysis. Based on data since 1973. Data as of November 2020.

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estimates for each of the asset classes involved over the next four years, and assuming a 15% allocation to inflation protection assets, these enhancements to a 60/40 portfolio would be expected to increase expected real returns by 70 basis points annually from 4.5% to 5.2% in an inflationary scenario, with similar levels of risk (See Display 3 and 4). In a deflationary scenario, expected real returns would improve expected real returns by 20 basis points from -2.2% to -2.0% annually, compared with a 60/40 portfolio.

Display 4: GMA Expected Returns of Enhanced vs. Traditional 60/40 Allocation, %



Source: MSIM Global Multi-Asset Team Analysis and Estimates. Based on data since 1973. Data as of November 2020.

Expected returns 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 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.

FOOTNOTES

- ¹ MSIM Global Multi-Asset Team Analysis; Bloomberg; Indices used are MSCI All-Country World Index and Bloomberg Barclays Global Treasury Total Return Index (USD Hedged)
- ² MSIM Global Multi-Asset Team Analysis; Bloomberg.
- ³ MSIM Global Multi-Asset Team Analysis; Bloomberg; based on hypothetical macro scenarios over 2021-2024. Inflation: faster growth and bigger inflation overshoot, Fed deliberately behind the curve in 2024 and some YC control/

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.

- moral suasion. Deflation: growth decelerating below trend, inflation below trend and falling to zero.
- 4 Between October 31, 2007 and March 9, 2009.
- MSIM Global Multi-Asset Team Analysis; Bloomberg.
- ⁶ See our May 2020 Global Multi-Asset Viewpoint, "<u>Stars Aligned for Higher Inflation</u>".
- ⁷ See our April 2018 Global Multi-Asset Viewpoint, "<u>Navigating Higher Inflation:</u> An Empirically-Based Multi-Asset Approach".

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 exdate 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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